THE MANITOBA CLEAN ENVIRONMENT COMMISSION

IN THE MATTER OF: Keeyask Generating Station

Environmental Impact Statement

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KEEYASK HYDROPOWER LIMITED PARTNERSHIP

I. INTRODUCTION

> "…when you look back at this hearing what you will remember best is that we are a partnership; two languages, two cultures, two ways of looking at the world woven into one project and one partnership…."

Doug Bedford, Transcript October 21, Page 27

This Project is being developed by a Partnership, the Keeyask Hydropower Limited Partnership (the "Partnership"). The Partnership has assessed it, the Partnership will own it and the Partnership has been the Proponent at this hearing. These facts do not change, no matter how often some Participants in this hearing would have it otherwise. The Keeyask Generating Station will not be owned by Manitoba Hydro. The Keeyask Generating Station has not been assessed by Manitoba Hydro. The proposed Keeyask Generating Station Project is not just another "Manitoba Hydro Project".

The EIS was written for the purpose of informing two governments, each of which must 'license' the Project. The purpose of this hearing was to provide the Manitoba public with an opportunity to review and question the Environmental Impact Statement (the "EIS"), made up of the "Response to EIS Guidelines", the three reports by the Partner First Nations and the *Keeyask: Our Story* video filed by the Partnership. The purpose of undertaking the hearing before five Commissioners of the Clean Environment Commission ("CEC") is that they are mandated by Manitoba's Minister of Conservation and Water Stewardship to provide advice and recommendations with respect to whether an *Environment Act* license should be issued to the Proponent for the Project and, if that is the recommendation, what conditions would be appropriate to be included in that license.

It is not 'usual' for a Proponent undertaking its environmental assessment to fund, and incorporate into its assessment, three parallel assessments by First Nations carried out by three significant investors in the Project. Nor is it 'usual' for a Proponent to endorse parallel assessments done in accordance with an Aboriginal worldview to which provincial and federal laws, guidelines and terminology are foreign. How, for example, does one reconcile an assessment process done in accordance with a world view that mandates that all environmental components are inter-related and a change to even one is 'significant' with a system of laws that mandates one determine and report on whether a project will result in any 'significant', adverse residual effects to a selected set of 'valued environmental components' ("VECs") as 'significant' is defined through guidelines, legislation and precedent?

The answer is that one does not, except to the extent that meetings, workshops, conversation and thinking can find a resolution, or at least identify important findings not captured by one of the approaches.

Obviously, there is nothing wrong with Partner First Nations doing assessments their way as part of their respective journeys to decide whether to support the Project and to promote it. Nor is there anything wrong whatsoever with an EIS incorporating into its 'scientific' studies all that was contributed by the assessments of the First Nations and, to the extent possible, building with it and trumpeting how it aided and informed the work of university trained, 'science oriented' professionals. And there is nothing wrong nor offensive about filing both assessments and presenting them as having been undertaken for distinctly different purposes: the 'science and ATK' of the EIS for the purpose mandated by provincial and federal regulators and the ATK of the Cree community evaluation reports for the purposes mandated by four Chiefs and Councils, namely to give their members the opportunity to speak about their knowledge of hydro-electric development, Askiy, and the merits of the proposed Keeyask Project.

The EIS and this hearing are only a part of a much larger and more complex story. Issues were raised during this hearing that are part of that larger, more complex story, but they should not form part of the decision-making of the Clean Environment Commission as they are not part of the mandate given to it. This is not to suggest that its mandate is diminished in any way – the CEC's role is a significant one to all Manitobans. It is merely to respond to some of the far-reaching issues raised by Participants. By way of example, the need for the Keeyask Generating Station was discussed. The importance of a secure, reliable source of renewable energy for today and in the future is a significant issue to be discussed, as the power represented by Keeyask for domestic purposes will be needed by approximately 2023. But the need for that energy was not under review at this hearing, as it will form part of the upcoming Need For and Alternatives To hearing before the Public Utility Board.

Why was an integral part of the project, the Keeyask Infrastructure Project, separately licensed? Primarily to provide jobs and experience to the four Partner First Nations. An environmental assessment for the Project and appropriate licences were obtained and the effects of this Project have been considered in the Partnership's cumulative effects assessment for the Keeyask Generation Project. There is nothing improper about this approach, but, in any event, this assertion was outside the scope of this hearing.

How viable are the projected profits of this generating station? Are the First Nations and their members, as distinct from their respective incorporated investment entities, in any way liable to repay debt? The First Nation partners would not be proceeding if the profit projections were not sound and there are options within the JKDA so that no Partner First Nations or its members are exposed to the debts of the Partnership, and to limits each community's exposure to repayment of loans made to their respective investment entities. Unfortunately, the Commissions has been

regaled with inaccurate and misleading information about the nature of the Partnership financial arrangements both in the hearing and in written final argument. But, again, these assertions were wrong and outside the scope of this hearing.

How much has been spent to negotiate the JKDA, to engage the members of the four First Nations, to conduct engineering studies, to 'do' the environmental studies and write the EIS? All this has no bearing on the validity of the Partnership's final EIS documentation or the robustness of the Project design and implementation process, and, again, was outside the scope of this hearing.

How much lead time is required to prepare a tender for the general civil contract of a six billion dollar project and how much time should be allowed from the date of issue of the tender and the deadline for response? Indeed, is a 'tender' still the best way to proceed or are there other approaches? And is there any practical way to delay these processes until after all licenses are granted and still commence work in less than two years from the date the last license is issued? The answer to the last question is 'no', but this answer and the complexities of finding and negotiating a general civil contract were outside the scope of this hearing.

What of others who assert that they have 'rights' in the region where the Project is to be built and that these rights take priority over a Proponent's desire and ability to proceed with its development? The answer to this question, as well, was outside the scope of this hearing and is an issue for Government to determine once all the requisite information is before it.

It is trite to observe that the future is unknown to us. However, we can make predictions about the future. We can study the past and the present in order to inform those predictions. We can seek assistance from those with more knowledge and experience than ourselves to refine and improve the predictions. We can spend time, months, even years, studying the past and the present with a view to improving our predictions of the future. The KHLP has done all of those things. It cannot guarantee that its vision of the future with the Keeyask Project will be exactly as it has predicted, but it can confidently say that the processes it has followed and the work that it has done support its predictions that there will not be significant, adverse residual cumulative effects to any VEC.

Examples of how the uncertainties associated with key issues relevant to this Project were addressed in oral argument and are covered in further detail in the pages that follow. These issues were properly within the scope of this hearing.

As for the many questions and evidence brought forward that were not within the scope of this hearing or within the mandate of the CEC, some further comment is provided below.

II. THE PARTNERSHIP

The most effective way to 'empower' the members of four First Nations who share an unhappy history of past hydro-electric development and a fear that more such development is "inevitable" is to give them the power to decide whether there will be another generating station built in their "traditional territories" for export purposes and, if so, to give them the power to negotiate the form such development will take. This was done with respect to the Keeyask Project.

Contrary to the misconceptions of some, it was Tataskweyak Cree Nation, followed by other Partner First Nations, who wanted to form a partnership that would give them the opportunity, not just to receive an 'amount' for their support, but the right to receive an increased share of the revenues generated by the Project in the event that those revenues meet and exceed conservative estimates.

Questions have been asked during the course of the hearing about the reasons the Partner First Nations would enter into such a partnership after years of impact upon their land, water, resources and people. This was answered in many ways by each of the Partners and those answers are worth repeating in the very words used by each representative.

FOX LAKE CREE NATION

"After long years of being outsiders in our own territories, of being helpless to the devastation of askiy and our people, we are here today as partners and proponents of the Keeyask project. Finally, for the first time ever we are being recognized as owners who have, and will continue to have participation, influence and authority in this major development project, which promises significant benefits for our people and a real opportunity to exercise our stewardship of our environment."

Chief Walter Spence, Transcript October 21, Page 96

As "individuals and as a community, we bear scars from that era which I am sure are unimaginable for the members of this Commission, but which are very real in our present and will be in our future until great healing has taken place. The first healing step in that direction was the negotiation and signing of our Impact Settlement Agreement in 2004 with the province and Hydro which began to address, in part, the effects of the then four existing dams. We are now at step two. So we are here as limited partners in the Keeyask project because for the first time in the history of hydro development in this province, our needs have been examined, the potential impacts on our lives have been investigated, our traditional knowledge of the environment, which we call Askiy, has been highlighted. And with the skills and experience of our people, our consultants and our lawyers, we have been fully involved in years of long, detailed and creative negotiation and the drafting of outcomes leading to the joint Keeyask development agreement and our adverse effects agreement. In short, for the first time in history finally, we are part of the process, not the object of the process. We are partners in this project

because for the first time in history, this is not their project, but theirs and ours. That is the revolutionary concept."

George Neepin, Transcript October 21, Page 169

YORK FACTORY FIRST NATION

"York Factory First Nation chose to support Keeyask, not only so our people could benefit from employment, business and investment opportunities. We chose to become a partner so we could have a voice in how the project is developed and managed. We want to be on the inside and influence the project."

Chief Louisa Constant, Transcript October 21, Page 103

"York Factory First Nation wants to work with our partners for the entire life of the Keeyask project, to sustain and achieve respect for our Cree culture and self-determination. We want to produce sustainable, tangible benefits for our First Nation, and continue to build trust and a meaningful partnership. We remain skeptical because of what has happened to us in the past, but we have stepped forward with our Keeyask partners as a determined and committed First Nation to the Keeyask project. And we're here today to move forward with our partners in the Keeyask project."

Chief Louisa Constant, Transcript October 21, Page 105

"The signing of the JKDA and Adverse Effects Agreement marked York Factory's decision to become a partner and co-proponent in Keeyask. This was not an easy decision for the community to make given the circumstances and the diversity of views held by community members regarding the Keeyask generation project. Members were faced with a deep moral dilemma in terms of assessing the potential environmental impacts that would affect the community. York Factory feels that there will still be substantial adverse effects to the land and our way of life. For York Factory, the decision to become a partner in Keeyask was made so our youth and future generations will benefit from the project revenues, jobs, training, and capacity-building opportunities. It has also been important for York Factory to participate in the project and the environmental impact assessment. To be at the table and have a voice in the planning, operation, and management of Keeyask."

Ted Bland, Transcript October 21, Page 155

"By adding our voices, values, and traditional knowledge to the Keeyask Generation Project, we hope to positively impact the project, reduce adverse effects, and continue to be stewards of the land and the waters."

Ted Bland, Transcript October 21, Page 156

"York Factory has become very aware of the role it will play in the potential environmental impacts, both positive and negative, as well as with mitigation measures, monitoring and follow-

up programs and adaptive management of the project. York Factory's history and experience with past Hydro development has lead to a level of distrust and scepticism of some of the scientific predictions. York Factory, however, is optimistic and hopeful moving forward in partnership with Manitoba Hydro and the other Keeyask Cree Nations. It's very important to York Factory to continue to build a better relationship with our partners and learn about and manage the environmental impacts of Keeyask. We must also maintain our cultural values, practices and traditional knowledge through the Keeyask Generation Project while ensuring various economic benefits for our children and our grandchildren. It is very important that we work together as partners to continuously reconcile a role in the partnership to heal past wounds related to the Hydro development, to build trustworthy relationships with our partners. We especially want our children and future generations to know that we entered into this partnership with these feelings and deep misgivings, but insisted on a long-term, ongoing commitment to healing, reconciliation, mutual respect and self-determination."

Ted Bland, Transcript October 21, Page 162

CREE NATION PARTNERS

"I look forward to the day now only a few years down the road when Keeyask turbines will supply homes and businesses in Manitoba and elsewhere with clean, affordable and reliable energy."

Chief Betsy Kennedy, Transcript October 21, Page 106

"Some may find it puzzling that a hydroelectric development which has caused such devastation to our lands and waters will now be proposed by us as a way forward to a better future of our children and grandchildren."

Victor Spence, Transcript October 21, Page 191

"This partnership gives us an opportunity of hope, to provide hope to our people and to our children and their grandchildren. It is with this hope that our members voted in favour to a referendum process on this partnership."

Victor Spence, Transcript October 21, Page 191

"Now through the vision, guidance and determination of our elders and leaders, and active participation of our members, we are in the position to meet our goals of secure socio-economic and cultural benefits sufficient to sustain our people while protecting the natural environment."

Roy Ouskun, Transcript October 21, Page 205

BENEFITS

The KHLP is a business investment. It was not conceived as the 'best' or the 'only' way to bring prosperity to four First Nations. It was not intended to solve all of the social and economic challenges faced by those communities. But it is predicted that it will provide revenue in due course that will facilitate funding effective responses to those challenges. The choice as to how to use that revenue must be that of Chief and Council. They may choose to spend it on infrastructure, such as housing, or on further programming and/or community development, but that choice is theirs alone.

Most often, a Chief and Council decide whether its Nation will enter into a new business investment. The only 'canvass' of its membership with respect to such decisions comes, as in any democratic system, when the next election for Chief and Council takes place. Keeyask was different. The parties to the JKDA accepted that the size and nature of this investment warranted the members of each community being given the opportunity, after copious information sessions, newsletters and workshops, to vote on whether their respective First Nation should support the Project through signing the JKDA and/or accept the Adverse Effects Agreement negotiated for their respective community. In all four cases, the majority of those who chose to vote supported the Project and the Adverse Effects Agreement.

The Partnership has provided and continues to provide many other wide-ranging benefits which include improved opportunities for training and employment in construction and operations, increased capacity building, a meaningful voice in future mitigation and monitoring, the potential for more positive health outcomes and better community conditions, enhanced cultural and socio-economic practices, and of course, reconciliation.

CONFIDENTIALITY

During the course of the hearing and argument, there has been some comment on the issue of confidentiality and confidentiality agreements within the Partnership. Confidentiality has been and continues to be important in two cases, and the Partnership makes no apology for that.

The first case arises in the case of business information. In order that the Partner First Nations could conduct their own independent analysis and come to their own informed decisions with respect to the business aspects of the Project, there was a need to make them privy to a wide variety of planning, forecasting, market, pricing and other strategic information which is proprietary to Manitoba Hydro, or prepared for Hydro on a confidential basis. In a highly competitive electricity market, it was necessary to ensure that proprietary or competitive sensitive information remained confidential. To that end, those individuals who were tasked with reviewing and analyzing the information for the Partner First Nations were requested to execute confidentiality agreements in favour of Manitoba Hydro in order to protect the information.

The second case concerned information provided to Manitoba Hydro by the Partner First Nations in connection with the reimbursement of the participation costs of the First Nations. The First Nations quite correctly required that this information be treated as confidential. A significant portion of this information would fall within the statutory definition of personal information as it pertains to an individual's income, employment, expenses or details of their personal activities and is afforded protection under *The Freedom of Information and Protection of Privacy Act*. Information has been made available on a higher level or aggregated basis which protects the identification of particular individuals and their information.

III. THE TASK BEFORE THE CLEAN ENVIRONMENT COMMISSION

At the beginning of these hearings, the Chair stated that:

> "[our] task in the next few weeks is for each of us to play a role in ensuring that the Keeyask Generation project, if it is to be built, *does not result in any serious and ongoing damage to the environment* of our Province. As in all Commission hearings, the challenge to the panel is to have a complete and understandable body of evidence upon which to base its recommendations to the Minister. The challenge for the proponent, the Keeyask Hydropower Limited Partnership, is to ensure that this record is complete and that the panel and the public fully understand the conclusions set out in the Environmental Impact Statement. The challenge for the participants is to *vigorously test the positions and arguments put forth by the proponent*, in this way assisting the panel and the process in the full understanding -- in achieving full understanding."
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> CEC Chair Terry Sargeant, Transcript October 21, Pages 15-16

The CEC has facilitated a fair and flexible hearing process in which funded participants have had an unfettered opportunity to retain and instruct experts, to question each of the Proponent's panels on relevant points and to submit evidence of their own on a multiplicity of topics. All those members of the public who wished to speak or file statements in writing were given an opportunity to be heard. The fact that so few members of the public participated in the hearing may be evidence of the success of the Partnership's PIP in meeting the public's need for involvement. We submit that the lack of public opposition to the Project is certainly evidence that the communities most affected by the Project have made their own democratic decisions to join the Partnership.

The task of the CEC now is to consider whether to recommend that an *Environment Act* licence be issued to the Partnership for the Project, taking into account the entirety of the evidence which is before it, both oral and written. If the Project is recommended, the CEC is also to suggest any conditions that it feels should be included in the licence. We respectfully submit that the weight

of the evidence before the CEC overwhelmingly favours and supports a recommendation to grant a licence for the Project for a multiplicity of reasons, including:

- the remarkable achievement by four local communities in using an environmental assessment process of their own design, based on Aboriginal traditional knowledge, to help them reach democratic decisions that advance self-governance, develop identity, promote social justice and encourage economic development;
- the excellence of the decade-long technical environmental assessment and planning process applied by the Partnership; and
- the fact that the project has been planned in a way which protects the environment and prevents any *significant residual cumulative adverse environmental impact.*

The Partnership also suggests that the most appropriate licence conditions would be the commitments the proponent has already made to develop and operate this Project in a manner that minimizes adverse effects and maximizes benefits. These commitments are documented in the environmental impact statement, information requests and the preliminary environmental protection program, and a table is provided with this final argument outlining mitigation commitments (see Appendix A).

As expected, many Hearing Participants would have the CEC believe that even more is needed (see Appendix B for the Partnership's specific comments on these recommendations). In considering what should be recommended as licence conditions, the Partnership would inject a note of caution to the CEC on the scope of the recommendations it may have under consideration for inclusion in its report. It is true that the Keeyask Project is intended to produce a profit for the First Nation Partners and for Hydro as well. Hydro's profit will be consolidated with Hydro's other revenues. Once a profit from Keeyask is brought into Hydro, it is subject to the same restrictions and the same treatment as all other revenue generated by Manitoba Hydro. As the CEC is more than aware, one of the benefits of the Keeyask Project is to provide the Partner First Nations with an income which they can use for the long term betterment of the physical, economic and social conditions of their respective members. Licensing or non-licencing conditions on the Keeyask Project that relate to matters which might be viewed by some as socially beneficial, in general, but are not specifically related to the Project, would be inappropriate. By increasing the costs of the Partnership and thus reducing income to the First Nations, such conditions would move in the direction of defeating the entire purpose of the Keeyask Hydropower Limited Partnership and the involvement of the Partner First Nations.

Manitoba Hydro has variously been demonized in these proceedings and referred to as a "rapacious" profiteer. While such a statement is superficially attractive to some and may be somewhat catchy, nothing is further from the truth. In reviewing the Keeyask Project and in considering the comments directed specifically to Manitoba Hydro on matters outside the

Keeyask Project, the CEC should firstly remember the mandate of Manitoba Hydro which is set out in section 2 of *The Manitoba Hydro Act* (the Hydro Act) :

Purposes and objects of the Act

2. The purposes and objects of this Act are to provide for the continuance of a supply of power adequate for the needs of the Province, and to engage in and to promote economy and efficiency in the development, generation, transmission, distribution, supply and end use of power and, in addition, are

(a) to provide and market products, services and expertise related to the development, generation, transmission, distribution, supply and end use of power, within and outside the Province, and

(b) to market and supply power to persons outside the Province on terms and conditions acceptable to the Board.

This, with respect, is the mandate of Manitoba Hydro. Others would suggest to you that Manitoba Hydro ought to be "the tide that raises all boats". To those holding such a view, we would respectfully suggest that this is outside the scope of the mandate given to the corporation by Government.

This narrower mandate is brought into sharper focus when one considers other sections of the Hydro Act which speak to the components of rate making and the uses to which corporate funds may be put.

From a rate setting perspective rates are in fact set not by Hydro but by the Public Utilities Board, Manitoba Hydro, as a Crown Corporation with an independent rate regulator, cannot operate in the manner suggested by some. In establishing rates, Manitoba Hydro is governed by section 39 of the Hydro Act which provides:

Price of power sold by corporation

39(1) The prices payable for power supplied by the corporation shall be such as to return to it in full the cost to the corporation, of supplying the power, including

(a) The necessary operating expenses of the corporation, including the cost of generating, purchasing, distributing, and supplying power and of operating, maintaining, repairing and ensuring the property and works of the corporation, and its costs of administration;

(b) All interest and debt service charges payable by the corporation upon, or in respect of, money advanced to or borrowed by, and all obligations assumed by or the responsibility for the performance or implementation of which is an obligation of the corporation and used in or for the

construction, purchase, acquisition or operation, of the property and works of the corporation, including its working capital, less however the amount of any interest that it may collect on monies owing to it;

(c) The sum that, in the opinion of the Board, should be provided in each year for the reserves or funds to be established and maintained pursuant to subsection 40(1).

The matters referred to in subsection 40(1) include reserves for amortization of the cost of assets, self insurance provisions and, most importantly, as set out in paragraph (c), for the stabilization of rates or prices for power sold by the corporation and meeting extraordinary contingencies or other requirements or purposes which are proper in the opinion of the Board. These reserves, under any construct, would not constitute a profit as that term would be understood by an investor owned utility, a pipeline company or any other business.

Finally, there are limitations on the nature of expenditure which Manitoba Hydro can make with corporate funds. This restriction is found in subsection 43(3) of the Act which provides

Funds of government and corporation not to mixed

43(3) Except as specifically provided in this Act, the funds of the corporation shall not be employed for the purposes of the government or any agency of the government as that expression is defined in *The Civil Service Act* other than the corporation, and the funds of the government shall not be employed for the purposes of the corporation except as advances to the corporation by the government by way of loan or as a result of a guarantee by the government of indebtedness of, or assumed by, the corporation or liability for the repayment of which is an obligation of the corporation.

This section is not meant to restrain the corporation from paying any taxes or charges lawfully imposed on it by government. It does however raise the issue of the purposes of government. When considering making broader recommendations, we would suggest that the CEC remain cognizant of these restrictions and consider very carefully the implications of making any recommendations about provision of health care, transportation infrastructure, housing and education which are all primarily purposes or functions of government (either federal or provincial) and which are not spoken to anywhere in the statutory mandate given to Manitoba Hydro.

Further, based on the construction of *The Hydro Act* it is suggested that if the CEC wishes to advocate for resource rents revenue sharing that is a matter for the government and moreover the CEC should be wary of injecting itself into a debate over resource ownership and allocation which may bring to the fore a number of constitutional issues.

We would agree that it is easy for a casual observer to be seduced by the magnitude of the financial numbers associated with Manitoba Hydro's assets, revenues and funds transferred to reserves or, the magnitude of export revenues, but it must be remembered that all of those revenues are factored into the cost of service calculations to arrive at an appropriate rate for all Manitobans. While it is appropriate for any proponent to deal with the array of direct and certain indirect effects associated with the construction and operation of a project, great care must be taken when one considers asking a proponent or a developer, especially one which has statutory constraints such as are placed on Manitoba Hydro, to go beyond and step outside of its statutory mandate and responsibility.

IV. EXCELLENCE OF THE ENVIRONMENTAL ASSESSMENT

As noted, the Chair of the Commission, Mr. Sargeant, said at the outset that the standard to meet is to "ensure that the project, if it is to be built, does not result in any serious and ongoing damage to the environment. (CEC Chair Terry Sargeant, October 21, Page 15)"

As part of its deliberations, it is fully anticipated that the CEC will review the quality of the assessment based on best practices in the field and its experience with previous hearing processes. The partnership has worked very hard over the last 12 years to develop, submit and present an environmental assessment that represents two differing worldviews and incorporates best practices throughout. This has been confirmed by many of the participant witnesses who have testified to the quality of the assessment.

Expertise

The Partnership has relied on the expertise of many specialists, resource users and Elders who have contributed invaluably to the work required to assess and review this complex Project.

Alone of all the parties who participated in the CEC process, counsel for CAC has chosen to attack the demeanour and expertise of various members of the study teams who appeared as witnesses in this proceeding. Most unfortunately, this issue was raised for the first time in written argument, leaving no opportunity for these witnesses to correct the record. And even more unfortunately, such allegations detract greatly from the tone of respect for lively debate and sometimes disagreement amongst scientists that has characterized this hearing process.

There is a rule of evidence that mandates that one cannot, in final argument, maintain that the evidence of a witness must be discounted because of the credibility of the witness, unless the advocate so arguing has put to the witness, in cross-examination, the concerns he has regarding the credibility of the witness. The rule in question originates from the 1893 decision of the House of Lords in *Browne* v. *Dunn* (1893), 6 R. 69 (H.L.) . It has been often cited by Canadian courts. The rationale for the rule is that it is unfair to the witness to assert in argument that the witness

was not credible, or that the witness' testimony must be discounted on some aspect of credibility, unless the advocate has given the witness an opportunity in cross-examination to give his explanation for the alleged lack of credibility. For example, it would not be appropriate for counsel to assert in final argument that an expert witness on the subject of boreal woodland caribou was not really expert at all in that subject because no publications on this type of caribou appeared in his curriculum vitae, unless he has put that to the expert in cross-examination and given him an opportunity to explain from whence comes his expertise.

Counsel can otherwise argue that the evidence his or her client put forward was more persuasive or more consistent with other testimony, or more consistent with the 'facts', but he or she should not, absent cross-examination, raise for the first time in final argument an allegation that the testimony lacked credibility due to his or her opinion as to the qualifications of the witness. In such circumstances, a judge or tribunal is expected to disregard that part of the argument. And rightly so.

Indeed, if counsel believes that an expert is not qualified in the area of expertise that the expert has just been sworn to address, then counsel is obliged to challenge immediately the expertise of the expert, and having put the expert's credentials to the test, then ask the judge, or tribunal, to dismiss the witness if they agree that he or she lacks proper expertise in the subject about which he or she is going to testify. A failure to do this is absolute and bars the advocate from arguing at the end of a hearing that the witness was in fact no expert at all and his or her evidence should accordingly be discounted and ignored.

For example, if counsel for CAC had raised the issue of his expertise in cross examination, Mr. Berger would have had the opportunity to explain that, in addition to being a "formidable expert on birds" and a "scientist well known for his work on … fur bearing mammals," he has spent many of his 25 years of experience as a consulting biologist studying caribou and other ungulate populations.

Counsel for CAC would have learned, for example, that Mr. Berger has been monitoring the Wapisu woodland caribou population for over a decade, including numerous aerial surveys carried out over time, the design and implementation of a four-year GPS and VHF radio-collaring study, and a six-year tracking study, which is still on-going today. Counsel for CAC would have learned that, in addition to reviewing the literature, designing studies and analyzing data, Mr. Berger has personally logged thousands of hours and kilometres in northern Manitoba, both in summer and winter, tracking and monitoring caribou herds.

Ms Cole could have explained that Mr. Berger is highly valued by the proponent because of his many years of experience on the land, especially in northern communities, working with First Nations elders, youth and community members, learning from them and sharing with them his experiences with caribou and other wildlife and because of the effectiveness of his participation

in the multi-disciplinary groups who have worked together to plan and carry out study plans for a large project.

As well, Ms Cole would have had the opportunity to explain that what matters to the Partnership is not Mr. Berger's comfort in talking to lawyers in a public setting, but rather his expertise in assessing effects to caribou populations and the complete ease with which he relates to the groups of scientists and traditional knowledge holders who have worked together on this assessment and who will have to continue to work together in management working groups if this Project is built and operated.

All the witnesses who appeared on the proponent's panels were leaders of teams of experts who carried out a decade or more of applied engineering and science. Dr. Schneider-Vieira represented the scientists at North-South Consultants who are engaged in the foremost research on sturgeon and other fish across western Canada and beyond, including Dr. Cam Barth on whom CAC relies in its arguments. The testimony provided by Dr. Schneider-Vieira at the hearings was based not on the opinion of one "expert" but on the combined expertise of a large team of professionals who prepared the environmental impact assessment and developed mitigation for the aquatic environment component of the Project.

Dr. Schneider-Vieira's area of expertise is aquatic ecology, founded on doctoral studies at Dalhousie University completed in 1990, and developed over 20 years of environmental work in freshwater and marine environments at North/South Consultants Inc. (NSC). Dr. Schneider-Vieira testified at the hearings in her role as team leader of the aquatic assessment and thus familiarity with all aspects of the assessment. Her role was to ensure that the aquatic assessment was conducted in a thorough and defensible manner, that all necessary inputs to the aquatic assessment from the engineering team as well as specialists in the physical and terrestrial environments were identified and addressed, and that all effects requiring mitigation were identified and appropriate mitigation measures developed. Dr. Schneider-Vieira led the process by which effects and mitigation were reviewed and further developed with representatives of the Partner First Nations. Dr. Schneider-Vieira has also played a lead role in discussing results of the technical assessment and proposed mitigation with Fisheries and Oceans Canada and Manitoba Conservation and Water Stewardship.

The CAC in its final argument has also bemoaned that expert witnesses for the Proponent have assisted legal counsel throughout this hearing. Generally, legal counsel have no prior expertise in the subject matter of expert testimony. Accordingly, counsel is always best advised to retain on behalf of her client an expert with the appropriate expertise. That expert is expected to explain key aspects of expert testimony to counsel, read the reports of experts testifying in opposition and advise counsel on the strengths and weaknesses of such reports and, often, to prepare a report for the counsel's client and to testify at trial on behalf of the counsel's client and to assist in the cross-examination of expert's testifying in opposition.

The assistance an expert provides to counsel largely takes place outside the hearing room, but during cross-examination, the most efficient and effective way for an expert to provide assistance is to sit with counsel and to alert her to errors in answers to cross-examination questions and to suggest potential areas for further cross-examination. To suggest that an expert providing such assistance is somehow behaving unusually or is shedding his or her ethical obligations to maintain the standards of his or her profession reveals a lack of experience in the role experts play in hearings along with a bit of naïve stereotyping. An expert does not become 'partisan' merely because he or she accepts a retainer to provide expert advice at a trial or in a hearing. An expert who fulfills his or her engagement by assisting with cross-examination on the subject of his or her expertise for which she or he was retained, does not thereby lose 'independence' of thought and of ethical standards. A defence attorney whose accused client sits beside him or her does not thereby become an 'associate' of the accused. Legal counsel retained by a private company to sue for trademark infringement does not thereby 'share' the political and business agendas of her client. And an expert retained to assist in a hearing, to repeat, does not because he or she engages in conversation and sits with the counsel representing the party who retained him does not thereby become 'committed' to the corporate policies of the client, is not thereby doing anything unfair and is not in any way in breach of his or her professional standards. Indeed, many cross-examination at this hearing would have benefitted immensely if the person cross-examining had thought to seek out the assistance of an expert knowledgeable in the subject matter of the questions and in some cases, such expert knowledge was available to the questioner but was not used. Many of the cross-examinations would have been shorter, focused and helpful.

Keeyask Cumulative Effects Assessment

A particular focus of the Partnership's work has been understanding and implementing best practices in the field of project-specific cumulative effects assessment.

CAC has argued that the proponent failed to produce an expert in a "core subject area." But the theory of cumulative effects assessment was not the subject of the Keeyask assessment, much less a core subject area. The proponent formulated its approach to cumulative effects assessment based on the CEAA guidance and after workshops with various experts in the theory of cumulative effects assessment, including Dr. Peter Duinker, Lorne Grieg and Michel Berube.

That approach was explained at the outset of this hearing by Ms Cole, who, as was apparent in cross examination by Mr. Williams, is herself qualified as an expert in the theory of environmental impact assessment. What Ms. Cole explained is that the Partnership chose to adopt an approach that treated the environmental assessment as a cumulative effects assessment. For each of the VECs considered, this involved fully understanding how past and current projects and activities have affected the current state of a VEC, the potential cumulative effects of Keeyask and the potential for these effects to interact with reasonably foreseeable future projects and activities. It has done this using a VEC-based approach that considers the long-term

sustainability of each of the 38 VECs considered in the assessment. This has also been accomplished by the partner First Nations in their own environmental evaluation reports which explicitly speak to their experiences with past hydro-electric and other developments and their perspectives on how Keeyask will act cumulatively with these developments to affect their communities. Throughout this hearing, the Partnership has demonstrated through its testimony and that of participant witnesses how collectively this represents a robust cumulative effects assessment as defined by experts in the field, federal guidance documents and the CEC in its own recommendations following both the Wuskwatim and Bipole III hearings.

In fact, this approach accorded with the principles explained in basic text books on environmental assessment such as the one written by Dr. Noble.

For example, in cross examination, Dr. Noble agreed with setting the spatial scope for cumulative effects assessment on the basis of maximum zones of detectable influence.

> MS. ROSENBERG: And now is a question for Dr. Noble because this is something I got from your book. One of the principles for spatial scoping that you talk about in the cumulative effects chapter of your book is called, it's a heading called "Maximum zones of detectable influence." Do you recall writing that? It's on page 207 of your book.
>
> DR. NOBLE: Yeah.
>
> MS. ROSENBERG: And what you say is that: "Boundaries for cumulative effects assessment at a project specific level should be established where the impacts of that project are no longer detectable."
>
> DR. NOBLE: That's right.
>
> MS. ROSENBERG: Do you recall writing that?
>
> DR. NOBLE: Yeah.
>
> MS. ROSENBERG: And that would take account of both direct and indirect effects, correct? But your boundary would stop at the maximum zone of detectable influence for that project.
>
> DR. NOBLE: Yes, for the particular VEC of concern, yeah.

CEC Hearing Transcript November 12, 2013, Pages 2765-2766

But the selection of an *approach* is only the *beginning of the cumulative effects assessment process*. Application of the approach requires specialized knowledge in each of the disciplines related to the potential impacts of the proposed Project. The pathways analysis required to identify and study possible cumulative effects requires understanding of variables which are not theoretical but real, for example, the extent to which impacts on sedimentation caused by

Wuskwatim, Keeyask and Conawapa may extend downstream and for how long into the future. This is not a matter of expertise in the theory of cumulative effects assessment, but rather in engineering and chemistry. While Drs. Gunn and Noble cited 29 references in their report, almost half of them on the theory of cumulative effects assessment, none were reports on sedimentation. On the other hand, the sections of the Physical Environment and Aquatic Technical volumes dealing just with water quality and the physical processes relating to sediment contain *12 pages* of *technical references*. That is the difference between theory and the application of the theory.

In its written argument, CAC repeats a number of the comments made by Drs. Gunn and Noble in their report. The problem is that, while their articulation of theory was interesting and perhaps useful, their comments on the specific merits of the Keeyask assessment did not hold up on cross examination. Their allegations about "futures" analysis all were shown to be wrong. Firstly, they alleged that the life of the Project was not stated. That was manifestly not so and finally admitted in cross examination. Secondly, they claimed that the temporal limits of the impact analysis were vague or unspecified. In cross examination, however, Dr. Noble conceded that future temporal limits were specified and that in fact, this was "one of the really good parts of the environmental impact statement."

> "MS. ROSENBERG: Now the temporal scope, general approach, is set out there. Agreed?
>
> DR. NOBLE: Yes.
>
> MS. ROSENBERG: And if you will look further down the page, do you see a bullet point called "For future with and without project conditions"?
>
> DR. GUNN: Um-hum.
>
> MS. ROSENBERG: Do you see that?
>
> DR. NOBLE: I see that.
>
> MS. ROSENBERG: Do you want to read it to me?
>
> DR. NOBLE: Yeah, I've read this before. This is an example from one of the really good parts of the environmental impact statement. "For the future with and without project conditions is as far into the future as needed to capture potential project effects but no less than 100 years after project operation commences and this is the assumed life of the project."
>
> MS. ROSENBERG: And do you recall, if you read further into that terrestrial environment volume, you would understand that the first 30 years of that analysis is quantitative and that after that, the assessment is qualitative?

DR. NOBLE: That's right, yeah.

MS. ROSENBERG: **So is the temporal scope unclear?**

DR. NOBLE: **Certainly not for the analysis in the terrestrial environment supporting volume.**

MS. ROSENBERG: **And if I tell you that there's a similar section in the aquatic volume?**

DR. NOBLE: **I'll believe you.**"

CEC Hearing Transcript November 12, 2013, Pages 2792-2793

This was the very "prospective analysis" that in their report was said to be weak.

Thirdly, they confused the prediction of *future trends* in the impacts of Keeyask on VECs with the identification of *future projects or activities* to take into account.

"MS. ROSENBERG: I think we're talking about two different things, Dr. Noble.

DR. NOBLE: I think so.

MS. ROSENBERG: I think we're talking about projecting forward the trends on all of the variables that were carefully analyzed and thinking what will happen with those trends 30 years in the future, and thinking about what's reasonably likely to appear on the landscape during that 30 year horizon and taking that all into account versus some sort of prospective thinking about what are the future options for other sorts of development.

DR. NOBLE: Yes, okay."

CEC Hearing Transcript November 12, 2013, Pages 2775-2776

The list of future projects and activities was created on the basis of the "reasonably foreseeable" standard set out in CEAA guidance, which Dr. Noble admitted to be good practice.

"MS. ROSENBERG: So we have talked about scoping but we have a lot of different types of scope there, right? We are scoping in and out one of the future projects that you are considering, correct?

DR. NOBLE: Yes.

MS. ROSENBERG: And that was done under regulatory guidance, correct?

DR. NOBLE: Correct.

….

DR. NOBLE: The traditional approach has been what's known, what may happen and what's hypothetical. But I mean we normally restrict ourselves to known developments in terms of scoping and other types of future projects and activities.

MS. ROSENBERG: And I believe the legal criterion in the 2009 operational statement is reasonably foreseeable, correct?

DR. NOBLE: That's correct. I don't know if that's a legal criterion.

MS. ROSENBERG: **Did you look at the list of future projects that were scoped in for this project?**

DR. NOBLE: **Yes, I did.**

MS. ROSENBERG: **And those were the ones that the proponent saw to be reasonably foreseeable, correct?**

DR. NOBLE: **Fair enough.**

MS. ROSENBERG: **And those were the ones taken into account?**

DR. NOBLE: **Yes.**

MS. ROSENBERG: **Not other ones, not other hypothetical ones or theoretical ones.**

DR. NOBLE: **That's right**."

CEC Hearing Transcript November 12, 2013, Pages 2772-2773

That list of future projects was reviewed by both Manitoba and Federal regulators.

Further, the Keeyask partners understand very well what is and isn't likely to occur in the future in their resource use areas. The maps reviewed in cross examination on the Athabasca River example used by Drs Gunn and Noble illustrate the differences between the heavily developed Athabasca River with multiple current and potential future projects, and the Nelson River. Reviewing this example explains why Drs Gunn and Noble were mistaken on their points regarding the Partnership's prospective analysis:

"MS. ROSENBERG: [*Referring to the Athabasca River*] I see the hatched area is agriculture, and I take it that's agricultural impacts on the river, and then you have all of the Xs represent oil and gas wells, and then the diamonds represent point source sewage discharge into the river, and then you have some cities and also pulp mills, and you show all of those things as they affect the Athabaska[*sic*] River. Have I fairly represented it?

MR. NOBLE: That's right.

MS. ROSENBERG: Now, I have to tell you that when I saw that map particularly, a light bulb went on in my head, and I realized that there was exactly the death by a thousand cuts, almost literally, the tyranny of small decisions that you have been talking about. It is an example of a process of environmental degradation caused by small and repetitive insults, and the Athabaska is an example of that in your view, correct?

MR. NOBLE: Yes, some of them small and some of them large.

MS. ROSENBERG: But a lot of them.

MR. NOBLE: Quite a few.

MS. ROSENBERG: And then I thought about that quite a bit, and I thought that point of view that you espoused makes sense with those many, many small decisions. And now I want you to look at the map that was just put in front of you. And that would be a map of the Keeyask region and you see on it -- I think you see the Manitoba Hydro infrastructure, and what that is displaying as well as the resource management areas of the four First Nations... where resources are managed by a First Nation together with Manitoba, and the boundaries you see there are the boundaries that are shown on the map. And the First Nations who are partners with Manitoba Hydro particularly wanted me to ask you to take note of the fact that what they see in that map, when they look at it, is Manitoba Hydro and those four First Nations. And I'm wondering if you can see that?

MR. NOBLE: I can see Manitoba Hydro and the four First Nations, is that --

MS. ROSENBERG: That's what I want you to see. Agreed?

MR. NOBLE: Yes, I can see that.

MS. ROSENBERG: And that's all they see when they look at that map.

MR. NOBLE: That's all that appears to be labeled on it.

MS. ROSENBERG: That's all that's on it.

MR. NOBLE: Okay."

CEC Hearing, November 12, 2013, Pages 2867-2869

In its written argument, CAC also repeats the Gunn and Noble allegation that "a regional study area effectively minimized effects," but that conclusion was shown to be not only contradicted by other comments in their report but also clearly wrong. On cross examination Drs. Gunn and Noble conceded the excellence of the Keeyask assessment on the criteria they had advocated at the Bipole III hearing, including: retrospective analysis back to a historic reference condition;

the assessment of significance against benchmarks; and the establishment of *regional study areas based on eco-system boundaries*:

> MS. ROSENBERG: You said: "Although total core area would decline by approximately 135 square kilometres, the percentage of the regional study area in core area is expected to remain higher than 80 per cent of land area, which is well within the range for low magnitude core area effects." And I would suggest to you that is an example of the assessment of significance against benchmarks. Agreed?
>
> MS. GUNN: Yes.
>
> MS. ROSENBERG: And against a historical reference condition?
>
> MS. GUNN: Yes.
>
> MS. ROSENBERG: And the benchmark gives you the health of the environment going forward. Correct?
>
> MS. GUNN: Yes.
>
> MS. ROSENBERG: And the historical reference condition gives you, where did we come from in the past?
>
> MS. GUNN: That's right.
>
> MS. ROSENBERG: Isn't it the case that you noticed as a positive that the terrestrial assessment, which is what we are talking about here, used eco-system boundaries as the measure for where to set those regional project --
>
> MS. GUNN: Yes.
>
> MS. ROSENBERG: They did that?
>
> MS. GUNN: Yes.
>
> MS. ROSENBERG: So that's an appropriate measure?
>
> MS. GUNN: Yes, it is an appropriate measure, yes.
>
> …
>
> MS. ROSENBERG: And you said actually in your Bipole III testimony that there are different ways to set those thresholds, but they could be ecological limits?
>
> MS. GUNN: Yes.

MS. ROSENBERG: And you said part of what one does is determine minimum viable population levels?

MS. GUNN: Yes, that was done.

MS. ROSENBERG: Then you look to see the minimum habitat needed to support those population levels?

MS. GUNN: Yes. And that was done.

MS. ROSENBERG: Correct?

MS. GUNN: Yes.

MS. ROSENBERG: Then you went on to say that thresholds can be ecological or they could be benchmarks, which is an acceptable amount of change. Correct?

MS. GUNN: Yes.

MS. ROSENBERG: Or they could be --

MS. GUNN: Yes, we thought that was an element of good practice here.

MS. ROSENBERG: And I'm going to suggest to you then that what you see displayed on the slide and in this assessment is actually an example of the method you advocated at the Bipole III hearings?

MS. GUNN: Absolutely, but it is not what this piece of this report was about, that wasn't the point that was being made in using this quote.

MS. ROSENBERG: When the regional boundaries were set for this assessment, it was done based on a set of criteria. Agreed?

MS. GUNN: Yes.

MS. ROSENBERG: And you actually commented that those were appropriate criteria?

MS. GUNN: Yes, I'm not disagreeing with that.

MS. ROSENBERG: So the comparison to the regional study area is the appropriate comparison?

MS. GUNN: Yes, and I'm not disagreeing with that.

CEC Hearing, November 12, 2013, page 2842, line 5 to page 2843, line 3; page 2844, lines 14 to 25; and page 2845, line 1 to page 2846, line 20.

In response to cross examination on the alleged failure to take the routes of Bipoles I, II and III into account, Dr. Noble conceded the excellence of the assessment:

> MS. ROSENBERG: Would you agree that the effects of Bipoles I, II and III on each of the terrestrial VECs were taken account of fully and properly within the regional study boundaries that were set?
>
> MS. GUNN: I can't recall with certainty, you know, the evidence that would support that. But I would, if you are asserting that was true, I would accept that assertion.
>
> MS. ROSENBERG: You are not challenging it?
>
> MS. GUNN: No, I won't challenge it, I can't recall.
>
> MR. NOBLE: Within the study area that's defined, and within the boundaries that are drawn, then my recollection is based on the intactness and core area habitat that it was included within the boundaries that are shown.
>
> MS. ROSENBERG: Past, present and future?
>
> MR. NOBLE: I know for sure past and present. I would only be -- yeah.
>
> MS. ROSENBERG: Look at the slides, sir, past, present and future?
>
> MR. NOBLE: Past, present and future, sure, within the regional boundary that is identified.
>
> MS. ROSENBERG: Significance assessed against benchmarks.
>
> MR. NOBLE: Within the context of the study area, yes.
>
> MS. ROSENBERG: **Within the context of the regional study area for every VEC?**
>
> MR. NOBLE: **Yeah, I can't answer that.**
>
> MS. ROSENBERG: **You are not challenging it?**
>
> MR. NOBLE: **No, I'm not challenging because I don't know.**
>
> CEC Hearing, November 12, 2013, page 2864, line 10 to page 2865, line 22

CAC suggests that any point made by Drs. Gunn and Noble, and other witnesses, that was not challenged on cross examination should be accepted as accurate. There is no “rule of evidence” or principle that a decision to refrain from cross-examining a witness on some aspect of the witness’s testimony, or, indeed, a decision not to cross-examine at all “must” result in a “finding” or “conclusion” that the party who chose to refrain from cross-examining has “admitted”, or “agreed” to the testimony that was not subject to cross-examination.

Understandably, those citizens who have been weaned on court room television or movie dramas have never been taught this. Most lawyers do know better. Very good lawyers who have experience in courts and hearings know well that there are a number of reasons why legal counsel may waive the opportunity to cross-examine or confine cross-examination to only a few topics. For example, if the testimony was not relevant to the issues before the court, or tribunal, cross-examination ought to be waived. Alternatively, if it is apparent that little weight will be given to the testimony, or if the testimony merely corroborated that of the advocate's client, there is no persuasive reason to carry on with an extensive cross-examination.

It is ultimately the obligation of a judge, or the members of a tribunal, to assess and weigh all of the evidence they have heard. If counsel can see a purpose in cross-examination, such as securing admissions helpful to her client or discrediting the adverse witness or casting some doubt on the thoroughness and reliability of the preparation done by an expert witness, then the testimony given through such a cross-examination may be of some help to the judge or tribunal. However, the best and generally the most effective evidence in response to adverse testimony is the evidence, written and oral, given by the counsel's own witnesses. A judge, or tribunal, is not able to disregard that oral and written evidence, where it contradicts adverse testimony, simply because no cross-examination was conducted on some testimony that contradicted it.

Were this not the case, parties in trials or hearings would have no alternative but to cross-examine every single witness on every single aspect of that witness's testimony with which they disagreed out of concern that a failure to do so would be cited in final argument as "conclusive" proof that the adverse evidence or 'point of view' "must" be true. Happily, only those who do not know better assert such things in final arguments and such ill-advised assertions "must" be dismissed.

Given the above, no such effort was made to cross-exam every single aspect of the evidence prepared by Drs. Gunn and Noble or of any other participant's expert. It is submitted that the weight of the evidence supports the excellence of the technical assessment, including the priority plants and the wetland analysis, which was one of the examples used by Dr. Ehnes to illustrate the terrestrial effects assessment and which was reviewed again in cross examination of Dr. Luttermann.

We also suggest that the Commission take into account the explicit limiting statement made by Dr. Gunn in cross examination by Ms Whelan Enns:

> "MS. WHELAN ENNS: Thank you. In your reading, your review and your study in terms of cumulative effects assessment, did you find -- and I remember what you've said in terms of the VECs approach and the compliments and also the best practices in Canada in terms of VECs approach, did you, though, in your review and your analysis identify any potential VECs, or VECs that you would have expected to see in the EIS and this CEA?

MS. GUNN: I don't think that we could comment on that because it wasn't part of the review framework that we were employing. That wasn't, you know, a piece of the work that we sort of undertook."

CEC Hearing, November 12, 2013, Pages 2899-2900

Keeyask & Regional Cumulative Effects Assessment

Many hearing participants have argued that the assessment of Keeyask is somehow deficient because the regional cumulative effects assessment recommended as part of the CEC's Bipole III report is not yet complete. The Partnership takes exception to this argument. It has demonstrated that the cumulative effects assessment submitted for Keeyask meets the best practice goals of a project-specific cumulative effects assessment – exactly what is asked of each and every project proponent in this country. The cumulative effects assessment accounts for the past and it accounts for the future. It considers all the impacts to each VEC, not just the ones related to Keeyask. And, it assesses the significance of effects against the health of each VEC and the sustainability of each VEC, exactly as experts and academics in the field of cumulative effects assessment have advised should be done.

The CEC has already recommended that Manitoba Hydro in cooperation with Manitoba look at the cumulative impacts of past hydro development in the Nelson River sub-watershed. The Minister has taken up this advice and the work is underway. Any aspects of this broader work that are relevant to the potential cumulative effects of the Keeyask Generation Project have already been contemplated in the Partnership's approach to cumulative effects assessment and are addressed by the Partnership in its EIS filing. As such, a further recommendation in that regard is not required.

From the Partnership's perspective, the record created in this hearing process and the overall regulatory review contains everything the CEC needs to recommend that the Project proceed, and everything the Minister needs to approve and set conditions for the Keeyask Generation Project.

As has previously been observed, the proponent of the Keeyask Project is not Manitoba Hydro, but rather the Keeyask Hydropower Limited Partnership which includes Hydro. Over the past 38 days of hearings, a significant part of the evidence has been directed not at this Project or this proponent but at past projects built and operated by Manitoba Hydro. Even where there were attempts to draw a link between the Manitoba Hydro issues alleged to continue for existing development on the Nelson River and the Keeyask Project, the evidence was still more focused on the past projects and allegations of unresolved effects rather than on the Keeyask Project.

Again, as has been noted, the CEC was charged with reviewing the Keeyask Project. It was not asked to review the history of the hydroelectric system on the Nelson River from its inception to

the present day or come to any conclusions or recommendations with respect to the existing system. As part of its assessment, the Partnership has done a thorough job of reviewing and understanding the effects of past projects that have the potential to overlap with effects anticipated as a result of developing Keeyask. It has not reviewed, nor was it incumbent upon the Partnership to review, the effects of all past hydro-electric developments in other areas that are in no way affected by Keeyask.

Notwithstanding the foregoing, it should be noted that Manitoba Hydro has considered and taken steps to assess and address the effects of past developments. The CEC will be aware from the extensive filings by the Partnership that agreements of one form or another to deal with past effects have been concluded with every First Nation along the Rat, Burntwood and Nelson Rivers. In addition agreements are in place with the Kisschickimee Treaty Council in Churchill and the South Indian Lake community (succeeded now by Op-Pipon-Opwiwin Cree Nation). Further agreements have been reached with either the Northern Affairs communities or community groups in those communities (on behalf of all of the residents) which are either adjacent to or within the region generally viewed as being affected by various forms of hydro development. It should be noted that the beneficiaries of such agreements in the Northern Affairs communities includes persons who would identify themselves as Métis.

V. IMPACTS ON THE RIGHTS AND INTERESTS OF OTHERS

The extensive engagement process with the Keeyask Partner First Nations located in the vicinity of the Project and the Partnership's thorough and inclusive Public Involvement Program, identified and confirmed all topics of importance (valued environmental components and supporting topics). It also provided another mechanism through which to identify and confirm possible Project effects and the appropriateness of related mitigation for all stakeholders.

Without a doubt, the majority of time and effort in communication and consultation took place in and with the Partner communities. They are the ones living in the vicinity of the Project and most deeply affected by it. As a result of their participation, this Project is rich in Aboriginal Traditional Knowledge and guided by their strong commitment to environmental stewardship.

This engagement process, however, was not to the exclusion of others interested in and potentially affected by Keeyask. Manitobans beyond the in-vicinity Partner communities also had a full opportunity to be engaged in the Project through the Partnership's comprehensive Public Involvement Program (PIP), implemented between 2008 and 2013.

The PIP provided the opportunity for Aboriginal and other communities and organizations, as well as the general public, to be engaged through three substantive rounds of public involvement implemented at key stages during the Environmental Assessment process.

The PIP design was based on recent Wuskwatim PIP experience, the core values of the International Association of Public Participation, and a review of public engagement processes and practices throughout Canada.

Through the PIP, over 130 stakeholder groups throughout Manitoba were informed of the potential Project, and opportunities were provided for their involvement, if they so choose. In excess of 70 PIP events were undertaken in the five-year period.

During the PIP, participants provided input into the best methods to communicate in future rounds, the most appropriate timing for PIP events to be scheduled, and the best locations for maximizing participation.

A variety of methods were used to provide information to the public and to receive their feedback, including small community meetings, leadership meetings, workshops, open houses, newsletters, presentations, use of translation services, newspaper, poster and radio advertising, and a Project website.

For those whose interest in the Project was not directly identified in the early stages of the PIP, the numerous public advertisements and Project website with contact information provided venues to solicit additional input from the public and to allow such interested parties to come forward.

Results of the PIP were considered in the environmental assessment process and provided in a transparent manner in the Keeyask Generation Project Public Involvement Supporting Volume. They also informed the VEC selection, effects assessment, and the many mitigation measures and monitoring programs developed.

The Partnership would like to make special mention of its efforts with respect to some of the Participants and particular issues raised by each of those during the hearing and final argument:

The Manitoba Métis Federation

a) Engagement

Manitoba Hydro, on behalf of the Partnership, engaged in special Keeyask-related processes with the Manitoba Métis Federation (MMF).

This organization and its members had the opportunity to participate directly in the PIP if they so chose. The MMF were invited, and encouraged, to participate in the PIP and special arrangements were offered to support their participation - these offers to the MMF were refused in all but Round 1 of the Program.

In addition, the MMF has been involved in processes related to Keeyask since it became a participant in the Hydro Northern Training and Employment Initiative in 2004. Since that time,

over 150 meetings that have addressed Keeyask in some way have taken place. Success in reaching agreement is not, in this case, an indication of a lack of effort on the part of Manitoba Hydro.

At the insistence of the MMF, these meetings have been organized by, and taken place with the MMF Head Office.

Métis witnesses at this hearing expressed a strong desire at the local level for more one-on-one discussions directly with the Proponent. Anita Campbell, in particular, indicated that not once has she had the opportunity to sit down and speak with Manitoba Hydro about the issues in her community:

> MR. BEDFORD: So, I have certainly heard you this morning. Something that I heard at past hearings regarding your concern, I think the words you used was there is no relationship in the north between the Métis and Manitoba Hydro. So, based on my personal experience, which I summarized ever so briefly about how in my life I have tried to build relationships with other human beings, I have firmly concluded that the time has come for me to urge my other client, Manitoba Hydro, to go forward into the world and seek out Métis people where they live, in their communities, in Thompson, in the north, and to engage them in conversation about what they do, where they hunt, where they fish, where they do their resource gathering. And in the same conversations, perhaps over coffee or over a meal, to describe what it is my colleagues at Manitoba Hydro do when they plan these projects, these dams, and when they operate these dams.
>
> Would you agree with me that the time has come for someone like me to urge my colleagues at Manitoba Hydro to get out and to meet Métis people where Métis people live?
>
> MS. CAMPBELL: When I'm down in the city, I always tell people to be careful of their "perimeteritus" because there are things, people that exist outside of the perimeter. People are so amazed when they come up north, not only of how beautiful it is up there, but how we lack in so many resources.
>
> With Vale, we have such a good relationship with Vale that we can call on individuals in there and have that coffee, have that conversation, have that working relationship with them and say, here is why you're not getting what you're getting. Here is why you're not attracting the people that you should be attracting.
>
> I have never once sat down with anybody from Hydro in that capacity to say to them, here are some of the things you might be wanting to change, in terms of whether it's hiring, whether it's retaining, whether it's keeping people, whether it's doing business differently. Not once have I had that opportunity to sit down.

> Is it time? It's way past time. The time was there a long time ago. And if that's the direction that Hydro is seeking to go, and I'm hoping that's the direction your current president is going in, but they need to start sitting down not only with First Nations, but other Aboriginal people that exist."

CEC Hearing, December 3, 2013, Pages 4747-4749

Manitoba Hydro, on behalf of the Partnership, would have welcomed the opportunity to meet directly with local Métis persons interested in the Keeyask Project – an opportunity that was offered on many occasions and consistently rejected by the MMF Head Office.

Between 2008 and 2013, Manitoba Hydro and the MMF met over 30 times specifically to come to the agreement reached in June 2013 for the MMF to undertake three projects - a Métis-specific traditional land use and knowledge study, a socio-economic impact assessment and a historical narrative for the Keeyask Resource Use Regional Study Area identified in the EIS. The delay in reaching agreement is not for lack of effort on the part of Manitoba Hydro, nor was it a strategy to delay the MMF's ability to undertake this research. On behalf of the Partnership, the company has dealt and will continue to deal with the MMF on relationship matters in a good faith manner and based on the best of intentions.

We have repeatedly heard throughout these hearings that the MMF are "being rushed" to finish this work in a six-month time frame. Nothing could be further from the truth. Since discussions began in 2008, the negotiated arrangements have been based on MMF-developed workplans and timelines that have consistently referenced a 6 month time period. In fact, through the course of cross-exam, we heard from Ms. Larcombe that study interviewees were actually identified in 2010, saving a considerable amount of time and effort at the front end of the Project, once the agreement was finalized.

> "MR. REGEHR: Now if we can turn to slide number 6? My understanding is that your work on the traditional land use and knowledge began back in 2010; is that correct?
>
> MS. LARCOMBE: That's correct."

CEC Hearing, December 4, 2013, Page 4938

Though due in October 2013, the results of these reports and studies are still outstanding and will not be available until at least late February. As such, Manitoba Hydro and the MMF have mutually agreed to extend the deadline for these studies. It has always been our expectation that the agreement reached with the MMF to complete this work was signed in good faith and is one that can and will be accomplished by the organization. This is confirmed by a simple reading of the agreement.

It is notable, however, that the evidence presented at the hearing did not come close to providing the information expected, and was not based on the study area agreed to for the work.

> "MR. REGEHR: So, Ms. Larcombe, were you aware of the requirement for the TLUKS study to be done in accordance with the study areas as set out in the EIS?
>
> MS. LARCOMBE: The work that I did, I was not provided with a contractual arrangement between Manitoba Hydro and the MMF. I was asked to do a TLUKS study for the Keeyask -- I wasn't told, you have to use this area or you use that area. I defined the Keeyask study area based on what I thought would encompass potential use by communities that I was aware that there was Métis presence in. I think that the work that I have done has not excluded any study area that the proponent has identified. So we have not disregarded any of the local or regional study area identified in the EIS. But I was -- I'll make this really clear -- I was not given the agreement between the MMF and Hydro and said, this is your contract. That did not happen."

CEC Hearing, December 4, 2013, Pages 4955-4956

As committed, the Partnership will review the material provided, once available, assess the relevance, and take such actions as may reasonably be required, if any.

b) Impacts on Métis resource users

If the information presented by the MMF at these hearings is any indication, it is anticipated that the results will simply confirm information already presented in the EIS on possible Project effects and mitigation - that there is no Métis community or significant presence in the Keeyask region, nor are there unique traditional uses of the land by Métis individuals in the vicinity of the Project. Project mitigation and monitoring designed for all resource users, and all types of resource use, including that for moose management, is (and will be) appropriate for Métis harvesters. As such, no further mitigation or monitoring will likely be required.

More particularly, both the local and regional study areas included the entire Aboriginal population in those regions, including any Métis residents In addition, any related mitigation would also be available, unless it is specifically included in the Adverse Effects Agreements, and would help to offset any effects that may be experienced by Métis citizens who use the local study area. An example of that is the Waterways Management Program that helps to create safe waterways for any user of the area. Similarly, in accordance with the Access Management Plan, individuals who traditionally use the Keeyask area will be provided access to the Keeyask area along the access road, regardless of whether or not they are members of the Partner communities. Communication products with respect to mercury and fish will be widely distributed so that resource users in the area are made aware of potential risks, with respect to consuming fish that may be taken out of Gull Lake or Stephens Lake.

Ms. Larcombe also confirmed that Métis harvesters who hunt outside the Métis Natural Resource Harvesting Zone found in western Manitoba have to obtain a provincial hunting licence:

MR. REGEHR: It's your understanding that should a Métis person with a harvester's card issued by the MMF hunt outside of the pink areas, they still have to obtain a provincial hunting licence?

MS. LARCOMBE: Yes, that's my understanding for hunting."

CEC Hearing, December 4, 2013, Page 4990

It is understood that the MMF negotiated the agreement it has with the Province in good faith and that Métis citizens are also abiding by this agreement in good faith. Since all licensed hunters have already been accounted for in the Keeyask Environmental Impact Statement, those using the Keeyask region have already been incorporated into the Project's assessment and the Moose Harvest Sustainability Plan developed by the Cree Nation Partners and referenced frequently by the MMF. A more detailed discussion on this issue is found below (see Section "d) Government Negotiations and a General Caution").

Further, on cross-examination, Ms. Larcombe confirmed that her own findings regarding resource use in the local study area (as defined in the EIS) are fairly consistent with the conclusions included the Keeyask Environmental Impact Statement – i.e., that there is very little harvest activity taking place by the Métis in the Resource Use Local or Regional Study Areas:

MR. REGEHR: Now, according to this data here, it would appear to me that using the local study area, as defined by the Environmental Impact Statement, none of the 35 harvesters are harvesting moose within the local study area; is that correct?

MS. LARCOMBE: Your local study area being the footprint of the generating station and the reservoir?

MR. REGEHR: Including the reservoir.

MS. LARCOMBE: That's correct.

MR. REGEHR: And if we go on the basis of the regional study area as defined by the EIS, I was going to suggest that it looks like there could be four to five harvesters, but you can't tell me that because you don't know?

MS. LARCOMBE: Mr. Regehr, I'm not going to analyse on the fly here.

MR. REGEHR: You have presented this map as evidence.

MS. LARCOMBE: And you are asking me to sit here and visually picture what your study area looks like on top of this map. And I'm just not prepared to do it. There's too much potential for error.

MR. REGEHR: So you can't tell me how many people are harvesting within the regional study area, as defined by the EIS, correct?

MS. LARCOMBE: I have not analyzed that data in that manner.

CEC Hearing, December 4, 2013, Pages 4997-4998

Based on the evidence presented, it appears that the majority of Métis harvest is in areas surrounding Thompson and the communities of Thicket Portage and Pikwitonei – locations that are not in any way affected by the development of the Keeyask Generation Project.

The Métis have not been ignored. Their interests, as identified by the Partnership and by their own expert, Ms. Larcombe, have been considered in the EIS and any effects will be mitigated. If new information comes to light, it will be addressed. Not only is that a commitment made by Manitoba Hydro and the Partnership, but it is also a requirement of the JKDA (Article 11.2.4 dealing with Potential Adverse Effects on Others).

c) Section 35 Rights

The terms of reference for the Clean Environment Commission in these hearings do not extend to s. 35 rights. The Manitoba Métis Federation itself has stated that "rights recognition" are not the subject of these hearings (statement of Jason Madden, CEC Hearing, Keeyask, Volume 21, p. 4657, lines 20 and 21; see also final submission by MMF, p. 13, "…the MMF is not asking the Commission to make a determination with respect to the existence of a rights-bearing Métis community in the region…"). It would not be appropriate for the CEC to comment upon the extent to which the Métis have a site-specific Aboriginal right in the Project area. The existence of such rights must be established by convincing evidence that a particular Métis community used a particular geographic area for traditional activities prior to the time of the assertion of European sovereignty.

The litigation of such cases can involve extensive and detailed testimony by academic experts as well as community members. Sometimes particular Métis communities have been successful in proving site-specific rights in respect of a particular area and activity (*Powley*), and sometimes not *R v. Hirsekorn*, 2013 ABCA 242 (CanLII). The Court in *R. v. Goodon*, 2008 MBPC 59, held in favour of the existence of a site-specific right in the area of Southwestern Manitoba, not in the Project area. The CEC should not speculate on whether a court of law would recognize a site-specific s. 35 right in the Project area. A court would decide on the basis of whatever historical evidence on both sides was adduced in a particular proceeding in relation to the specific nature of whatever right was asserted. The MMF submission has provided some sense of what a Métis community might argue in such a case, but a particular litigant might have other or more detailed submissions. For its own part, the Crown might, for example, introduce evidence or argument to the effect that at least some of the first Métis in the area were raised by First Nations' mothers in First Nations' communities, rather than living in distinct Métis communities; (Manitoba Métis

Report submitted by the partnership, dated July 13, 2013, pp. 2-5 to 2-6, referring to the work of Métis historian Jean Legasse); that some scrip takers at the time of the historic treaties were not ordinarily resident in the area or were induced to disavow their First Nations identities by scrip buyers who accompanied the Treaty Commissioners (p. 2-9), or that some Métis communities emerged after the date of the assertion of European control. Proposals concerning that date might vary, depending on the area, from around 1880 to at the latest around 1910. It should also be noted that the communities of Wabowden, Thicket Portage, Pikwitonei, Ilford and Gillam did not exist before 1910, when construction of the Hudson Bay Railway first began. Thompson did not exist until 1956. The compatibility of asserted Métis rights with the historic uses and rights of First Nations might also have to be considered. Any particulars here are mentioned by way of illustration of some of the complexities, uncertainties, and potential controversies concerning s. 35 rights for Métis in the Project area, rather than to invite the CEC to comment upon them. There are other more appropriate forums for discussion, negotiation and resolution of these matters.

Agreements between provincial government and the Métis may recognize a Métis community as having rights in a particular area, but such agreements do not necessarily establish that the right is a historically-established and constitutionally-protected one under s. 35. In any event, the CEC should not speculate on whether the current agreement between the Province of Manitoba and the MMF will be extended to the area of the Project footprint.

Likewise, agreements between the federal government and the Métis National Council, the so-called "Powley Agreements", only establish a process of discussion between the federal government and the Métis National Council – not the MMF. These agreements explicitly do not recognize any rights. In addition, the federal government's Métis Harvesting Guidelines are merely that – guidelines designed to assist federal officers in dealing with Métis harvesters in areas which are monitored by federal officers – national parks, military bases, coastal fisheries and migratory bird sanctuaries – none of which are affected by the Project or exist in Manitoba.

These proceedings would also not be an appropriate forum in which to explore whether there is any basis in law or fairness to extend to the MMF or any local Métis community the same kind of partnerships that have been reached with the First Nations' proponents. The Supreme Court of Canada has by now several times ruled that constitutional equality does not necessarily require the same treatment for all aboriginal persons and groups. The history, rights and practical circumstances of a particular aboriginal community may make it appropriate for a federal or provincial order of government to carry out a program that is focused on that particular community. In *Lovelace v. Ontario*, 2000 SCC 37 (CanLII), the Supreme Court of Canada held that a partnership program concerning casinos could be extended to a group of First Nations, even though it did not also extend to Métis or non-status individuals. In *Alberta (Aboriginal Affairs and Northern Development) v. Cunningham*, 2011 SCC 37 (CanLII), the Court held that

the distinctive identity and circumstances of Métis in Alberta could justify the exclusion of status First Nations' citizens from participation designed specifically for Métis.

The approach that the CEC should take is interest-based, rather than rights-based. The issue is identifying and addressing expected impacts of the Project on the expected use of the area by Métis, regardless of who operates the permitting system for Métis hunting or whether the use has a constitutional foundation. The proponents have acted in a reasonable and diligent manner to identify Métis resource use in the Project area and the potential effects of the Project on them. The design of the Project and mitigation measures have taken into account the current resource users, including Métis, that have been identified. Measures have been put in place to address in a satisfactory manner the potential emergence of resource users, including Métis, who have not been identified so far or who are new to the area.

d) Government Negotiations – and a General Caution

It is incumbent on the CEC, having in mind the Terms of Reference given to it by the Minister, to look behind the positions presented by the MMF.

The CEC has been invited to become an agent and ally of the MMF in its ongoing negotiations and discussion with the Government over extending and expanding the nature and scope of rights recognition and its status as the sole and exclusive representative of all Métis people in Manitoba. This is not within the scope of the reference to the CEC with respect to the Keeyask Generation Project specifically and goes beyond what has been, to date, in the scope of non-licensing recommendations considered by the CEC. The MMF is asking the CEC to take sides in a legal and political dispute and make non – licensing recommendations which would require the CEC to make judgements and interpretations on what are, at their most basic, questions of law.

The MMF asserts generally that the issues and impacts alleged by specific Métis communities have not been dealt with appropriately. Nothing is further from the truth. The CEC will be aware that many communities in northern Manitoba have entered into processes and agreements to resolve their particular issues. The MMF assertion can only be true if one accepts the principle that, notwithstanding the provision of independent legal and technical resources to these communities and groups, any agreement that does not include the MMF as a party or had the MMF as a negotiating agent or otherwise has the imprimatur of the MMF, is not a valid, proper or appropriate agreement.

The MMF has stated before you that the Partnership has failed to capture information on Métis harvest in the Keeyask study area and, as a foundation for that position, takes the position that there is a protected aboriginal right to hunt or take resources within the area. Under current laws and agreements, Métis people harvesting resources are required, and the MMF agreed, to have provincial harvest licences to take resources in the Keeyask study area. This area is outside of the area agreed by the Government and the MMF as being covered by the Harvester Card system.

While the MMF and the Government continue to discuss and explore that issue the CEC should not speculate or attempt to influence that process.

Further, the evidence presented by the MMF shows that the overwhelming majority of the Métis harvest occurs within the vicinity of Thompson and there are no pathways of effect from the Keeyask Project which would impact the identified harvest. The MMF also overlooks the fact that Métis harvest can be easily estimated and extrapolated based on the issuance of game licences. On the specific question of Moose harvest, each harvester would be required by law and agreement to have a Moose tag. If it is alleged that these data are unreliable, then the only alternative that can explain the discrepancy would be illegal harvest and it is doubtful that information of that nature would be made available to any proponent.

The MMF continues its complaints about the Northern Flood Agreement. As some of the CEC may be aware, the development of the Churchill and Nelson Rivers directly impacted treaty rights and also required that Hydro obtain access to reserve land which would be impacted by the works and operations. One of the considerations to be received by Hydro and Manitoba under the NFA was a flooding easement over reserve land. While the MMF asserts aboriginal rights in the Nelson River watershed, these assertions have not been accepted by Manitoba nor have they been determined by the courts.

The MMF also suggests that the CEC advise the Government to specifically name which parties should be consulted for each project. While this recommendation is attractive on its face, consultation is generally driven by what a proponent expects to be the pathways of effects as those impact people in a project region. It would seem somewhat curious that a government which has few project details beyond perhaps a basic project description (to support an application for the start of a licensing process) and some form of draft scoping document would somehow be better positioned than a proponent to determine who ought to be consulted with respect to the preparation of an EIS. This would be similar to suggesting that a proponent should mandate who government consults as part of their process. Each of government and a proponent has consultation mandates, needs and obligations and, therefore, consults various interests as the circumstances dictate. The needs and processes are not necessarily identical nor should they be. To suggest that such a recommendation is required due to, as counsel phrased it, “internal biases and self interest” cannot be sustained in the face of the efforts put forth by Manitoba Hydro on behalf of the partnership to engage with the MMF. The environmental assessment and s. 35 tracks both converge (along with the NFAT Review Process) on licensing decisions that are made by a Minister or Cabinet as the case requires. In the context of the s. 35 track, the duty of consultation is dependent on the existence or plausible assertion of historically based rights in an area. That is also beyond the scope of these proceedings. The CEC, it is respectfully suggested, should not take up any express or implied invitation to use its role in the environmental assessment process to comment upon the appropriate choice of business partners or the manner in which the Crown fulfills its s. 35 duties.

In the context of an environmental assessment, which is of course squarely within the jurisdiction of the CEC, the determination as to who is to be consulted should depend on the impacts that the particular project might have on individuals and communities within its footprint, and is not by its nature a political decision for government. The proponent submits that it has acted in a diligent and thorough manner to consult residents of the Project area and to engage with the MMF. The proponent has also committed to being open and responsive to legitimate concerns as they are brought forward in the future by any of those potentially affected by the Project, including Métis. There has been no demonstration that on the basis of environmental concerns the progress of this Project should be contingent upon the negotiation or conclusion of partnership agreements with the MMF or any other Métis organization, or that such organizations should be brought into the process as monitors of Project effects, rather than being genuinely and entirely welcomed to bring facts, concerns and proposals to the attention of the Project monitors. It has not been shown by evidence in these proceedings that such conditions would be necessary or even productive. They might, to the contrary, entail significant contention, delay and cost that would divert time and resources away from a substantive focus on identifying environmental issues and engaging in appropriate measures for their prevention or remediation.

Pimicikamak Cree Nation

Pimicikamak Cree Nation had the opportunity to participate directly in the PIP. Manitoba Hydro, on behalf of the Partnership, also engaged in a special Keeyask-related process with Cross Lake First Nation/Pimicikamak Cree Nation, consistent with the requirements of Article 9 of the Northern Flood Agreement and this was specifically addressed in Question 53 of the CEC's final questions to the Partnership.

a) Land Use and Occupancy Study

In its final argument before the CEC, Pimicikamak has recommended that, if the Keeyask Project is to be licensed, such licence be subject to the following condition:

> "**A Land Use and Occupancy Study must be conducted to determine Pimicikamak's connections to, values in, uses and occupancy of the land. An impacts assessment (impacts from Keeyask on the values, connections and uses and occupancy of the land, identified through the LUOS), must be completed before Keeyask may be constructed or operated. Once these Studies are complete, Manitoba Hydro and the Partnership must meet with Pimicikamak to discuss the resulting necessary accommodation and mitigation measures, and must apply such accommodation measures to the extent possible."**

The Proponents have already "provided the information on current and proposed use of land and resources by each Aboriginal group (not just the KCN partners) based on information provided

by the Aboriginal groups or, where Aboriginal groups did not provide this information, on available information from other sources" (Response to EIS Guidelines Keeyask Federal Guidelines Concordance Table page xxvii) The Partnership prepared a draft response to CEAA-0014, as it related to the Pimicikamak, and provided that draft response to Pimicikamak. Pimicikamak provided comments and a revised final draft was filed with the CEAA and forms part of the record before the CEC. The conclusions found within that response have not been contradicted by any submissions made by Pimicikamak during this hearing. To the contrary, even in its final submission it does not identify any adverse environmental impacts of the Keeyask Project on Pimicikamak, but speculates about how such adverse environmental impacts, if there are any, would be dealt with.

In its final argument, Pimicikamak suggests that the Keeyask Project falls within Pimicikamak's traditional territory. However, the only treaty signed by TA-PAS-TA-NUM, the Chief referenced by Pimicikamak as signing the treaty, is Treaty 5. The Keeyask Project does not fall within the area ceded under Treaty 5, but within the area ceded under adhesions to Treaty 5, signed by other First Nations. The map that Pimicikamak references as depicting its traditional territory includes the current resource areas of a number of other First Nations. There is no evidence before the Commission that this is an area that is currently extensively used or harvested by Pimicikamak or its members.

The Partnership respectfully submits that there is not a shortage of evidence about current and proposed use of land and resources by Aboriginal groups or about the potential adverse environmental effects of the Keeyask Project on such uses. As a consequence, there is no need for such a study for the CEC to make its report, nor for such a recommendation to be included by the CEC in its report on the proposed Keeyask Generation Project.

Manitoba Hydro's relationship with Pimicikamak is much broader than the Keeyask Generation Project and the study proposed continues to be considered by Manitoba Hydro based on such broader considerations. The Partnership at no time considered that there was any gap that needed to be filled through information to be gathered under the proposed study, nor that in the absence of such study, was the Keeyask EIS deficient.

In addition to the information submitted specifically with respect to Pimicikamak, Aboriginal people beyond the Partner First Nations were considered among other residents of the Socio-economic Local and Regional Study Areas. In the Local Study Area, this included analysis of effects to residents of Thompson and Gillam inclusive of their Aboriginal populations. Analysis of effects stemming from physical and biophysical changes arising from the Project include potential changes to community health (including mercury and human health), and travel access and safety. Mitigation measures identified were inclusive of all residents in Gillam and Thompson, Aboriginal or otherwise. Physical effects on heritage resources focused on the presence of those resources relative to physical changes anticipated by the Project and are not

specific to any one community. Other effects stemming from Project expenditures, such as on the economy, employment, training, and income, or effects to population, infrastructure and services, provided consideration of effects on Gillam and Thompson as well. In the case of labour expenditures on construction and the effects on employment, the analysis considered the Aboriginal population of northern Manitoba as a whole because such opportunities are governed by the Burntwood-Nelson Agreement, which provide preference to qualified Aboriginal people. This is not related to the physical/biophysical pathways of effect.

In summary, the Partnership has made all necessary efforts to identify effects of the Keeyask Generation Project, including on land and resource uses by Aboriginal people, in order that mitigation can be identified to reduce those effects. The Partnership has identified a broad array of mitigation measures that are included in the filing. The Partnership remains open to considering further mitigation if at any time new information is provided (through monitoring, new studies, or other relevant sources) that additional mitigation measures are required or appropriate.

b) Northern Flood Agreement Implementation

Pimicikamak also requested the following condition be recommended by the CEC relating to the Northern Flood agreement:

> "**The NFA must be implemented in its full spirit and intent. The NFA must be implemented in accordance with annual action plans developed jointly by Pimicikamak and Manitoba Hydro, and funded by Manitoba Hydro, through good faith best efforts negotiations and in accordance with the spirit and intent of the NFA. The action plans should provide that to the extent feasible, Pimicikamak should manage and employ its citizens to work on, the implementation programs. The resources required for such management shall be provided by Manitoba Hydro."**

As discussed under the section relating to the MMF, the Northern Flood Agreement ("NFA") is a multi-party agreement with multi-party obligations. It does not involve only Manitoba Hydro and Pimicikamak. Canada is also a party, as is Manitoba and the five NFA First Nations, who at the time were represented by the Northern Flood Committee. The Partnership itself and some of the partners in the Partnership, are not parties to the NFA

The NFA contains its own provisions for implementation and enforcement, including arbitration and appeal by way of stated case to the Court of Appeal of Manitoba. There have been many arbitrations before the NFA Arbitrator and there have been a number of appeals to the Court of Appeal of Manitoba. The Cross Lake First Nation and, in some cases, Pimicikamak as the representative of the Cross Lake First Nation, have matters in arbitration under the NFA.

The NFA, and the implementation and enforcement of its provisions, are not matters within the scope of the CEC in relation to the hearings on the Keeyask Generation Project.

Shamattawa First Nation

In terms of engagement with respect to the Keeyask Generation Project, Shamattawa First Nation was:

- Invited to participate in the Round One PIP, but declined the invitation;
- Participated in a PIP Round Two community meeting; and
- Participated in a PIP Round Three Chief and Council meeting and community meeting.

Land and resource use for traditional purposes by Shamattawa First Nation members has not been documented in the Keeyask Resource Use Local Study Area. Therefore, traditional land and resource use undertaken by Shamattawa First Nation Members is not expected to be directly affected by the Project.

Based on available information, land and resource use for traditional purposes has occurred and is occurring in the Keeyask Resource Use Regional Study Area. It is not expected that this use and associated travel and navigation will be affected in any noticeable way. No significant adverse effects are expected. However, Manitoba Hydro, on behalf of the Partnership, remains committed to consider any additional information provided on the use of lands and resources for traditional purposes by Shamattawa First Nation. Upon review of further information provided, Manitoba Hydro (on behalf of the Partnership) will consider the need to develop appropriate or alternate mitigation strategies, if necessary.

There has also been discussion about the impact of York Factory First Nation Offsetting Programs under the YFFN Keeyask Adverse Effects Agreement. Those programs can be carried out in a wide variety of areas, including anywhere in the YFFN Resource Management Area (RMA), an area set out in the 1995 Comprehensive Implementation Agreement (1995 CIA) between YFFN, Canada, Manitoba and Manitoba Hydro.

The YFFN RMA consists of two regions: the larger coastal RMA and the much smaller Trapline 13 area around York Landing. The coastal portion of its RMA is in the “heart” of YFFN traditional territory and YFFN members have continued to use this coastal area since being relocated to York Landing in 1957. YFFN has cabins at Ten Shilling Creek and at York Factory.

The 1995 CIA also provides for a Resource Management Board with representatives from YFFN and the Province of Manitoba. The Resource Management Board may develop land use plans and/or resource management plans for the YFFN RMA. However, the Resource Management Board must hold at least one public meeting on any such plan and must also give notice to Manitoba Hydro, Shamattawa First Nation and Fox Lake First Nation of such a meeting and

provide a copy of any proposed plan. While YFFN is in the very early stages of such planning, YFFN has already initiated contact with Shamattawa First Nation.

There are Shamattawa First Nation members who currently hold trapping licences for commercial purposes in the YFFN RMA and so there is the potential for Offsetting Programs to be carried out in those trapline areas. However, The commercial interests of Shamattawa First Nations members who hold trapline licences are not expected to be affected. Therefore, there is no rationale for Shamattawa First Nation involvement in setting conditions for the York Factory First Nation Offsetting Programs and management of resources in the YFFN Resource Management Area. In addition, trapline allocations by the Province of Manitoba make the trapline holder the furbearer manager.

Potential effects of Keeyask to Shamattawa First Nation's collectively held Aboriginal and Treaty Rights are being assessed through the Crowns' Section 35 consultation processes. The Partnership is not involved in this consultation process.

Peguis First Nation

It has been alleged by the Peguis First Nation that it was not properly engaged in the Keeyask Project's PIP, and that the Partnership should have known its interest in the Project because of the community's claim that it has been affected by past hydro-electric developments.

Peguis First Nation's main community settlement is located roughly 700 kilometres from the Keeyask Generation Station site. Manitoba Hydro provides power for all Manitobans and has infrastructure throughout the province. Many communities and individuals claim they have been affected by these developments; this does not necessarily mean they are potentially affected by Keeyask development.

The PIP was designed specifically for the Keeyask Project and to understand the effects of the Keeyask Project. It was not a program to engage with communities on their perspectives and concerns with respect to previous hydro-electric developments.

In order to identify potential for the PIP, the Partnership undertook an extensive stakeholder mapping program that began as early as 2000. It looked at pathways of effects related to the Project and who might be potentially interested or potentially affected by the Project. In order to capture all who might be interested, it was advertised extensively throughout Northern Manitoba when there were open houses in both Thompson and Gillam. It was also advertised in Winnipeg when there were open houses and the website clearly was accessible to everyone.

Round One of the public involvement program included meetings directly with communities, based on the Partnership's understanding of communities who were likely interested in participating in the Project, based on their past discussions with Manitoba Hydro, their proximity

to the Project, or other related interests. It also included a series of public open houses and workshops.

It was and remains the Partnership's view that there are no pathways of effect from the Keeyask Project that have the potential to affect Peguis First Nation. Despite the opportunity to do so, Peguis First Nation did not express any interest in the Project until it applied for the CEC's Participant Assistance Program. This means the Partnership was not aware of their interest in either Rounds One or Two of the PIP. However, as soon as the Partnership became aware that Peguis First Nation was interested, it did reach out to the community. The Partnership provided the community with all relevant Project materials, including the Executive Summary, the EIS, the video, all of the previous PIP information, and copies of all newsletters. The community was also then invited to participate in Round Three of the PIP.

To date, no additional interests or impacts have been ascertained that have not already been considered for other resource users or interested parties. Like others, Peguis First Nation would like to see a Regional Cumulative Effects Assessment, but their request is not unique to their community.

Peguis has also asserted Treaty Land Entitlement rights in the vicinity of the Keeyask Project. In 2008, Peguis' Treaty Land Entitlement Agreement (TLE Agreement) was executed. Peguis' TLE Agreement entitles Peguis to select up to 55,038 acres of Crown Land and acquire or purchase up to 111,756 of private lands.

Peguis' TLE rights are minimal at best. Numerous restrictions on selecting and acquiring land along the Nelson River and within the Keeyask Project area, as well as the clear contemplation of hydro development and how to accommodate treaty land entitlement processes with hydro development illustrate that Peguis cannot now claim that any impacts have not been addressed.

As presented on December 11, 2013, Peguis has not made any Crown Land selections or private land acquisitions outside the Treaty Area, nor within the Treaty 5 area. It should also be noted that at the presentation on December 11, 2013, Peguis relied upon the incorrect agreement with respect to its ability to select and acquire land. Peguis representatives testified that Peguis could select Crown Land and acquire private land in its Treaty Area and within its traditional territory. Upon questioning, and as later confirmed by Peguis legal counsel in Undertaking #19, such a provision was present in the Manitoba Treaty Land Entitlement Framework Agreement dated May 29, 1997. Peguis is not a party nor entitled to rely upon the provisions of the Framework Agreement and the Peguis TLE Agreement has no provision allowing it to select within its "traditional territory."

There are principles with respect to the selection and acquisition of land under the TLE Agreement. A key defined term within the TLE Agreement is the term "Treaty Area. The term is defined at subsection 1.01(91) of the TLE Agreement as follows:

> "Treaty Area" means the area of land particularly described in, and surrendered and ceded by those First Nations which entered into Treaties No. 1 and 2 with Her Majesty the Queen;

With specific regard to Crown Land, under subsection 3.02(1) of the TLE Agreement, Peguis may select Crown Land within the area comprising the Treaty Area. Peguis may select Crown Land from outside the Treaty Area and within Manitoba, on a case by case basis, provided that Peguis can establish a reasonable social or economic development objective and the Province of Manitoba concurs in the selection.

With specific regard to private lands (referred to as Other Lands in the TLE Agreement), under subsection 3.02(2) of the TLE Agreement, Peguis may acquire private lands within the area comprising the Treaty Area. Peguis may acquire private lands outside the Treaty Area and within Manitoba, on a case by case basis, provided that Peguis can establish a reasonable social or economic development objective.

The Keeyask Project is wholly located within the boundaries of Treaty 5.

There are also provisions contained within the Peguis TLE Agreement related to competing treaty land entitlement claims of other First Nations which were not presented by Peguis to the Commission. Subsections 3.02(10) and (11) of the Peguis TLE Agreement specifically address that any Crown Land selection made by Peguis which has a competing interest from a First Nation entitled to the benefits of the Framework Agreement or simply a competing interest from any other First Nation, will not proceed with further in the reserve creation process until Peguis and the other First Nation resolve their competing interests. It is noteworthy that of the four KCN, three are entitled to the benefits of the Framework Agreement – namely Fox Lake Cree Nation, War Lake First Nation and York Factory First Nation.

There are provisions dealing specifically with hydro developments. Subsection 12.04(2) of the Peguis TLE Agreement requires the Province of Manitoba and Manitoba Hydro, to consult with Peguis, during a period of time known as the "Period of Selection" concerning any proposed water project not physically constructed as of 2008 **and** which may have a reasonable likelihood of having a material and continuing physical, chemical or biological impact upon a water body **in the Treaty Area**. The Partnership does not anticipate any impact on any water body within the Treaty Area. The "Period of Selection" is a finite period of time for five years commencing in 2008 and subject to some short extensions.

Subsection 12.04(3) of the Peguis TLE Agreement states that where Peguis selects Crown Land or acquires private land along a "Developed Waterway" (as defined in subsection 1.01(22) of the Peguis TLE Agreement to include the Nelson River and its lakes and affected tributaries), and that land is confirmed as eligible to be set apart as reserve, the Province of Manitoba and Manitoba Hydro will consult with Peguis concerning the construction of any proposed water

project not physically constructed as of 2008 and which may have a reasonable likelihood of having a material and continuing physical, chemical or biological impact upon that "Developed Waterway" which may affect that land.

As indicated by Peguis representatives, Peguis has not made any Crown Land selections or private land acquisitions along the Nelson River (which is wholly within the Treaty 5 area).

Should Peguis select Crown Land or acquire private land along the Nelson River, section 12.05 of the Peguis TLE Agreement sets out that such land will be subject to a "Hydro Easement." Such an easement will allow the holder of the easement (whether Manitoba Hydro or the Partnership) to use that portion of the selection or acquisition for hydro purposes, including the inundation of water. As compensation for this easement, Peguis is then entitled to select additional land equivalent to the land affected by the easement, so long as the additional land is above the easement line.

Subsection 12.08(3) of the Peguis TLE Agreement states that any selections or acquisitions by Peguis on land which adjoins Lake Winnipeg shall not be subject to a hydro easement, and Peguis and its members shall have no right to make any claim for any losses associated with the raising or lowering of the water levels on the land as long as the water levels continue to be regulated in accordance with the licence issued to Manitoba Hydro under *The Water Power Act* (Manitoba).

Lastly, Section 12.09 of the Peguis TLE Agreement addresses the issue of lands required by Manitoba Hydro for future water projects. The sixteen sites are listed in Schedule "F" of the Peguis TLE Agreement – Keeyask is listed as "Gull", site number 9 in the Schedule.

Commercial Rights Holders

Issues surrounding commercial activities must be distinguished from those activities that are carried on by virtue of the individual exercise of the collective Treaty and Aboriginal Rights. Activities for which programs, measures or compensation may need to be provided which flow from the individual exercise of a right held by the collective are provided for under the various Adverse Effects Agreements. Licensed or commercial activities are specifically excluded from the Adverse Effects Agreements. Commercial activities are carried out based on the grant of a permission, privilege or concession by the Crown. Issues arising in the context of licensed commercial trapping fall into this latter category and are dealt with through discussions and negotiations with individual licensed trappers

Manitoba Hydro provides compensation to registered trappers for disturbances (noise, aircraft and ground activities) during exploration, environmental investigations and other ongoing Keeyask activities in the area. The factors that are considered in arriving at these payments include past fur production on the trapline and the estimated amount of disturbance over the time

period in question typically on an annual basis. This measure is more qualitative in nature than the formula used for transmission lines and considers the extent and frequency of the anticipated disturbances during the period. As the past fur production on the trapline would include the production records of any trapper helpers, it is expected that the trapline licence holder would address the concerns of his or her helpers, as required.

Manitoba Hydro has a disturbance agreement in place on Trapline 9. The Trapline 15 disturbance agreement expired on December 31, 2013 and it is anticipated a new disturbance agreement for the coming year will be signed shortly. These agreements address disturbances of the Project to the Resource Use trappers' commercial fur harvest production and lost incidental domestic production (including, but not limited to, country foods, crafts, baiting, etc.). These agreements are negotiated with trappers; provisions of the agreements may include trapline improvements (trail cutting), employment opportunities with Manitoba Hydro, equipment replacement and/or monetary settlement.

Once there is greater certainty that the Keeyask Generation Project will proceed, Manitoba Hydro, on behalf of the Partnership, will provide an offer of compensation to any member, who is a licensed trapper, to enter into an agreement over a longer term to address any existing or anticipated loss of net revenue from commercial trapping, and for any anticipated direct loss or damage to any buildings, structures or other infrastructure located on a Registered Trapline used by the member, resulting from the construction and operation of the Keeyask Generation Project, as per the processes in the Adverse Effects Agreements. As set out in those Agreements, Manitoba Hydro remains liable to compensate licensed trappers for any loss of net revenue from commercial trapping and for any direct loss or damage to any buildings, structures or other infrastructure which results from the construction and operation of the Keeyask Generation Project.

Manitoba Hydro in accordance with the Adverse Effects Agreements will also operate an ongoing claims process to facilitate the resolution of claims by members of the four First Nations for loss or damage to personal property resulting from Keeyask adverse effects to personal property.

VI. ADDRESSING UNCERTAINTY FOR KEY ISSUES

The theme of "uncertainty" has been raised by a number of the Hearing Participants. Their common mantra has been – "delay this Project until uncertainty has been resolved". This is especially so for several key topics discussed at these hearings and in the environmental assessment like lake sturgeon, caribou, mercury and human health, public safety and worker interaction, climate change and the safety of waterways.

The reality is that no level of study or analysis can completely eliminate uncertainty in environmental assessment.

During the hearing, one of the Participants put a "motherhood statement" to the Environmental Assessment Approach Panel. He said words to the effect that:

> Environmental assessment done well "appropriately outlines its level of confidence, as well as its limitations and uncertainties".
>
> Byron Williams, Transcript October 24, Page 846

That statement recognizes the inherent uncertainty that exists in the field of environmental assessment, even when it is done well or is "best practice".

Uncertainty is a reality when it comes to managing systems and projects, and is inherent in environmental assessment – after all, we are making predictions about the response of many environmental parameters to the implementation of a major development. These predictions and, ultimately, project decisions must be made with the best information available. Then adaptive management during project implementation must be used where necessary. This is the crux of sound environmental assessment, licensing and management.

It is the Partnership's view that it has gone to extensive efforts to minimize uncertainty, to clearly acknowledge where uncertainty exists and to put plans in place to address this uncertainty through its approach to Project planning, assessment and implementation. These efforts include:

- ***A decade of in-depth study and analysis based on both western science and Aboriginal Traditional Knowledge:***

  The Partnership filed its environmental impact statement for the Keeyask Generation Project in early July 2012. The final product submitted by the Partnership represents over a decade of collaborative work, from both a technical science and Cree worldview perspective, by a predominantly Manitoba-based team. It includes a Response to EIS Guidelines that incorporates technical science and Aboriginal Technical Knowledge, and three separate Cree environmental evaluation reports. The final product is a major accomplishment – it is a very rigorous assessment of the Project, in a manner that respects two worldviews and reflects the knowledge and wisdom of the Partner First Nations, along with that of scientific researchers.

The partners agreed early on to a two-track approach for the assessment. There was criticism of this approach during this hearing, arguing that a three track approach should have been used. In answer to that, we remind the Commission of the words of Mr. Keeper at this hearing on October 23, 2013:

> "From the beginning of the consultation on the Keeyask project in 1998, Tataskweyak Cree Nation took the position that they must do their own environmental assessment of the Keeyask project, based on their knowledge, experience, customs and values, to which Manitoba Hydro agreed... The term Two-track approach was adopted to describe the unique, this unique approach for assessing the effects of Keeyask...
>
> To avoid confusion, it is essential to emphasize that the two processes are different in scope, methods, values and concepts. Equally important, both approaches, but particularly the Cree assessment process, needs to be recognized and respected as being different, equal and separate in the EIS itself. Aboriginal traditional knowledge and an Aboriginal assessment based on the Cree world view and values are completely different matters. On the one hand, specifics specialized environmental knowledge derived from and a part of Aboriginal traditional knowledge can contribute to the understanding the specific impacts of the project together with sources of information and knowledge derived from western technical science leading to regulatory approval or rejection. On the other hand, an assessment of the impacts of the project based on the Cree world view and values is a different and separate process, altogether, since it does not conform to the regulatory concepts and values like significant adverse effects or valued ecosystem components."

Mr, Joe Keeper, October 23, 2013, Page 457

Using those two different knowledge and value systems, assessments were carried out and, astonishingly, both processes arrived at the same conclusion - that the Project should proceed based on its final design including the extensive suite of enhancement and mitigation measures. Although it has not been an easy or smooth journey, both the Project and the assessment are infinitely better as a result of this collaboration.

- ***A VEC-centric approach that focuses on long-term VEC sustainability based on all factors affecting a VEC, regardless of source.***

  The Partnership has undertaken its cumulative effects assessment using a VEC-centric approach, rather than a project-centric approach. This approach is consistent with best practices, addresses a key criticism raised about project-specific cumulative effects assessments and minimizes uncertainty in the assessment by focusing on long-term VEC sustainability. It also means that full consideration has been given the effects of past, present

and reasonably foreseeable future projects, in addition to the Keeyask Generation Project, on the long-term health of each of the VECs assessed.

For Keeyask, VECs were selected based on input from a variety of sources, including the Partner First Nations, experts, and those involved in the public engagement process. In total, 38 VECs were selected for study as part of the Keeyask environmental assessment – 5 aquatic VECs, 13 terrestrial VECs, and 20 socio-economic VECs. Since the Partnership also felt it was important to have a full understanding of the environment that supports each VEC, other components of the environment – for example, the aquatic habitat that supports fish populations – were also studied. Other important components of the environment that had the potential to be affected by the Project, like amphibians, were also studied. These additional components, called "supporting topics" were studied to provide greater insight into the nature of potential effects on VECs and to improve the reliability and completeness of the assessment.

Wherever possible, the Partnership has based its findings of the significance of Project effects on a VEC based on established thresholds set by governments (of which there are very few) and benchmarks set by the Partnership. These "benchmarks" are values set below the range of what a specialist, or government regulator, believes are the thresholds for significant change in a VEC. In such cases, there may be insufficient information to define a specific "threshold" – but the information that is available is considered to be sufficient to set out a 'benchmark" level which is considered to be well below any likely threshold. The Partnership has also committed to incorporating benchmarks and thresholds into the draft monitoring plans wherever it is reasonable to do so.

Finally, using a VEC-centric approach, the Partnership has scoped the specific study areas for each VEC based on what Dr. Noble has referred to as "the maximum zone of detectable influence" of the Project (November 12, 2013, page 2765). This was noted as a best practice for a project-specific cumulative effects assessment during the course of testimony from Dr. Noble.

- ***A comprehensive engagement process with our partners, other Aboriginal communities and organizations, and provincial and federal regulators:***

  The extensive and meaningful engagement process with the Keeyask Partner First Nations located in the vicinity of the Project and the Partnership's Public Involvement Program (PIP) have reduced uncertainty in the assessment by identifying and confirming topics of importance (valued environmental components and supporting topics) and by providing another mechanism through which to identify and confirm possible Project effects and the appropriateness of related mitigation.

This engagement process has also extended to regulatory authorities. Extensive discussions and a comprehensive information request process have taken place over many years with both federal and provincial government agencies. The expert staff at these agencies bring additional knowledge and experience to the review of the Keeyask environmental assessment – its approach, its findings and its planned mitigation and monitoring measures. Discussions with regulatory agencies will be ongoing throughout the life of the Project and will be especially important in determining the need for adaptive management.

- ***Ongoing application of the precautionary approach and the development of detailed mitigation measures to address effects:***

  The ATK principles developed to guide the environmental impact statement identified how Aboriginal Traditional Knowledge (ATK) would be included in the Environmental Assessment (EA). Notably, one of those principles was **'**Acknowledging Caution and Addressing Uncertainty' (page 2A-2, Appendix 2A: Aboriginal Traditional Knowledge Principles within the Keeyask Environmental Impact Statement, Response to EIS Guidelines). This principle acknowledged and respected the caution that many of our Partner First Nations members have about predictions of environmental effects of hydro-electric development (e.g., uncertainty associated with predictive models). For that reason, it was important to employ a precautionary approach that identifies knowledge gaps and recognizes the uncertainty of predictions. The need to apply a precautionary approach is also a condition of the EIS Guidelines issued for the Keeyask Generation Project (Keeyask Generation Project EIS Guidelines, CEAA, Section 9.1.1, page 20).

  When asked to define what its precautionary approach was, Stuart Davies, on behalf of the Partnership, indicated simply that, "where there is uncertainty, we assume that the effect is larger rather than smaller" (October 24, 2013, page 750). Having made that assumption, Project design was reconsidered and mitigation measures were carefully planned to either avoid, prevent or reduce, to the extent practical, adverse effects from the Project. The measures are based on extensive study of the Project, the relevant ATK, best practices, research, literature reviews and numerous discussions between the Partners. These measures are documented in the environmental impact statement and community-specific Adverse Effects Agreements. The Partnership also took the unusual step of developing and submitting its preliminary Environmental Protection Program, at an early stage and prior to licensing, for review and input by regulators, the CEC, interested parties and the public.

  To assist the CEC, the mitigation measures committed to in the EIS, in Information Requests and in the preliminary Environmental Protection Program have been summarized in a single document that is provided with this final argument as Appendix A. These measures, developed jointly with the First Nation Partners, go a very long way towards reducing

uncertainty. We urge the CEC to recommend that the Minister make our commitment to these measures a condition of licensing.

- ***A commitment to ongoing monitoring and adaptive management for the life of the Project:***

  Despite the tremendous efforts to assess this Project, and despite the anticipated effectiveness of planned mitigation measures, there are still some uncertainties with predicted effects. These are documented and fully discussed in the Response to EIS Guidelines and in each of the Partner evaluation reports. To address these uncertainties, the partners will continue to address uncertainty head on through follow-up and monitoring programs designed to identify actual Project effects and evaluate the effectiveness of mitigation measures. The commitments in this regard are comprehensive and demonstrate the importance of, and the value placed on, environmental stewardship by the Partnership – a key aspect of the Cree worldview.

  As noted on many occasions, adaptive management is a cornerstone of the Partnership's environmental protection program. This is the planned process for responding to uncertainty or to an unanticipated or underestimated Project effect, and the Partnership received "good marks" from the Participant's experts on its efforts in this regard.

  > "As I mentioned right at the beginning of our talk, yeah, I think that there certainly has been an increase in the level of detail, and the plan, and improvement in the contingents articulated in the program."

  Dr. Diduck, CEC Hearing, December 12, 2013, Page 6194-6195

  Adaptive management was defined during the hearing by one witness as "...the implementation of new or modified mitigation measures over a project to address unanticipated environmental effects." It is a way to deal with uncertainty and a tool defined specifically for that purpose to allow for adaptation to change.

  Adaptive management will be used extensively by the Partnership, where necessary, and several examples of how it will be applied are documented in Chapter 8 of the Response to EIS Guidelines. In her presentation to the Commission on January 6, 2014, Ms. Northover also provided several examples of where and how adaptive management may be applied.

  Adaptive management will also be used with respect to the Adverse Effects Agreements negotiated by the Partner First Nations. The Partner First Nations have an intimate knowledge of the Nelson River Basin, which allowed them to best assess the foreseeable adverse effects of the Project and negotiate Adverse Effects Agreements with unique programs to address their particular effects and needs. These programs are summarized in the attached Appendix C. Though some criticized this approach as untested and predicted a significant chance of failure, that criticism is unfounded. Some of the offsetting programs

were tested in pilot projects such as TCN's Pilot Access Program between 2004 and 2009, and Fox Lake's pilot Youth Wilderness Tradition Program in 2009. The success of these pilot programs was used directly to develop and plan for the programming in each community's adverse effects agreements. Where uncertainty still exists, the agreements themselves provide adaptive ways to modify the mitigation response by allowing the communities to make improvements to existing programs or even implementing new ones. There are a number of safeguards in place to account for new information arising out of monitoring and evaluation of those programs.

Most importantly, ongoing Project evaluation and adaptive management will continue to be assessed through the lenses of two different worldviews and ways of knowing – a recommendation made by many hearing participants and already committed to by the Partnership. The proponent of this Project is a Partnership, and the monitoring done by this proponent reflects that reality. All of the partners in this Partnership will jointly design, develop and implement monitoring activities, and each of the communities will independently undertake ATK monitoring programs. This will continue throughout the life of the Project.

The monitoring and follow-up of the Partnership will be overseen by its Monitoring Advisory Committee. It has been described in detail at the hearings and its success on the Wuskwatim Project has been described by Partner witnesses. MAC brings together the Project's partners in a collaborative and solution-focused forum so that they can collectively address environmental matters. Community representatives at the MAC will have independent advisors and the Committee, as a whole, can seek the advice of independent experts, as required.

Several hearing participants have argued that the Partnership needs to define a formal and prescribed process for MAC for responding to differences between the findings of scientific and ATK monitoring programs. The Partnership already has a defined process for dispute resolution that is outlined in the JKDA and that has been agreed to among the partners. This has been documented in several IRs and in the Partnership's testimony. It is also hoped that this dispute resolution process will never need to be employed. Experience on the Wuskwatim Project and throughout the planning process for Keeyask indicates that the best process for resolving differences has been, and will continue to be, one which brings the partners together in a forum that allows for open and honest discussion and that has the flexibility to collaboratively seek and implement innovative solutions. For over 14 years now, the Keeyask partners have demonstrated that they can successfully work together to resolve differences. This is how MAC has functioned for Wuskwatim and it is how the partners on Keeyask will continue to work together through their involvement on MAC.

All of the Partnership's monitoring and follow-up activities will be publicly available and opportunities exist for public input and dialogue about these efforts through regulators and the partnership. The Project will have regulatory oversight at both a federal and provincial level, but most importantly at the local level.

Many hearing participants have argued and are, in effect, demanding that they also deserve a seat at the MAC table and should also be funded to undertake their own separate monitoring activities. To bolster this argument, in the MMF Final Argument (page 24), it states that:

> "Within the Wuskwatim Hydropower Project License, the proponent was required to establish an ongoing advisory committee that included other potentially impacted Aboriginal communities. This advisory committee would not affect the existing Partnership structures, but would complement those processes by creating a more transparent and inclusive process with respect to planned research and monitoring related to Keeyask."

This is not accurate. Clause 14 of the Wuskwatim *Environment Act* Licence calls for the establishment of a woodland caribou committee for the Wapisu herd. It specifically states:

> "The Licencee shall establish an ongoing advisory committee comprised of representatives of the Department, the Government of Canada and individuals *representative of resource user communities in which new facilities will be located or those where there are expected to be discernable project related changes to the physical environment,* for the purpose of providing guidance on the research and monitoring activities described in Clause 13 of this Licence related to potential project effects on woodland caribou and, where appropriate, to apply with the advisory committee established pursuant to *Environment Act* Licence no. 2700 for the purpose of modifying project research and monitoring activities in relation to other regional developments, as required."

The "inclusive of resource user communities in which new facilities will be located" is a direct reference to the Nisichawayasihk Cree Nation (NCN) community. To fulfill this Licence condition, the Wuskwatim Power Limited Partnership established the Wapisu Caribou Committee, which includes representatives of Manitoba Hydro, Manitoba and NCN.

Ultimately, a recommendation to expand MAC or involve Aboriginal communities or organizations in monitoring is unwarranted and would be extremely difficult to implement since none of these parties have demonstrated that they have a tangible interest in the Project, and are instead using the regulatory review process to advance other issues and concerns. Such a recommendation would also be unacceptable to the Partner First Nations – they are not only Project proponents, but those most affected by the Project's development, those resident in and using those areas most affected by the Project and, therefore, those most

appropriate to oversee its Environmental Protection Program. Really, it is unlikely that anyone else could, or would, hold the Partnership more accountable for its mitigation and monitoring efforts. As strong, independent communities, they are committed stewards of the land and water. They will take whatever steps are necessary to ensure that Askiy, and everything it represents, is protected and strengthened if Keeyask proceeds. This is fundamental to each community's ongoing support of the Project.

The following sections provide a detailed overview of how uncertainty has been addressed for several key topics that emerged at the hearings.

Lake Sturgeon

Lake Sturgeon has been a significant focus of the planning and assessment process due to its importance to both First Nations and regulatory authorities, and its sensitivity to hydro-electric development. It is well known that Lake Sturgeon populations in the Keeyask region have declined dramatically primarily as a result of commercial overharvest and, secondarily, hydro-electric development. In fact, sturgeon populations in the Kelsey to Kettle reach of the river are very low, and the current low numbers are limiting the potential for recovery and, in some areas, notably Stephens Lake, it is unlikely that the population is presently self-sustaining.

To address this existing condition and the possible incremental effects of Keeyask, the Partnership has committed to a large-scale, long-term (25 year) stocking program to bring back self-sustaining populations of sturgeon in the reach of river between Kelsey and Kettle. Stocking is one of the most effective strategies for restoring depleted Lake Sturgeon populations.

To address uncertainties associated with sturgeon stocking, the Partnership's plan includes provision for the release of a range of sturgeon ages and, based on monitoring, this plan will be adapted to provide the best long-term solution. As discussed at the hearings, stocking one-year-old sturgeon increases the chance of survival but also lengthens the time in the hatchery and the potential for concerns related to a reduction in natural selection; therefore, a balanced approach is required.

Manitoba Hydro and the Partnership have also worked to improve certainty with respect to stocking success. Stocking efforts have been undertaken on the upper Nelson River through the Nelson River Sturgeon Board and monitoring has demonstrated high survival rates of stocked one-year-old fish. Similarly, rearing techniques have improved over the years, and the Partnership will benefit from the hard work of local communities, governments, and organizations such as Manitoba Hydro to understand what it takes to realize successful sturgeon recovery in the Nelson River and elsewhere. This has included a tremendous amount of work done over decades to gather information from other hatcheries, universities, river systems, and programs. In addition, individuals involved in the hatchery programs have acquired experience and their ability and dedication was recognized by expert witnesses for the Hearing Participants.

Dr. Steve Peake on being told by Mr. Bedford that his former student, Ms Cheryl Klassen, was now working for Manitoba Hydro stated:

> "I am very happy for Ms. Klassen and I think she will be an asset to your client. And it definitely reduces my concerns with her there as opposed to her not being there. I think she is very good at what she does."

CEC Hearing, Dr, Peake, Nov 13 2013, p. 3015

But, it is not just about the stocking program. Sustainable lake sturgeon populations exist in many river systems but they need suitable habitat to survive and thrive. As such, much study has been done on habitat development to ensure it will be available, in time, to support all life history requirements. Use and effectiveness of this habitat will be monitored throughout Project implementation and adaptive management measures, if required, have already been identified. Habitat design has taken into consideration known characteristics of specific life history stages. For example, the proposed young-of-the-year habitat in the Keeyask reservoir will be constructed where drifting larval Lake Sturgeon would settle to the bottom, recognizing that this life stage exhibits strong site fidelity and would not move around to seek suitable habitat after settling. Similarly, provision has been made in the design of the spawning structure for the responses of Lake Sturgeon to flow characteristics (the "ecological flows" referenced by some Hearing Participants), and monitoring will determine whether further modifications are required. Development of mitigation measures has benefitted from consultation with external experts, including in the design of turbines and to look at genetic relationships.

Many of the Hearings Participants raised concerns about further fragmentation of the Nelson River by construction of the Keeyask Generating Station and the need to mitigate fragmentation effects of existing generating stations. Genetic information collected from Lake Sturgeon in the Upper Nelson River (upstream of the Kelsey Generating Station) and along the Lower Nelson River to the estuary has demonstrated that mixing among these groups has been minimal for hundred of generations, long before any hydroelectric development. Lake Sturgeon on the Nelson River, similar to the Winnipeg River in southern Manitoba, use segments of the river, separated by either large rapids, large lakes, or in today's environment, hydroelectric stations.

The genetic differences between Lake Sturgeon upstream and downstream of the Kelsey Generating Station is especially relevant, given the many recommendations from Hearing Participants to provide fish passage at Kelsey. The genetic evidence for sturgeon above and below Kelsey shows that two separate genetic stocks have existed since before Kelsey was developed. Construction of fish passage at Kelsey could actually damage the genetic stocks in these two areas by allowing them to mix and become one, potentially less suited, stock.

Finally, in addition to the programs being implemented for the Project, there are other important initiatives underway to promote the protection and recovery of Lake Sturgeon on the lower Nelson River – two of those being the Lower Nelson River Lake Sturgeon Stewardship

Committee ratified among five First Nations, MCWS and Manitoba Hydro, and the Manitoba Hydro Lake Sturgeon Stewardship and Enhancement Program in the Nelson, Churchill, Saskatchewan and Winnipeg Rivers. These programs will continue to work to inventory populations, and identify suitable mitigation and habitat enhancement measures. Future projects will be evaluated based on the collective input of all participants, and could include habitat enhancements downstream of existing facilities, including activities identified by some of the Hearing Participants.

The passion and level of commitment of the broad team of sturgeon experts and resource users is extraordinary, and while uncertainty cannot be avoided, it is clear that no possibility for full sturgeon recovery will be left unexplored until sturgeon are thriving. The importance of both commitment and expertise was emphasized by Dr. Steve Peake, in responding to a question regarding the potential for mitigation to make things worse rather than better for Lake Sturgeon:

> "I think honestly that with a Partnership that is genuinely concerned about the resource, which I believe they are, and the amount of knowledge that the group working with them has, again, I think it's really -- I think it's very unlikely that things would get worse than this, to be honest."

CEC Hearing, Dr, Peake, Nov 13 2013, p. 3065

Caribou

One of the key questions posed by the Project partnership" was whether <u>any</u> caribou displaced by construction would return. After careful study and analysis, it is predicted that they will. That prediction is, in part, based upon actual experience in the Stephens Lake proxy area, as well as years of scientific research, Aboriginal traditional knowledge studies, peer-reviewed studies and information from government sources. The Partnership jointly carried out aerial surveys, tracking and trail camera studies to identify current calving and rearing habitat, winter habitat use and migratory movements, in an effort to identify and understand all caribou in the region.

In challenging that prediction, Hearing Participants pointed to the population of summer resident caribou that have, as of yet, not been designated by either federal or provincial governments as woodland caribou, but which share characteristics of both migratory and boreal woodland herds. Provincial wildlife managers, one of whom was also a scientific advisor to Environment Canada on boreal caribou, have researched, and been legislatively empowered to manage and designate caribou in Manitoba's North for decades. Their reports, such as Manitoba's Conservation and *Recovery Strategy for Boreal Woodland Caribou* (2005), speak to their efforts and describe their strategy for caribou conservation. And, to date, they have not listed this group of caribou as a distinct boreal woodland caribou herd.

The Partnership could have relied exclusively on the designations of governments in their assessment. Instead, in attempting to make a clear and certain determination about the potential

for these animals to be boreal woodland caribou, the Partnership also utilized Aboriginal Traditional Knowledge, local knowledge, scientific field data and literature on boreal woodland caribou.

We have heard several times during the hearing that radio-collaring would have been the best approach to studying the behaviour of these local animals. However, radio-collaring would have to be done in the summer months, during a time when calving is taking place and risks to the health and safety of females and their young is at its highest. This was of great concern to the elders, the partners and regulators and, for these reasons, radio-collaring of summer resident caribou in the summer was not undertaken. Collecting recruitment and survival data from these animals was also very difficult in the absence of a radio-collaring program. This was due to the secretive nature of these animals, low population density (20-50 animals in RSA), thick summer tree cover, and sampling complications due to the influx of other caribou herds during the aerial survey season (winter). However, the Partnership did use Bipole III radio-collaring studies, in addition to its own long-term field work, including genetic sampling and tracking surveys, to inform the effects assessment and reduce uncertainty.

In the end, the Partnership chose to use a precautionary approach that assessed effects to these local caribou as if they are a boreal woodland caribou population herd that resides in the Local and Regional Study Areas. Because of this precautionary approach, if this population is designated in the future by Manitoba Conservation & water Stewardship and Environment Canada, it is expected that no change in the effects assessment, predictions or monitoring will be required.

In his evidence, Dr. Schaeffer discussed uncertainty with respect to fires using these words:

> "The other point, if I might make, is that my understanding of the key to boreal forest conservation is to buffer for uncertainties as they say. In other words, we want a margin of safety, so we don't foreclose on options and put ourselves into a box. Fire may be unplanned, unintended, but we have enough information in the EIS to make an educated projection of what this landscape was going to look like in the next 20, 40 years, and we should plan for that."

CEC Hearing, Dr, Schaefer, Nov 13 2013, p. 3153

The Partnership has done just that – it has looked ahead, taking into account all possible impacts to caribou, and it has planned and created mitigation measures to protect the species. The Partnership has also provided additional information with respect to the impact of last summer's fires on caribou populations. Although the regional fire regime was included in the modelling and analysis previously done, it is hoped that this additional material will help to alleviate the concerns relating to caribou that have been raised. In brief, that material noted that local caribou have already persisted through disturbance levels higher than 35%, and are expected to continue to do so in the future even if future climate change increases the average level of total

disturbance, because the 35% value is likely not appropriate for the Keeyask region since the data used to derive the 35% were not ecologically comparable and studies have shown that human disturbance more strongly influences caribou than fire disturbance.

Over the long term, the Partnership will continue to investigate, monitor and research all caribou populations and their habitat in the region, not only with respect to the type of caribou, but also with respect to other potential uncertainties such as the extent of harvest, predation, mortality, fire occurrences, habitat loss or alteration so that Project effects are well understood and mitigated. This will be done based on ATK and western science. In addition, Manitoba Hydro is currently funding University of Manitoba caribou researchers in the Keeyask region who are using new technology in DNA caribou pellet analysis to help determine the genetics and herd association of the summer resident caribou.

To further reduce uncertainty throughout Project implementation, the Partnership has committed to establishing a caribou coordination committee as a subcommittee of MAC. This group will have representatives of the Partnership, each of the partner first nations, governments and others who are involved in caribou research and management throughout the Lower Nelson River region. The purpose of this group will to coordinate our efforts and share the results of research so the best possible management decisions can be made to protect and sustain this species.

Mercury and Human Health

The topic of mercury and human health (including uncertainty) was identified early by the Partner First Nations as a key concern, based upon their past experience. Tataskweyak Cree Nation and War Lake First Nation recognized early on the importance of addressing community concerns with methylmercury through the establishment of a Healthy Food Fish Program and a Community Fish Program under their respective Adverse Effects Agreements. Similarly, YFFN and FLCN have resource use programs that allow for the harvest and consumption of off-system country foods.

The partners also established a Mercury and Human Health Technical Working Group in 2007 with representation from each of the Partner First Nations, Manitoba Hydro and supporting specialists - to better understand possible mercury and human health effects of the Project and how risks could be appropriately communicated to local resource users. To further reduce uncertainty and ensure a full understanding of the issues, that group selected Ross Wilson, a toxicologist expert in the field of mercury, to complete a human health risk assessment (HHRA). As well, Dr. Laurie Chan, an internationally renowned mercury and human health specialist – perhaps the best known and respected on this topic in the world - was selected to provide independent advice to the group and to conduct a peer review of the HHRA and communication products developed for use in the communities.

As part of the HHRA, the Partner First Nations provided community specific information on the types of all country foods used by people in their communities, the frequency of consumption and the portion sizes consumed. This local and community specific information was used to assess possible risk, rather than generic information pulled from scientific literature and studies in other regions. Making the assessment of risk in this manner has resulted in a cautious approach, but one which is specific to these communities.

Going forward, monitoring and adaptive management will be key elements to understanding and communicating risks associated with increased mercury in country foods, especially fish, associated with the Project. Ongoing monitoring will be conducted as part of the Aquatic Environment Monitoring Plan to identify actual levels of mercury concentrations in fish flesh in the Keeyask and Stephens Lake reservoirs and in offsetting lakes used for the Health Food Fish programs. The objectives of this monitoring are to "verify predicted increases in mercury levels in fish in the Keeyask reservoir and Stephens Lake and address uncertainties regarding the duration and magnitude of increases". Opportunities for testing of human hair will continue to be offered to communities on a voluntary basis, and samples of wildlife will be tested, if submitted, through a voluntary testing program. As well, starting in 2022, and every five years subsequent to that, a survey of country food consumption in the Partner First Nation communities will be undertaken.

Collectively, all of this monitoring information will be used to develop an updated HHRA every five years after peak mercury levels have been reached so that appropriate adjustments can be made to the consumption recommendations. All of this work will be overseen by the partners through the Monitoring Advisory Committee and General Partner Board of Directors, and through discussions with federal and provincial health authorities.

Public Safety & Worker Interaction

The Partner communities and, in particular, FLCN and TCN members, have regularly expressed concern about negative interactions during the course of past hydroelectric developments, and their intense desire to prevent these types of occurrences from ever happening again. All of us share that desire. In fact, the Partnership has spent considerable time and effort trying to fully understand the issue of public safety and worker interaction, and trying to develop ways to prevent incidents from occurring. It was rather disconcerting when Dr. Kulchyski make light of those efforts, using words to the effect that "Hydro thinks it has it all covered" (January 7, 2014, page 6647).

No amount of work can guarantee that every woman and child will be safe at all times, but we can do everything possible to work with all the important stakeholders to plan for this vision. And, so, such planning has been done. Not just for Keeyask, but collectively for all possible hydro-related developments taking place in the Gillam region in the foreseeable future.

The Partnership has described and committed to taking preventative mitigation measures at the construction site in an effort to minimize travel outside the camp for recreational purposes and to reduce the time spent in the nearby communities by Project workers. Cultural awareness training for all Project workers, as part of the Employee Retention and Support Contract, is to be implemented by FLCN and YFFN. This will provide the opportunity to describe past experiences with hydro development and expectations for respectful behaviour by construction workers at site, as well as when visiting communities. This contract also includes on-site counselling for employees to hopefully deal with issues proactively before they escalate.

Manitoba Hydro has already started working with FLCN, the Town of Gillam and local service providers to coordinate measures related to worker interaction in Gillam through a worker interaction subcommittee of the Harmonized Gillam Development process. This sub-committee has been formed to:

- Identify and confirm potential issues and concerns from each respective organization/community on the subcommittee;
- Identify existing or planning mitigation measures for each of the identified issues/concerns;
- Identify programs/mitigation measures which exist elsewhere (and not currently existing or planned in the Gillam area) which could be implemented in Gillam to assist in addressing any of the issues/concerns; and
- Identify and discuss ways to address any remaining mitigation gaps.

The subcommittee will be developing a worker interaction monitoring plan that will include accessing existing data collected through monitoring activities by the respective member communities and organizations, as well as any additional monitoring that may be required. The monitoring plan will enable the subcommittee to identify, and seek to address, any trends of concern in a timely manner and within the respective mandates of each of the represented organizations. The development of mitigation and monitoring measures with those most knowledgeable about local circumstances and with the mandate and expertise to take ownership of these measures is expected to lead to better mitigation that is successfully implemented.

Manitoba Hydro has also been meeting regularly with the RCMP to discuss policing matters related to the Town of Gillam and has started discussions with them to assess and respond to Project impacts on policing requirements for the region including the Project site and beyond the Town into the rural areas around Gillam (Bird), Thompson and Split Lake.

Human behaviours and interactions are not entirely predictable, but it can be said that the Partnership has made considerable effort to try to minimize the risks associated with that uncertainty and prevent incidents from occurring. It will continue to do so, with full participation of its Partners.

Reservoir Clearing & Debris Management

Hearing Participants have expressed concerns about debris management and many references have been made to debris management issues following the development of previous hydro-electric projects in the 1970s. This was also a concern for the Partnership. Manitoba Hydro and the Partner First Nations engaged in a joint process to develop plans to mitigate the potential for adverse effects of debris on travel, access and human safety.

As part of the JKDA negotiations, the parties developed and agreed to both a Reservoir Clearing Plan and a Waterways Management Plan. Under the Reservoir Clearing Plan, the majority of the 45 square kilometers of land that will be flooded will be cleared through a combination of both machine (majority) and hand clearing (sensitive or inaccessible areas) prior to reservoir impoundment. Clearing the reservoir in advance will allow for additional archaeological work to be undertaken prior to reservoir impoundment and will substantially reduce the potential for debris to enter the waterway and become a safety concern.

The Partnership's preferred method of mechanical clearing is shear blading during the winter when the ground is frozen (JKDA Schedule 11-2). Clearing when the ground is frozen allows heavy machinery to access areas that would otherwise be very difficult, if not impossible, to access during the summer when the ground is soft. Chipping and mulching the material, rather than shear blading, was also considered, but would require significantly more effort and greater cost. It is also not appropriate in this circumstance. Chipping and mulching are used for the purpose of leaving biomass on the ground surface to allow it to naturally decompose and provide nutrients to the soil system for re-establishment of ground cover. This method results in more woody debris being left on the ground which is not desirable in the reservoir area since it will mobilize and enter the waterway when the reservoir is impounded.

The timber to be cleared from the reservoir is not considered to be merchantable. Some of the cleared trees will be available for fuel to local residents, depending on demand and distance from the access road. The remainder of the cleared material will be deposited in windrows or piles, left to dry, and then burned the following winter. Burning in the winter greatly reduces the risk of forest fires and peat fires.

The Waterways Management Plan (JKDA Schedule 11-2; Response to EIS Guidelines Appendix 4B) has been described in detail at the hearing. This program will further address debris-related safety concerns through the ongoing removal of debris that has the potential to move into the waterway and impede safe navigation. Main navigation routes and safe landing sites, which will be identified by Partnership representatives and implemented as part of the Waterways Management Program, will be a priority for debris removal. Any affected group can request debris removal in Keeyask waterways. These requests will be evaluated, in light of the objectives of the Waterways Management Program, and the requested debris removal work will be undertaken, as required.

Climate Change

Taking a precautionary approach, the Partnership also considered the potential influence of future climate changes on the Project. Climate change is a topic of interest for Manitoba Hydro, the Project's First Nations Partners, regulatory agencies and, based on the Information Requests and hearing itself, many of the Hearing Participants.

In undertaking its analysis with respect to climate change, the Partnership considered CEAA Guidance on how to incorporate Climate Change Considerations into Environmental Assessment. In general, the EIS considered three aspects of climate change:

a) The effect of the environment (including climate) on the Project. This was a requirement of the federal EIS Guidelines. The Project has been designed with careful consideration of potential environmental and climate impacts on the Project, including extreme events. The sensitivity of the Project design and operations to climate change, e.g., higher runoff or accelerated permafrost thawing, was reviewed and it was concluded that the Project overall is robust with respect to climate change. Ongoing infrastructure monitoring and maintenance programs during the life of the Project will assure the continued integrity of the structures, such as dams and dykes, regardless of future changes in climate.

b) The effect of the Project on the environment (GHG emissions). This was also a guideline requirement. For this, a comprehensive and independent Life Cycle Assessment (LCA) was completed for the Project by the Pembina Institute using three key air emission indicators, including greenhouse gases (GHG), and following appropriate ISO guidelines. The LCA considered construction, land use changes, operation and decommissioning. An independent review found no significant errors or omissions in the analysis.

   Witnesses put forward by Manitoba Wildlands testified that they "…haven't offered any comments or critique to Hydro…" on the LCA that was performed by the Partnership (S. Salazaar, CEC transcript, Nov. 28, 2013). Despite this, it has been suggested by Manitoba Wildlands that an expanded and ongoing life cycle assessment (LCA) should be conducted for the Keeyask Project. Implementation of this recommendation would yield little or no value to the evaluation or operation of the Keeyask Project. Given the nature of a generation station project, the vast majority of the greenhouse gas implications are associated with the initial phases of development, including construction activities, material sourcing, component manufacturing, transportation, and land use changes. An ongoing LCA would have no substantive benefit in reducing the Project's GHG implications since operations and maintenance over the 100-year operating life account for only 1% of total Project emissions, offering no opportunities to meaningfully reduce the Project's total GHG emissions.

c) The sensitivity of the effects assessment to climate change. This was not a requirement of the federal EIS Guidelines but was done by the Partnership as a precautionary approach

to consider potential future changes in climate. Following guidance documentation published by the Intergovernmental Panel on Climate Change (IPCC), plausible future climate change scenarios were developed for the Keeyask Project area based on a combination of Global Climate Models (GCMs) and a Canadian Regional Climate Model (CRCM). An ensemble of 139 climate scenarios from 24 GCMs in the IPCC Fourth Assessment Report and up to 9 scenarios from the CRCM were considered to estimate the projected average changes in future climate conditions. The "future" considered three 30-year averaging periods: the 2020s (2010-39), 2050s (2040-2069), and 2080s (2070-2099). The sensitivity of Project effects to climate change was analyzed to determine whether the conclusions of the assessment, and especially the significance of adverse effects, would be likely to change based on the projected climate changes. The review indicated that the conclusions of the effects assessment and the significance of residual effects after mitigation were not sensitive to climate change. Going forward, the Partnership will continue to coordinate with Manitoba Hydro on its ongoing climate change impact studies. Additionally, adaptive management principles will be employed to respond to unforeseen effects.

VII. FINAL COMMENT OF THE PARTNER FIRST NATIONS

The filing of the closing arguments by the Participants, along with similar arguments made orally during the hearing, requires the Partner First Nations to express their collective disappointment in, and rejection of, a number of perspectives and recommendations. We believe that all of the Participants, both in oral evidence and in their written submissions, are well meaning but, in our collective view, have a paternalistic concept of their role and the role of the Commission in these Hearings.

We accept the right of the Participants to express criticism of, or offer recommendations for, the Environmental Evaluation Reports prepared by the Cree Nation Partners, York Factory First Nation and Fox Lake Cree Nation, and the right of members of our communities and their advisors to express opposition to or criticism of the Project or to make recommendations.

We strongly believe that it is inappropriate for non-Aboriginal organizations to practice a form of paternalism insofar as those organizations and those Participants question the appropriateness of the commercial terms of the Project, such as income opportunity, business opportunities, training and employment, and the content and implementation of each of the communities' Adverse Effects Agreements.

This is a proceeding designed exclusively to openly examine the Environmental Impact Statement of the proposed Keeyask Project. This is not a proceeding designed to assess the appropriateness of the commerciality of the Project – rather, we submit that this is one of the

purposes of the upcoming NFAT hearings, to be administered by Manitoba's Public Utilities Board.

We suggest strongly that the right of our communities to assess the economic, social and cultural impacts on our communities is ours alone. We do not need, and it is inappropriate for, any organization or group to tell us that our decision making processes, our analysis of the benefits and disbenefits of the Project and the terms and distribution of those benefits is misinformed, wrongful, inadequate, or not as good as others may have done or should have done. If our collective judgment was, and is, that in matters of negotiation the excellent need not be the enemy of the good and that it is our right and prerogative to have concluded as we did, no one outside of our communities, Aboriginal or non-Aboriginal, is entitled to judge the appropriateness of licensing the Project by way of a critical analysis of our decision making. That is all the more true when, as is evident in many of the submissions, the purpose of critical assessment of our decision making and, ultimately of our decisions, is not to improve our standing, but rather to employ a mechanism to oppose the Project.

The Cree World View and Aboriginal Traditional Knowledge are the heart, soul and intellectual property of our people, not those who do not share our heritage. Attempts by non-Aboriginal organizations to define and appropriate distinctions between the Cree World View and Aboriginal Traditional Knowledge and the component parts of Askiy are not appropriate – these beliefs are interwoven and cannot be compartmentalized. These hearings, however, have provided a forum for debates and, in some cases, legal issues which are outside the scope and intent of these hearings.

We suggest strongly that those critics have no right or jurisdiction to second guess our involvement, or the nature of our involvement, in the KHLP. Any critical analysis is legitimate only insofar as it speaks to the adequacy or inadequacy of the Environmental Impact Statement, including both Western Science and Aboriginal Traditional Knowledge, and the question of whether it is advisable or not from an environmental perspective, to license the Project. We collectively say that the Project should be licensed with as few conditions as possible to allow its early commencement. We accept, however, that others may legitimately disagree and that the Commission ultimately must form its own conclusion, based on environmental evaluation, of the appropriateness of licensing. But, this decision must not be influenced by extrinsic matters.

This is not a hearing about the soundness of our decision making. It is not appropriate to attempt to tell us who or what we should be. We have a right to be what our people alone determine is appropriate.

There has been much said about whether the Western Science methodology and Aboriginal Traditional Knowledge have been properly "integrated" in the Environmental Impact Statement. We agree with those Participants who suggest that in the monitoring processes to come, special attention must be paid to ensuring that equal weight is given to both Western Science and

Aboriginal Traditional Knowledge and that our people be properly resourced to fully participate as equals. Whether or not Western Science and Aboriginal Traditional Knowledge were properly integrated in the Environmental Impact Statement to date, about which we have no complaint here, is an irrelevant argument. We reject the notion that those opposed to the Project attempt to use a question of this kind in support of that opposition. The question before the Commission now, and the question that will be before the Minister is not whether the two worlds were adequately integrated, but the extent to which they should be integrated in the decision making processes of the Commission and the Minister.

Recommendations are made which would have the effect of delaying the licensing of the Project or its construction. Those recommendations often:

- are based on theories which have already been found to be difficult to apply in practice, such as the complete integration of Aboriginal Traditional Knowledge and Western Science; or,
- suggest, without justification and outside the scope of these Hearings, the distribution of benefits from projects built in our Resource Management Areas to other parties; or,
- attempt to impose unnecessary conditions; or
- promote further consultation processes with other people, Aboriginal or non-Aboriginal, notwithstanding the extraordinary effort in that regard that has already been made.

These are recommendations which do not sit comfortably with us. We suggest they are at best unnecessary or repetitive of action already taken and at worst unworkable.

As a result, it is the collective view of the Cree Nations that the licensing of the Project should proceed promptly and with as few conditions as possible.

Final Comment of Fox Lake Cree Nation

After a long and troubled history of unilateral action by Manitoba Hydro devastating the land, waters, economy and society of Fox Lake members, not to mention their psychological and physical health, a new era has dawned, one in which as a partner of fellow Cree Nations and Manitoba Hydro, Fox Lake has the opportunity to benefit from the development, operation, maintenance and governance of Keeyask. This phenomenon truly constitutes a sea change.

No one has suggested, or would suggest, that the Keeyask Hydro Electric Partnership is the ultimate panacea of progress and reclamation for Fox Lake and its members. Obviously, it is not. But it does represent a significant step towards a measure of independent financial autonomy, already improved capacity with more to come and a significant role not only in the environmental assessments which preceded this hearing but, perhaps even more importantly, a significant role in future monitoring and mitigation of the effects of the Project on the environment.

The importance of this monitoring function cannot be overstated. Its base elements are detailed in the Environmental Impact Statement and it is more developed and much more greatly resourced in Hydro's commitment letter to the Chiefs of November 17, Exhibit No. KLLP 70. That commitment, based on agreement with the limited partners, will ensure collaborative efforts amongst the Cree for on the ground, moment by moment monitoring of the effects of the Project and a significant role for them equal to that of Technical Science in devising appropriate solutions to problems, in emergencies, even before the MAC is convened, through adaptive management. It also will help build capacity in both Traditional Knowledge and technical science so that young First Nation's people will ultimately be able to master and utilize both types of knowledge.

Building on the participation of Nelson House in the Wuskwatim Project, the Keeyask Project brings before this Commission a new paradigm, a fresh methodology and perspective in fulfilling your recommendatory function, one which focuses on the First peoples. Keeyask's footprint and study area are large and comprehensive, larger than some European countries. Much has been heard about the need for a regional cumulative effects' study. But, in Fox Lake's view, the partnership, through technical science and the comprehensive and long worked on evaluation studies of each of the Cree Nations, has already concluded the significant part of such a study having looked at the past, present, future and geographic limits of discernible effects. What more cogent, reliable and comprehensive information can be gleaned about past projects and this Project than that which is gleaned from the memory, insight and daily experience through the centuries of the people who populate that region….the four limited partners of this partnership? As Karen Anderson said, the Fox Lake Report on ATK was framed through the participation of numerous elders and resource users. Through ATK, together with technical science, one has a full understanding of the adverse impacts of previous projects, the state of the environment as we go into Keeyask and most important in this context, the prediction of what marginal impacts Keeyask will have on the environment and its sustainability; protected by collaborative monitoring and adaptive management. Frankly, it goes beyond curious that effects outside of the Keeyask footprint and study area could in any way be discernible by, or more significant for, others.

You have heard the term Askiy repeated frequently throughout these proceedings and with good reason. Askiy is an holistic term describing everything corporeal and incorporeal in the environment, real and metaphysical. It is a concept that does not distinguish between human beings and everything else. It underlies the new paradigm we urge on the Commission. Until the Wuskwatim decision, what was required of this commission was environmental evaluation primarily concerned with the non-human environment and, in the case of humans, primarily with the adverse or negative effects that development might have on their lives. Surely, all of that is still a part of the work of this commission and of environmental assessment. But the new factors, and in our submission, equal if not greater factors, to be taken into account are the positive benefits and impacts that the Project will have on the human content of Askiy. If the

commission takes First Nations seriously and “Askiy” as a synonym for “environment” it will recognize and balance the enormous step forward which will accrue to the members of these four communities, the human element of Askiy, as a result of this Project and the projects which will follow.

Our submission has both a qualitative and chronological dimension. Qualitatively, as Chief Spence, Karen Anderson and Councilor Neepin all testified, the benefits of the Project both monetary, capacity building, pride of ownership and rights of participation in decision making, are a beginning step in healing and growing to independence as peoples. The evidence of the youth of Fox Lake at this Hearing exemplified this new path. Chronologically, as Councilor Neepin and Chief Spence testified, Fox Lake believes that the recommendation of this Commission to the Minister, and the Minister's decision, should proceed expeditiously without incorporating time consuming processes or other hurdles which would have the effect of delaying the timing of the Project and, in the result, the earliest enjoyment of the benefits by the young people of Fox Lake and the other Nations.

Some of the evidence tendered by the interveners during the course of the hearings has offended Fox Lake and the other Nations. That includes the sort of evidence that was received from Dr. Gibson who admitted under cross examination that he had paid little or no attention to the Nation's evaluations and the evidence of Drs. Buckland and O'Gorman who, under the guise of their particular theoretical methodology, implied as did others, that First Nations are not fully capable themselves of understanding and determining their own fate and managing their own affairs. They and others also implied that the consultation and decision making processes of the Nations were somehow flawed or unreliable. On the first issue, inadequacy, though the professional evidence was surely well meant, in Fox Lake's view, it was naïve, ideologically based and insulting to the Cree. The Cree are not incapable nor by the way, with training, are they destined only for menial jobs as Professor Kulchisky suggested. Chief Primrose was clear and eloquent on that point in his evidence at the Wuskwatim hearing which was read into the record here. Alternatives are weighed and choices made. The youth may choose to be hunters, trappers, AND/OR doctors, lawyers, or carpenters. They are not mutually exclusive. That’s why under its Adverse Effects Agreement, Fox Lake specifically negotiated for, and included, programs to help the community ensure that no matter what their choices, the youth will know their culture and their customs will be nurtured so that they will grow to maturity knowing who they are and how they are connected to the land.

On the second point, the Nations’ clear evidence was that their consultation processes were more than adequate qualitatively, as in carefully expressed, understandable explanations, and quantitatively, as in thousands of meetings held amongst the four. Moreover, the positive results of all four referenda are determinative. In that regard we bring back to the Commission's attention a normative touch point. During the hearing, the Commission was provided with a copy of Section 39 of *The Indian Act* which regulates voting in referenda on surrenders of land. Now

nothing is more important in the life or history of First Nations than a surrender of land. In fact, two court cases, the *Guerin*[1] case at the Supreme Court of Canada and the Federal Court decision in *Fairford*[2], suggest that the all-important fiduciary obligation of the Federal government to First Nations may be engaged **only** where a surrender or significant dealing in land involves the Federal government. The point is that, even though we believe the cases are wrongly decided, under Subsection 39(3), where less than 50% of eligible voters vote in a first referendum, a second vote may be called and if a majority of those then voting approve the surrender, it is deemed to have been assented to **conclusively** by a majority of the electors of the band. The referenda here were not about surrender but the policy expressed in the Act is instructive here as well.

We would also observe that almost all of the interveners' expert testimony relating to the Partner First Nations was based on minimal, if any, direct research and investigation in the communities themselves. Instead, all of the experts on the issue of consent relied on theory and/or statistically invalid, minimal adverse commentary, by the few. In fact their evidence did not even purport to have taken into account the circumstances of all four of the communities, but rather just one and sometimes two of them which were then generalized to the four. This notion, let's call it, the tyranny of the minority is an interesting one which could bear hours of fruitful academic debate. But, though it is obviously very important to take into account dissenting and opposition perspectives, something which Councilor Neepin and Chief Spence as well as Karen Anderson and the other Cree witnesses spoke to eloquently, it is important to remember that major benefits of this Project, like annual profit sharing, the development of a business base in the communities, extensive monitoring activities and learning and the pride of ownership will result for a hundred years or more for the benefit of the **whole** of the communities. That represents a lot of schools and housing. The distilled philosophy of John Stuart Mill "the greatest good for the greatest number" is not necessarily the doctrine which this Commission necessarily must accept. But it is suggested that the evidence is that all four communities favoured moving forward into the new era as beneficiaries and owners of the Project and its benefits because in the long run the communities as a whole will be improved.

Parenthetically, it is important to accept that it was and is the exclusive prerogative of each of the First Nations to have decided whether to participate in Hydro Electric development and which contractual terms were or were not acceptable. Those, with a faint arrogance of paternalism, who criticize or second guess the Nations' decisions as a tactical means of attacking the environmental acceptability of the Project itself, are playing a historically discredited card. The commercial details of the deal have nothing to do with its environmental acceptability. The overriding fact of the participation and consent of the Cree do.

[1] Guerin v. The Queen, [1984] 2 SCR 335.
[2] Fairford First Nation v. Canada [1999] 2 FC 48.[wrongly cited in oral argument]

For the last more than quarter Century Fox Lake's lawyer, Jack R. London, has been involved as senior, external legal counsel for the Assembly of Manitoba Chiefs, the Assembly of First Nations and numerous First Nations in Canada on a wide variety of issues. His experience attests to the fact that the single most common demand of First Nations across the country, aside from the repeal of *The Indian Act* itself, is to implement the treaties and to be able finally to share equitably in the profits of the resource base of First Nations' Territories.

Here, in Keeyask, we have a classic example of exactly that happening in surely what is a precursor of what is yet to come. The people who have historic rights to those resources and are most impacted by their exploitation finally will share in its benefits.

Nothing should be allowed to get in the way of that sea change.

Final Comment of York Factory First Nation

York Factory First Nation ("YFFN"), a partner in the Keeyask Hydropower Limited Partnership, has participated fully in the CEC hearing for the Keeyask Generating Station. Having had the opportunity to see all the presentations and review the materials filed by the Participants, YYFN wishes to make a few closing remarks for the Commission to review prior to issuing its final decision in the present matter.

There is no doubt that there has been a troubled history between Manitoba Hydro and YYFN. Some of this history has been detailed in *Kipekiskwaywinan ("Our Voices")*. *Kipekiskwaywinan* has become a very important document to the community as it helps to explain the history and experiences that led YYFN to make the decision to support and become a partner in the Keeyask Project. The history, experiences and views shared in that document are important and cannot be accurately or fairly condensed and should be read in their entirety. One Participant suggested that *Kipekiskwaywinan* is "tokenism"; that statement is inaccurate and greatly offensive to YFFN.

It is critical that the Commission recognizes that the EIS is not just the Response to EIS Guidelines and the Supporting Volumes – it includes *Kipekiskwaywinan* and the other Keeyask Cree Nation Environmental Evaluation Reports as well as the *Keeyask: Our Story* video.

It is submitted that the Commission should give substantial weight to *Kipekiskwaywinan*, *Keeyask: Our Story*, the opening statements made by Chief Constant and the testimony of YYFN members Ted Bland and Martina Saunders.

YFFN's evaluation of Keeyask does not ignore its relationship with Manitoba Hydro and hydro development over the past 55 years. The past should never be forgotten, but it is important to move forward and look towards a better future. Times have changed and something very important and historic is happening here and it is YFFN's hope that the Commission does not overlook the fact that the First Nations, the aboriginal peoples, whose land and waters are

directly impacted by hydro development are partners in the Keeyask Project; this is an important and significant change from past practices.

This is a positive new phase in the relationship between Manitoba Hydro, YFFN and the other First Nation partners.

The decision to support the Keeyask Project was not an easy one and was certainly not made quickly or without serious consideration. As stated during the hearing, YFFN participated in hundreds of meetings and workshops related to the Keeyask Project since 2002. Over 600 of those meetings and workshops were related to the environmental effects of the Keeyask Project and the associated assessments. Over the past decade, YFFN members have also participated in hundreds of additional meetings and workshops regarding topics such as: negotiations related to the JKDA, training, employment opportunities, business opportunities and various other issues related to the Project. Members have had the opportunity to discuss and share their views, feelings, fears and hopes about becoming a partner in the Keeyask Project. There is much hope in the community regarding the benefits that the Keeyask Project will bring, but members understand there may also be negative impacts.

YFFN worked very hard to ensure community members were well informed about the potential benefits and the potential negative impacts of supporting the Keeyask Project. It was because of this transparent process that all voices were heard: those that supported the Project, those that were opposed to the Project and those that were uncertain. Even though 86% of those who voted support the Project, YFFN understands that opposition to any proposal is a normal and healthy part of any democratic process.

After carefully weighing the pros and cons, YFFN members made the decision to support the Keeyask Project and join the Partnership. The community chose to pursue the potential benefits that could result from the Keeyask Project for both the current generation and for generations to come, to sustain and achieve respect for their Cree culture and to have a voice in the Partnership.

As stated by Chief Constant in her opening statement, YFFN recognizes that the Keeyask Project will not solve all the challenges and obstacles the community faces and that the Project may present new problems and obstacles. YFFN is well aware that benefits are often accompanied by negative consequences, however, with that knowledge, members still chose to support the Keeyask Project.

The overarching reason provided by community members as to why they wished to join the Partnership was that being a partner would be beneficial for their children, grandchildren and for generations to come.

Those benefits include training and employment opportunities that would not otherwise be available to the community. There will also be financial benefits derived from employment, increased business opportunities and investment income. The increased capacity building and

income will empower YFFN to improve the community's socio-economic conditions, which will ultimately benefit generations to come.

By joining the Partnership YFFN not only has the opportunity to benefit from the Keeyask Project, but also to have a voice in how the Project will proceed. Being a partner means that members can ensure their traditional ways, their culture and their land and waters will be sustained while participating in the financial and other benefits of the Keeyask Project. It is a delicate balancing act, but one that the community is prepared to take on. YFFN is confident that it can live in both worlds, both modern and traditional. Only YFFN can and should determine what will work for it.

Askiy is the Cree word for the whole of the land, waters, people, plants, animals and all things. YFFN members are a part of *Askiy* and have great respect for it. During the hearing, the Commission was informed that members of YFFN have been taught that they must care for Askiy by protecting their ancestral lands and traditional territories and sustaining the people, land, waters, animals, fish, plants, language, culture and knowledge.

Throughout time, YFFN's relationship with the land has been and continues to be fundamentally important. Traditional teachings have been handed down through the generations and continue to be passed on today. Community members view themselves as stewards of the environment and that will not change.

There is no doubt that the Keeyask Project will impact *Askiy*. YFFN hopes that by becoming a partner and adding its voice, traditional knowledge and values, it will positively impact the Keeyask Project by reducing the adverse effects while still being a steward of the land and waters. YFFN will continue to protect and preserve *Askiy*.

The Commission can have confidence that YFFN's role as a steward of the environment will not end if a license is granted for the Keeyask Project. YFFN recognizes that ownership in the Keeyask Project will come with responsibilities and its members accept and welcome those new responsibilities.

YFFN and its partners are committed to ensuring that the Environmental Protection Program for Keeyask will be comprehensive, substantial and respectful to the importance of both Aboriginal Traditional Knowledge and Western Science. YFFN's Aboriginal Traditional Knowledge is fundamental to its members. The Traditional Knowledge is maintained by Elders and passed down through the generations. Therefore, YFFN's Traditional Knowledge is an essential part of the ongoing process of sharing and participating in the Partnership, it is not just information to be recorded and included in the Environmental Impact Statement or in science - based management programs.

The Commission has heard from a group of York Factory Elders. The Kaweechiwasihk Kay-tay-a-ti-suk are a group of concerned Elders who have questions regarding the Environmental

Impact Statement. As they stated in York Landing on September 26, 2013, they do not oppose the Keeyask Project, rather, they have advised that they are looking out for YFFN's interests. This group of Elders wants to ensure that YFFN fairly benefits from the Keeyask Project while still fulfilling its duty as steward of the land and waters. In addition, these Elders have emphasized that Traditional Knowledge and Wisdom and Western Science should be given equal importance and value. YFFN agrees with these Elders.

Representatives from YFFN stated several times during the hearing, and it has also been stated in *Kipekiskwaywinan*, that an essential element of the Partnership is that the partners work together and learn from one another. YFFN's Traditional Knowledge is held by its Elders and has been and will continue to be passed down through the generations. The best way for this knowledge to be expressed and shared is through the participation of Elders, resource users and knowledge holders in the Partnership; thus allowing the exchange of information, ideas and knowledge. By joining the Partnership, YFFN has the opportunity to bring prominence to its world view, values, Traditional Knowledge and language, both within the community and throughout Manitoba.

YFFN has said as a Nation, and members have said as individuals, that it is important to continuously reconcile participation in the Partnership with relationships and obligations to the natural and spiritual world and to generations to come. Without this reconciliation, the Elders and their teachings advise that the Cree will not survive as a people. This is a central, core message and impact for the YFFN Cree.

YFFN wants to work with its partners to heal, rebuild and strengthen trustworthy relationships, through processes, programs and decision-making, throughout the life of the Keeyask Project and Partnership. YFFN has entered into this Partnership insisting on a long term, ongoing commitment to healing, reconciliation, mutual respect and self-determination. YFFN intends to sustain its Cree values, customs and traditions in the process.

The Commission heard from members of the Shamattawa First Nation who stated they were concerned that the off-setting programs of the Keeyask Project will have an adverse effect on Shamattawa. Shamattawa contends that resource users from YFFN, via the off-setting programs, will begin using Shamattawa's traditional territory.

A response has already been provided in writing to the Commission on January 3, 2014, but to reiterate, YFFN is adamant that the off-setting programs will simply take resource users back to YFFN's traditional land and waters and to an area that YFFN resource users have used thousands of years and will continue to use.

During the course of this hearing the panel has received evidence from several Participant witnesses. These witnesses, in a very short period of time, and with either limited or no direct contact with the communities or their members, have come to certain conclusions about what is best for the partner First Nations.

Compare that to the community based, grass-roots process used by YFFN. Over the course of more than a decade, YFFN discussed the Keeyask Project with community members, provided information, conducted studies, held workshops, training sessions, meetings, sharing circles and information sessions. The opinions of all community members were canvassed, regardless of what those opinions were, and everyone's opinion was heard.

The overall theme in these witnesses' evidence was that the First Nation partners were incapable of fully understanding the process they became involved in and were therefore unable to make appropriate decisions regarding their own future and destiny. That view is judgmental, incorrect and paternalistic. YFFN takes offence to many of the statements made by these witnesses. YFFN does not need these witnesses to tell them what is good for YFFN.

YFFN has approached participation in the Partnership with great caution and care. The intent is to move forward while continuing to respect the past. YFFN members view the Keeyask Project as an important step towards self-determination as well as reconciling the relationship between YFFN and Manitoba Hydro. Community members are determined to use the Keeyask Project to empower their community, to maintain who they are and to create a better future for their youth and generations to come, who will inherit the Keeyask Project.

The Commission should carefully consider the submissions and testimony of YFFN representatives that were presented throughout this hearing. YFFN has taken great care in coming to the decision to join the Partnership and support the Keeyask Project.

YFFN does not need or want other people or organizations to decide what is best for it. YFFN is well aware of what lies ahead and is prepared to participate in the Keeyask Project. This is YFFN's opportunity to help its people, to improve the lives of the Cree, the lives of its youth and create a better future for the generations to come.

YFFN will be involved with Keeyask for the life of the Project and YFFN is optimistic about that relationship. YFFN requests that the Commission recommend to the Minister that the license for the Keeyask Project be granted.

Mr. Eric Saunders, a widely respected Elder of YFFN, was involved with the Keeyask Project for many years. Mr. Saunders was the Chief who was involved with the *Northern Flood Capital Reconstruction Authority* and the Chief who signed the 1995 *Comprehensive Implementation Agreement* between YFFN, Canada, Manitoba and Manitoba Hydro; this is the agreement that one of the Participant witnesses said was "not worth the paper it is written on."

Sadly, Mr. Saunders passed away on January 7, 2014. Mr. Saunders lived with his feet planted in both worlds. An accomplished harvester and community leader, he was also comfortable working with a computer and bookkeeping software. His quotes, which can be found at pages 3

and 8 of *Kipekiskwaywinan*, eloquently represent the view of many community members:

> *"I'd like to see a better future. I'd like to see more benefits for our people. We need more opportunities for the future of our people, for our youth. I'd like to see them have jobs. I'd like to see more business development."*

> *"We have to respect and uphold what our Elders taught us in terms of how we use the land and how to take care of it. It is important for our younger generations to be taught and learn the traditional ways of life, so that these teachings can be passed on to future generations."*

Final Comment of Cree Nation Partners

In 1908, Tataskweyak Cree Nation (TCN), then known as the Split Lake Band of Indians, was recognized by Canada as a First Nation by signing an adhesion to Treaty 5 – the wrong adhesion due to clerical error, but nonetheless a legally binding adhesion. War Lake First Nation (WLFN) was recognized by Canada as a distinct First Nation in 1980, with the majority of the members of WLFN had previously been members of TCN.

At the signing of Treaty, TCN had 407 members on its membership list. Today it has 3,615. WLFN, when it was first recognized as an independent First Nation, had 79 members. Today it has 289.

Mr. Victor Spence, TCN Manager of Future Development, has often described TCN and WLFN's path to the Joint Keeyask Development Agreement (JKDA) and respective Adverse Effects Agreements (AEA) as a long and winding road. In the early 1970s, already living with the devastating impacts of existing dams and preparing for the planned development of future dams and river diversions, TCN joined York Factory First Nation, Norway House Cree Nation, Nisichawayasihk Cree Nation and Pimicikamak in the Northern Flood Committee (NFC). The NFC negotiated the Northern Flood Agreement (NFA) with Manitoba Hydro, the Government of Manitoba, and the Government of Canada and, in 1978, the NFA was concluded and ratified.

Mr. Joe Keeper, the former Executive Director of the Northern Flood Committee, and who is today a highly respected elder, has testified at these hearings. Mr. Keeper has clearly stated that the Cree Nation's objective for the NFA was about fairness, opportunity, and finding a place for NFA signatories in the fabric of the larger Canadian society. The NFC faced continuing failure to fairly implement the terms of the NFA by the other parties. From 1988 to 1989, the NFC attempted, in spite of the other parties inflexibility, to negotiate a comprehensive framework to implement the commitments made in the NFA. That negotiation, while ground breaking in a number of areas, did not result in an implementation agreement. Instead, it resulted in the withdrawal of four of the Cree Nations from the negotiations.

TCN, at the direction of its members, exercised its rights under the NFA to negotiate their own implementation agreement. That agreement with Manitoba, Manitoba Hydro and Canada was signed on June 24, 1992, at Split Lake. Over the next decade, three of the other NFA signatories also negotiated their own implementation agreements.

The 1992 NFA Implementation Agreement contains specific provisions that establish the Split Lake Resource Management Area, the Split Lake Resource Management Board, and provision for allocation of resources within the area. It also made the Government of TCN and the Government of Manitoba jointly responsible for land use planning and monitoring in that area.

In 1996, TCN again negotiated with Hydro what is referred to as a water regime agreement. That agreement, for the first time in Manitoba, saw Hydro pay the First Nation whenever the levels and flows of the Nelson River through their territory exceeded or fell below agreed upon water levels. Provisions of this agreement were overtaken by the unprecedented 2005 flood, resulting in major commitments to better protect TCN lands and waters.

In 1998, TCN, after significant deliberation, wrote to Manitoba Hydro and proposed exploring the possibility of building Keeyask to be jointly owned by Manitoba Hydro and the Cree.

The 2000 Agreement-in-Principle between TCN and Hydro, which was later signed by WLFN, set out the process and a framework for negotiating what ultimately became the Joint Keeyask Development Agreement (JKDA), which is the binding partnership agreement that has been presented to the Commission.

In 2001, TCN and WLFN formed a partnership, the Cree Nation Partners (CNP), to represent their shared interest in future hydroelectric development that will impact their traditional lands. In the same year, Fox Lake Cree Nation and York Factory First Nation, after their own internal deliberations, independently joined negotiations and became part of the group that became known, for purposes of convenience during negotiation, as the Keeyask Cree Nations.

The erroneous representations made to this Commission by certain Participants that the KCNs believed that Keeyask would be built "whether they really wanted it or not" are offensive. As stated clearly in the CNP Environmental Evaluation Report, TCN initiated discussions regarding the potential development of Keeyask Rapids for hydroelectric development and, as the evidence has confirmed, had a veto over whether or not Keeyask would proceed.

Contrary to comments made throughout the course of these hearings, the community involvement of CNP members was exhaustive. As TCN Chief Michael D. Garson, WLFN Chief Betsy Kennedy, Victor Spence, Robert Flett and Roy Ouskun testified, there were more than 2,000 meetings over the course of the consultation period from 2001 to 2009 to consider and participate in all elements of the Project.

In 2009, following ratification votes in each of the KCN communities, the JKDA and AEAs were signed by all parties.

The AEAs provide for offsetting programs which include an access program, maintenance of harvesting trails and portages, cabins, snow machines and equipment, the TCN healthy fish food program, and a variety of other programs aimed at strengthening CNP culture. Importantly, they contain a provision that allows the flexibility to alter these programs over time.

The TCN AEA also provides for the construction of the Keeyask Centre in Split Lake and the WLFN AEA provides for the construction of facilities in WLFN. CNP will participate in the revenue from Keeyask. Importantly, the decision on how to participate does not have to be taken by the CNP until after the Project is licensed and constructed, such that the costs of construction are actually known, and the terms of potential sale contracts are known. This is not a matter of making an uninformed decision before there is a project.

CNP also have direct negotiated contracts. These contracts, which have a value which exceeds $110 million to date, have been part of the ongoing work associated with the Keeyask Infrastructure Project. Additional contracts will be available if the Project receives regulatory approval. The substantial social and economic benefits which are expected to flow from Keeyask have been described in detail throughout the course of these hearings and, as such, will not be reiterated here.

There has been and will continue to be meaningful participation in all aspects of Project development. CNP and their KCN partners have had an unprecedented impact on the preparation of the Keeyask EIS. They will continue to have an unprecedented role in developing and implementing environmental monitoring programs.

In fact, aspects of the Project were modified in important ways, including the Project's size, location and name (from "Gull" to "Keeyask," which means gull in Cree). As stated in the JKDA, the following fundamental features cannot be changed without CNP's concurrence:

- The north and south access road will be routed within specific corridors;
- The intake, powerhouse complex, spillway and main construction camp will all be at the locations shown in the Project description;
- The construction and operation of the Project will not require any changes to the CRD Licence, as modified by the Augmented Flow Program, or the LWR Licence;
- The operation of the generating station will not affect water levels on Split Lake during open water conditions; and
- The full supply level of the reservoir will be 159 m and the minimum operating level will be 158 m, and the reservoir will be higher or lower than these elevations only under special or emergency conditions, which are described in the JKDA.

As well, in response to concerns raised by the Cree, improvements were made to plans for clearing the reservoir, waterways management, ice monitoring, navigation and hazard marking, and reclamation of disturbed sites.

The group of concerned elders from York Factory raised, quite correctly, their concerns regarding respectful dealings with any graves that might be discovered or any artifacts that might be found during construction. They brought as a witness Elder Darcy Linklater, who testified about the agreement Nisichawayasihk Cree Nation reached with Hydro and the Province of Manitoba in this area. CNP, in support of this type of arrangement, wrote to and received from the Province of Manitoba assurance that it would enter into a Heritage Resources Agreement. The Partnership, in answer to the written questions from the CEC panel, gave a similar assurance. An agreement covering these matters is wanted by and is a commitment of the Partnership.

There are provisions addressing construction monitoring, but most significantly provisions covering CNP environmental monitoring for the life of the Project.

Keeyask, if built, will be in the heart of the Split Lake Resource Management Area. Knowing what is happening through monitoring is critical to CNP members. It is the Cree who will be affected first and to the greatest extent. It is the Cree who have the knowledge and life experience to best recommend mitigation and adaptive management measures.

The Keeyask Project, however, is about more than land and animals, megawatts, monitoring and dollars, it is about the Cree people who live in the area. It is about the members who are looking for a future, a future that only to a minimal extent can rely on hunting and gathering as a basis for survival.

Indian leaders, from the late David Courchene of the Manitoba Indian Brotherhood and the late Harold Cardinal of Alberta, in the 1960s and 1970s, and today the TCN and WLFN Chiefs, including the late John Garson, Norman Flett, Duke Beardy, Michael D. Garson and Betsy Kennedy, recognized and promoted participation in the larger Canadian economy as the vehicle to protect the culture and lifestyle of the First Nation members. They worked diligently to open doors and create opportunities for First Nations.

Keeyask is about the people who live with the impacts of river diversions and four dams in their recognized territories. They received few benefits from those dams. They have endured their construction and are still enduring their operation.

The governments of CNP want greater things for their people, particularly their young people. The Commission has heard evidence regarding certain provisions of the JKDA as being improvements over the Wuskwatim agreement. This is positive. Each generation of agreements

aims to learn from and build on its predecessors and become more robust and meaningful for those affected.

The goal of the Cree Nation Partners is best stated by Elder William Beardy.

> *"The land and waters and the resources have provided for us in the past. We can't exercise our traditional pursuits as in the past because the waters have changed. Yet these waters and their power could once again help to provide for our people."*

CNP believe that the JKDA and the proposed Keeyask Project is a major step down that road. It is an agreement proposed and negotiated by the KCNs as equals with Hydro, not with the same financial size, but as recognized autonomous governments.

We respectfully ask the Commission in making your decision to give serious consideration to the KCN's historic decision and support that decision by recommending a licence for Keeyask.

VIII. KEEYASK & SUSTAINABLE DEVELOPMENT

During the course of the hearing, it has been suggested that there is an onus on the Proponent to demonstrate that the Project will make a net positive contribution to sustainability. With respect, this is not a court hearing where onus, burdens of proof, and standards of proof apply – nor should it be. More importantly, there is no requirement, in law or in the Scoping Document or in the Terms of Reference and mandate issued by the Minister for the Proponent to demonstrate such a net positive contribution.

The Minister asked this Commission to incorporate in its recommendation, where appropriate, the Principles of Sustainable Development and Guidelines for Sustainable Development as contained in the *Sustainable Development Strategy for Manitoba.* Principle 4 states that Manitobans should "*anticipate, and prevent or mitigate, significant adverse* economic, environmental, human health and social effects of decisions and actions, having particular careful regard to decisions whose impacts are not entirely certain but which, on reasonable and well-informed grounds, appear to pose serious threats to the economy, the environment, human health and social well-being." Principle 4 represents exactly the environmental planning process followed by the Partnership in planning the Keeyask Generation Project.

No one has said that there will be no adverse effects, or no adverse cumulative effects, or no adverse residual cumulative effects. In fact, it has been acknowledged that the "Keeyask Generation Project will cause numerous and widespread environmental and social effects, some of which *would have had* the *potential* to be significant. However, using past experience, Aboriginal traditional and leading scientific and engineering techniques, the Keeyask

Hydropower Limited Partnership has *mitigated, remediated and/or compensated* for these effects…".

As noted throughout the hearing, the Partners have worked together to assess this Project and to plan it in a manner that, based on our collective knowledge and experience, seeks to minimize environmental effects and enhance its benefits. And, ultimately, the Principles of Sustainable Development require consideration not only of adverse environmental effects, but also of environmental, economic and social benefits. To that end, it is submitted that the Project will produce substantial environmental, social and economic benefits, all of which are consistent with the principles of sustainable development established by the Governments of Canada and Manitoba. The Project will:

- contribute to reductions in greenhouse gases and increases in lake sturgeon populations;
- provide training and employment for hundreds of Aboriginal and northern workers;
- enable the First Nations Partners to build capacity and profit from construction contracts and their investment as equity partners;
- provide income tax and water rental revenues to governments for the benefit of all Manitobans, and
- provide clean renewable energy for Manitobans and export markets.

This is a good project and it will contribute positively to sustainable development in the north and throughout Manitoba.

IX. CONCLUSION

For all of the reasons outlined in this final argument, the five Partners who form the Keeyask Hydropower Limited Partnership are asking this Commission to recommend the Project be licensed by the Minister of Conservation and Water Stewardship. With that recommendation, the Partnership understands that there will be also be conditions recommended. We believe that only one condition is necessary – to hold the Partnership to the commitments it has already made in its EIS filings (see Appendix A). If the CEC feels additional recommendations are required, we ask that they be appropriate, practical and capable of implementation by the Partners, keeping in mind the complexities already associated with such a partnership.

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APPENDIX A

Mitigation Commitment Table

KEEYASK
Hydropower Limited Partnership

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
1	Aquatic	Fish Community	Blasting	Project Footprint	Construction	Blasting will take place in the dry as much as practicable.
2	Aquatic	Fish Community	Blasting	Project Footprint	Construction	No explosive will be detonated in or near fish habitat that produces, or is likely to produce, an instantaneous pressure change (i.e., overpressure) greater than 100 kPa (14.5 psi) in the swimbladder of a fish as per "The Guidelines for the Use of Explosives in or near Canadian Fisheries Waters" (DFO, 1998).
3	Aquatic	Fish Community	Blasting	Project Footprint	Construction	No explosive will be detonated that produces, or is likely to produce, a peak particle velocity greater than 13 mm•s-1 in a spawning bed during the period of egg incubation as per "The Guidelines for the Use of Explosives in or near Canadian Fisheries Waters" (DFO, 1998).
4	Aquatic		Blasting	Project Footprint	Construction	After loading a charge in a hole, the hole will be back-filled with angular gravel to the level of the substrate/water interface or the hole collapsed to confine the force of the explosion to the formation being fractured.
5	Aquatic		Blasting	Project Footprint	Construction	The angular gravel used for back filling will have a particle size of approximately one-twelfth (1/12th) the diameter of the borehole.
6	Aquatic		Blasting	Project Footprint	Construction	All "shock-tubes" and detonation wires will be recovered and removed after each blast.
7	Aquatic	Fish Community	Blasting	Project Footprint	Construction	If the Guidelines for the Use of Explosives in or near Canadian Fisheries Waters (DFO, 1998) cannot be achieved for lake whitefish for two areas: the powerhouse tailrace channel and spillway discharge channel. To mitigate impacts to lake whitefish, blasting in these areas will be conducted outside of the lake whitefish spawning period.
8	Aquatic	Fish Community	Concrete Wastewater	Project Footprint	Construction	No heated water from concrete production will be discharged directly into the river.
9	Aquatic	Fish Community	Fish Habitat	Causeways	Construction	Once the borrow pits N-5 and G-3 are no longer required (in the first year following reservoir impoundment), both causeways will be decommissioned. This will include removing all culverts and removing 80% of the rock material from each causeway.
10	Aquatic	Fish Community	Fish Habitat	Causeways	Construction	At the causeway to the N-5 borrow area, the remaining 20 % of Class C1 construction material (2200 m^3) will be spread over 0.4 ha (approximately) to create a shallow, rocky shoal for fish and other aquatic species.
11	Aquatic	Fish Community	Fish Habitat	Causeways	Construction	At the causeway to the N-5 borrow area, the remaining 20 % of Class C1 construction material (2200 m^3) will be spread over 0.4 ha (approximately) to create a shallow, rocky shoal for fish and other aquatic species.
12	Aquatic	Fish Community	Fish Passage	Causeways	Construction	Two, 1 m culverts and one, 1.5 m culvert will be installed in the southern causeway to N-5 to allow fish passage; culverts to be installed at different elevations to allow fish passage when the water levels fluctuate (at 95th percentile - the 1 m culverts to be installed at 140.3 and 140.4 mASL & 1.5 m culvert to be installed at 139.35 mASL).
13	Aquatic	Fish Community	Fish Passage	Causeways	Construction	Culverts in the causeway to N-5 will have mitred or flared ends to improve flow and fish passage success.
14	Aquatic	Fish Community	Fish Passage	Causeways	Construction	The Site Environmental Officer will inspect the culverts (causeway) each spring and fall during the project for debris/blockage, alignment and structural changes to determine if fish passage may be affected.
15	Aquatic	Fish Community	Fish Passage	Causeways	Construction	A channel will be excavated just west of the G-3 causeway (no culverts required) to connect the unnamed creek from Pond 13 to Stephens Lake to address fish stranding caused by fluctuating water levels in Stephens Lake; to be constructed with a 2 m base width with 4H:1V side slopes excavated from 142 mASL to 137.5 mASL to cover the full range of water depths.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
16	Aquatic	Fish Community	Fish Passage	Project Footprint	Construction and Operation	Access to small tributaries by fish could be blocked by debris created by reservoir flooding. This will be mitigated through the monitoring and removal of debris.
17	Aquatic	Fish Community	Fish Passage	Stream Crossings	Construction	Gull Rapids Creek, Gillrat River, Butnau River and an unnamed tributary of Stephens Lake will require proper stream crossings. These crossings will consist of single or double corrugated metal pipe culverts, which will be designed to provide fish passage as required. Culvert sizing will be based on hydraulic analysis and using the "Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat (1996)". For streams which require fish passage, the minimum culvert diameter will be 1,000 mm.
18	Aquatic	Fish Community	Fish Passage	Stream Crossings	Construction	The inlet and outlet of culverts at stream crossings may have rock placed for protection against scour. The velocity of the water exiting the culvert may be reduced by the use of baffles, rock or stilling pools at the outlet.
19	Aquatic	Fish Community	Fish Stranding	Little Gull Lake	Construction	Two 5 m base-width channels will be excavated from Little Gull Lake to the main body of the reservoir to prevent winterkill; channels are to be excavated in the dry, before reservoir impoundment; channels are to connect Little Gull Lake to the main body of the reservoir as other areas will experience varying levels of DO that may deter the fish from moving out of Little Gull Lake; channel needs to be accessible throughout the ice-on period; with a bottom elevation of 156.0 m to provide a water depth of between 1-2 m below the ice surface, depending on reservoir water surface elevation and ice thickness. The two channels will be approximately 800 m and 400 m long.
20	Aquatic	Fish Community	Fish Stranding	Spillway	Operation	A series of channels will be constructed to avoid stranding of fish in isolated pools after spillway operation ceases. Channels will be excavated between the spillway and Stephens Lake to enable fish to move into Stephens Lake Initial design concepts includes an approximately 1000 m channel that will be 2 m wide by 2 m deep. Plans can only be developed and construction carried out once the Project is operational.
21	Aquatic	Sturgeon	Conservation Awareness	Project Footprint	Construction and Operation	A lake sturgeon conservation awareness program for the Project will be developed and implemented in consultation with local domestic resource users and MCWS to highlight the sensitivity of populations in the Keeyask reservoir and immediately downstream.
22	Aquatic	Sturgeon	Fish Impingement	Trash Racks	Operation	Should acoustic telemetry monitoring results suggest that tagged Lake Sturgeon are moving to the immediate upstream side of the GS and becoming impinged on the trash racks (i.e., are no longer recorded at any receivers), further mitigation/monitoring will be developed by the Partnership in consultation with DFO and MCWS.
23	Aquatic	Sturgeon	Spawning	Project Footprint	Operation	During those years when discharge from the spillway appears adequate to attract spawning sturgeon, the spillway channel and immediate downstream river environment will be monitored to determine whether lake sturgeon are spawning in this area and, if so, attempts will be made to identify locations and timing of egg deposition. If eggs are deposited, spillway discharge would be maintained at levels sufficient to permit egg hatch and survival of larval fish until they emerge and drift from the site.
24	Aquatic	Sturgeon	Spawning	Reservoir	Operation	*Contingent on poor or no spawning success (lake sturgeon) measured during monitoring in the first three years following reservoir impoundment, additional compensation work may be conducted including creating spawning habitat such that sufficient habitat remains to support a self-sustaining population.*

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
25	Aquatic	Sturgeon	Spawning	Tailrace	Construction	A spawning structure for lake sturgeon will be constructed off of the tailrace, as close as possible to the north side. A slope will be incorporated into the north wall of the tailrace channel and a bench will be constructed along the north shore of the tailrace and subsequently covered in spawning substrate. The substrate will be comprised of varying sized rock that is free of fines and placed in water with 0.5-1.5 m/s velocity. It will be placed at depths of 2-11 m over a 3 ha (up to 5.3 ha) area. 65 x 3 boulder clusters will be placed in an upstream chevron orientation over the habitat (Phase 1). This phase 1 work will be monitored for 3 years to determine if Phases 2 and 3 are required (create up to 15.9 ha).
26	Aquatic	Sturgeon	Spawning	Tailrace	Operation	*If monitoring of Phase 1 shows sturgeon are not using the area in the tailrace, Phase 2 and 3 lake sturgeon spawning areas will be constructed to create up to 15.9 ha. This involves a continuation of the Phase 1 technique over a wider area. Phase 2 and 3 areas were selected based on hydraulic modeling, but would likely be modified based on reaction of sturgeon to flows downstream from the GS and site-specific conditions.*
27	Aquatic	Sturgeon	Spawning	Tailrace	Operation	Regarding the lake sturgeon spawning areas- During the lake sturgeon spawning and egg incubation period (late May to mid-July), the operation of the Keeyask GS will be modified such that flow from the two northernmost units is continuous to maintain appropriate hydraulic conditions over the spawning structure installed on the north shore immediately downstream of the tailrace. Monitoring will be required to determine if the cycling mode of operation adversely affects the behaviour of spawning fish.
28	Aquatic	Sturgeon	Spawning	Tailrace Cofferdam	Construction	To create spawning areas and where practicable, coarse materials from the remnants of the tailrace summer level cofferdam will be spread around, but only in locations that will not interfere with the outflow from the GS.
29	Aquatic	Sturgeon	Stocking	Kelsey to Kettle	Construction and Operation	A conservation stocking program will be implemented in the Kelsey to Kettle GS reach of the Nelson River. Sturgeon use of habitat falls into three partially distinct areas of the Nelson River: the upper end of Split Lake including the lower sections of the Burntwood, Nelson and Grass rivers; the reach of the Nelson River between Long and Gull Rapids (Keeyask area); and the reach of the Nelson River from Gull Rapids up to and including Stephens Lake. The stocking program will be conducted in all three areas for at least one complete generation (25 years) to restore the historically depleted population to self-sustaining number. Stocking in the area upstream of Gull Rapids will begin during the construction phase and will continue into the operation phase until a sustainable population has been established. Stocking lake sturgeon in Stephens Lake will commence during construction to offset construction period effects and continue into operations.
30	Aquatic	Sturgeon	Stocking	Off-site Locations	Construction and Operation	Lake sturgeon will be stocked at off-site locations that currently provide habitat to support all life history functions where the current small populations are limiting the potential for recovery. To date, candidate sites have been identified in the upper Split Lake area, in the Nelson River below the Kelsey GS, the Grass River, and the Burntwood River below First Rapids
31	Aquatic	Sturgeon	Stocking	Project Footprint	Construction and Operation	Lake sturgeon fry would also be stocked in the reservoir and Stephens Lake in years where hatchery fry production exceeds rearing capacity.
32	Aquatic	Sturgeon	Stocking	Project Footprint	Construction and Operation	Monitoring will be undertaken to evaluate the relative success of each life stage stocked and to modify stocking rates to maximize recruitment.
33	Aquatic	Sturgeon	Stocking		Construction and Operation	Lake sturgeon brood stock from the Nelson River will be selected based on genetic considerations, including numbers of individuals and genetic similarity to the target area

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
34	Aquatic	Sturgeon	Stocking		Construction and Operation	The stocking program will be conducted in consideration of the need to maintain genetic diversity
35	Aquatic	Sturgeon	Stocking		Construction and Operation	Target numbers and ages of fish stocked at each location will be determined based on the size and age structure of the existing population, the ability of the habitat to support additional fish, and recommended stocking rates and population targets developed elsewhere (e.g., DFO 2010;Wisconsin stocking guidelines).
36	Aquatic	Sturgeon	Stocking		Construction and Operation	The stocking plan would include the introduction of fall fingerlings (three to four months old) and spring yearlings.
37	Aquatic	Sturgeon	YOY in Reservoir	Reservoir	Operation	*This mitigation is contingent on behavior of YOY fish measured during monitoring in the first three years following reservoir impoundment. The compensation work includes creating a sand blanket in an area of the reservoir where it is most likely the YOY will occupy post-impoundment. The specific area will be chosen where deposition of fine sediments is unlikely to occur. Phase 1 includes placing a sand blanket (0.2 m thick to cover existing boulders/cobble) over a 20 ha area specified after review of monitoring results. After monitoring for an additional year to determine if the sand blanket is successful, Phase 2 will be undertaken and includes additional placement of 20 ha of sand blanket, which may or may not be adjacent to the Phase 1 blanket.*
38	Aquatic	Sturgeon and Fish community	Fish Impingement	Project Footprint	Construction	Intake pipes, including intakes/hoses used to remove water from fish bearing water for dust control, will be screened according to current end-of-pipe fish screening guidelines (Fisheries and Oceans Canada; formerly known as the Department of Fisheries and Oceans [DFO] 1995) to minimize the entrainment and impingement of fish.
39	Aquatic	Sturgeon and Fish Community	Fish Passage	Project Footprint	Operation	The requirement for fish passage facilities will be determined by DFO, in consultation with MCWS, based on the results of monitoring, established fisheries management objectives and support for ongoing fisheries productivity.
40	Aquatic	Sturgeon and Fish Community	Fish Passage	Project Footprint	Construction	The Project will be designed and constructed in a manner that would allow it to be retrofitted to accommodate other upstream and/or downstream fish passage options if required in the future.
41	Aquatic	Sturgeon and Fish Community	Fish Passage	Project Footprint	Construction	Trash racks will be installed on the face of each intake to the powerhouse to reduce the risk of injury and mortality to fish. They will be approximately 22.7 m tall and 6.4 m wide. The trash racks for Keeyask will be comprised of vertically oriented rectangular shaped steel bars with a clear bar spacing of 16.75 cm. The spacing between the horizontal support bars will be 50 cm. They will likely not prevent or interfere with the downstream movement of the vast majority of fish approaching the racks.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
42	Aquatic	Sturgeon and Fish Community	Fish Passage	Turbines	Operation	Downstream fish passage is being provided via the turbines and spillway, both of which incorporate design features to reduce the risk of injury and mortality to fish. The use of a fixed-blade, vertical-shaft turbine design for Keeyask results in several advantages for fish passage survivability compared with other turbine types: • The fixed-blade pitch of the vertical shaft units allows for the gap between the runner blades and the discharge ring to be minimized, reducing the likelihood of fish impingement and injury. • The relatively-low rotational speeds associated with large-diameter, vertical-shaft turbines also result in greater fish survivability. • Runner blades that incorporate a thicker rounder leading edge. • The gaps between wicket gates and both the bottom ring and head cover are minimized; and the wicket gate overhang is also minimized. • Features designed to reduce turbulence levels experienced by fish passing through the turbines include: the runner blades incorporate a thinner trailing edge; units will operate at best gate whenever possible; and the shape of the draft tubes incorporate large sweeping radii.
43	Aquatic	Sturgeon and Fish Community	Fish Passage	Turbines	Operation	Although there are many variables to consider beyond those relevant to fish survival, the objective for the Keeyask turbines is to achieve a minimum survival rate of 90%.
44	Aquatic	Sturgeon and Fish Community	Fish Stranding	Project Footprint	Construction	A fish salvage will be conducted in areas where they could become isolated to capture and release fish back into the Nelson River.
45	Aquatic	Sturgeon and Fish Community	Spawning	Project Footprint	Construction	During May 15 and July 15 (Lake Sturgeon spawning) and September 16 to May 15 (Lake Whitefish spawning) no in water work (below the ordinary high water mark) is to occur, unless prior authorization is received from the Department of Fisheries and Oceans Canada.
46	Aquatic	Sturgeon and Fish Community	Spawning	Project Footprint	Construction	To minimize impacts on fish and fish habitat, adjustments to scheduling to restrict construction and removal of structures to times of the year when sensitive life stages of fish are least likely to be present, include: Quarry cofferdam construction; North channel rock groin construction; North channel Stage I cofferdam construction; Powerhouse Stage I cofferdam construction; Spillway Stage I cofferdam construction; Spillway Stage I cofferdam removal of portions; Central Dam cofferdam construction; South Dam Stage II Upstream Rockfill Section Construction; South Dam Stage II upstream and downstream coffer dams construction; Tailrace summer level cofferdam construction; Tailrace summer level cofferdam repairs; and Tailrace summer level cofferdam removal.
47	Aquatic	Sturgeon and Fish Community	Spawning	South Access Road	Construction	Construction of the stream crossings will be scheduled to take place in the winter and early spring, before snowmelt runoff occurs.
48	Aquatic	Sturgeon and Fish Community	Spawning		Construction	Schedule changes affecting in-stream work will be communicated to and approved by regulators as required.
49	Aquatic	Walleye and Lake Whitefish	Spawning Habitat	Reservoir	Construction	Seven shallow spawning shoals at a depth of 3-4 m and six deep spawning shoals at depths greater than 4 m will be constructed in the lower reservoir for walleye and lake whitefish spawning. The total area of the shallow and deep spawning shoals are 0.7 ha and 0.6 ha respectively. The spawning shoals will be constructed at, or near to, known and suspected spawning locations, thereby improving the likelihood of success.
50	Aquatic	Water Quality	Blasting	Project Footprint	Construction	Ammonium nitrate fuel oil (ANFO) will not be used in or near a watercourse/body. ANFO use will be restricted to areas that will not be subject to contact with surface waters (i.e., powerhouse and spillway structures) to avoid introduction of nitrogenous blasting residues to the aquatic environment.
51	Aquatic	Water Quality	Blasting	Project Footprint	Construction	The use of dynamite is planned for blasting where the final rock face will be in contact with water.

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52	Aquatic	Water Quality	Concrete	Cofferdams and Other Instream Works	Construction	Water from cutting green concrete will be confined within the cofferdam and pumped to the settling ponds.
53	Aquatic	Water Quality	Concrete	Concrete Batch Plant	Construction	The batch plant and associated activities, including material stockpiles and truck washing, will not be situated within 100 metres of a watercourse/body.
54	Aquatic	Water Quality	Concrete	Concrete Batch Plant	Construction	A wheel wash will be installed at the entrance of the plant area, if practicable.
55	Aquatic	Water Quality	Concrete	Principle Structures	Construction	Concrete will not be poured in-the-wet (under water).
56	Aquatic	Water Quality	Concrete	Project Footprint	Construction	Liquid concrete will not be allowed to enter a watercourse. Storage, mixing and placing of concrete and grouting will be undertaken in the contractor work area or within the cofferdam, or at least 100 metres from the Nelson River or tributary streams.
57	Aquatic	Water Quality	Concrete Wastewater	Settling Pond	Construction	The settling pond cells will be properly designed, which could include (but not be limited to) installing baffles and/or filters, such that the final effluent is < 25 mg/L TSS.
58	Aquatic	Water Quality	Concrete wastewater	Settling Pond	Construction	The final effluent will be monitored on a weekly basis to verify the settling ponds are in good working order.
59	Aquatic	Water Quality	Concrete Wastewater	Concrete batch plant	Construction	The relatively small amounts of water used to wash out concrete trucks and the concrete batch mixer, will be contained on-site and treated to meet turbidity and pH requirements prior to discharge. Turbidity will be treated by settlement or filtration; pH will be treated by use of acid, dry ice, carbon dioxide gas or other methods.
60	Aquatic	Water Quality	Concrete Wastewater	Project Footprint	Construction	Wastewaters from concrete processing (i.e., concrete batch plant effluent) will be initially discharged to a two-cell settling pond to reduce TSS prior to discharge to the lower Nelson River and apply end-of-pipe discharge criterion of less than 25 mg/L for TSS.
61	Aquatic	Water Quality	Concrete Wastewater	Settling Pond	Construction	The multi-cell settling pond for concrete wastewater and aggregate washing will be constructed with a barrier to prevent contained wastewater from percolating into the ground.
62	Aquatic	Water Quality	Construction In and Near Water	Project Footprint	Construction	During construction, the use of heavy equipment in and near watercourse/bodies will be restricted to limits prescribed in regulatory permits and authorizations.
63	Aquatic	Water Quality	Construction In and Near Water	Project Footprint	Construction	Where required, clearing below the ordinary high water mark on steep or potentially unstable slopes will be conducted by hand.
64	Aquatic	Water Quality	Construction In and Near Water	Project Footprint	Construction	Disturbed banks will be restored, where practicable.
65	Aquatic	Water Quality	Construction Timing	Stream Crossings	Construction	Construction of stream crossings will take place in the winter when flow is minimal, where practicable, to avoid disruption to banks and associated vegetation.
66	Aquatic	Water Quality	Construction Timing	Stream Crossings	Construction	If construction of stream crossings occurs during times when the stream is flowing, an appropriate method of isolating the work area from the watercourse/body will be used allowing “work in the dry”.
67	Aquatic	Water Quality	Contamination	Project Footprint	Construction	Spill response programs and equipment will be in place to address spillage of oils or other contaminants.
68	Aquatic	Water Quality	Drainage	Project Footprint	Construction	Drainage activities will not be intentionally directed to watercourses/bodies.
69	Aquatic	Water Quality	Drainage	Project Footprint	Construction	Any sediment laden water with TSS >25 mg/L will be directed to adequately sized multi-cell settling pond(s) for treatment prior to release to surface waters. Sediment laden water is not intended to include stormwater runoff/drainage from around the site, which will be mitigated through implementation of erosion and sediment control works

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
70	Aquatic	Water Quality	Drainage	Project Footprint	Construction	Sediment laden runoff from roadside ditches or from the approaches to the crossings will be prevented from entering the watercourse/body.
71	Aquatic	Water Quality	Drilling	Project Footprint	Construction	All sediment laden drill water will be treated before release.
72	Aquatic	Water Quality	Drilling	Project Footprint	Construction	Only non-toxic drilling additives and muds will be used.
73	Aquatic	Water Quality	Drilling	Project Footprint	Construction	Fluids will be contained at the drill hole locations to allow sediment to settle.
74	Aquatic	Water Quality	Effluent Discharge	Wastewater Treatment Plant	Construction	The wastewater treatment plant effluent will be disinfected using ultraviolet light and not chlorine, so there will be no residual chlorine in the effluent.
75	Aquatic	Water Quality	Effluent Discharge	Water Treatment Plant	Construction	Water treatment plant sludge will be disposed of in a landfill and filter backwash will be discharged to the wastewater treatment plant
76	Aquatic	Water Quality	Effluent Discharge	Wastewater Treatment Plant	Construction	The wastewater treatment plant will be operated so the effluent entering the Nelson River meets or is of better quality than what is listed in both Manitoba's Tier 1 Water Quality Standards, (effluent quality will meet or exceed standards of 200 fecal coliform organisms/100 mL for fecal coliform, CBOD5 (carbonaceous biochemical oxygen demand of a sample incubated at 20°C for five days) at a concentration not to exceed 25 mg/L. 25 mg/L for biochemical oxygen demand (BOD) and 25 mg/L for total suspended sediments (TSS)) and the Manitoba Environment Act Licence No. 2952 (The Licence), which stipulates how the plant must be operated.
77	Aquatic	Water Quality	Effluent Discharge	Wastewater Treatment Plant	Construction	All wastewater from camp laundry, dishwashing, showers, toilets and other domestic activities will be directed to the wastewater treatment plant.
78	Aquatic	Water Quality	Erosion and Sediment Control	Stream Crossings	Construction	Regarding road and access trail construction, all new channels or banks will be stabilized against erosion by using rock, geotechnical fabric, seeding, mulching or a combination of these.
79	Aquatic	Water Quality	Erosion and Sediment Control	Stream Crossings	Construction	A 30 m buffer zone of low vegetation from the ordinary high water mark will be maintained at the stream crossings until immediately prior to construction of the crossings.
80	Aquatic	Water Quality	Erosion and Sediment Control	Stream Crossings	Construction	Riprap and fill material placed adjacent to watercourses/bodies will be clean to minimize sediment suspension in the water.
81	Aquatic	Water Quality	Erosion and Sediment Control	Project Footprint	Construction	Disturbed areas will be stabilized, vegetated and/or seeded as soon as possible following construction.
82	Aquatic	Water Quality	Erosion and Sediment Control	Project Footprint	Construction	Erosion and sediment control measures will be maintained until either natural vegetation or permanent measures are established to prevent further erosion or sediment loss.
83	Aquatic	Water Quality	Erosion and Sediment Control	Project Footprint	Construction	Clearing and grubbing will take place only where required (e.g., road embankment and ditch).
84	Aquatic	Water Quality	Erosion and Sediment Control	Reservoir	Construction	Lands closest to the existing shoreline will be cleared last, as close as possible to the date of reservoir impoundment, thereby providing a natural buffer between the construction activities and the water body.
85	Aquatic	Water Quality	Erosion and Sediment Control	Excavated Materials Placement Areas	Construction	The majority of excavated material placement areas (EMPAs) have been sited within back bay areas so that they are located away from the main flow of the river. There is generally little to no river flow in the back bay areas which minimizes the water velocities in these areas, thus reducing the potential to erode the material.

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86	Aquatic	Water Quality	Erosion and Sediment Control	Excavated Materials Placement Areas	Construction	The maximum elevations to which material can be placed in the EMPAs has been set to an elevation that minimizes the potential for erosion based on the estimated water velocities at each of the EMPAs. The maximum elevation of material placement varies among the EMPAs because the water velocity at each EMPA also varies. The contractor will be permitted to fill the EMPA to an elevation that cannot exceed the maximum permissible elevation. EMPAs may be filled to elevations lower than the maximum permissible elevation.
87	Aquatic	Water Quality	Hazardous Materials and Petroleum Products	Powerhouse	Operation	To prevent any accidental discharge of oil into the river, the main transformers on the tailrace deck will be supported on concrete pedestal foundations surrounded by tall concrete curbs to contain any oil leaks should a transformer fail.
88	Aquatic	Water Quality	Hazardous Materials and Petroleum Products	Powerhouse	Operation	The transformer foundations will drain to the oil-water separation reservoir below the electrical gallery floor.
89	Aquatic	Water Quality	Hazardous Materials and Petroleum Products	Powerhouse	Operation	The tailrace deck will have downstream curbs and drainage slopes to contain any oil spills. Run-off from the deck will be drained to the oil-water separation reservoir.
90	Aquatic	Water Quality	Erosion and Sediment Control	Project Footprint	Construction	In steeply sloped areas susceptible to erosion, runoff will be directed away from disturbed areas to prevent further site degradation.
91	Aquatic	Water Quality	Erosion and Sediment Control	Project Footprint	Construction	Accumulated sediment will be removed from silt fences, check dams, straw bales, etc. at regular intervals to ensure proper function.
92	Aquatic	Water Quality	Erosion and Sediment Control	Project Footprint	Construction	Construction will be designed and executed to prevent the release or settling of any sediment outside of construction boundaries.
93	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	Each cofferdam will be constructed in a sequence that minimizes the exposure of readily-transported fines to flowing water.
94	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	Impervious fill will be placed in tranquil water, as much as possible.
95	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	Water that is trapped or accumulates behind cofferdams will be discharged to the Nelson River. An end of- pipe criterion of 25 mg/L will be applied such that where met, water behind cofferdams will be directly released to the Nelson River. Where this target is not met, cofferdam water will be pumped to settling ponds and discharged to the Nelson River when the end-of-pipe TSS concentration is less than 25 mg/L.
96	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	Accumulated sediment and excavated materials will be removed to the extent practicable from within the dewatered area before removing a cofferdam.
97	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	Cofferdams will be removed in stages to minimize sediment inputs.
98	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	Excavation in the wet will be conducted in tranquil waters, as much as possible.
99	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	Prior to removal of cofferdams, the water levels inside and outside of the isolated area will be equalized, where appropriate, to mitigate suspension and transport of sediment in the river.
100	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	Removal of the cofferdam will be done “in the dry” as much as practicable to mitigate suspension and transport of sediment.
101	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	The inner rockfill groin of cofferdams will be removed as much as possible using the outer rock groin for protection which will minimize mobilization of fine material into the river; from the bulk of flow.

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102	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	The placement of finer materials (i.e. the granular filter and impervious seal) will be dumped onto the upstream side of the rockfill materials near the front of the advancing face of the rockfill zone and pushed into the river by utilizing dozers so that the fill enters the water as a sliding mass, thereby minimizing the amount of fill that will come in direct contact with the water.
103	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams	Construction	The rockfill groin part of the cofferdam will be kept some 20 to 30 m ahead of the placement front of the finer grained materials.
104	Aquatic	Water Quality	Erosion and Sediment Control	Cofferdams and Other Instream Works	Construction	A preliminary “In-stream Construction Sediment Management Plan” (SMP) has been written for the project. It outlines instream total suspended solids monitoring to take place during instream construction that will trigger an Adaptive Action Plan with immediate corrective actions when target levels for total suspended solids are reached.
105	Aquatic	Water Quality	Erosion and Sediment Control	Excavated Materials Placement Areas	Construction	Areas selected for placement of materials inside the dykes of the reservoir were chosen to prevent mobilization and release of unclassified materials (as suspended sediments) to the aquatic environment and prevent dissolved oxygen (DO) depletion through increased oxygen demand associated with organic (peaty) soils.
106	Aquatic	Water Quality	Erosion and Sediment Control	Excavated Materials Placement Areas	Construction	Excavated material remaining in the reservoir will be placed in such a way that it will not erode.
107	Aquatic	Water Quality	Erosion and Sediment Control	Excavated Materials Placement Areas	Construction	If there is a risk of mobilization due to waves and currents of excavated materials remaining in the reservoir they will be capped/armoured with a minimum thickness of 1 m of unclassified mineral materials to prevent the introduction of sediment.
108	Aquatic	Water Quality	Erosion and Sediment Control	Excavated Materials Placement Areas	Construction	Excavated material comprised of many fines will be placed in a contained area (i.e. with a surrounding berm) to prevent it from entering watercourses/bodies during precipitation events. Collected runoff from bermed areas will be sent to settling ponds.
109	Aquatic	Water Quality	Erosion and Sediment Control	Stage II Diversion	Construction	When flow is first passed through the spillway, increases in TSS will be managed by controlling the flow through the spillway. Flow will be gradually increased based on observed effects on TSS.
110	Aquatic	Water Quality	Shoreline and Banks	Causeway and Stream Crossings	Construction	The installation of headwalls or rock will be carried out at the earliest possible time following culvert installation in order to prevent erosion and sedimentation.
111	Aquatic	Water Quality	Shoreline and Banks	Stream Crossings	Construction	Streams will be crossed at right angles, where practicable, to minimize shoreline disturbance.
112	Aquatic	Water Quality	Shoreline and Banks	Stream Crossings	Construction	Construction procedures at stream crossings will minimize disturbance of the watercourse bed and banks.
113	Aquatic		Shoreline Stabilization	Project Footprint	Construction	The boat patrol under the Waterways Management Program will stabilize shoreline at sensitive streams using low impact techniques. *Low impact techniques include hand placement of field stone and planting of willows to protect a site.
114	Aquatic		Shoreline Stabilization	Project Footprint	Operation	After impoundment, the Waterways Management Program will include monitoring and maintaining shoreline stabilization measures installed at sensitive streams.
115	Aquatic	Water Quality	Stream Crossings	Project Footprint	Construction	Drill cuttings, solid waste or any other untreated effluent will not be released where it may enter a watercourse/body.
116	Aquatic	Water Quality	Wastewater	Holding Tanks	Construction	Holding tanks will be anchored in place when located in areas with a high water table.
117	Aquatic	Water Quality	Wastewater	Holding Tanks	Construction	Holding tanks will be above the one hundred (100)-year flood mark.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
118	Aquatic	Water Quality	Wastewater	Project Footprint	Construction	Wastewater, including concrete processing wastewater, will not be directly released to a water body unless it has been treated to meet applicable provincial and federal effluent licences, authorizations and guidelines.
119	Aquatic	Water Quality	Erosion and Sediment Control	Stream Crossings	Construction	Temporary soil erosion and sedimentation control measures will be implemented as dictated by local conditions, consistent with Manitoba Transportation and Government Services "Manual of Erosion and Sedimentation Control" (Manitoba Government 2000), The "National Guide to Erosion and Sediment Control on Roadway Projects (Transportation Association of Canada 2005)" and "Manitoba Stream Crossing Guidelines for Protection of Fish and Fish Habitat". These may include seeding of exposed areas, riprap at culvert inverts and on steep ditch slopes, straw or coconut fibre erosion control blankets on grade and backslopes constructed with soils of high erodibility, and silt fences to prevent sediment from entering watercourses.
120	Aquatic	Whitefish	Spawning	Stephens Lake	Construction	1000 m^2 of spawning habitat (reef) for lake whitefish will be constructed along the south shore of Stephens Lake approximately 1.5 km downstream of the powerhouse. The spawning habitat will be designed and constructed to have water depths of 1.5 m to 2.5 m below the Stephens Lake 5th percentile open water level of 139.1 m (eggs vulnerable to freezing) and depth averaged velocities of between 0.2 m/s and 1.0 m/s. Velocity measurements near the proposed lake whitefish spawning habitat locations during the Project operation are required to determine the optimum location for the spawning shoals. To be constructed of substrate free from silt and clay to a minimum thickness of 0.75 m. The crest area will be constructed long and rectangular and not circular or square with a slope of less than 10% and be placed adjacent to bedrock, on mineral soils or thin organic soils (the latter to be support by gabion mesh or equivalent for support).
121	Aquatic		Erosion and Sediment Control	Borrow Pits	Construction	Borrow pits will not be located within 100 m of a watercourse/body, wetland or steep slopes;
122	Aquatic		Burning	Project Footprint	Construction	Burn piles will be located a minimum of 30 metres from the ordinary high water mark of any watercourse/body.
123	Aquatic		Clearing	Project Footprint	Construction	A 100 metre vegetation buffer will be maintained adjacent to lakes, streams, marsh and riparian areas, wherever practicable.
124	Aquatic		Clearing	Project Footprint	Construction	At locations where in-water construction will occur, a 30 metre buffer of low vegetation from the ordinary high water mark will be left adjacent to the watercourse until immediately preceding construction at that location.
125	Aquatic		Clearing	Project Footprint	Construction	Trees will not be felled into watercourses and solid waste and/or slash will not be allowed to enter a watercourse/body.
126	Aquatic		Clearing	Project Footprint	Construction	Slash will not be stockpiled within 100 metres of watercourses/bodies
127	Aquatic		Clearing	South Access Temporary Camp	Construction	If required, the temporary camp site along the South Access Road boundaries will be at least 100 metres from a stream crossing.
128	Aquatic		Concrete Wastewater	Settling Pond	Construction	Sludge will be periodically removed from the settling pond and disposed of at an appropriate location where fines will not enter a watercourse/body.
129	Aquatic		Equipment	Project Footprint	Construction	All machinery, vehicles and equipment will be stored 100 metres away from any watercourse/body. Where not practicable, machinery, vehicles and equipment, will be stored in a fashion that prevents fluid leaks from entering any watercourse/body. They will not be stored at the top or on the side of steep slopes, adjacent to water.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
130	Aquatic		Equipment	Project Footprint	Construction	All machinery, vehicles and equipment working within 100 metres of any watercourse/body will be visually checked for fluid leaks prior to work commencing and spills will be reported to the Resident Manager or delegate.
131	Aquatic		Equipment	Project Footprint	Construction	Any parts of equipment entering the water to place/remove material will be cleaned of existing dust/clay/sand/soil, etc. prior to work commencing.
132	Aquatic		Equipment	Project Footprint	Construction	All machinery, vehicle and equipment washing will take place at a site approved by Manitoba Hydro. Wash water will be contained and treated before release.
133	Aquatic		Equipment	Project Footprint	Construction	Detergents or solvents containing phosphates are not permitted for washing equipment.
134	Aquatic		Erosion and Sediment Control	Project Footprint	Construction	Stockpiled material will be located at least 100 metres from any watercourse/body or wetland, where practicable and will be surrounded by a berm if it contains a high fines content.
135	Aquatic		Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	Where construction activity occurs near open watercourses, silt fences will be installed to limit soil erosion into waterbodies.
136	Aquatic		Grubbing	Project Footprint	Construction	Grubbing will not occur along shorelines, except at access locations or areas required to construct project structures. In these instances, grubbing will take place immediately before the work is scheduled to begin.
137	Aquatic		Hazardous Materials and Petroleum Products	Project Footprint	Construction	There will be no refuelling of machinery, vehicles and equipment within 100 metres of a watercourse/body. If 100 metres cannot be attained, machinery, vehicles and equipment will be refuelled in an approved fuelling area, in a contained manner, as approved by the Site Environmental Officer.
138	Aquatic		Hazardous Materials and Petroleum Products	Project Footprint	Construction	All chemicals, fuels, and other harmful materials will be stored a minimum of 100 metres from a watercourse/body.
139	Aquatic		Staging Areas	Project Footprint	Construction	All staging areas will be located at least 100 metres from any watercourse/body.
140	Aquatic		Stripping and Grading	Project Footprint	Construction	Soils will be graded away from all watercourses/bodies at all times and never towards them.
141	Aquatic		Stripping and Grading	Project Footprint	Construction	Grading at watercourse/body access locations for Project structures will be timed to occur immediately before construction begins.
142	Aquatic		Winter Stream Crossings	Project Footprint	Construction	Snow fills at stream crossing will be constructed using clean snow only (i.e. free of dirt and debris) and only when there are sufficient depths available to protect the banks.
143	Aquatic		Winter Stream Crossings	Project Footprint	Construction	Construction of snow fill stream crossings will begin (where applicable): o After the stream has frozen to the bottom; o After the stream has ceased to flow; and/or o Once there is enough ice over the stream to prevent snow loading from damming any free water beneath the ice.
144	Aquatic		Winter Stream Crossings	Project Footprint	Construction	Care will be taken to not scrape dirt and debris into the snow fill during its construction.
145	Aquatic		Winter Stream Crossings	Project Footprint	Construction	All snow fill material will be removed as soon as the work is complete, and prior to the spring melt. It will be placed above the ordinary high water mark to minimize sedimentation and erosion. Care will be taken to not disturb the streambed or banks.
146	Aquatic		Winter Stream Crossings	Project Footprint	Construction	A “V” shaped notch will be placed at the centre of any ice bridges prior to the start of the spring thaw.
147	Aquatic	Mercury in Fish		Project Footprint	Operation	Site selection and station configuration of Keeyask represent the most efficient ways to reduce the extent of increases in mercury concentrations of reservoir fish . In particular, the area of newly flooded soils and vegetation was minimized for the Keeyask Project.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
148	Construction Activities		Aggregate Processing	Project Footprint	Construction	Crushing operations and associated pits will be left in a safe condition free from overhanging banks.
149	Construction Activities		Blasting	Project Footprint	Construction	Explosives will be stored, transported and handled in accordance with regulations in The Workplace Safety and Health Act and The Explosives Act. (Refer to Manitoba Hydro's Safety Publication (0016/05) Transportation, Storage and Handling of Explosives).
150	Construction Activities		Blasting	Project Footprint	Construction	Drill hole sites will be clearly marked with flagging tape and tape will be removed upon completion of the blasting. Signs will be posted to warn personnel of safety hazards.
151	Construction Activities		Blasting	Project Footprint	Construction	The contractor will retain a certified blaster responsible for purchasing, safe storage, tracking and use of explosives. The contractors will be the applicant for authorizations for the temporary magazine.
152	Construction Activities		Borrow Areas and/or Quarries	Project Footprint	Construction	No quarry will be established closer than 150 metres from a Provincial Trunk Highway or Provincial Road unless there is an established vegetated berm or tree screen sufficient to shield the quarry from view of the road.
153	Construction Activities		Borrow Areas and/or Quarries	Project Footprint	Construction	Construction, solid and food waste will not be discarded into borrow areas and/or quarries.
154	Construction Activities		Borrow Areas and/or Quarries	Project Footprint	Construction	Open burning will not be permitted in any borrow areas and/or quarries.
155	Construction Activities		Clearing	Project Footprint	Construction	The majority of the remaining timber/slash will be burned. Anything left will be stockpiled and mulched for erosion control, where required. Any remaining stockpiles designated for mulch will be burned at the end of the Project.
156	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include removal of equipment, fuel, chemicals, etc.
157	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include removal of all project structures, including roads, buildings, underground tanks, stockpiles and other features not required for site operation.
158	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include collection and disposal of any remaining wastes, recyclables and hazardous materials.
159	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include removal and disposal of survey tapes, stakes, and other markers.
160	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include removal and disposal of temporary erosion and sediment control devices if they are no longer required.
161	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include cleaning up areas of contaminated soils/sediment.
162	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include removal and recycling of fire hydrants and above ground water mains/force main.
163	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include cutting off buried watermains, forcemains and effluent discharge pipes, if not used for long-term operation, below the surface and sealing.
164	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include removal of the mechanical wastewater treatment facility and holding/septic tanks.
165	Construction Activities		Decommissioning	Project Footprint	Construction	Decommissioning will include closing borrow areas and/or quarries not required for operations.
166	Construction Activities		Equipment	Project Footprint	Construction	An emergency spill kit will be kept on-site at all times in case of fluid spills.
167	Construction Activities		Equipment	Project Footprint	Construction	Machinery, vehicles and equipment will arrive on-site in a clean condition, in good working order and maintained as such and be free of fluid leaks.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
168	Construction Activities		Equipment	Project Footprint	Construction	Maintenance activities will take place in contained areas on impermeable surfaces. These surfaces will be surrounded by berms to contain spills.
169	Construction Activities		Equipment	Project Footprint	Construction	Drip pans will be placed under machinery, vehicles and equipment during maintenance.
170	Construction Activities		Erosion and Sediment Control	Project Footprint	Construction	All temporary and permanent erosion and sediment control measures will be inspected regularly by the Site Environmental Officer for effectiveness. Shortcomings will be rectified to restore their proper function.
171	Construction Activities		Erosion and Sediment Control	Project Footprint	Construction	Routine maintenance (at least once per week) of sediment (silt) fencing, check dams and erosion control blankets will be completed by the contractor to confirm proper function.
172	Construction Activities		Erosion and Sediment Control	Project Footprint	Construction	All erosion and sediment control measures (structures and procedures), either temporary and/or permanent, will be maintained in proper working condition for the duration of the Project.
173	Construction Activities		Erosion and Sediment Control	Project Footprint	Construction	The contractor will implement erosion and sediment control measures for the Project as per the drawings and construction details.
174	Construction Activities		Erosion and Sediment Control	Project Footprint	Construction	Prior to construction activities, as soon as it is feasible, erosion and sedimentation control measures will be put into place.
175	Construction Activities		Erosion and Sediment Control	South Access Road	Construction	Ditching along the side of the South Access Road will be designed with erosion and sediment control works, where appropriate, to divert the water away from the constructed wetland as much as feasible to minimize sediment inputs.
176	Construction Activities		Excavation	Project Footprint	Construction	All temporary shoring, bracing, sheeting, pumping, roads/bridges will be removed after excavation activities are complete.
177	Construction Activities		Excavated Materials	Project Footprint	Construction	Excavated material will be separated by size/type and stockpiles will be spaced appropriately to allow for drainage.
178	Construction Activities		Excavated Materials	Project Footprint	Construction	The side slopes of material piles will be set to minimize washout and erosion.
179	Construction Activities		Excavated Materials	Project Footprint	Construction	On land material will be piled to a maximum height of three metres.
180	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Prior to construction, the contractor will prepare a Project-specific Emergency Response Plan including prevention planning and response for both hazardous material spills and fires. The plan will be reviewed and accepted by the Resident Manager or delegate.
181	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Site clean-up and disposal of contaminated material will be managed as stated in the Emergency Response Plan in consultation with the Site Environmental Officer and the Resident Manager or delegate. Larger spills would be assessed and delineated following Phase III Environmental Site Assessment standards and a remediation program would be developed.
182	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	All hazardous materials including petroleum products will be transported, including transfer between storage areas and work sites, according to The Dangerous Goods Handling and Transportation Act.
183	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	The contractor will establish a documented inspection process for all hazardous materials and petroleum products.
184	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Transportation of Dangerous Goods labels will be present and legible on all hazardous material and petroleum product containers.
185	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Containers will be correctly labelled to disclose contents, according to The Transportation of Dangerous Goods Regulation, SOR/2008-34.
186	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Hazardous material and petroleum product containers will be inspected daily for leaks.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
187	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Product inventory and inspection sheets will be recorded daily and retained for Manitoba Hydro and regulatory authorities (as required).
188	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	A material inventory covered by Workplace Hazardous Materials Information Systems will be maintained on-site.
189	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Storage of hazardous materials will be limited to only the necessary quantities to conduct work.
190	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Site selection for hazardous materials and petroleum product storage must be approved by the Resident Manager, or delegate.
191	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Hazardous materials and petroleum products will be stored in full compliance with regulatory requirements within dedicated sites at staging areas.
192	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Storage and handling of all products will occur only within dedicated staging areas.
193	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Sites dedicated to hazardous material and petroleum product storage will provide the following features: bermed storage areas; clear identification of the materials present; restricted access to authorized personnel and vehicles only; and dedicated spill response equipment.
194	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	If stored outside, all materials will be stored in weatherproof containers on appropriately sized spill containment pallets and under a weatherproof tarp.
195	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Storage areas will be protected from accidental vehicle collisions via concrete filled bollards or other methods approved by the Resident Manager or delegate.
196	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Warning signs will be posted in clearly visible locations near the storage facility.
197	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	All portable petroleum storage containers (< 230 litres) will be located on spill trays in the construction area when not in use.
198	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Spill trays will remain impervious at very low temperatures (-45°C) and be maintained daily to remove accumulated precipitation when in use.
199	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	All petroleum storage sites (> 230 litres) will incorporate secondary containment features (double-walled tanks, containment dikes, or concrete pads).
200	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Containment systems other than double walled tanks must be liquid proof and maintained to remove accumulated precipitation daily.
201	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Containment systems must have 110% capacity of the largest tank's volume.
202	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Portable petroleum storage containers will be refuelled in a designated area.
203	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Fuel nozzles will not contain a filling lock flap.
204	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	All portable petroleum storage containers must be removed from the back of the vehicle and placed on a spill pad or inside a berm for filling.
205	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	No person shall transfer a petroleum product from a storage tank system to a tank vehicle or from a tank vehicle to storage tank system, without properly grounding the tank system.
206	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	The transfer of petroleum products will be supervised at all times and in such a manner as to be able to immediately shut off the flow of the petroleum product during transfer.
207	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	The grounding connection points will be free from corrosion, contamination and all pieces of equipment must be free from defects.
208	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	All fuel dispensing systems will be secured and locked by authorized personnel when not in use.

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209	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Tanks will consist of all above ground double-walled tanks.
210	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Tanks will meet all standards and codes outlined in The Storage and Handling of Petroleum Products and Allied Products Manitoba Regulation, 188/2001.
211	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	The installation or removal of petroleum product storage tank systems identified in Manitoba Regulation, 188/2001 will only occur under the supervision of a registered licensed petroleum technician.
212	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	Hazardous wastes will be segregated, labelled, stored and disposed of in accordance with the Workplace Safety and Health Regulation 217/2006, Part 35.
213	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	All used oil products (including empty containers and filters) and other hazardous wastes will be collected and disposed of in approved storage containers.
214	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	All used oils and hazardous wastes will be removed from the site for disposal or recycling at a licensed facility.
215	Construction Activities		Hazardous Materials and Petroleum Products	Project Footprint	Construction	An inventory of materials shipped for recycling and/or disposal must be maintained, as well as a record of receipt of materials from the licensed facility.
216	Construction Activities		Hazardous Materials and Petroleum Products		Construction	Flammable waste will be disposed of on a regular basis.
217	Construction Activities		Hazardous Materials and Petroleum Products		Construction	Appropriate spill clean-up equipment will be in place for each hazardous material.
218	Construction		Potable Water	Project Footprint	Construction	Drinking water holding tanks will be designed for potable water containment.
219	Construction		Potable Water	Project Footprint	Construction	Drinking water holding tanks will be cleaned and disinfected before use.
220	Construction Activities		Potable Water	Project Footprint	Construction	The water treatment plant will provide potable water that meets The Guidelines for Canadian Drinking Water Quality.
221	Construction Activities		Potable Water	Project Footprint	Construction	Potable water used to fill the drinking water holding tanks will be in compliance with The Guidelines for Canadian Drinking Water Quality.
222	Construction Activities		Potable Water	Project Footprint	Construction	Water sample(s) and sampling will be taken from the water holding tank and two different faucets at the end of the distribution piping, put on ice and submitted within 24 hours to a laboratory and tested for total coliform, Escherichia coli and free chlorine levels.
223	Construction		Potable Water	Project Footprint	Construction	Water sampling will be conducted until the camp or work area is decommissioned.
224	Construction		Potable Water	Project Footprint	Construction	Leaking fixtures will be repaired in a timely manner.
225	Construction Activities		Potable Water	Water Treatment Plant	Construction	Potable water treatment will comply with The Drinking Water Safety Act and its regulations
226	Construction Activities		Safety	Camp and Work Area Buildings	Construction	The camp and work area buildings will contain fire detection sensors, which will be continuously monitored by the site security forces.
227	Construction Activities		Staging Areas	Project Footprint	Construction	Spill containment equipment must be available at all refuelling and service areas within the staging area.
228	Construction		Waste Management	Project Footprint	Construction	Work area(s) will be kept neat and tidy at all times.
229	Construction Activities		Waste Management	Project Footprint	Construction	The contractor will develop, in conjunction with Manitoba Hydro and at the approval of the Site Environmental Officer or Resident Manager, a solid waste reduction, re-use and recycling plan that will reduce solid waste and recover recyclable material from site waste streams. Plans for food services, office, and construction recycling must be included.
230	Construction Activities		Waste Management	Project Footprint	Construction	Construction waste will be separated and sorted for reuse or recycling.
231	Construction Activities		Waste Management	Project Footprint	Construction	Waste will be disposed of at a facility approved under an operating permit issued pursuant to The Waste Disposal Grounds Manitoba Regulation 150/91, or an Environment Act Licence issued pursuant to The Environment Act.

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232	Construction Activities		Waste Management	Project Footprint	Construction	During the Project, all equipment, solid and construction waste(s) will be removed and disposed of in accordance with Manitoba Conservation and Water Stewardship regulations.
233	Construction Activities		Waste Management	Project Footprint	Construction	Littering is prohibited. This includes solid waste tobacco products.
234	Construction Activities		Wastewater	Holding Tanks	Construction	Wastewater holding tanks installed will be registered with Manitoba Conservation and Water Stewardship and installed by a certified installer.
235	Construction		Wastewater	Holding Tanks	Construction	Wastewater holding tanks will be watertight with a minimum capacity of 4500 L.
236	Construction Activities		Wastewater	Holding Tanks	Construction	If prefabricated wastewater holding tanks will, conform to Canadian Standards Association Standard B66-00, Prefabricated Septic Tanks and Sewage Holding Tanks and bear a valid stamp or mark indicating certification by the Association.
237	Construction Activities		Wastewater	Holding Tanks	Construction	Wastewater holding tanks will be constructed of concrete, fibreglass, polyethylene or other approved material and be installed in accordance with the manufacturer's recommendation.
238	Construction Activities		Wastewater	Holding Tanks	Construction	Wastewater holding tanks will be protected from damage by equipment and vehicles by installing barricades.
239	Construction Activities		Wastewater	Holding Tanks	Construction	Wastewater holding tanks will be protected from freezing. If the tank is located above ground and in a heated building, a temperature alarm is required for winter operation.
240	Construction		Wastewater	Holding Tanks	Construction	Wastewater holding tanks will be equipped with liquid level monitor and alarms.
241	Construction Activities		Wastewater	Holding Tanks	Construction	Wastewater holding tanks will have a covered, watertight, perpendicular access shaft that extends above the ground surface.
242	Construction		Wastewater	Holding Tanks	Construction	Wastewater holding tanks will have a locked access prevention cover.
243	Construction Activities		Wastewater	Holding Tanks	Construction	Levels in all wastewater holding tanks used will be inspected and reported to the Site Environmental Officer on a weekly basis to prevent overfilling.
244	Construction Activities		Wastewater	Project footprint	Construction and Operation	Should wastewater be unintentionally spilled on the ground, the contaminated soil/vegetation will be removed and disposed of at a permitted or licensed waste disposal ground.
245	Construction Activities		Wastewater	Project Footprint	Construction	Wastewater will be removed from holding tanks when they are no more than 90% full by a registered wastewater hauler and disposed of at a wastewater treatment facility licensed under The Environment Act.
246	Construction Activities		Wastewater	Wastewater	Construction	Should wastewater be unintentionally spilled on the ground, the contaminated soil/vegetation will be removed and disposed of at a permitted or licensed waste disposal ground.
247	Construction Activities		Wastewater		Construction	Wastewater sludge will be dewatered and hauled to an approved landfill for disposal. This will occur approximately on a weekly basis.
248	Facility Operations		Equipment	Powerhouse	Operation	Regarding equipment, leaks, mechanical failures and reduced performance will be recorded and remedial actions taken as needed.
249	Facility Operations		Equipment	Powerhouse	Operation	Equipment will be monitored and maintained to operate in compliance with manufacturer and corporation standards.
250	Facility Operations		Equipment	Powerhouse	Operation	Only PCB-free oil will be used in distribution line infrastructure.
251	Facility Operations		Hazardous Materials and Petroleum Products	Powerhouse	Operation	Petroleum products will be stored within the powerhouse with appropriate spill containment and inventory control and documentation.
252	Facility Operations		Hazardous Materials and Petroleum Products	Powerhouse	Operation	Where necessary, equipment inside the powerhouse will include full containment capacity in the event of an oil spill.
253	Facility Operations		Hazardous Materials and Petroleum Products	Powerhouse	Operation	Petroleum products will be stored within the powerhouse with appropriate spill containment and inventory control and documentation.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
254	Facility Operations		Hazardous Materials and Petroleum Products	Powerhouse	Operation	Hazardous wastes will be stored in approved bins, handled, transported and disposed of in compliance with regulatory requirements.
255	Facility Operations		Hazardous Materials and Petroleum Products	Powerhouse	Operation	A spill response plan for those operating and maintenance activities involving increased risk to the environment will be kept in the control room and engineering office and with the emergency response crews. These activities will be assessed annually.
256	Facility Operations		Potable Water		Operation	Only trained and certified operators will operate the water treatment infrastructure.
257	Facility Operations		Waste Management		Operation	Wastes will be stored in protected areas to reduce the potential for unsafe conditions and negative aesthetic impacts.
258	Facility Operations		Waste Management		Operation	Wastes will be hauled to a licensed landfill for disposal.
259	Facility Operations		Waste Management		Operation	Non-hazardous waste will be diverted from landfills when practical for reuse and recycling.
260	Facility Operations		Wastewater		Operation	Only trained and certified operators will operate the wastewater treatment infrastructure.
261	Physical		Air Quality	Clearing	Construction	Fire prevention measures would include supervision of burning.
262	Physical		Air Quality	Clearing	Construction	Fire prevention measures would include having firefighting equipment on site.
263	Physical		Air Quality	Clearing	Construction	Fire prevention measures would include no burning at night.
264	Physical		Air Quality	Concrete Batch Plant	Construction	If practicable, the concrete batch plant will be sited in an area with minimum exposure to prevailing winds.
265	Physical		Air Quality	Project Footprint	Construction	Vehicle idling will be minimized, where practicable.
266	Physical		Air Quality	Project Footprint	Construction	Oil or petroleum products will not be used to control dust
267	Physical		Air Quality	Project Footprint	Construction	Aggregate stockpile areas and transfer points will be enclosed and/or shielded to reduce dust generation, where practicable.
268	Physical		Air Quality	Project Footprint	Construction	Aggregate stockpiles will be wetted to control dust, if practicable
269	Physical		Air Quality	Project Footprint	Construction	Conveyors will be enclosed, if practicable.
270	Physical		Air Quality	Project Footprint	Construction	Transfer points for raw materials will be minimized.
271	Physical		Air Quality	Project Footprint	Construction	Drop heights for conveyor or hoppers will be minimized to reduce dust emissions.
272	Physical		Air Quality	Project Footprint	Construction	Posted speed limits will be adhered to reduce dust generation
273	Physical		Air Quality	Reservoir Clearing	Construction	Manually piled trees and shrubs may be burned earlier in the reservoir as burn regulations permit.
274	Physical		Air Quality	Project Footprint	Construction	Acceptable dust-control measures will be used on the roadway, as necessary, to limit the amount of airborne dust.
275	Physical		Air Quality	Project Footprint	Construction	To reduce effects on air quality will include limiting traffic to construction vehicles/equipment.
276	Physical		Air Quality	Project Footprint	Construction	Contractors will be encouraged to take reasonable measures to minimize construction-related emissions (including SOx).
277	Physical		Air Quality	Clearing	Construction	Woody debris that is not salvaged will be piled, windrowed and burned after drying and only under acceptable wind conditions.
278	Physical		Air Quality and Noise	Project Footprint	Construction	Equipment will be operated at and within load tolerances, be regularly maintained and be in good working order to reduce noise and vibration emissions.
279	Physical		Debris	Waterways Management	Operation	Boat patrols operating under the Waterways Management Program during the operating period will remove large woody debris as required and it is expected that small woody debris would also be opportunistically removed as currently occurs.
280	Physical		Debris	Clearing	Operation	Areas that will convert from land to water over time as a result of peat land disintegration and shoreline erosion will be cleared on an ongoing basis through the implementation of the Waterways Management Program.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
281	Physical		Debris	Reservoir Clearing	Construction	The Reservoir Clearing Plan (JKDA, Schedule 11-1) will be implemented prior to impoundment to remove large woody vegetation, thus preventing it from becoming mobile debris after impoundment.
282	Physical		Debris	Reservoir Clearing	Construction	The surface elevation of the reservoir up to at least 159.0 m ASL, and some level above as a buffer, will be surveyed and staked to define the extent of area to be cleared.
283	Physical		Debris	Reservoir Clearing	Construction	All standing woody material, which includes dead and living trees and shrubs 1.5 m tall or taller, as well as all fallen trees 1.5 m or more in length with a diameter of 15 cm or greater at its largest point will be cleared.
284	Physical		Debris	Reservoir Clearing	Construction	Cleared material will burned during the following winter season.
285	Physical		Debris	Reservoir Clearing	Construction	Almost all of the clearing will be accomplished using mechanical means (shear blading), during the winter when the ground is frozen, to level and pile the vegetation, which subsequently will be burned. Because this clearing method strips off a large amount of the surface material (trees, brush, grasses, etc.), much of the loose and dead woody debris on the ground will also be removed. This will minimize the potential amount of small woody debris initially entering the reservoir when it is impounded.This reduces the amount of organic debris remaining after clearing.
286	Physical		Debris	Reservoir Clearing	Operation	According to the post-flooding Reservoir Clearing Plan shorelines at risk of erosion after flooding will be cleared on an ongoing basis to prevent the creation of new large woody debris
287	Physical		Debris		Operation	Boat patrols performing woody-debris management under the Waterways Management Program will monitor the presence of hazardous or problematic peat debris.
288	Physical		Debris		Operation	Mitigation of peat debris could include installing debris booms to collect peat and woody debris, preventing it from moving downstream into Stephens Lake.
289	Physical		Debris		Operation	Mitigation of peat debris could include towing peat islands that create a navigation safety issue to shore and anchoring them to the shore.
290	Physical		Debris		Construction	The pre-flooding phase of the Waterways Management Program will monitor and address this situation by removing debris as needed.
291	Physical		Erosion	Cofferdams	Construction	The rock groin for the Stage II south dam upstream cofferdam will be advanced across the south channel and onto the south bank of the river at a location containing a relatively high bedrock outcrop, thus minimizing the potential for erosion of the riverbank.
292	Physical		Groundwater	Project Footprint	Construction	Decommissioning will include capping drinking water wells.
293	Physical		Groundwater	Settling Pond	Construction	The multi-cell settling pond will be constructed with a barrier to prevent contained wastewater from percolating into the ground.
294	Physical		Groundwater	Project Footprint	Construction	Any artesian flow (water bubbling out of a hole) will be plugged and permanently sealed immediately after drilling.
295	Physical		Groundwater and Surface Water	Concrete Batch Plant	Construction	Water use will be metered, recorded and reported weekly during periods of heavy use to the Site Environmental Officer.
296	Physical		Physiography	Access Roads and Dykes	Construction	Regarding construction of the South Access Road - Any usable material will be excavated from the ditches and backslopes and compacted into the embankment.
297	Physical		Physiography	Access Roads and Dykes	Construction	Regarding construction of the South Access Road - The waste material, including slash and surface organics, will be placed on the spoil banks at the top of the backslope to promote vegetation growth.

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298	Physical		Physiography	South Access Road	Construction	Where the road traverses an area of discontinuous permafrost, the roadbed within these areas will be constructed by using granular fill material and geotextile placed directly on top of the unstripped peat.
299	Physical		Physiography	Project Footprint	Construction	Flooded areas will be cleared of vegetation but not grubbed.
300	Physical		Physiography	Dykes	Construction	Preferred dyke alignments were selected to reduce the maximum height of the dykes and reduce fill volumes.
301	Physical		Physiography	Dykes	Construction	Preferred dyke alignments were selected to provide adequate drainage management.
302	Physical		Safety	Cofferdams	Construction	An emergency response plans will be developed for the possibility of exceeding the design event for the cofferdams so that worker safety is maintained.
303	Physical		Sedimentation	Cofferdams	Construction	Cofferdam designs, construction methodology and sequencing have been developed to minimize erosion and sediment inputs during construction including designing cofferdams to prevent erosion due to wave action.
304	Physical		Sedimentation	Cofferdams	Construction	Cofferdam designs, construction methodology and sequencing have been developed to minimize erosion and sediment inputs during construction including removing cofferdams in stages to minimize loss of cofferdam materials into the river.
305	Physical		Sedimentation	Cofferdams	Construction	Controlled breaching of cofferdams will be achieved by removing a portion of the impervious and transition fill material on the upstream side to control the rate of seepage into the cofferdam area.
306	Physical		Sedimentation	Cofferdams	Construction	Cofferdams will be removed in stages to minimize sediment inputs.
307	Physical		Surface Water and Ice Regime	Ice Boom	Construction	An ice boom will be installed in 2014 approximately 3 km upstream of the powerhouse site during construction to ensure that an ice cover forms on Gull Lake early in the winter to minimize the formation of a hanging ice dam below Gull Rapids. It will be removed prior to reservoir impoundment.
308	Physical		Surface Water and Ice Regime	Reservoir	Operation	The low head generating station option (FSL 159 m) has been selected in part to minimize flooded area, reduce the zone of influence to downstream of the Clark Lake outlet, and to minimize the impact of the Project on Split Lake.
309	Physical		Surface Water and Ice Regime	Reservoir	Operation	The operating range of the reservoir will be limited to 1 m to reduce Project induced water level fluctuations, which will assist in minimizing the formation of ice ridges along the shorelines during the winter.
310	Physical		Surface Water Temperature and Dissolved Oxygen	Spillway	Construction	Design features to mitigate the potential of high total dissolved gases include directing the flow from the spillway into the flow path of water discharged from the powerhouse approximately 2 km downstream of the spillway to facilitate mixing of these two flows.
311	Physical		Surface Water Temperature and Dissolved Oxygen	Spillway	Operation	Operation of the spillway (e.g., height of gate openings, number of gates operating) can be adjusted to minimize the potential increase in total dissolved gas pressure downstream of the spillway.
312	Physical		Surface Water Temperature and Dissolved	Tailrace	Construction	Design features to mitigate the potential of high total dissolved gases include constructing a shallow tailrace channel.
313	Physical		Surface Water Temperature and Dissolved Oxygen	Tailrace	Construction	Design features to mitigate the potential of high total dissolved gases include designing the tailrace channel with an upward slope on the downstream end to aid in degassing the water by directing the flow towards the surface.
314	Socio-Economic, Heritage, and Resource Use	Community Health	Air Quality and Noise		Construction	If complaints are received during construction regarding noise or dust and other related air quality issues these will be handled on-site on a case by case basis and corrective action taken as necessary.

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315	Socio-Economic, Heritage, and Resource Use	Community Health	Health Services		Construction and Operation	Manitoba Hydro continues to work closely with the Northern Regional Health Authority (NRHA) to help it identify new health service requirements and priorities to be incorporated in its 5 year Strategic Plan. This is mutually beneficial for the NRHA and the Partnership in preparing for any additional service requirements that may be needed as the project unfolds.
316	Socio-Economic, Heritage, and Resource Use	Community Health	Health Services		Construction and Operation	The Partnership is working with the Northern Regional Health Authority (NRHA) to secure an on-site public health care professional who would be responsible for the provision of and/or referral to health promotion and risk management programming (including communicable disease education and prevention measures, if required) and make referrals to appropriate and more comprehensive services at the community or regional level.
317	Socio-Economic,	Community Health	Air Quality	Project Footprint	Construction	Burning will take place when the wind direction is not toward adjacent communities.
318	Socio-Economic, Heritage, and Resource Use	Community Health and Culture and Spirituality	Counselling		Construction and Operation	Counselling and family support services will be available on site through the employee retention and support services contract, which is a Direct Negotiation Contract through a joint venture of two of the KCNs (Fox Lake Cree and York Factory)
319	Socio-Economic, Heritage, and Resource Use	Community Health, Infrastructure and Services, Public Safety and Worker Interaction	Health and Social Services		Construction and Operation	Continue existing dialogue with health and social services providers in Gillam (e.g., National Native Alcohol and Drug Abuse Program (NNADAP), Awasis, RCMP, Burntwood Regional Health Authority (BRHA))regarding increased demand for health and social services in the KCNs communities and Gillam.
320	Socio-Economic, Heritage, and	Culture and Spirituality	Adverse Effects Agreements		Construction and Operation	Offsetting programs in AEAs are key to addressing effects on culture and spirituality due to the loss of cultural landscape and the rapids.
321	Socio-Economic, Heritage, and Resource Use	Culture and Spirituality	Ceremonies	Project Footprint	Construction and Operation	Opportunities for the KCNs to undertake appropriate activities hsve been put in place, including rituals and ceremonies, to show respect and give thanks to Askiy at major Project milestones, and the development of measures to retain cultural memory of the Keeyask region.
322	Socio-Economic, Heritage, and Resource Use	Culture and Spirituality		Generating Station	Operation	An interpretative display will be created in the visitor space of the generating station.
323	Socio-Economic, Heritage, and Resource Use	Culture and Spirituality, The way the Landscape Looks (Aesthetics)		Gull Rapids	Construction	A video of Gull Rapids and Nelson River between the outlet of Birthday Rapids and Stephens Lake has been recorded. (This was to take place prior to construction.)
324	Socio-Economic, Heritage, and Resource Use	Domestic Fishing, Domestic Hunting and Gathering	Resource Use	Regional Study Area	Construction and Operation	AEA offsetting programs are available for KCNs resource use.
325	Socio-Economic, Heritage, and Resource Use	Domestic Fishing, Domestic Hunting and Gathering	Resource Use	Regional Study Area	Construction and Operation	A Fish Harvest Sustainability Plan (TCN&WLFN) will be developed to manage fish resources harvested through the offsetting program.
326	Socio-Economic, Heritage, and Resource Use	Domestic Hunting and Gathering, Commercial Trapping	Resource Use		Construction and Operation	Compensation agreements are in place for local area resource users to address any decrease in commercial trapping.
327	Socio-Economic, Heritage, and Resource Use	Employment and Training	Training of Youth	KCNs	Construction and Operation	To provide capacity building opportunities for the Keeyask Cree Nations, Manitoba Hydro Keeyask Leadership Scholarship ($500 each) is provided annually to four graduating high school students from each of the KCNs.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
328	Socio-Economic, Heritage, and Resource Use	Employment and Training	Operational Employment		Construction and Operation	Operational job provisions are included in the JKDA. A Working Group for Operational Jobs (WGOJ) has been established with a target of employing 182 Keeyask Cree Nations (KCNs) Members into Hydro's ongoing operational jobs over a 20 year period. The activities of the working group are aimed at different segments of each community, from youth in elementary school (general awareness presentations) to teens in high school (career presentations and facility tours) to post secondary students (presentations on scholarships and bursaries and summer employment) to mature students (hands on sessions, education upgrading opportunities). The aim is to provide the information and assistance required by each of these segments so they can make optimal career decisions regarding employment with Manitoba Hydro. All of these activities are undertaken to achieve the permanent job target.
329	Socio-Economic, Heritage, and Resource Use	Employment and Training	Employment		Construction	Through a joint venture, two of the KCNs (Fox Lake Cree and York Factory) will provide aboriginal awareness training and KCN site orientation where, prior to arrival at the work site Members have an opportunity to learn about the camp construction experience and enhance their prospects of staying on the job.
330	Socio-Economic, Heritage, and Resource Use	Employment and Training	Aboriginal Employment		Construction	An Advisory Group on Employment (AGE) will be in place for the project. It is a forum for addressing employment related issues, in particular Aboriginal employment related to the Project, with voting representatives from the KCNs, the Province of Manitoba, the Hydro Project Management Association and the Allied Hydro Council. Non-voting representatives include each Project contractor and the Aboriginal union site representative from the Allied Hydro Council.
331	Socio-Economic, Heritage, and Resource Use	Employment and Training	Employment		Construction	Hydro Projects Management Association (HPMA) and the Allied Hydro Council of Manitoba (AHC) are presently reviewing changes to the Burntwood Nelson Agreement (BNA) in regards to isolation leaves to better attract and retain a qualified workforce.
332	Socio-Economic, Heritage, and Resource Use	Employment and Training	KCNs Employment		Construction	Each of the KCNs communities will have a job seeker manager hired by Employment Manitoba in order to assist with ensuring KCNs Members are registered correctly in the JRS.
333	Socio-Economic, Heritage, and Resource Use	Employment and Training	KCNs Employment		Construction	KCNs Members are not required to live in their home communities to be eligible for preferential hiring on the Project. This has the potential to reduce in-migration and thus any added pressure on housing in the communities. For those Members who gain employment on the Project, housing is provided at the camp.
334	Socio-Economic, Heritage, and Resource Use	Employment and Training	Aboriginal Employment		Construction	The Burntwood Nelson Agreement (BNA), the collective agreement governing employment on the Project, includes preferential hiring provisions for qualified Aboriginal residents from the Churchill-Burntwood-Nelson area (the KCNs communities are located within this CBN area).
335	Socio-Economic, Heritage, and Resource Use	Employment and Training and Business Opportunities	KCNs Employment		Construction	To provide the KCNs training and employment opportunities extensive use of Direct Negotiation Contracts (DNCs) will be used that, through the BNA include direct-hire provisions.
336	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction and Operation	The Heritage Resources Protection Plan (HRPP) will provide objectives for the protection of any known and any future discoveries of heritage resources during the construction phase (to the extent feasible). This will allow that provincial legislation The Act and Policy Respecting the Reporting, Exhumation, and Reburial of Found Human Remains and any requirements established by the KCNs are observed.
337	Socio-Economic, Heritage, and	Heritage Resources	Environmentally Sensitive Sites	Keeyask Reservoir	Construction	Hand clearing will be undertaken in areas that are designated environmentally sensitive sites (e.g. sacred, cultural or heritage sites)

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
338	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction	All artifacts will be left in situ, that is, in the same position in which they were discovered and no objects will be removed from the site until advised by the Project Archaeologist.
339	Socio-Economic, Heritage, and Resource Use	Heritage Resources			Construction and Operation	As part of TCN's AEA program repatriation, display and interpretation of heritage resources found within this area will be part of the Keeyask Cultural Centre's Museum and Oral Histories Program.
340	Socio-Economic, Heritage, and	Heritage Resources		Project Footprint	Construction	If heritage resources or human remains are found during construction worked will be stopped at that location.
341	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction	Heritage resources that may be disturbed by the Project will be salvaged to enable long-term preservation of tangible heritage and to enhance public and local awareness through education kits, interpretive displays and other forms of cultural media.
342	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction	If sacred or ceremonial objects are discovered, the KCNs (TCN lead) representative, in consultation with other KCNs partners, will arrange for and facilitate an appropriate ceremony.
343	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction	KCN members will be involved in identifying and contributing to impact management measures at important spiritual and heritage sites.
344	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction	The Project Archaeologist will advise and provide field support should any heritage concerns be raised.
345	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction	The Resident Manager (or delegate), with the advice of the Project Archaeologist, will establish a buffer around the find (e.g. a minimum of 35 metres radius from the centre of the area of inquiry).
346	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction	Archaeological salvage of heritage resources includes seven known sites.
347	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Operation	KCN participants in the Waterways Management Program will be involved in activities pertaining to high priority heritage sites.
348	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project footprint	Construction	Heritage resources found in dewatered areas will be recovered.
349	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project footprint	Construction and Operation	With respect to heritage resources, mitigation includes development of a cemetery for reburial of human remains found during construction and operation of the Project.
350	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project footprint	Construction and Operation	On-going seasonal monitoring for heritage resources will be conducted during the course of construction and during the operation phase until the maximum predicted reservoir shoreline is reached. This will be completed by the Project Archaeologist and/or by the Environmental Officer and Members of the KCNs who are assigned to the task of shoreline monitoring
351	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project footprint	Construction	Increased human traffic due to the Project is expected to have an adverse effect on known and unknown heritage resources. Education and awareness of Project workers as to the nature of heritage resources and management of any heritage resources that may be encountered will be conducted.
352	Socio-Economic, Heritage, and Resource Use	Heritage Resources		Project Footprint	Construction	An important activity before impoundment will be to work with Members of the KCN to indentify and contribute to impact management measures at high priority spiritual and heritage sites that will be flooded.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
353	Socio-Economic, Heritage, and Resource Use	Heritage Resources	Environmentally Sensitive Sites	South Access Road	Construction	Known heritage resource sites and environmentally sensitive areas to be avoided will be identified in advance of construction.
354	Socio-Economic, Heritage, and Resource Use	Heritage Resources	Environmentally Sensitive Sites		Construction	Generally, hand clearing will take place at locations within 10 m (33 ft) of the existing normal high water mark on the Nelson River and within 5 m (16 ft) of tributary stream banks, due to the higher potential for disturbance of sensitive sites in these areas (heritage sites).
355	Socio-Economic, Heritage, and Resource Use	Heritage Resources and Culture and Spirituality	Waterways Public Safety	Project Footprint	Operation	After impoundment, the Waterways Management Program will include planning and implementing the remaining protection and preservation measures at spiritually and culturally significant, historical or heritage sites using low impact techniques.
356	Socio-Economic, Heritage, and Resource Use	Infrastructure and Services	Social Services	KCNs, Gillam, Thompson	Construction	Through FLCN AEA, increased youth programming due to potential increased pressure on RCMP and social services due to influx of non-local construction workers to Gillam.
357	Socio-Economic, Heritage, and Resource Use	Infrastructure and Services, Community Health, Housing	Housing	KCNs, Gillam, Thompson	Construction and Operation	The Gillam Land Use Planning process is underway through Gillam Redevelopment and Expansion Program (GREP) to meet increased demand for housing for operation staff and overall community growth.
358	Socio-Economic, Heritage, and Resource Use	Mercury and Human Health		KCNs and Gilliam	Operation	A risk communication strategy and communication products on mercury and human health will be employed (e.g., poster, placemats, fish yardstick, maps and video) for pre and post-impoundment conditions; encourage use of country foods generally
359	Socio-Economic, Heritage, and Resource Use	Mercury and Human Health	Fish Harvest	KCNs and Gilliam	Operation	The communication products related to mercury related adverse health impacts will focus on the protection of the most sensitive receptors first (i.e., women of child-bearing age and children).
360	Socio-Economic, Heritage, and Resource Use	Mercury and Human Health		KCNs and Gilliam	Operation	With respect to mercury and human health, based on results of Aquatic and Terrestrial monitoring, additional human health risk assessment (HHRA) until mercury levels return to pre-Project conditions.
361	Socio-Economic, Heritage, and Resource Use	Mercury and Human Health	Fish Harvest	KCNs and Gilliam	Operation	Harvest of fish from unaffected lakes will be encouraged (via AEA programs) due to elevated levels of methylmercury resulting in consumption restrictions on Gull and Stephens lakes.
362	Socio-Economic, Heritage, and Resource Use	Mercury and Human Health	Fish Consumption		Operation	Results on mercury levels in fish tissue will be used to inform health communications, such as local consumption guidelines, undertaken as part of the mercury-in-foods programs.
363	Socio-Economic, Heritage, and Resource Use	Mercury and Human Health	Fish Harvest		Operation	Information and awareness programs will be carried out for local resource users on how to minimize mercury uptake under current fish harvest practices.
364	Socio-Economic, Heritage, and Resource Use	Moose	Resource Use	Regional Study Area	Construction and Operation	Harvest of moose in the Split Lake Resource Management Area through the TCN offsetting program will be managed by the CNP Moose Harvest Sustainability Plan.
365	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Project Footprint	Construction	Camp rules, as part of a Security Contract, will be adhered to and will govern the behaviour of Project workers lodged at the camp.
366	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Project Footprint	Construction	With respect to worker interaction during the project, mitigation includes separate dorm(s) for female occupants.
367	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Project Footprint	Construction	With respect to worker interaction during the project, mitigation includes strict provisions in camp rules and the Burntwood Nelson agreement (BNA) concerning harassment.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
368	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Project Footprint	Construction	With respect to worker interaction during the project, the contractors are required to provide gender specific washrooms/washcar facilities.
369	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Project Footprint	Construction	With respect to worker interaction during the project, considerations related to respect for women (amongst others) are anticipated to be incorporated into mandatory Cultural Awareness training for the Project workforce.
370	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Gillam Area	Construction	To prevent negative worker/local population interaction issues there will be coordination between Manitoba Hydro, Town of Gillam and FLCN under the Harmonized Gillam Development Committee process through Worker Interaction Subcommittee. This committee will include representatives from these three parties, as well as community health care providers and other stakeholders and service providers in the Gillam area. This Committee is intended to provide a coordinated approach to addressing worker interaction issues across all of Manitoba Hydro's projects in the vicinity of the Gillam area and will track and address such issues and concerns in the vicinity of Gillam, and provide input into Keeyask socio-economic monitoring.
371	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Project Footprint	Construction	Mitigation to prevent negative worker/local population interaction issues include constructing recreational facilities at the main camp.
372	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction		Construction	Mitigation to prevent negative worker/local population interaction issues include cultural awareness training for all workers, including expectation of respectful behaviour.
373	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Security Gates	Construction	Mitigation to prevent negative worker/local population interaction issues include restriction of unauthorized public visits to the camps (including 24/7 security).
374	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Transportation Service	Construction	Mitigation to prevent negative worker/local population interaction issues include discouraging non-northern workers from bringing personal vehicles to the site and providing a shuttle service from Gillam and Thompson airports. There will be a shuttle service to and from airports in Gillam and Thompson to transport workers to the Project site for isolation leaves. The availability of a Project shuttle service is a mechanism to enhance worker safety as well as reduce traffic congestion from use of personal vehicles.
375	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction		Construction	Mitigation to prevent negative worker/local population interaction issues include restrictions on the use of company vehicles for personal purposes.
376	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Worker Interaction	Camp	Construction	Mitigation to prevent negative worker/local population interaction issues include establishment of a camp committee to oversee implementation of consequences of inappropriate behaviour by workers in camp.
377	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Safety		Construction	An on-site safety supervisor, reporting to the Project Manager, will be employed during the construction phase to assure that staff receives safety training and that contractors comply with the required regulations.
378	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction			Construction	Amenities located at the Main Camp (to help provide balance to a worker's stay a camp) include accommodation with private bathrooms, personal televisions and individual heating and cooling units.
379	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction			Construction	Keeyask Site Representatives will be hired to liaise with construction workers (including the KCNs) and assist with issues that may arise at the job site.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
380	Socio-Economic, Heritage, and Resource Use	Public Safety and Worker Interaction	Public Safety		Operation	In the event of a dam failure at the Keeyask GS, Manitoba Hydro would notify the Local Civil Authorities, who in turn would notify the Manitoba Emergency Management Organization and the RCMP. The Local Civil Authorities would coordinate all emergency response in the affected downstream communities and would also coordinate the response of appropriate provincial departments and other agencies as may be required, and would also provide overall liaison.
381	Socio-Economic, Heritage, and Resource Use	Resource Use	Commercial Trapping and Fishing	KCNs	Construction and Operation	Settlements with affected resource users due to commercial resource loss.
382	Socio-Economic, Heritage, and Resource Use	Resource Use	Tourism, Commercial Forestry and Mining		Construction and Operation	Compensation to MCWS for loss of standing timber due to permanent loss of forestland as specified by the Forest Damage Appraisal and Valuation (FDA&V) policy.
383	Socio-Economic, Heritage, and Resource Use	Resource Use	Tourism, Commercial Forestry and Mining		Construction and Operation	Implementation of TCN's guidelines and principles for Access Program participants for potential disturbance of certain lodges and outfitters.
384	Socio-Economic, Heritage, and Resource Use	Resource Use	Commercial Lodge and Outfitting Business	Project Footprint	construction	Implementation of the TCN Access Program Guidelines and Principles to: o respect the land and environment; o use firearms safely; o conduct s elective harvest; and o respect others; Coordination with the Split Lake Resource Management Board to: o review and discuss annual reports on the management and administration of the AEA offsetting programs; o provide a forum for ongoing communication among resource users and provincial resource managers; and o consult with TCN on Healthy Food Fish Program lakes other than those named in the TCN AEA; Commitment by TCN to: o operate offsetting programs within and only in the Split Lake RMA as per the TCN AEA agreement; and o work with other users of the resources to resolve concerns of mutual interest now and in the future as they have in the past.
385	Socio-Economic, Heritage, and Resource Use	Resource Use	Trapping	Project Footprint	Construction	Discussions with respect to traplines 7 and 25 will be initiated when there is greater certainty of the Keeyask Generation Project proceeding (they are not affected by prelicencing activities). As Trapline 25 is a community trapline, the approach in this case will be somewhat different and will involve discussions with the local fur council or other representative body, rather than individual trappers.
386	Socio-Economic, Heritage, and Resource Use	Resource Use	Trapping	Project Footprint	Construction	Manitoba Hydro will also operate an ongoing claims process to facilitate the resolution of claims by members of the four First Nations for loss or damage resulting from Keeyask adverse effects to personal property (e.g. section 10.1.3 in the TCN AEA).
387	Socio-Economic, Heritage, and Resource Use	Resource Use	Trapping	Project Footprint	Construction	Once there is greater certainty that the Keeyask Generation Project is going forward, the Partnership will seek to enter into an agreement with Mr. Massan for project effects on Trapline 9. Manitoba Hydro will also seek agreement with Mr. Massan with respect to Keeyask transmission issues in accordance with the transmission Trappers Notification and Compensation Policy.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
388	Socio-Economic, Heritage, and Resource Use	Resource Use	Trapping	Project Footprint	Construction	Once there is greater certainty that the Keeyask Generation Project will proceed, Manitoba Hydro, on behalf of the Partnership, will provide an offer of compensation to any Member, who is a licensed trapper, to enter into an agreement over a longer term to address any existing or anticipated loss of net revenue from commercial trapping, and for any anticipated direct loss or damage to any buildings, structures or other infrastructure located on a Registered Trapline used by the member, resulting from the construction and operation of the Keeyask Generation Project, as per the processes in the AEA (see, for example, Article 10 "Members' Claims in the TCN AEA).
389	Socio-Economic, Heritage, and Resource Use	Resource Use	Compensation for Loss or Damage	Project Footprint	Construction and Operation	Pursuant to the AEAs, Manitoba Hydro will establish and operate a claims process for an individual's loss or damage resulting from Keeyask Adverse Effects to personal property belonging to such Member, which claims are not settled and resolved by the AEAs. This could include, for example, the loss of cabins or other personal property.
390	Socio-Economic, Heritage, and Resource Use	Resource Use			Construction	Hand clearing at selected mainland locations may be designated by the Project Manager, where practical, for tree salvage (for use as firewood, saw-logs, cabins, etc.).
391	Socio-Economic, Heritage, and Resource Use	The way the Landscape Looks (Aesthetics)		Camp	Construction	Nature trails within north camp area will be provided as a result of changes in physical landscape and scenic views.
392	Socio-Economic, Heritage, and Resource Use	The way the Landscape Looks (Aesthetics)		Boat Launches	Operation	A Park/rest area with boat launch and a commemorative plaque/memorial is proposed both upstream and downstream of the generating station and at the location of the north construction site to recognize people who have used and continue to use the Gull Lake area.
393	Socio-Economic, Heritage, and Resource Use	The way the Landscape Looks (Aesthetics)		Project Footprint	Construction	Reclamation of construction site due to changes in physical landscape and scenic views.
394	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Air Quality and Safety	Roads	Construction	Dust control will be used on roads during construction.
395	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Air Quality		Construction	Mitigation measures to reduce effects on air quality will include limiting traffic to construction vehicles/equipment.
396	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Debris	Keeyask Reservoir	Construction	Along with removing large woody debris, it is expected that Waterways Management crews will opportunistically remove small woody debris as they currently do within the Local Study Area.
397	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Debris	Keeyask Reservoir	Operation	Rafted debris that accumulates and impacts navigation routes and safe landing sites for boats will be managed and removed under the post-flooding Waterways Management Program.
398	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Debris	Keeyask Reservoir	Construction	The boat patrol crew performing waterway management work will also monitor waterway activities, liaise with individuals and groups using the river, and share information on safety issues.
399	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Firearms	Project Footprint	Construction	Firearms rules and the "no shooting" buffer zone of 300 m will be made known by posting signs along access roads and at designated snowmobile/ATV trails and crossings, orientation of workers, information session with KCN members and neighbouring community media.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
400	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Firearms	Project Footprint	Construction	Project workers will be prohibited to transport, use or store firearms (including long bows and cross bows) on the Project site. Those in possession of firearms must find suitable storage off site. All Project-related workers (including KCNs workers) will be made aware of this restriction at the time of hire.
401	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Firearms	Project Footprint	Construction	For those resource users requiring firearms (including long bows or cross bows), they will be permitted on the access road only if firearms (including long bows and cross bows) are unloaded, locked and cased while on the site, including the access road ROW, and within a safe distance (300 m) from the access road/site.
402	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Firearms	Project Footprint	Construction	A “no shooting” buffer zone of 300 m will be within which firearms (including long bows and cross bows) cannot be unlocked/uncased. This buffer zone is a safety mechanism that is in line with current Manitoba Conservation and Water Stewardship hunting regulations that cover provincial and private logging/mining roads.
403	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Firearms	Project Footprint	Construction	If a trapper needs to use his/her firearm in the 300 m buffer zone for emergency purposes (e.g., wolf caught in a trap) he/she must use a small-calibre firearm (e.g., no greater than a 22 calibre firearm).
404	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Noise	Project Footprint	Construction	Affected parties (including site personnel) will be notified prior to each blasting event in accordance with the blasting plan.
405	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Access Roads	Construction and Operation	In terms of the North Access, to prevent public access to the north access road for the duration of the project, a security gate and gatehouse was installed at km 174 of PR280, at the junction of PR 280 and the road. The security gatehouses will be equipped with a turn-around apron to enable larger vehicles to exit back to Gillam. Construction contractors, their employees and authorized subcontractors will be required to follow predefined identification and access procedures to gain access to the road and construction site for the duration of the Project.
406	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Access Roads	Construction and Operation	In terms of the South Access, Upon leaving the Butnau Road (at the junction with the Butnau River), the Project site will be deemed an active construction site and closed to the public. The security gate for the south access road will be installed in the vicinity of the Butnau Weir, which will retain existing access to the Butnau Dam and marina on Stephens Lake.
407	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Access Roads	Construction	The security gates (north and south access roads) will be staffed on a full-time basis: 24 hours per day and seven days per week for the duration of the construction phase of the Project. Signs will be posted requiring all vehicles to report to the security office. Individuals will be required to register at the security gates. Staff at the gate will monitor to make sure only authorized users access the area, ask whether users have locked and cased firearms (including long bows or cross bows) and provide information to those entering the area.
408	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Access Roads	Construction	Unauthorized users of the access roads could possibly gain access using ATVs or snow machines via numerous existing resource-use trails located in the vicinity of the north and south access roads. Unauthorized use of these access roads will be monitored by security patrols during the construction phase.
409	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Project Footprint	Construction	Construction-related cutlines and trails built as part of the construction phase of the Project to access Project infrastructure (e.g., borrow areas) will be blocked where they intersect the Project Footprint (including the north and south access roads) as a safety and terrestrial mitigation measure.
410	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Project Footprint	Construction and Operation	KCNs resource harvesters and Members may travel by snowmobile or ATV for the purposes of carrying out commercial and/or domestic harvesting, and for spiritual/ceremonial activities.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
411	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Project Footprint	Construction and Operation	Snowmobile crossings will be developed at intersections of selected existing resource-use snowmobile trails to facilitate the safe crossing of the access roads by authorized local resource users. Such crossings can also be used by ATVs to encourage safe crossing of the access roads.
412	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Project Footprint	Construction and Operation	Travelling along the access roads by KCNs resource harvesters and members by snowmobile or ATV will not be permitted for safety reasons – both for the snowmobile/ATV user and for construction traffic.
413	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Road-based Travel, Access and Safety	Project Footprint	Construction and Operation	Project workers will be prohibited to transport, use or store snowmobiles, ATVs or boats on the Project site (including the access roads). All Project-related workers (including KCNs workers) will be made aware of this restriction at the time of hire.
414	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel	Project Footprint	Construction	To mitigate risks to public safety for those using the river, buoys will be installed upstream and downstream of the construction site.
415	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel	Project Footprint	Construction	To mitigate risks to public safety for those using the river, an ice boom and safety booms will be installed.
416	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel	Project Footprint	Construction	To mitigate risks to public safety for those using the river, designated winter trails will be established at a safe distance from the construction zone.
417	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	A helicopter landing area will be located at the work site to provide a means for emergency access and egress.
418	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel	Project Footprint	Construction	For addressing construction related effects on water and ice travel include: Development of a number of safe landing sites along the future reservoir shorelines to facilitate access that has been compromised by Project activities. These sites will be cleared of stumps, peat and other vegetation to ensure safe access/egress to the shoreline; and will include required docks and shelters.
419	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel	Project Footprint	Construction	For addressing construction related effects on water and ice travel include: Issuance of timely, community notification bulletins to inform local users about the disruptions around the Project footprint. This will enable local users to plan their travels accordingly.
420	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety		Operation	A crew of up to 25 workers, configured as two primary boat patrols and three supplementary work crews, will operate five multi-purpose boats for 100 days in each open water season for the first three years following impoundment and potentially two years thereafter.
421	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Operation	After impoundment, the Waterways Management Program will include collecting floating debris.
422	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Operation	After impoundment, the Waterways Management Program will include constructing and maintaining safe landing sites and required docks and shelters.
423	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Operation	After impoundment, the Waterways Management Program will include installing and monitoring regularly the condition of safe trails and the nature and extent of their use.
424	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Operation	After impoundment, the Waterways Management Program will include marking safe travel routes, by installing and maintaining navigation and hazard markers.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
425	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety		Operation	After impoundment, the Waterways Management Program will include monitoring waterways activities and liaising with individuals and groups.
426	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety		Operation	After impoundment, the Waterways Management Program will include preparing forebay depth charts and travel routes.
427	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Waterways Management	Operation	Below the powerhouse of the Keeyask Project, it is expected that concerns will arise with respect to the unknown effects of powerhouse flows. To help manage downstream issues one of the boat patrol crews will operate as a temporary boat patrol for the first three years. The primary function of this boat patrol will be to implement safety measures, deliver information to downstream resource users, and help people become accustomed to the powerhouse's operating mode. The future requirement for this measure would be evaluated thereafter.
428	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel		Construction	The boat patrol will construct and maintain a safety cabin and shelters.
429	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel	Project Footprint	Construction	The boat patrol will cut and maintain trails and portages.
430	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel	Project Footprint	Construction	The boat patrol will install and monitor regularly the condition of safe ice trails and the nature and extent of their use.
431	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Generating Station	Operation	Directional sirens will be located at the spillway and powerhouse aiming upstream and downstream. The sirens will be used to warn waterway users 15 minutes before the opening or closing of the spillway gates.
432	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel		Construction	A communication plan will be developed during the construction phase that will inform the public of construction activities near the Project and provide education to correctly identify hazard areas and control measures.
433	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Operation	Warning buoys will be located downstream of the tailrace channel providing warning of dangerous waters to vessels traveling from the Stephens Lake or from the downstream boat launch.
434	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Operation	Warning buoys may be installed in the reservoir delineating safe navigation areas and identifying hazards which may include shallow waters, rocks and reefs.
435	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Boat Launches	Operation	Signs located on the shoreline will provide users with sufficient warning to safely reach any of the identified boat launches.
436	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Boat Launches	Operation	Signs and maps will be located along the along the entire length of the portage route to provide directions for users as well as at the upstream and downstream boat launches to guide waterway users through these facilities and identify waterway danger and warning zones.
437	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Operation	The location of the hazards and potential locations of the (warning) buoys is not currently known; however, during the operation phase these hazard areas will be identified.
438	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Generating Station	Operation	The powerhouse complex and spillway structures will have warning lights and video cameras installed on both structures. To protect the public, closed circuit television cameras will be used to inspect areas downstream of the spillway prior to flow changes.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
439	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Reservoir	Operation	A safety boom will be located upstream of the spillway, will be placed after the spring freshet has passed, prior to the opening of fishing season, if possible, as soon as it is safe to do so (when ice is no longer present on the river and spill operations can be safely curtailed during the installation) to prevent boats from straying too close to the open spillway and prevent unpowered boats from being carried through the spillway.
440	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Generating Station	Operation	Video equipment will be used to inspect areas upstream and downstream of the powerhouse and spillway before gate operations are initiated and when gate settings are changed.
441	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety		Operation	To protect the public, warning signs will be posted at numerous locations upstream and downstream of the generating station, on the principal structures and rock quarries at appropriate viewing distances, as well as along fences. They will inform the public of the purpose for the restriction, possible consequences should they disregard the warnings and will provide contact information in the event of an emergency situation.
442	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Public Access	Project Footprint	Construction and Operation	In terms of the Construction Access Management Plan, The Resident Manager, acting for the Project Manager, will work cooperatively with the KCNs to strategically develop and implement the communication materials and processes. Activities may include the development and distribution of newsletter materials, gate brochure and tracking forms and meetings with key parties.
443	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	Security officers will provide roving security and fire watch patrols through the camp and work areas, and related facilities. Security involves patrolling the roadways and enforcement of camp rules and policies.
444	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Public Access	Project Footprint	Construction	Boat launching facilities upstream and downstream of the generating station will be accessible to the public only for emergency purposes.
445	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety		Operation	To protect the public, non-climbable guard rails and fencing will be installed along the powerhouse and spillway structures. Guard rails will be 1.4 m non-climbable located on the upstream side along the principal concrete structures and will meet Manitoba Infrastructure and Transportation standards along the embankment structures. The fence installed will be 2.4 m non-climbable with barbed wire strands at the top, unless specified otherwise.
446	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Operation	To protect the public, warning signs and high visibility barricades will be installed on dykes.
447	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Water and Ice Based Travel	Project Footprint	Operation	To protect the public, winter safety trails for snowmobiles will be marked and signed at a safe distance from structures
448	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Project Footprint	Construction and Operation	A 3.2 km long portage will be constructed on the north side of the Nelson River to allow people using the waterway to move between Stephens Lake and the Keeyask reservoir.
449	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety		Construction	Safety booms (upstream and near the rock fill causeways to Borrows G-3 and N-5) installed to limit access to the causeways by waterway users.
450	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Site Access		Construction	The public will not have access to the Project sites, including the north and south access roads, while the Project is being constructed. However, consideration will be given to resource users who normally use the general area, ATK monitors and religious leaders performing ceremonies.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
451	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Boat Launches	Operation	The upstream and downstream boat launches will be accessible to the public during the operation phase.
452	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Boat Launches	Operation	A communication system (i.e., telephones) will be in service at the upstream and downstream boat launches, which will allow communication with the powerhouse to request assistance during an emergency or to transport people and boats between the two boat launches. Assistance will be provided by staff working at the generating station
453	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Waterways Public Safety	Boat Launches	Construction	The water will be relatively shallow near the upstream boat launch so material will be excavated to ensure safe navigation.
454	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction and Operation	With respect to dam safety, Manitoba Hydro will distribute copies of the emergency preparedness plans as well as offer presentations to local emergency response agencies and local civil authorities about these plans prior to completion of the Project
455	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Fish Harvest	Project Footprint	Construction	Fishing by the workforce will be restricted in all construction areas for safety reasons.
456	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	During construction, on-site emergency response teams will receive training with respect to fuel spill containment, clean-up and other emergency measures.
457	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	Emergency plans will be established, updated and practiced.
458	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	Site emergency response programs include notification by siren or radios.
459	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	Site emergency response programs include evacuation procedures
460	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	Site emergency response programs include identification of assembly points and escape routes
461	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	If a temporary camp is required to build the South Access Road, the kitchen will be located at least 200 metres from the sleeping quarters, if practicable
462	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	There will be fire suppression equipment and a fire truck on site.
463	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Project Footprint	Construction	Contractors will have their own safety officer(s).
464	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety		Construction	A rapid response will be facilitated by fire awareness and prevention training for personnel.
465	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety		Operation	Emergency response programs will be developed to include procedures to address situations that may occur during operation.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
466	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Powerhouse	Operation	Security at the site will include fences and security gates restricting access to the powerhouse.
467	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Powerhouse	Operation	There will be a secured parking lot as well as an unsecured area away from the control room.
468	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety	Powerhouse	Operation	Video cameras and security lights will be installed where required across the principal structures, parking lot, gates and doors.
469	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety		Operation	The station will be operated according to Manitoba Hydro's Dam Safety System.
470	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety		Operation	An Emergency Preparedness Plan will be prepared specifically for the very unlikely event of a dam failure
471	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety		Operation	Existing Manitoba Hydro dam safety policy includes requirements for plant staff and internal specialists to have appropriate training to carry out inspections, recognize potential emergency conditions, and be prepared to respond to a dam safety emergency.
472	Socio-Economic, Heritage, and Resource Use	Travel, Access and Safety	Safety		Operation	Design and construction of new structures will meet or exceed the Canadian Dam Association guidelines.
473	Terrestrial	Amphibians and Reptiles	Clearing	Project Footprint	Construction	Retention of some slash piles and coarse woody debris (i.e., snags and logs) on the forest floor to benefit boreal chorus frogs by providing cover.
474	Terrestrial	Amphibians and Reptiles	Erosion and Sediment Control	Project Footprint	Construction	Where construction activity may cause sediment flow into wetlands and slow-moving creeks, silt fences will be installed.
475	Terrestrial	Amphibians and Reptiles	Habitat Replacement	Borrow Areas	Operation	Some of the decommissioned borrow areas may be enhanced in a manner that creates suitable wetland habitat for amphibians.
476	Terrestrial	Amphibians and Reptiles, Yellow Rail, Willow Ptarmigan	Clearing	Project Footprint	Construction	Hand clearing methods will be used within a minimum of 30 m around wetlands during the winter period. This will reduce amphibian and willow ptarmigan mortality and minimize degradation to yellow-rail breeding habitat.
477	Terrestrial	Bald Eagle	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	Bald eagle nests removed as a result of reservoir clearing will be replaced by artificial nesting platforms located in suitable areas along the new reservoir shoreline.
478	Terrestrial	Bald Eagle	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Operation	Bald eagle nests located in trees at risk to eroding into the reservoir will be removed during the fall or winter and replaced by artificial nesting platforms located in suitable adjacent sites not at risk to shoreline erosion.
479	Terrestrial	Bald Eagle	Wildlife Mortality	Project Footprint	Operation	The removal of road-killed mammals along access roads will mitigate the risk of vehicle-related bald eagle mortality.
480	Terrestrial	Beaver	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	100 m buffer will be left at creeks, streams, ponds and lakes to the extent practicable to maintain existing beaver habitat.
481	Terrestrial	Beaver	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	The contractor will notify the Site Environmental Officer if beaver dams need to be removed.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
482	Terrestrial	Beaver	Wildlife Management	Project Footprint	Construction and Operation	Beaver baffles will be used where culverts and control structures are repeatedly blocked due to beaver dam construction to minimize mortality due to conflicts with humans.
483	Terrestrial	Beaver	Wildlife Mortality	Reservoir Clearing	Construction	Beavers from affected areas will be trapped prior to and during reservoir clearing, and periodically until the reservoir reaches maximum capacity to manage inadvertent winter mortality that is highly likely to occur during operation.
484	Terrestrial	Birds	Bird Collisions	Project Footprint	Construction and Operation	Installation of bird diverters and/or aerial marker buoys (used for aviation safety purposes) on the Unit and Construction Power transmission lines that cross the Nelson River.
485	Terrestrial	Birds	Clearing	Project Footprint	Construction	Clearing will be undertaken outside of the sensitive breeding period (April 1 – August 31) to the extent practicable to minimize disturbance to breeding birds. . This measure will also benefit terrestrial invertebrates as snow provides a protective cover to soil and frozen soils may be more resistant to compaction by heavy equipment.
486	Terrestrial	Birds	Clearing	Project Footprint	Construction	If a situation arises where clearing needs to be undertaken between April 1 and August 31, a survey for active nests will be conducted. If an active nest is found in an area where habitat destruction activities are to take place, species appropriate setbacks will be put in place in most instances and the setbacks will be held until the young have fledged. These commitments are erosion and sedimentation controlribed in more detail in the Construction Avian Management Plan.
487	Terrestrial	Birds	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	Stick nests (other than bald eagles) requiring removal will be assessed with the Northeast Region Wildlife Manager (Manitoba Conservation and Water Stewardship). The regional Wildlife Manager will advise where and how the stick nest should be reconstructed, or if the nest can be destroyed.
488	Terrestrial	Birds	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	100m vegetated buffers will be retained wherever practicable around lakes located adjacent to infrastructure sites as identified in the EnvPP to minimize noise-related disturbances and the loss of upland nesting habitat for mallards, geese and rusty blackbirds.
489	Terrestrial	Birds	Incidental Take	Project Footprint	Construction	A Construction Avian Management Plan has been prepared to address incidental take under the Migratory Birds Convention Act for the Project.
490	Terrestrial	Birds	Lighting	Project Footprint	Construction and Operation	Lighting for the powerhouse and communication tower will follow EC recommendations, where feasible (where safety, security and operation requirements are not compromised) for the purposes of reducing bird collisions. Manitoba Hydro, on behalf of the Partnership, will provide EC with lighting design information regarding the generating station and ancillary buildings/structures as it becomes available.
491	Terrestrial	Birds, Mammals	Access Management	Project Footprint	Construction	A Construction Access Management Plan will be implemented to reduce the effects of increased access to the Local Study Area.
492	Terrestrial	Birds, Mammals	Access Management	Project Footprint	Construction	Project workers will be prohibited to transport, use or store snowmobiles, ATVs or boats on the Project site (including the access roads).
493	Terrestrial	Birds, Mammals	Blasting	Project Footprint	Construction	The plans for blasting will be worked out with the General Civil Contractor (GCC) for project construction (still to be contracted). The plan will give consideration to timing of blasting, number of blasts and maximum charge sizes per delay, drill and blast pattern, and any new blasting technologies that may become available prior to project construction.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
494	Terrestrial	Birds, Mammals	Blasting	Project Footprint	construction	Mitigation strategies to minimize potential effects of blasting on breeding birds and caribou involve timing windows in which blasting will be avoided to the extent practicable.
495	Terrestrial	Birds, Mammals	Environmental Staff	Project Footprint	Construction	An environmental monitor (Site Environmental Officer) familiar with the identification of species at risk will be on site during construction.
496	Terrestrial	Birds, Mammals, Terrestrial Habitat, Plants & Ecosystems	Access Management	Project Footprint	Construction and Operation	Except for existing resource-use trails (see Construction Access Management Plan), Project-related cutlines and trails will be blocked where they intersect the Project Footprint, and the portions of these features within 100 m of the Project Footprint will be revegetated to minimize the risk of habitat disturbance, invasive plant spreading, accidental fires and access-related effects.
497	Terrestrial	Caribou	Access Management	North and South Dykes	Construction	Gates will be added to the north and south dykes, to be kept closed and locked from May 15 to June 30 and during other sensitive periods as may be determined by monitoring (e.g. the arrival of migratory caribou) to minimize disturbances by humans.
498	Terrestrial	Caribou	Access Management	Project Footprint	Construction	In the event that additional access trails are identified during construction, any cross-country access trails through forested areas will be designed to either be less than 200 m long or cleared in a manner such that sight lines are no greater than 200m.
499	Terrestrial	Caribou	Blasting	Local Study Area	Construction	If caribou are present, MCWS will be consulted for advice prior to blasting. As stated in the original response to CEC Rd 1 MMF- 0009e, blasting will be minimized to the maximum extent feasible from May 15 to June 30. The maximum extent feasible does not refer to a spatial extent away from the blasting areas but rather it refers to minimizing blasting as much as possible when it is feasible and practicable to do so. To the extent practical, the construction schedule has been developed to avoid or reduce work activities during sensitive periods for aquatic and wildlife species.
500	Terrestrial	Caribou	Blasting	Project Footprint	Construction	Blasting will be minimized to the extent practicable from May 15 to June 30, to reduce the effects on caribou calving females and their young.
501	Terrestrial	Caribou	Caribou Coordination Committee	Local Study Area	Operation	A plan is being developed to coordinate caribou mitigation and monitoring activities among Manitoba Hydro's northern developments, as well as with government authorities and existing caribou committees and management boards, through the creation of a Keeyask Caribou Coordination Committee (a sub-committee of the MAC).
502	Terrestrial	Caribou	Clearing	Reservoir Clearing	Construction	Much of the future reservoir area will be cleared prior to impoundment in 2019, which will reduce debris accumulation on shorelines. Floating debris will be collected from the reservoir to further reduce possible debris accumulation on shorelines.
503	Terrestrial	Caribou	Fire Prevention	Project Footprint	Construction	Fire prevention measures will be employed in remote working environments to minimize the risk of habitat loss for caribou.
504	Terrestrial	Caribou	Fish, Wildlife and Terrestrial Habitat Protection	Access Roads	Construction	The access roads were routed to avoid caribou calving complexes and reduce loss of effective habitat.
505	Terrestrial	Caribou	Fish, Wildlife and Terrestrial Habitat Protection	Access Roads	Construction	The excavated material placement areas were sited to avoid caribou calving complexes and reduce habitat loss.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
506	Terrestrial	Caribou	Fish, Wildlife and Terrestrial Habitat Protection	Local Study Area	Construction	Future caribou calving islands greater than 0.5 ha in the reservoir area will be flagged and left undisturbed to protect the vegetation that will remain on these islands from clearing disturbances.
507	Terrestrial	Caribou	Lighting	Project Footprint	Construction and Operation	Although lights cannot be turned off for safety reasons, shielded and downward directed lighting will be placed where feasible on the outside of the generating station if it does not interfere with operations safety.
508	Terrestrial	Caribou	Wildlife Mortality	Access Roads	Construction and Operation	Wildlife crossing signs will be placed along the access roads near caribou travel corridors and high-quality habitats to reduce the potential of wildlife-vehicle collisions, and to emphasize the need for safety for migrating caribou and other wildlife.
509	Terrestrial	Caribou	Wildlife Mortality	Local Study Area	Construction	To prevent and minimize inadvertent vehicle harassment disturbance and to reduce the potential for vehicle-caribou collisions, contractors were briefed on protocols to be used to avoid caribou conflicts. Recommendations were implemented for vehicle speeds, and to stop and wait for caribou groups to clear the roadway if encountered.
510	Terrestrial	Caribou, Black Bear, Moose, Small Mammals	Rehabilitation	Access Roads	Construction	Roadside ditches will be rehabilitated with native plants with low quality food value for caribou, black bear, moose, and small mammals, where practicable, to minimize attraction and the risk of collisions and harvest opportunities.
511	Terrestrial	Caribou, Moose, Large Carnivores	Wildlife Mortality, Access Management	Work Camps	Construction	Firearms will be prohibited in camps and at work sites; and a “no shooting” buffer zone of 300 m will be designated on either side of the access roads and around the Project work site to reduce mortality due to hunting during construction.
512	Terrestrial	Caribou, Small Mammals	Rehabilitation	Project Footprint	Operation	Temporarily cleared areas and excavated materials placement areas will be rehabilitated to native habitat types where feasible to improve caribou and small mammals habitat.
513	Terrestrial	Colonial Waterbirds	Deterrents	Local Study Area	Construction	There will be implementation of a deterrent program in each year that blasting or in-stream construction is scheduled within the 1000-1600 m setback distance of gull/tern nesting habitat.
514	Terrestrial	Colonial Waterbirds	Habitat Replacement	Local Study Area	Construction and Operation	In conjunction with the bird deterrent program, the Partnership will make sure there is other appropriate habitat available in the area for nesting and breeding. In subsequent years of construction, when in-stream construction activities start to span the width of the river, artificial gull/tern nesting platforms designed to provide replacement habitat will be installed at a nearby location in an area not affected by construction activity.
515	Terrestrial	Colonial Waterbirds	Habitat Replacement	Local Study Area	Construction and Operation	If monitoring confirms that it is warranted and feasible, a constructed island will be developed in the new reservoir in relatively close proximity to the Generating Station. It would be constructed in an area of relatively shallow water (i.e., on a high point of land) prior to filling the reservoir. Construction of the island would involve the placement of granular material suitable for nesting habitat, likely as a cap over clay or impervious fill, with the sides of the island being heavily rip-rapped to protected against ice damage.
516	Terrestrial	Colonial Waterbirds, Raptors	Wildlife Mortality	Local Study Area	Operation	Traffic signs will be installed to facilitate reduced vehicle speed over the GS and at other sensitive waterbody crossing sites, where practicable.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
517	Terrestrial	Common Nighthawk	Deterrents	Project Footprint	Construction	To minimize the potential for common nighthawk to nest in construction areas, a deterrent program will be in place in construction areas of suitable nesting habitat. The focus of this program will be construction areas that contain suitable nesting habitat and for which construction activity is planned to commence after the start of the breeding bird season. Components of the deterrent program could include the use of noise deterrents (propane cannons and/or predator calls) and the possible use of human patrols (equipped with noise makers).
518	Terrestrial	Common Nighthawk	Rehabilitation	Project Footprint	Construction and Operation	With consideration of other planned rehabilitation measures (e.g. revegetation efforts within temporary Project footprint components), some areas of open and flat habitat will be retained at locations deemed to be suitable nesting habitat for common nighthawks.
519	Terrestrial	Cranes	Fish, Wildlife and Terrestrial Habitat Protection	Local Study Area	Construction	100 m vegetated buffers will be retained wherever practicable around bogs, fens or wetlands located adjacent to infrastructure sites to minimize the loss of crane nesting habitat, to limit noise-related disturbances to cranes and to minimize access.
520	Terrestrial	Ecosystem Diversity	Decommissioning and Rehabilitation	Project Footprint	Construction	Wherever practical in developing the decommissioning and rehabilitation plan, consideration will be given to using principles that give regard to the KCNs' concern for respecting the land.
521	Terrestrial	Ecosystem Diversity	Rehabilitation	Project Footprint	Operation	The rehabilitation plan developed and initiated during construction will extend into the operation phase, and continue until all necessary rehabilitation is completed.
522	Terrestrial	Ecosystem Diversity, Intactness	Rehabilitation	Project Footprint	Construction	A rehabilitation plan will be developed that gives preference to rehabilitating the most affected priority habitats using approaches that “go with nature”.
523	Terrestrial	Ecosystem Diversity, Intactness, Priority Plants, Terrestrial Habitat	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	Clearing and disturbance within the Project Footprint will be minimized to the extent practicable.
524	Terrestrial	Ecosystem Diversity, Intactness, Priority Plants, Terrestrial Habitat, Soil Quantity and Quality	Fish, Wildlife and Terrestrial Habitat Protection	Local Study Area	Construction	Disturbance of areas adjacent to the Project Footprint will be avoided to the extent practicable.
525	Terrestrial	Ecosystem Diversity, Terrestrial Habitat, Ruffed Grouse	Fish, Wildlife and Terrestrial Habitat Protection	Borrow Areas	Construction and Operation	The portion of borrow area N-6 identified as the N6 sensitive site will be avoided to reduce effects on the white birch priority habitat types, and protection measures will be implemented to ensure that soil alteration or accidental disturbance within this site does not occur. This area also provides regionally rare habitat for ruffed grouse.
526	Terrestrial	Fire Regime	Fire Control	Local Study Area	Construction	Fire control precautions contained in the construction EnvPP will include roving fire patrols, fire suppression training for personnel and maintaining fire suppression equipment, infrastructure, and fire detection sensors in the generating station work area.
527	Terrestrial	Fire Regime	Fire Control	Local Study Area	Operation	Fire control precautions such as maintaining fire suppression equipment in the generating station area, water trucks, as well as fire procedure manuals and emergency response crews.
528	Terrestrial	Fire Regime	Fire Prevention	Local Study Area	Construction	Public access to the Project will be restricted at PR 280 and the Butnau dyke.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
529	Terrestrial	Furbearers	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Operation	A minimum of 100m vegetated buffers will be retained wherever practicable around lakes, wetlands and creeks to minimize the loss of furbearer habitat.
530	Terrestrial	Furbearers	Wildlife Mortality	Project Footprint	Construction	Muskrats from affected areas will be trapped prior to and during reservoir clearing, and periodically until the reservoir reaches maximum capacity.
531	Terrestrial	Invasive Plants	Invasive Plant Control	Project Footprint	Construction	Temporarily cleared areas will be revegetated or treated with a non-invasive ground cover as soon as practicable during construction.
532	Terrestrial	Invasive Plants	Invasive Plant Control	Project Footprint	Construction	Containment, eradication, and/or control programs will be implemented if monitoring identifies problems with invasive plants during construction.
533	Terrestrial	Invasive Plants	Invasive Plant Control	Project Footprint	Construction	Contractors utilizing equipment and machinery that was recently used more than 150 km from the Project area will wash that equipment and machinery prior to transport to the Project area.
534	Terrestrial	Invasive Plants	Invasive Plant Control	Project Footprint	Construction	Contractors will be educated about the importance of cleaning their vehicles, equipment and footwear before travelling to the area.
535	Terrestrial	Invasive Plants	Invasive Plant Control	Project Footprint	Construction	Areas where there are patches of noxious weeds will be flagged for avoidance if they are not contained in active construction areas.
536	Terrestrial	Invasive Plants	Invasive Plant Control	Project Footprint	Operation	Containment, eradication, and/or control programs will be implemented if monitoring identifies problems with invasive plants within the areas that remain as permanent infrastructure and along reservoir shorelines.
537	Terrestrial	Invasive Plants	Rehabilitation	Project Footprint	Construction and Operation	Where seeding is used as a rehabilitation or erosion control measure, the seed mixture will only contain native species and/or non-invasive introduced plant species.
538	Terrestrial	Kingfishers	Wildlife Mortality	Local Study Area	Operation	100 m vegetated buffers will be retained wherever practicable around lakes, wetlands and creeks located adjacent to access roads to minimize the risk of vehicle-related kingfisher mortality.
539	Terrestrial	Large Mammals	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	Where practicable, 100 m buffers will be established around active gray wolf and black bear dens within the Construction Phase Project Footprint to minimize the disturbance of animals during sensitive periods.
540	Terrestrial	Mallard	Habitat Replacement	Local Study Area	Construction	Mallard nesting platforms will be installed in suitable wetlands in order to offset some of the losses in upland nesting cover.
541	Terrestrial	Mallard, Canada Goose, Waterfowl, Rusty Blackbird, Kingfishers	Fish, Wildlife and Terrestrial Habitat Protection	Local Study Area	Construction	100 m vegetated buffers will be retained wherever practicable around lakes located adjacent to infrastructure sites to minimize noise-related disturbances and the loss of upland nesting habitat.
542	Terrestrial	Moose	Wildlife Mortality	Access Roads	Construction	Information about wildlife awareness will be provided for workers to reduce the risk of wildlife-vehicle collisions.
543	Terrestrial	Olive-sided Flycatcher	Fish, Wildlife and Terrestrial Habitat Protection	Reservoir Back Bays	Construction	Some of the treed areas located within the future reservoir back bays may be retained to off-set some of the losses in olive-sided flycatcher habitat.
544	Terrestrial	Olive-sided Flycatcher	Habitat Replacement	Borrow Areas	Operation	Following Project construction, perching structures will be created in open, decommissioned borrow areas that retain water (sources of invertebrates for olive-sided flycatchers).

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
545	Terrestrial	Priority Plants	Rare Plants	Local Study Area	Construction	Pre-construction rare plant surveys will be conducted in the Project Footprint and nearby areas that were previously surveyed and have the highest potential for supporting provincially very rare to rare species. In the unlikely event that a provincially very rare to rare species is discovered in the terrestrial plants zone of influence and there are not at least 20 known healthy patches outside of the terrestrial plants zone of influence, then the discovered locations will be avoided where practicable. Where avoidance is not practicable, the plants will be transplanted outside of the terrestrial plants zone of influence.
546	Terrestrial	Priority Plants	Rare Plants	Local Study Area	Operation	Pre-construction rare plant surveys will be conducted in the Project Footprint and nearby areas that were previously surveyed and have the highest potential for supporting provincially very rare to rare species. In the unlikely event that a provincially very rare to rare species is discovered in the reservoir expansion area, the plants will be transplanted outside of the terrestrial plants zone of influence.
547	Terrestrial	Raptors	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	100 m vegetated buffers will be retained wherever practicable around streams and waterbodies located adjacent to infrastructure sites to minimize the loss of raptor roosting and nesting habitat.
548	Terrestrial	Raptors	Rehabilitation	Project Footprint	Operation	Temporary Project footprints will be rehabilitated to provide enhanced prey availability to raptors inhabiting the Local Study Area.
549	Terrestrial	Raptors, Mammals	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	Trees containing large nests of sticks (potential raptor nests) and areas where active animal dens are encountered will be left undisturbed, where practicable. Presence of nests and active dens will be reported to the Site Environmental Officer, who will report the information to the regional Natural Resources Officer (Manitoba Conservation and Water Stewardship) and the Environmental Licensing and Protection Department.
550	Terrestrial	Soil Quantity and Quality	Soil Compaction	Local Study Area	Construction	Staging areas will be sited to the extent practicable on soils with a high weight bearing capacity and low permeability to minimize rutting and soil compaction.
551	Terrestrial	Soil Quantity and Quality	Soil Compaction	Local Study Area	Construction	To the extent practicable, traversing across known wetland areas outside of the Project Footprint will not be done until the ground is frozen solid to minimize rutting and soil compaction.
552	Terrestrial	Soil Quantity and Quality	Stripping and Grading	Project Footprint	Construction	Where there is sufficient depth of materials stripping will take place in two phases: Removal of organics and removal of inorganics.
553	Terrestrial	Soil Quantity and Quality	Stripping and Grading	Project Footprint	Construction	All stockpiles will be stabilized; measures include biodegradable mats or tarps. If they are to be stored for extended periods, they will be vegetated to minimize nutrient loss, erosion of fines and structure change.
554	Terrestrial	Soil Quantity and Quality	Stripping and Grading	Project Footprint	Construction	Grading activities will halt during heavy rains, where/when practicable, to reduce the potential for erosion.
555	Terrestrial	Soil Quantity and Quality	Stripping and Grading, Rehabilitation	Project Footprint	Construction	Organic material, topsoil and overburden will be stripped and piled separately and will be used for future site rehabilitation.
556	Terrestrial	Soil Quantity and Quality, Terrestrial Habitat	Stripping and Grading	Project Footprint	Construction	Compaction and disturbance of the vegetation and organic cover which insulates permafrost will be minimized.
557	Terrestrial	Terrestrial Habitat	Burning	Project Footprint	Construction	To prevent damage to standing trees, burning will take place within the cleared ROW at least 15 metres from standing trees.
558	Terrestrial	Terrestrial Habitat	Burning	Project Footprint	Construction	A 15 metre (minimum) fire break will be created in slash windrows every 100 metres, or alternately, the placement of windrows will be varied from side to side along the ROW.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
559	Terrestrial	Terrestrial Habitat	Clearing	Project Footprint	Construction	Hand clearing in the reservoir will take place in areas identified in the EnvPP during the winter period to protect key habitat areas. Trees and shrubs will be cleared about 15 to 30 cm from the ground. The stumps and other forest floor debris will remain on the ground.
560	Terrestrial	Terrestrial Habitat	Clearing	Project Footprint	Construction	Clearing will be kept to the minimum area required to carry out construction. Areas within the Green Zone (areas of planned disturbance, as identified in the EnvPP) that are not required for construction activities will not be cleared.
561	Terrestrial	Terrestrial Habitat	Clearing	Project Footprint	Construction	Environmentally sensitive sites bordering on areas of planned disturbance (Green Zone, as identified in the EnvPP) within the Construction Phase Project Footprint will be clearly marked with flagging tape by the Site Environmental Officer, prior to clearing taking place adjacent to these areas.
562	Terrestrial	Terrestrial Habitat	Clearing	Project Footprint	Construction	Existing trails, roads or cut lines will be used wherever practicable to avoid disturbance to riparian vegetation.
563	Terrestrial	Terrestrial Habitat	Clearing	Project Footprint	Construction	Trees will be felled towards the cleared area to avoid damage to standing trees.
564	Terrestrial	Terrestrial Habitat	Clearing	Project Footprint	Construction	Any trees located outside the designated clearing area that overhang the construction area will be identified and felled by hand.
565	Terrestrial	Terrestrial Habitat	Clearing	Project Footprint	Construction	Solid waste or slash will not be pushed within six metres of standing trees.
566	Terrestrial	Terrestrial Habitat	Clearing	South Access Road ROW	Construction	Right of way (ROW) clearing will be limited to a maximum width of 100 metres, and will be narrower where it is environmentally desirable and technically feasible.
567	Terrestrial	Terrestrial Habitat	Decommissioning and Rehabilitation	Project Footprint	Construction	A full decommissioning and rehabilitation plan will be developed for review and approval by regulators prior to the end of construction. The plan will take into consideration provincial interests regarding the level of decommissioning, potential future use for the site(s) and revegetation.
568	Terrestrial	Terrestrial Habitat	Grubbing	Project Footprint	Construction	Grubbing will not occur within six metres of standing timber to prevent damage to the root system and to reduce the occurrence of blow down.
569	Terrestrial	Terrestrial Habitat	Grubbing	Project Footprint	Construction	Windrows of grubbed material to be burned will be piled at a minimum of 15 metres from standing timber.
570	Terrestrial	Terrestrial Habitat	Maintenance	Project Footprint	Operation	Vegetation management, including landscaping, erosion controls, insect control and drainage management will be undertaken for rights-of-way, fire breaks (fire guards), station yards and earth-fill dams. Mechanical means of vegetation control will be the preferred method, and chemicals will be used only if mechanical methods are unsuccessful and only when authorized by the appropriate authorities.
571	Terrestrial	Terrestrial Habitat	Rehabilitation	Project Footprint	Construction	Construction areas that are not required for operation will be decommissioned and rehabilitated where practicable.
572	Terrestrial	Terrestrial Habitat	Rehabilitation	Project Footprint	Construction and Operation	Seed mixtures used for rehabilitation will be obtained from commercial suppliers and will meet the requirements of the Canada Seeds Act for Certified Canada #1 seed for certified cultivars or Canada Common #1 for common cultivars. Commercial seed suppliers will provide seed analysis certificates verifying that the number of noxious seeds will not exceed the following limits per 25 grams for species listed by the Weed Seeds Order: 0 prohibited noxious weeds, 0 primary noxious weeds, 1 secondary noxious weeds, 25 total noxious weeds.
573	Terrestrial	Terrestrial Habitat	Rehabilitation	Project Footprint	Construction and Operation	For seed mixtures used for rehabilitation, commercial seed suppliers will provide seed analysis certificates verifying that the seed mixture does not contain sweet clover or alfalfa seeds.
574	Terrestrial	Terrestrial Habitat	Stream Crossings	Project Footprint	Construction	All spoil piles will be stabilized, including covering spoil piles with biodegradable mats or tarps will be maintained until disturbed areas or spoil piles are successfully reclaimed.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
575	Terrestrial	Terrestrial Habitat	Stream Crossings	Project Footprint	Construction	The width of the cleared right of way will be minimized at each stream crossing. Only that vegetation required to construct the actual stream crossing and maintain proper sight lines will be cleared.
576	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Borrow Areas and/or Quarries	Project Footprint	Construction	Borrow areas and/or quarries will be located as close to existing access as practicable.
577	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Drainage	Project Footprint	Construction	Drainage activities will be directed in accordance with the erosion and sediment control plan, or where not indicated, it will be directed into dense vegetation.
578	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Drainage	Project Footprint	Construction	If it is imperative that an area must be used as a drainage route even though it is susceptible to erosion, proper erosion and sediment control measures will be put in place to prevent site degradation.
579	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	South Access Road ROW	Construction	Within the SAR ROW, where temporary pumping may be required to empty excavations that fill up with surface water after a storm event, water will be pumped out of the excavation onto a velocity dispersion device (mat, rocks, etc.). Water will be directed into a flat, densely vegetated area or off take that does not contain permafrost, where it is allowed to seep into the ground.
580	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	South Access Road ROW	Construction	Areas where water is being discharged from the empty excavations within the SAR ROW will be inspected once per day while pumping is taking place to confirm effectiveness of erosion and sedimentation control measures. If erosion/gullies/sediment transport is observed as a result of pumping, the water will be directed into another area, or suitable erosion control devices (mats, straw bales, blankets, check dams, etc) will be installed to further reduce water velocity until pumping is no longer required.
581	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	South Access Road ROW	Construction	Within the SAR ROW, any velocity dispersion/erosion control devices will be removed, disposed of and any disturbed areas will be reseeded after pumping of the empty excavation is complete.
582	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	Project Footprint	Construction	In steeply sloped areas susceptible to erosion, runoff will be directed away from disturbed areas to prevent further site degradation.
583	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	Project Footprint	Construction	Disturbed areas will be stabilized, vegetated and/or seeded as soon as practicable following construction.
584	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	Project Footprint	Construction	Additional measures will be implemented, if required, to protect permafrost areas from extreme runoff events during periods of heavy precipitation or melt.
585	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	Project Footprint	Construction	Erosion and sedimentation control measures will be left in place until at least 50% vegetative cover is established in the seeded area.
586	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	Project Footprint	Construction	Silt fences will be removed and recycled/disposed of at the end of construction, after 50% of the area's vegetation is established.
587	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Erosion and Sediment Control	Project Footprint	Construction	Completed work areas will be graded and permanently stabilized.
588	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Grubbing	Project Footprint	Construction	The contractor will stabilize (grade, seed, etc.) construction-sites requiring extensive grubbing as soon as practicable to minimize erosion.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
589	Terrestrial	Terrestrial Habitat, Soil Quantity and Quality	Temporary Access Roads/Trails	Project Footprint	Construction	Existing and planned ROWs will be used as much as practicable during construction and the need for additional access trails will be carefully reviewed before proceeding.
590	Terrestrial	Terrestrial Habitat, Wildlife	Emergency Response Plan	Project Footprint	Construction	The contractor will confirm that proper fire fighting practices are established and that adequate firefighting equipment is installed and maintained in all buildings, vehicles and work areas under their ownership. Project emergency response/evacuation procedures will be adhered to in case of forest fires.
591	Terrestrial	Terrestrial Habitat, Wildlife	Environmentally Sensitive Sites	Project Footprint	Construction	If markers or marked areas for environmentally sensitive sites are unclear, construction will halt and the Site Environmental Officer will be consulted to provide clarification before construction continues.
592	Terrestrial	Terrestrial Habitat, Wildlife	Environmentally Sensitive Sites	Project Footprint	Construction	Work will not take place in environmentally sensitive sites identified in the EnvPP without permission from the Site Environmental Officer, who will first obtain specific environmental protection measures to be applied at the requested site from the Environmental Licensing and Protection Department.
593	Terrestrial	Terrestrial Habitat, Wildlife	Environmentally Sensitive Sites	Project Footprint	Construction	The Contractor will not disturb marked/flagged environmentally sensitive sites.
594	Terrestrial	Terrestrial Habitat, Wildlife	Environmentally Sensitive Sites	Project Footprint	Construction	Environmentally sensitive sites will be flagged in the field to confirm that construction crews are able to distinguish boundaries and locations.
595	Terrestrial	Terrestrial Habitat, Wildlife	Fire Prevention	Project Footprint	Construction	Every off-road vehicle, including ATVs and 4-wheel drive trucks used for off-roading purposes, will be equipped with a working spark arrester that will be in operation while the engine is running to prevent the possibility of a fire hazard to the terrain.
596	Terrestrial	Terrestrial Habitat, Wildlife	Fish, Wildlife and Terrestrial Habitat Protection	Local Study Area	Construction	The Project Footprint was overlaid with the terrestrial habitat mapping to determine if there was any overlap of Project components with sensitive terrestrial habitat areas. Where overlap was identified and where practicable, modifications to EMPA and borrow area boundaries were made to avoid these sensitive areas.
597	Terrestrial	Terrestrial Habitat, Wildlife	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	All equipment will remain within the area of planned disturbance of the Construction Phase Project Footprint shown in the EnvPP, unless otherwise approved by the Environmental Site Officer.
598	Terrestrial	Terrestrial Habitat, Wildlife	Project Design	North and South Dykes	Construction	Preferred dyke alignments were selected to minimize forebay clearing and flooding, and minimize the impact on moderately sensitive habitat types.
599	Terrestrial	Terrestrial Habitat, Wildlife	Project Design	North and South Dykes	Construction	Preferred dyke alignments were selected to avoid impacting the white birch habitat type at borrow area N-6.
600	Terrestrial	Terrestrial Habitat, Wildlife	Rehabilitation	Project Footprint	Construction and Operation	A Vegetation Rehabilitation Plan will be prepared after areas required for construction are cleared and long term needs for operations of the cleared areas are known. Revegetation efforts will commence in an area when it is known that it is no longer needed for construction. This plan will be placed on the Partnership's website once it is ready and will be included as part of the Project's Environmental Protection Program.
601	Terrestrial	Terrestrial Habitat, Wildlife	Rehabilitation	Project Footprint	Construction and Operation	As soon as is practicable, permanent access road ditches will be seeded to produce low vegetation ground cover.
602	Terrestrial	Terrestrial Habitat, Wildlife	Rehabilitation	Project Footprint	Construction and Operation	Reclamation and re-vegetation programs will be initiated for the vacated sites and borrow sites to control/prevent erosion, re-establish wildlife habitat, and create buffer zones.
603	Terrestrial	Terrestrial Habitat, Wildlife	Rehabilitation	Project Footprint	Construction and Operation	Reclamation measures and vegetation species selection will be undertaken as determined by regulatory requirements, site conditions and management objectives. Consideration will be given to feasibility, practicality, effectiveness and management requirements.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
604	Terrestrial	Terrestrial Habitat, Wildlife	Rehabilitation	Project Footprint	Construction and Operation	Native plants will be used, and where conditions are suitable, the most affected priority habitat types will be part of the revegetation prescription for specific locations.
605	Terrestrial	Terrestrial Habitat, Wildlife	Rehabilitation	Project Footprint	Construction and Operation	In general, bare soil areas within other permanent Project features will be vegetated with plants appropriate for the ultimate use of the site. The condition of the areas such as temporary construction camps, temporary roads and borrow areas and other areas that are no longer needed for construction or operation of the station will be assessed and specific site preparation and revegetation prescriptions will be developed for each site.
606	Terrestrial	Terrestrial Habitat, Wildlife	Rehabilitation	Project Footprint	Construction and Operation	Tree and tall shrub propagules used for rehabilitation will be of local provenance. Most other propagules will also likely be of local provenance since the majority will come from stockpiled materials that are later spread.
607	Terrestrial	Terrestrial Habitat, Wildlife	Rehabilitation	Project Footprint	Construction and Operation	Additional or alternative rehabilitation will be applied to the extent practicable in areas not meeting rehabilitation targets.
608	Terrestrial	Terrestrial Habitat, Wildlife	Temporary Access Roads/Trails	Project Footprint	Construction	All proposed haul roads/access trails will avoid environmentally sensitive sites shown in the SAR EnvPP.
609	Terrestrial	Terrestrial Habitat, Wildlife	Temporary Access Roads/Trails	Project Footprint	Construction	The Resident Manager or delegate will consult the Environmental Licensing and Protection Department and the local Natural Resources Officer (Manitoba Conservation and Water Stewardship) regarding the routing of all access trail locations, including rock outcrop by-passes, prior to establishment. (A Crown Lands permit may be required.)
610	Terrestrial	Terrestrial Invertebrates	Erosion and Sediment Control	Project Footprint	Construction	Silt fences and/or vegetated buffers of shrubs and/or trees will be retained in areas where streams or waterbodies occur within or adjacent to construction sites.
611	Terrestrial	Terrestrial Invertebrates	Maintenance	Project Footprint	Construction and Operation	Roads will be watered appropriately to minimize road dust.
612	Terrestrial	Terrestrial Invertebrates		Project Footprint	Construction	Proper containment and storage of fuels away from waterbodies and other potentially sensitive sites will be carried out.
613	Terrestrial	Wetland Function	Borrow Areas and/or Quarries	Project Footprint	Construction	Borrow areas will not be located within 100 metres of a watercourse/body, wetland or steep slope.
614	Terrestrial	Wetland Function	Erosion and Sediment Control	Project Footprint	Construction	Erosion and sedimentation control measures will be implemented around construction areas including borrow areas and excavated material placement areas that are within 50 m of any off-system marsh that is outside of the Construction Phase Project Footprint.
615	Terrestrial	Wetland Function	Fish, Wildlife and Terrestrial Habitat Protection	Local Study Area	Construction	Of the three south access road alternative routes, the south alternative was in part selected because it avoids the most sensitive wetland types, minimizes the number of waterway crossings and minimizes total affected wetland area.
616	Terrestrial	Wetland Function	Fish, Wildlife and Terrestrial Habitat Protection	Local Study Area	Construction	Additional measures to avoid potential effects on off-system marshes outside of the permanent Project Footprint includes implementing measures to protect against erosion, siltation and hydrological alteration in utilized construction areas that are within 50 m of any off-system marsh that is outside of the Project Footprint. Setbacks for off-system marsh wetlands outside of the permanent Project Footprint will be increased to the 100 m recommended by Environment Canada except at approximately 12 locations along borrow areas, excavated material placement areas, the dykes and near two dyke drainage ditches. Measures to protect against erosion, siltation and hydrological alteration during construction will be implemented at these locations. Of the 12 locations where a 100 m buffer is not currently possible, mitigation may include use of a slightly smaller buffer, or a physical barrier such as clean fill and rock or a silt fence.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
617	Terrestrial	Wetland Function	Fish, Wildlife and Terrestrial Habitat Protection	South Access Road ROW	Construction	Construction of the roadbed in wetland areas will utilize geotextile material with clean granular fill progressively dumped over the geotextile along the road alignment. Where the road traverses an area of discontinuous permafrost, the roadbed within these areas will be constructed by using granular fill material and geotextile placed directly on top of the unstripped peat.
618	Terrestrial	Wetland Function	Rehabilitation	Excavated Materials Placement Areas	Construction	The rehabilitation plan may prescribe wetland creation for some excavated material placement areas in depressions (locations will not be known until construction determines which excavated material placement area locations are actually used).
619	Terrestrial	Wetland Function	Stream Crossings	Project Footprint	Construction	Stream banks will be protected from rutting and other construction effects by using mats or construction pads.
620	Terrestrial	Wetland Function	Wetland Replacement	Local Study Area	Construction	The off-system marsh wetland compensation area along Gull Rapids South creek was added to the Project footprint. This could increase the total area by approximately 286 ha. Approximately half of this area may potentially be disturbed during the construction of the wetlands and flow improvements in the Gull Rapids South creek. To the extent this area is actually disturbed, the mitigation involves creating a regionally rare off-system marsh habitat that will replace regionally widespread and relatively abundant wetland types.
621	Terrestrial	Wetland Function	Wetland Replacement	Local Study Area	Operation	Additional wetland development will be implemented to the extent practicable if monitoring determines that further measures are needed to achieve successful development of 12 ha of the off-system marsh wetland type.
622	Terrestrial	Wetland Function, Wildlife	Wetland Replacement	Local Study Area	Construction	12 ha of the off-system marsh wetland type will be developed within or near the Local Study Area. Mitigation for wetland function will also benefit wildlife through the development of wetlands in the Local Study Area. and could off-set some of the losses in habitat for some species (e.g., waterfowl, cranes, rusty blackbird, aquatic furbearers, moose).
623	Terrestrial	Wildlife	Clearing	Project Footprint	Construction	No chemical vegetation control will be utilized during construction clearing.
624	Terrestrial	Wildlife	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	To reduce the possibility of vehicle and wildlife collisions, posted speed limits will not be exceeded.
625	Terrestrial	Wildlife	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	All vehicle collisions with wildlife will be reported to the Site Environmental Officer, who will report it to the local Natural Resources Officer (Manitoba Conservation and Water Stewardship) and regional Wildlife Manager (Manitoba Conservation and Water Stewardship). Road kill will be disposed of as soon as practicable.
626	Terrestrial	Wildlife	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	Staff working on-site will attend wildlife awareness training.
627	Terrestrial	Wildlife	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	No person on-site will feed or harass wildlife. Failure to comply could lead to dismissal from the Project.
628	Terrestrial	Wildlife	Fish, Wildlife and Terrestrial Habitat Protection	Project Footprint	Construction	The hunting or harvesting of wildlife by Project staff will not be allowed on-site (this includes access routes). Signs prohibiting these activities will be posted as necessary.
629	Terrestrial	Wildlife	Waste Management	Project Footprint	Construction	Solid waste containing food wastes will be collected on a regular basis to prevent wildlife attraction to work area(s).
630	Terrestrial	Wildlife	Waste Management	Project Footprint	Construction	During operation, wastes will be hauled regularly to a local permitted waste disposal ground for disposal.

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
631	Terrestrial	Wildlife	Waste Management	Project Footprint	Construction	Animal (bear)-proof bins will be used to store food waste and other waste until it is removed from the Project site.
632	Terrestrial	Wildlife		Project Footprint	Construction	Wildlife that affects, or has the potential to affect, worker health and safety will be immediately reported to the Site Environmental Officer, who will then contact the local Natural Resources Officer (Manitoba Conservation and Water Stewardship) and Regional Wildlife Manager (Manitoba Conservation and Water Stewardship).
633	Terrestrial		Borrow Areas and/or Quarries	Project Footprint	Construction	The number of borrow areas and/or quarries developed will be minimized as much as practicable.
634	Terrestrial		Burning	Project Footprint	Construction	Mixing soil in with the materials to be burned will be avoided.
635	Terrestrial		Burning	Project Footprint	Construction	A slash free fire break zone at a minimum of six metres wide or greater will be maintained between the right of way (ROW) being cleared and standing timber.
636	Terrestrial		Burning	Project Footprint	Construction	As much as practicable, any unburned material remaining post-burn will be piled and removed or spread out for erosion control.
637	Terrestrial		Burning	Project Footprint	Construction	Burning is not permitted between April 1 - November 15 unless a burning permit is obtained from Manitoba Conservation and Water Stewardship.
638	Terrestrial		Clearing	Keeyask Reservoir	Construction	Materials from reservoir clearing will be burned in areas selected to minimize the risk of peat fires.
639	Terrestrial		Clearing	Keeyask Reservoir	Construction	Hand clearing at selected locations may be identified by the Project Manager, where tree and shrub density is sufficient to reduce wave energy, leaving trees and shrubs standing in shallow water to provide protection to the shoreline from wave energy, thereby reducing erosion rates and providing a more stable shoreline for the new growth of riparian shrubs and trees.
640	Terrestrial		Concrete	Concrete Batch Plant	Construction	Liquid concrete will not be dumped on the ground.
641	Terrestrial		Decommissioning and Rehabilitation	Project Footprint	Construction	Decommissioning and rehabilitation will occur as soon as practical.
642	Terrestrial		Drainage	Project Footprint	Construction	Natural drainage will be maintained and drainage channels will be kept free of slash and debris and blockages will be avoided, where practicable, to prevent erosion and ponding.
643	Terrestrial		Drainage	Project Footprint	Construction	Openings will be left between piles of cleared debris to allow for drainage.
644	Terrestrial		Drainage	Project Footprint	Construction	Stockpiled materials will not impede natural drainage.
645	Terrestrial		Drainage	Project Footprint	Construction	If drainage is directed into dense vegetation the area will be monitored to confirm the receiving environment is not eroded.
646	Terrestrial		Erosion and Sediment Control	Project Footprint	Construction	Wherever practicable, clearing will be minimized to reduce the exposure of bare ground.
647	Terrestrial		Fish, Wildlife and Terrestrial Habitat Protection	Keeyask Reservoir	Construction	Generally, hand clearing within the reservoir area will take place within 10 metres (33 feet) of the existing normal high water mark on the Nelson River and within 5 metres (16 feet) of tributary stream banks, due to the higher potential for disturbance of environmentally sensitive sites in these areas (for example, riparian areas).
648	Terrestrial		Fish, Wildlife and Terrestrial Habitat Protection	Keeyask Reservoir	Construction	Hand clearing within the reservoir area will be considered at landing sites above the high water mark to minimize environmental effects.
649	Terrestrial		Fish, Wildlife and Terrestrial Habitat Protection	Keeyask Reservoir	Construction	The majority of the reservoir clearing will occur during the winter months, when the ground is frozen. This results is less rutting and soil compaction from heavy equipment.
650	Terrestrial		Grubbing	Project Footprint	Construction	Work will be halted during heavy rains, if practicable, when grubbing in areas of finely textured soils (clays, silts, fine sands, etc.).

ID	Category	VEC and Supporting Topic	Topic	Project Component	Phase/Time Frame	Mitigation
651	Terrestrial		Rehabilitation	Borrow Areas	Construction and Operation	Rehabilitated borrow areas will be inspected annually for at least five years to confirm revegetation success; and rehabilitated areas where vegetation planted covers less than 50% of the area seeded after 5 years will be improved and replanted.
652	Terrestrial		Rehabilitation	Borrow Areas	Construction and Operation	Borrow area walls will be left at a maximum slope of 4:1 (horizontal:vertical) for erosion and sediment control purposes, unless otherwise written in the provincial permit.
653	Terrestrial		Rehabilitation	Excavated Materials Placement Areas	Construction and Operation	The excavated material placement areas outside of the dyke lines will be gently sloped and covered with salvaged organics and soils, providing an erosion resistant surface layer and promoting the regrowth of natural vegetation.
654	Terrestrial		Rehabilitation	Project Footprint	Construction and Operation	Site preparation, if necessary, will be done to help re-establish vegetation. These activities may consist of scarification, grading and/or contouring (to stabilize slopes) and fertilizing.
655	Terrestrial		Rehabilitation	Project Footprint	Construction and Operation	Seed mixes selected for revegetation efforts will be approved by Manitoba Hydro prior to use.
656	Terrestrial		Rehabilitation	Project Footprint	Construction	Organic material (including top soil) removed during the clearing, grubbing and excavations will be stockpiled and some will be used later in the rehabilitation of borrow sites, temporary roads and excavated material placement areas.

APPENDIX B

KHLP Response to Recommendations made by Hearing Participants - Keeyask Generation Project

KEEYASK
Hydropower Limited Partnership

APPENDIX B: KHLP Response to Recommendations made by CEC Hearing Participants - Keeyask Generation Project

	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
1	Adverse Effects	Prior to construction, the Partnership shall address the issues, concerns and effects of the Project with other willing Aboriginal communities, including, the MMF, who live within and use the Nelson watershed with a view to arriving at mutually agreeable agreements or arrangements that set out processes that address necessary Aboriginal community specific mitigation measures, provide opportunities for participation in monitoring relevant to an Aboriginal community's traditional use and culture, present ongoing information in relation to the Project's construction and operation. Reasonable costs associated with the negotiation of these agreements or arrangements shall be borne by the Partnership. If a mutually agreeable arrangement or agreement is not reached with a willing Aboriginal community, including, the MMF, who live within and use the Nelson watershed within a reasonable period, the Partnership shall provide a report outlining its efforts and reasons an agreement or arrangement could not be reached to the Director who may determine that this licensing condition has been met through best efforts. (MMF) Properly mitigate and compensate impacts on local communities (C Kennedy-Courcelles)	Already Addressed / Not Required	The Partnership has already provided thorough documentation on the potential effects of the Keeyask project to Aboriginal communities, resource users and others resident in the Keeyask region, including the Métis. To date, there has been no evidence provided by the MMF or others through the regulatory processes for Keeyask that this assessment is deficient, or that additional or enhanced mitigation measures, or other forms of agreements, other than outlined in the EIS or negotiated with the Partner First Nations, are required. Comprehensive Adverse Effects Agreements for Keeyask have been negotiated with the Partner First Nations, based on the known and foreseeable effects to these Aboriginal communities. At this time, based on available information and the assessment of possible Project effects, it is not anticipated that similar agreements will be required with other Aboriginal communities; however, the Partnership remains open to considering any new information that becomes available. The Partner First Nations are involved in monitoring activities as part of fulfilling their role as a Project proponent, and not simply because they represent affected communities.
2	Adverse Effects	That additional funds provided to programs like the youth wilderness traditions program (FL Youth)	Already Addressed / Not Required	Manitoba Hydro and each of the partner First Nations negotiated Keeyask Adverse Effects Agreements through a process of dialogue, drawing on a range of information and experiences. The suite of offsetting programs in each of the agreements reflects the interests, concerns and aspirations of that community. In the event that community priorities change, the AEAs include a mechanism to discontinue an existing program, create a new program, or enhance an existing program.
3	Adverse Effects	That the Partnership address the concerns and effects of the project with other Aboriginal communities, including the Manitoba Métis Federation, who live within and use the Nelson watershed with a view to arriving at agreements that address mitigation measures, provide opportunities for participation in monitoring and mechanisms to provide ongoing Project information (MMF)	Already Addressed / Not Required	To date, neither the MMF nor any other Aboriginal community, have demonstrated that they are adversely affected by the Project and that there is a need for the Partnership to modify or enhance its mitigation commitments. The Partnership has consistently indicated that it will consider new information as it becomes available and determine whether changes to its mitigation programs are required as a result of this information.

APPENDIX B: KHLP Response to Recommendations made by CEC Hearing Participants - Keeyask Generation Project

	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
4	Adverse Effects	Compensate damage and personal loss on Trapline 15 as a result of the Keeyask project (TL 15)	Already Addressed / Not Required	The anticipated impacts of Keeyask on the collective rights of Tataskweyak Members, including those using Trapline 15, were compensated through an adverse effects agreement with TCN which agreement was approved by the membership. Where the interests impacted are personal, as opposed to collective, Manitoba Hydro on behalf of the KHLP has agreed to make offers to trappers and establish a claims process to address such Keeyask impacts on other members. With respect to Trapline 15 specifically, Manitoba Hydro on behalf of the KHLP has negotiated disturbance agreements to address impacts on commercial trapping with the trapline holder and will negotiate an agreement for the impacts of the Keeyask project if and when a license is issued. Manitoba Hydro continues to be involved in extensive discussions and negotiations with the Trapline 15 families to acknowledge and address the unique history and interests of members of the families who have used Trapline 15.
5	Aquatic Environment	In order to ensure progress toward achieving Kwayaskonikiwin – meaning a reconciliation of impacts and a restoration of balance - Kaweechiwasihk Kay-tay-a-ti-suk recommends that the Commission recommend a process by which ATK and WSK will work together to identify, design and implement fish passage and fish passage enhancements and enhancements to fish habitat. (KK)	Already Addressed / Not Required	The Partnership has already undertaken an environmental assessment that incorporated all available western science and ATK to assess the need for fish passage and the design and location of fish habitat enhancements. The outcomes of this work are documented in the Partnership's evidence. This work will continue throughout construction and operations through the implementation of the Partnership's Environmental Protection Program, which includes both ATK and western science monitoring. As set out in correspondence from Fisheries and Oceans Canada (DFO), DFO is of the opinion that there is currently not sufficient evidence to determine whether or not fish passage is warranted. Therefore, the results of monitoring will be used by DFO in consultation with MCWS to determine the ultimate need for fish passage, with the requirement that the KHLP identify means to retrofit fish passage, if it is required in the future.
6	Aquatic Environment	Modification of flows at the Keeyask project site through both the spillway and powerhouse to maintain the ecologically-based flow regimes needed for spawning, egg incubation, juvenile rearing, summer feeding and overwintering and in particular maintaining water flows during the spawning periods for Namayo (Lake Sturgeon) and other fish species. (KK)	Already Addressed / Not Required	The full range of flows and variation in flows downstream of the Keeyask GS were considered in the assessment of impacts to fish and the design of mitigation measures.
7	Aquatic Environment	Keeyask Fish Passage (as required by Fisheries and Oceans Canada in the project design). (KK)	Already Addressed / Not Required	As set out in correspondence from Fisheries and Oceans Canada (DFO), DFO is of the opinion that there is currently not sufficient evidence to determine whether or not fish passage is warranted. Therefore, the results of monitoring will be used by DFO in consultation with MCWS to determine the ultimate need for fish passage, with the requirement that the KHLP identify means to retrofit fish passage, if it is required in the future.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
8	Aquatic Environment	Kaweechiwasihk Kay-tay-a-ti-suk recommends that the Commission recommend that the implementation of measures to mitigate the adverse effects of the Keeyask Generation Project on Lake Sturgeon, in addition to those proposed for the Keeyask site, should also include innovative measures to mitigate the impacts of previous hydroelectric developments on Lake Sturgeon. (KK)	Already Addressed / Not Required	Although not part of the Keeyask assessment, work at the Kelsey GS and other GSs on the Lower Nelson River will be considered by the Lower Nelson River Lake Sturgeon Stewardship Committee. The large-scale stocking program to be undertaken by the Partnership if Keeyask is approved is designed to reestablish a self-sustaining population of Lake Sturgeon in the reach of river between the Kelsey GS and Kettle GS and, in so doing, does address the effects of past projects and activities in this area.
9	Aquatic Environment	Kelsey Spawning Site (spillway operation and enhancements to create spawning habitat for Namayo (Lake Sturgeon) and other fish species) (KK) Kelsey discharge deflection (addition of in-stream structure to deflect flows downstream) (KK) We also recommend building a structure in the river to make a more natural flow of water at the discharge of the Kelsey generating station to improve habitat for Na May O and other fish. (Beardy," Keeyask Hearing", December 12 2013 at p 6227.) (CAC)	Out of Scope	Although not part of the Keeyask assessment, work at the Kelsey GS and other GSs on the Lower Nelson River will be considered by the Lower Nelson River Lake Sturgeon Stewardship Committee.
10	Aquatic Environment	Modification of flows at the Kelsey project site through both the spillway and powerhouse to maintain the ecologically-based flow regimes needed for spawning, egg incubation, juvenile rearing, summer feeding and overwintering and in particular maintaining water flows during the spawning period for Namayo (Lake Sturgeon) and other fish species. (KK)	Out of Scope	Although not part of the Keeyask assessment, work at the Kelsey GS and other GSs on the Lower Nelson River will be considered by the Lower Nelson River Lake Sturgeon Stewardship Committee.

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11	Aquatic Environment	We, the Kaweechiwasihk Kay-tay-a-ti-suk recommend that the restoration of the former seasonal fish passage at the Kelsey generating station be considered. If it can be done, it should be done. (KK) Kelsey Fish Passage (built at the site of the original Kelsey rapids or mispawistik) (KK) Kaweechiwasihk Kay-tay-a-ti-suk recommends that the Commission recommend that the continuity of the river must be maintained and "what can be done, must be done" to achieve Kwayaskonikiwin by taking every step to mitigate and reconcile past and future blockages in the river and habitat losses, including by restoring migration routes between different habitats used by fish. (KK)	Out of Scope / Ill Advised	Existing genetic differences in Lake Sturgeon populations upstream and downstream of the Kelsey GS indicate that interchange among these populations was very limited prior to the construction of the Kelsey GS; therefore, introducing upstream fish passage could result in mixing of genetic stocks and potentially a reduction in the adaptation of Lake Sturgeon to local environments.
12	Aquatic Environment	Sturgeon monitoring and studies need to incorporate all ATK and scientific data available in Manitoba and also relevant areas/ for projects... independent of whether the findings agree or disagree with hydro objectives. (MWL)	Out of Scope / Ill Advised	Effects of the Keeyask GS will be determined based on monitoring in the Keeyask area and not in other sturgeon-bearing waters in Manitoba (i.e., the continued presence of Lake Sturgeon after 100 years of regulation of the Winnipeg River will not be taken as sufficient evidence that monitoring is not required to determine the effects of the Keeyask GS). However results from work in other systems will be considered where these could improve planned mitigation in the Keeyask area.
13	Aquatic Environment	There should be a general monitoring program (not a small sample tagging program) to assess the frequency of lake sturgeon interactions with the facility, as well as impingement and entrainment events, so that the true impact of the facility on upstream populations is known. (CAC)	Already Addressed / Not Required	Monitoring of fish movements in relation to upstream and downstream passage is being developed in consultation with Fisheries and Oceans Canada and Manitoba Conservation and Water Stewardship. The proposed monitoring program is based on tagging approximately 10% of the adult Lake Sturgeon in the Keeyask reservoir, which is sufficient to provide good representation of downstream movements. The KHLP will continue to assess other methods of recording downstream passage but other methods investigated to date, such as those that rely on hydroacoustic technology, provide poor differentiation among fish species.

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14	Aquatic Environment	Given the high uncertainty of success for young of the year habitat remediation, the Proponents should develop plans for alternative approaches. (CAC)	Already Addressed / Not Required	It should be noted that the assertion by the CAC Lake Sturgeon expert that there is a high uncertainty with the success of young of the year habitat remediation is based primarily on his assessment that sand could not be effectively placed on the river bottom. During cross examination, he indicated that engineering is not his area of expertise; in fact, the proposed method of sand placement is a well-established technique used to cap areas of contaminated sediment in rivers. A second concern was that invertebrates would not colonize the newly placed sand; during cross examination he indicated that he was not an expert in benthic invertebrates and was not aware of the rapid colonization rates by benthic invertebrates (e.g., use of artificial substrate samplers). As noted in testimony, the KHLP does recognize uncertainty with the creation of young of the year Lake Sturgeon habitat, and as such as provided for adaptation in the placement of sand, as well as provision for using stocking to avoid missing year classes during the time that the habitat is being adjusted, if required.
15	Aquatic Environment	Identifying marks should not overly stress, injure, maim or kill the fish. (CAC)	Already Addressed / Not Required	The objective of marking is to be able to identify marked fish at recapture without overly stressing or injuring them. Fish marked with PIT tags will be identified with a scanner. Fish marked with an isotope will be identified through a small sample of a fin ray (also routinely collected for ageing).
16	Aquatic Environment	The subsequent monitoring program should evaluate survival, year class strength, and growth in marked hatchery as well as unmarked wild individuals. (CAC)	Already Addressed / Not Required	The monitoring plan will address the parameters suggested by the CAC. A comparative analysis of growth rates between hatchery and wild-hatched fish is planned where sufficient wild hatched fish can be captured. Evaluations of survival and year-class strength, as well as the proportion of each year-class comprised of hatchery and wild fish, are also planned.
17	Aquatic Environment	All marks should be permanent and their identification should not be subjective. (CAC)	Already Addressed / Not Required	The objective of marking is to obtain readily identified, permanent marks. In some instances, marks are lost (e.g., PIT tags are sometimes expelled by fish).
18	Aquatic Environment	The Proponents should consider a program whereby only the largest (perhaps 10%) of fingerlings are stocked in the fall and the rest are kept over the winter to grow out, with stocking of these yearling individuals to occur in late spring or early summer (CAC)	Already Addressed / Not Required	The stocking program will release a range of ages and sizes of fish (including yearlings as suggested by the CAC recommendation), however, the age/size at release also depends on the area where the release will occur, the number of sturgeon existing in the hatchery (i.e., success of the hatch), and results of monitoring studies. Considerations in planning the annual release of fish will be based on: (i) the number of fish available in relation to hatchery capacity; (ii) habitat available in target area (e.g., would release larger, older fish into newly formed reservoir given expected habitat changes); and (iii) size of fish in hatchery. Annual release plans would be developed in consultation with Manitoba Conservation and Water Stewardship and depend on permits for handling of live fish issued by MCWS.
19	Aquatic Environment	Smaller fish should be retained in the hatchery, grown out over the winter, tagged with PIT tags and released in the spring. (CAC)	Ill Advised	The stocking plan will release a range of sizes and ages of fish. The size and age of fish to be stocked will be determined in consultation with MCWS. Selection of the largest (fastest growing) fish for release in fall, when survival rates may be lower and retaining slower growing fish for release in spring/summer when survival rates are higher, may not support the development of a well-adapted Lake Sturgeon population.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
20	Aquatic Environment	The Proponents should plan to uniquely mark ALL stocked sturgeon prior to release (CAC)	Ill Advised	All stocked sturgeon will be marked prior to release; however, marking of smaller fish will rely on methods such as isotopic marking that do not distinguish among individuals.
21	Aquatic Environment	Yolk sac fry should never be stocked into the Keeyask area but should be released in other appropriate areas of the Province when/if they are available. (CAC)	Ill Advised	There is no good reason not to stock yolk sac larvae if excess fish are available after hatching. The rationale that these fish cannot be individually marked is not sufficient – there will be sufficient older fish released by the stocking program to measure individual growth rates. If the input of yolk sac fry increases the number of Lake Sturgeon in the region, this could only be considered a benefit. The presence of the isotopic mark on yolk sac fry will be sufficient to identify a sturgeon recaptured during monitoring as a stocked fish and the age that the fish was released. These data will provide important information on the survival of released fry relative to the other released life stages, and provide the necessary information to assess the success of the stocking program. In addition, given concerns over maintaining the genetic integrity of Lake Sturgeon stocks, it is highly unlikely that the CAC recommendation of releasing Lake Sturgeon from Keeyask into other areas of the province would be endorsed by MCWS and DFO.
22	Aquatic Environment	Only passive integrated transponders (PIT tags) should be used to mark fish. (CAC)	Ill Advised	It is assumed that the CAC recommendation refers to stocked fish. Fish too small to be marked with PIT tags will be marked with isotopes.
23	Aquatic Environment	Fingerlings large enough to carry 8 mm PIT tags should be stocked in the fall. (CAC)	Ill Advised	The stocking plan will release a range of sizes and ages of fish. The size and age of fish to be stocked will be determined in consultation with MCWS. Selection of the largest (fastest growing) fish for release in fall, when survival rates may be lower and retaining slower growing fish for release in spring/summer when survival rates are higher, may not support the development of a well-adapted Lake Sturgeon population.
24	CEC Process	Manitoba Wildlands recommends to the CEC that you ignore any proponent materials not received by Round 2 IRs, in your recommendations. Ideally only spring 2013 supplemental filings, the late set of technical reports and public/ Technical Advisory Committee comments and IRs would be relevant in your reviews. (MWL)	CEC Process	Ultimately the decision of what materials to consider as part of its deliberations rests with the CEC. Having said that, it would seem inappropriate to ignore relevant information filed by the Partnership before and during the hearings that may assist the CEC in this task. It is an especially odd recommendation since the evidence of one of their experts relied almost exclusively on a technical report finalized and made available in late August after the second round of IRs was complete.
25	CEC Process	For the first time ever in a CEC hearing we had multiple proponent lawyers present in the hearing room. We achieved a single day record of ten lawyers for the proponent. These lawyers did not always identify themselves or their client when they spoke. We had at least one lawyer who was never identified. And there were some lengthy polemics. We ask the CEC to consider how best to put procedures in place about legal counsel for the proponent that will improve the process for all those also present in the room. (MWL)	CEC Process	This recommendation is specific to the CEC process. It is noted that the Partnership is made up of five different parties and each is rightly entitled to its own legal counsel.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
26	CEC Process	Undertakings identified and listed during the hearings are best in a common listing. This saves duplication of effort by different parties, and ensures accuracy. We ask the CEC to make sure that all parties and participants have the same list of undertakings in future hearings. (MWL)	CEC Process	This recommendation is specific to the CEC process. The Partnership found the level of communication and the documentation of undertakings to be appropriate and satisfactory.
27	CEC Process	Manitoba Hydro staff, all three who were sent Manitoba Wildlands IRs, lost track of 26 IRs. That essentially meant our office was dealing with IRs from May through August. We request the CEC put in place a requirement for the proponent to confirm receipt of all IRs by participant source, so that any glitches are identified immediately. (MWL)	CEC Process	This recommendation is specific to the CEC process. The Partnership regrets this error occurred, but notes that it replied promptly to the IRs once the mistake was discovered and replied to all Round 2 IRs within the originally specified timeframes.
28	CEC Process	Information Requests (IRs) are a selective process, with what we see as an improved, but still needing improvement in level of response from the proponent. Unfortunately the proponent appears to assume that any answer to an IR that is not challenged is correct and complete. While this is helpful in the instances where the proponent provided information that should have been in the EIS in the first place, it is not justifiable in a blanket assumption. We request the CEC consider how its procedures could clarify that participants and the CEC have to be selective in the areas or topics for IR content, and then selective again in identifying which IR responses are relevant to use resources for a Round 2 request. (MWL)	CEC Process	This recommendation is specific to the CEC Process. The Partnership would fully endorse a process that requires participants and the CEC to be selective in the areas or topics for IR content, and believe this was especially well communicated with respect to the scope of the Round 2 IRs.
29	CEC Process	Another precedent was set with these hearings. We have audio and video recording of all presentations, cross exams, and the whole hearing. As a public venue and public proceeding this is appropriate. As a public utility with a project in a public hearing we suggest that Manitoba Hydro should make its audio files and videos public also. We request the CEC require Manitoba Hydro to provide all of these materials and recordings to the CEC for your archives. Certainly if they can provide 25 sound and video feeds to advisors, legal counsel, staff, consulting firms, other rooms in the hotel, etc. they can provide a set of these materials to the CEC. (MWL)	CEC Process	The sound and video feeds during the hearing were not recorded. Consequently it is not possible to provide this information.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
30	CEC Process	The questioning of Manitoba Hydro/proponent panels and experts in these hearings has been somewhat different than in the Bipole III hearings. We suggest to the CEC you consider providing a half day workshop or orientation for new participants, and for those participants without legal counsel, in advance of the next Class 3 or Class 2 CEC proceedings and hearings. This step could support both participants and the CEC requirements. (MWL)	CEC Process	This recommendation is specific to the CEC Process. The Partnership has no comments.
31	CEC Process	In contrast to recent CEC hearings, the topics/content/number of presenters and advisors for Manitoba Hydro/proponent Panels regarding Keeyask Generation Station increased significantly. We had panels with as many as 15 – 20 persons in the front row and the back up row. (MWL) The CEC and participants were not informed in advance of the sequence, or topics in relation to the EIS for each panel. We were not provided with identification of who would be presenting in advance either. The document that was provided October 18, on the Friday before the Monday hearings start in Winnipeg was simply inadequate and not identified as to source, or project etc. Content re: panels was incomplete. (MWL) We suggest to the CEC that your procedures could stipulate this information be provided to all parties on the 14 day rule or even earlier. This step would make better use of the public funds that go to participants because it would support preparation for the proponent panels. Certainty and predictability are important in any business undertaking. We suggest that these qualities also assist in the quality of participant preparation and analysis for hearings. (MWL)	CEC Process	This recommendation is specific to the CEC Process. The Partnership would note that it provided a complete listing of its panels, including panel membership and the topics to be addressed, well in advance of the hearing to all hearing participants. The Partnership had multiple panels and many witnesses so that those involved in the hearing - both the Commission and participants - could hear directly from the experts, specialists and Partner First Nations about their studies and analyses.
32	CEC Process	We recommend that the CEC panel review The Manitoba Planning Act with respect to Manitoba Hydro when considering the Keeyask EIS commitment and discussion about redevelopment of Gillam. We also recommend that the Interpretation Act of Manitoba, with respect to Aboriginal rights, be considered in your recommendations about this project. The Tritschler Report of 1979, made public in 1982, is the result of an inquiry into Manitoba Hydro projects built in the 1970s, especially the Churchill River Diversion. A summary of that report is posted on our website. (MWL)	CEC Process	The Partnership has no comments.

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33	CEC Process	Also there is the question of whether or not Manitoba Hydro consultants are lobbyists. We request the CEC to review Manitoba's regulatory framework and registration process and consider whether consultants or advisors to our utility may need to register as lobbyists. This question arose when I heard one of the consultant/experts discuss the current thinking at the Legislature about Keeyask, based on a recent meeting or discussion. One was reporting to the other, and the other was a Partner in Keeyask. (MWL)	CEC Process	This recommendation is based entirely on hearsay. The Partnership's consultants are experts in their field and their assessment of the Keeyask Project is based on over a decade of study. The final EIS reflects the results of their assessment and the mitigation required to addressed concerns identified through this process.
34	CEC Process	That, for future projects, there be an expectation that the proponent will fully cooperate in sharing map data and data when requested by affected parties, to allow for proper peer review of map data, methodology and analysis. (Peguis)	Already Addressed / Not Required	To the extent reasonable, the Partnership has provided these data. It is unreasonable to expect that a proponent provide data that is proprietary or provided under licence to the proponent. The Partnership has consistently indicated a willingness to work with participants to assist them with their technical reviews, and has provided all of its technical reports in addition to the extensive materials filed with the EIS.
35	CEC Process	That the process of a CEC hearing is adversarial in nature. (CAC)	CEC Process	This recommendation is related to the CEC Process.
36	CEC Process	That in future proceedings, the CEC make accommodations for Elders evidence as per the Federal Court Guidelines, particularly Part IV: Elder Testimony and Oral History (cas-ncr-nter03.cassatj.gc.ca/fct-cf/pdf/PracticeGuidelines Phase I and II 16-10-2012 ENG final.pdf) (CAC) Consider the application of Cree law procedural principles, processes and protocols in its future proceedings. (CAC)	CEC Process	This relates to CEC process. The Partnership has no comments.
37	CEC Process	Manitoba Hydro / proponents lawyers used various documents in examining expert witnesses provided by the participants. These documents were not provided to the participants, or legal counsel for participants – despite ongoing preparation for examining those same experts. We note that all of a sudden this happened on January 7. We ask the CEC to: - require the Manitoba Hydro project manager to provide all of these documents to each participant in the room immediately - put specific directions into the hearing procedures in this regard. (MWL)	CEC Process	This recommendation relates to the CEC Process and is not entirely clear. To the best of our recollection, all of the documents used for cross-exam were provided to a Participant's legal counsel and, where appropriate, other participants to the hearing.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
38	Conawapa	While they would prefer that the location of their community's annual spring goose camp (the limestone quarry) is left as is, if this area is required by Manitoba Hydro, another goose camp location should be developed in replacement (note: this relates to the Conawapa project) (FL Youth)	Out of Scope	This comment relates to the potential Conawapa Generation Project and not Keeyask. Manitoba Hydro will be discussing these matters directly with Fox Lake Cree Nation as part of planning for that development.
39	EA Approach	ATK, and methods, should be used to develop environmental assessment studies and assessment - no two track. This has been recommended by participant community panels and also by participant experts. An ATK standard, as discussed by other participants, signed onto by First Nations for use in EA and EIS would go a long way. (MWL)	Already Addressed / Not Required	Elders, resource users and others have been involved in the design and implementation of environmental assessment field studies and overall environmental assessment methodology since the outset of the Keeyask planning process. ATK is well documented throughout the Response to EIS Guidelines, including in sections that specifically discuss ATK related to important topics considered in the EIS. This ATK was provided through years of working together as partners and through community-led ATK studies. As is most appropriate, the Partners also determined how this ATK would be discussed, presented and utilized in the EIS based on the ATK principles developed specifically for the Project. In this regard, the Partnership has demonstrated a level of best practice for incorporating ATK into a regulatory-based environmental assessment that is equal to or better than any other undertaken in this country. At the request of Partner First Nations, an opportunity was also provided for each community to undertake its own environmental evaluation based on the Cree worldview. This is not at all standard and the Partnership should be heralded, not criticized, for providing this important and meaningful opportunity. What better way to show respect than to allow those most affected to assess the Project based on their own perspectives and worldview and to give this equal weight and standing in the EIS.

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40	EA Approach	Aboriginal knowledge has not been sufficiently attended to. While some effort went into gathering ATK, the CFLGC was in part formed because Elders from the Fox Lake Cree Nation felt their views were being filtered. Mr. Massan has reported that attendance at 'core group' Elder's meetings dropped off considerably in the period of project preparation. None of the Manitoba Hydro science based experts appeared to have a background in working with Elders and their reports show very little (or no) consideration to ATK. It is very likely that as the project proceeds and as Elders see their knowledge being given little credence, their participation will actually decrease and ATK will become even less of an influence in the future monitoring and mitigation phases. We recommend a three-track process as suggested by Dr McLachlan, in which systematic efforts are made to bring the two forms of knowledge together and provides mechanisms for conflict-resolution. We also recommend a decision-making process that includes equal participation of First Nations and Manitoba Hydro at all stages; anything less only ensures that serious conflicts will always be resolved in favour of Manitoba Hydro. (CFLGC)	Already Addressed / Not Required	There is absolutely no need for a "three-track process" since the EIS process and ongoing monitoring already reflect a collaborative approach that gives equal consideration to ATK and Western science. Elders, resource users and others have been involved in the design and implementation of scientific field studies and overall environmental assessment methodology since the outset of the Keeyask planning process. ATK is well documented throughout the Response to EIS Guidelines, including in sections that specifically discuss ATK related to important topics considered in the EIS. This ATK was provided through years of working together as partners and through community-led ATK studies, and the Partners have worked together throughout to address differences. As is most appropriate, the Partners also determined how this ATK would be discussed, presented and utilized in the EIS based on the ATK principles developed specifically for the Project. In this regard, the Partnership has demonstrated a level of best practice for incorporating ATK into a regulatory-based environmental assessment that is equal to or better than any other undertaken in this country. At the request of Partner First Nations, an opportunity was also provided for each community to undertake its own environmental evaluation based on the Cree worldview. This is not at all standard and the Partnership should be heralded, not criticized, for providing this important and meaningful opportunity. What better way to show respect than to allow those most affected to assess the Project based on their own perspectives and worldview and to give this equal weight and standing in the EIS.
41	EA Approach	It would seem prudent for modeling to be combined with ATK based around previous hydro developments in the region in order to reduce uncertainty around predictions for impacts on the physical environment. (CAC)	Already Addressed / Not Required	This has already been addressed through responses to information requests filed by the CAC. ATK information is not provided as numerical, quantitative information that is conducive to scientific models. Rather, ATK has been and will continue to used by the Partnership to determine important factors to be considered as part of assessment and monitoring programs, and to verify the outcomes of Project modelling, predictions related to Project effects and the effectiveness of mitigation measures.
42	EA Approach	For future EIS, it would be helpful to understand if the technicians and experts in WSK had any training on methods of including ATK in their analysis and conclusions. If ATK is to have a "distinguishable voice", it would be beneficial to include information about how the ATK informed the WSK in the EIS and technical reports. (CAC)	Already Addressed / Not Required	A "distinguishable voice" for ATK has been provided in the Partnership's EIS Filing. The Response to EIS Guidelines specifically identifies how ATK has been utilized in the assessment in various places throughout the document - among the most notable is the specific section at the very beginning of Chapter 6: Environmental Effects Assessment, entitled "Aboriginal Traditional Knowledge Overview". Each of the Partner First Nations has also provided its own environmental evaluation reports documenting its perspectives on the Keeyask Project. These perspectives are also provided candidly in the video Keeyask: Our Story. This was accomplished by a Partnership team of dedicated and open-minded individuals who committed to working together collaboratively and to determining together the most appropriate way of including ATK in the EIS filing. It is not clear how knowing the "training" of individuals in this regard would in any way improve the review of the EIS. Its success in this regard should be based on the final product.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
43	EA Approach	ATK must be treated as "expert" knowledge and with "equal value and importance" to Western Scientific Knowledge. (KK) The Kaweechiwasihk Kay-tay-ti-suk recommends that the Commission recognize Traditional Scientific Knowledge as “expert” knowledge that is treated with at least equal an value and importance by the Partnership and regulators regarding: a) the project design, construction and operation; b) the EIS; c) the environmental protection plans) the environmental monitoring plans; and e) the environmental and project management plans." (KK) CAC supports the recommendations of the Kaweechiwasihk Kay-tay-a-ti-suk, that that Aboriginal traditional knowledge and Western science work together to recognize and protect the Noschimik Atikok. (CAC) TK should be incorporated into both the analysis and conclusions in the EIS. A methodology for consideration of ATK and WS should be made explicit in future EIS. (CAC) ATK must be considered FIRST in order to guide the technical science work. In this way, Western Science will be coordinated and harmonized with ATK in the design, implementation and monitoring of the Keeyask project. (KK) Encourage greater incorporation of Aboriginal worldviews in management decisions. (C Kennedy-Courcelles)	Already Addressed / Not Required	Throughout the project the Partnership has given equal weight to Aboriginal Traditional Knowledge and Western Science. Example of this is the development of the Environmental Impact Statement that includes each of the Partner Cree Nation's Environmental Evaluation Report and the Reponses to the EIS Guidelines, which draws on both Aboriginal Traditional Knowledge and Western Science, determination of the project fundamental features, monitoring plans and the MAC.
44	EA Approach	The arguments made by scientists employed by Manitoba Hydro were in many cases not credible, involving as they did overarching assurances that a massive industrial project changing the seasonal behavior of a major river, flooding land, and involving roads, transmission lines, quarries, camps, and massively increased human presence, would after relatively small mitigation efforts have ‘neutral impacts’ on the identified valued ecological components of the region. Indeed, in some cases they had the audacity to argue that this mitigation and rehabilitation would actually leave lake sturgeon populations better off?! A process of producing independent, refereed assessments at arms length from the proponents must be found in order to ensure credibility of the process and the knowledge produced by it. (CFLGC)	Already Addressed / Not Required	The Clean Environment Commission Hearings are an independent process that reviews the credibility of the Partnerships EIS and supporting information. We are confident that the CEC is fully capable of this task and a duplication of this effort is not required.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
45	EA Approach	Manitoba Hydro, for both Keeyask and any future hydro-electric development, consider local and regional effects more broadly in EA analysis, and within the context of cumulative effects. (SFN)	Already Addressed / Not Required	The cumulative effects assessment filed by the Partnership takes a VEC-based approach. Local and regional study areas have, correctly, been determined on the extent of possible pathways of effect stemming from the Project. This has included the selection of very large regional study areas for migratory species like caribou and many socio-economic VECs like employment. Ian all cases, all past and reasonably foreseeable future projects that have the potential to affect a VEC and that could overlap with the effects of Keeyask have been considered in the analysis.
46	EA Approach	Before a license is recommended, the EIS must take into account the impacts of the existing Hydro Project when assessing the significance of the impacts of Keeyask and the cumulative effects for all VECs. (PCN)	Already Addressed / Not Required	The assessment and findings of significance undertaken by the Partnership are based on an assessment of VEC sustainability. The Partnership assessed the significance of residual adverse effects on each VEC based on the effects of Keeyask, acting in combination with all relevant past/current projects and activities, and again based on the effects of Keeyask acting in combination with past/current and reasonably foreseeable future project projects/activities. The analysis was thorough and considered all project/activates, including hydro development, that have the potential to overlap with the effects of Keeyask.
47	EA Approach	Manitoba Hydro's own efforts do not amount to the sort of cumulative impacts assessment that the Clean Environment Commission, and the Manitoba Government, as well as several intervenor groups, have been calling for. There is little or no discussion in the EIS of impacts from previous projects. (Peguis)	Already Addressed / Not Required	The Partnership has undertaken a comprehensive, project-specific cumulative effects assessment that explicitly considered the effects of past projects and activities. Its work is consistent with both the recommendations made by the CEC in its Wuskwatim and Bipole III reports and CEAA Guidance documents. Discussion of the effects of past projects is detailed throughout the Response to EIS Guidelines, the Partner First Nations' environmental evaluation reports and the supporting volumes. As well, the cumulative effects summary document submitted by the Partnership in response to CEC Rd 1 CEC-0020 provided discussion on the past for each VEC expected to be adversely affected by the Keeyask Project, as did each of the topic-specific presentations made at the CEC Hearing.
48	EA Approach	A more meaningful cumulative assessment, using a three-track process and conducted at arm's length from -Manitoba Hydro, must be completed before this or other projects are to be started. The very design of these projects should take into account the result of such a review. (CFLGC)	Already Addressed / Not Required	There is absolutely no need for a "three-track process" since the EIS process, including the cumulative effects assessment, already reflect a collaborative approach that gives equal consideration to ATK and Western science. Elders, resource users and others have been involved in the design and implementation of scientific field studies and overall environmental assessment methodology since the outset of the Keeyask planning process. This has included collaborative participation in determining the design of the Partnership's approach to cumulative effects assessment. At the request of Partner First Nations, an opportunity was also provided for each community to undertake its own environmental evaluation based on the Cree worldview. These evaluation reports were undertaken independent of Manitoba Hydro and inherently incorporate cumulative effects from the perspective of each of the Partner First Nations. This was an important and meaningful opportunity and resulted in the preparation of three comprehensive reports that have given equal weight and standing in the EIS.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
49	EA Approach	That the CEC recommend to the Minister that, for any future projects, all related transmission and convertor stations and any other related projects be considered, reviewed and assessed in connection with one another. (Peguis)	Already Addressed / Not Required	The cumulative effects assessment undertaken by the Partnership considered all related infrastructure required to support the Keeyask Generation Project. Some of this infrastructure has already been separately licensed (Keeyask Infrastructure Project) to support capacity development for the Partner First Nations, or is being licensed separately because it is not owned by the Partnership (Keeyask Transmission Project). In these cases, full environmental assessments have been completed that meet all regulatory requirements.
50	EA Approach	All sources of information used to draft the EIS materials; scientific, technical, etc, should be made available to the public to assist with review of EIS materials, in a timely fashion. (MWL)	Already Addressed / Not Required	All of these materials have been made available on a timely basis.
51	EA Approach	An overarching guideline should be developed from which all study areas are derived, that includes scientific justification, control areas, proxy areas, benchmark areas, etc. This guideline should be reviewed every 3 – 5 years in relation to results of monitoring, and ongoing technical studies and reports. (MWL)	Already Addressed / Not Required	Study areas for each VEC have appropriately determined on a VEC by VEC basis. Generic study areas that are not linked in any way to the VEC and possible pathways of effect from the Project represent poor EA methodology. The methodology for how study areas were determined is described in Chapter 5 of the Response to EIS Guidelines and in greater detail in the sections describing the work undertaken for each of the environments and related VECS and the relevant supporting volumes. These study areas will also be used for monitoring programs so the results of monitoring can be compared to EIS predictions.
52	EA Approach	Selected VECs and Supporting Topics should include all species at risk within the northern Hydro region, not just a select few identified by the utility. (MWL)	Already Addressed / Not Required	This is neither practical nor reasonable, as outlined for a variety of proposed VECs in CEC Rd 1 CEC-0036. Some species at risk simply do not meet standard criteria for VEC selection. For example, a number of identified species at risk may occasionally pass through but do not breed in the region, and therefore are very unlikely to be affected by the Project – "weak Project linkage" (e.g., short-eared owl). Other species at risk are similar in habitat requirements to selected VECs that have stronger linkages to Project effects, and therefore the understanding gained about habitat effects on the VEC is applicable to that other species (e.g., caribou [VEC] and American marten). Lastly, Environment Canada accepted the VECs selected, and did not suggest the addition of additional species at risk.
53	EA Approach	Manitoba Hydro should be required to conduct a complete Life Cycle Assessment, based on the full suite of international standards. It should be made public, as a guide for ongoing assessment and monitoring of the materials, and emissions from the project areas, infrastructure, reservoir, etc. through the life of the project. (MWL)	Already Addressed / Not Required	A comprehensive and independent Life Cycle Assessment (LCA) was completed for the Project by the Pembina Institute using three key air emission indicators, including greenhouse gases (GHG), and following appropriate ISO guidelines. The LCA considered construction, land use changes, operation and decommissioning. An independent review found no significant errors or omissions in the analysis. Ongoing life cycle assessment (LCA) would yield little or no value to the evaluation or operation of the Keeyask Project as the vast majority of the greenhouse gas implications are associated with the initial phases of development, including construction activities, material sourcing, component manufacturing, transportation, and land use changes. An ongoing LCA would have no substantive benefit in reducing the Project's GHG implications since operations and maintenance over the 100-year operating life account for only 1% of total Project emissions, offering no opportunities to meaningfully reduce the Project's total GHG emissions.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
54	EA Approach	The literature reviews provided in the EIS materials need to identify literature that contradicts hydro's findings, so as to provide an objective review of the science, rather than only research and literature that agrees with Manitoba Hydro findings. (MWL)	Already Addressed / Not Required	The Partnership has undertaken and provided a thorough literature review that includes a consideration of all relevant literature for each VEC.
55	EA Approach	The EIS, presentations, answers to questions, assumptions about monitoring programs and reporting may all be based on the false assumption that not identifying a species during limited aerial study, or desk reviews of technical literature, or from existing data, means absence of the species. We ask the CEC to consider the risks from this principle being ignored or misused. We recommend that standards for monitoring, reporting, environmental management, and all future analysis re species be based on this principle. (MWL)	Already Addressed / Not Required	The filed material demonstrates that this principle is well-understood by the scientists involved in conducting the EIS studies. Using caribou as an example, the possibility that boreal woodland caribou are present in the Project area was not ignored but rather addressed by treating these animals as if they were boreal woodland caribou throughout the Project design and environmental assessment (e.g., when designing mitigation by avoiding calving and calf-rearing habitat, applying the Environment Canada intactness benchmark). Conclusions regarding the potential presence or absence of a species were based on studies carefully designed to maximize the likelihood that the full range of species present in the Project area would be detected. In the case of terrestrial plants, several complementary sampling strategies were implemented in order to meet the objectives of characterizing ecosystem types and identifying the locations of plant species of particular scientific or social interest that could be affected by the Project. For the scientific studies, random sampling was complemented with targeted sampling in the habitat conditions that had the highest potential to support the rare and culturally important plant species that could occur in the Project area. Scientific studies were complemented by ATK information provided by the KCNs through four plant workshops, terrestrial and aquatic working group meetings, responses to written requests submitted to the communities and the evaluation reports undertaken by the Partner First Nations.
56	EA Approach	For future proceedings relating to hydro-electric developments on the Nelson River, the riparian corridor should be considered as a VEC. (CAC)	Already Addressed / Not Required	This recommendation has merit in principle, and will be considered for assessments of future hydro-electric developments on the Nelson River. It was not chosen as a VEC for the Keeyask assessment because the functions performed by the Nelson River riparian corridor were already evaluated by the wetland function and ecosystem diversity VECs. The wetland function VEC provides an assessment of ecosystem functions for every wetland type, and the ecosystem diversity VEC includes wetland types in its evaluation using different indicator measures than the wetland function VEC. Additionally, the Partner First Nation evaluations, the aquatic VECs and supporting topics and the socioeconomic VECs provide evaluations for the cultural, aquatic and resource values associated with the riparian corridor. Adding the Nelson River riparian corridor as a VEC would have created redundancy, which is inconsistent with the objective of using VECs to focus an assessment. In summary, there was no strong ecological justification to elevate the Nelson River riparian corridor to a VEC for the Keeyask assessment given that: (i) the issues that would have been represented by it were already represented by other VECs; and, (ii) the other VECs provide better representation for potential Project and cumulative effects on the Nelson River corridor in the Keeyask region.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
57	EA Approach	Study areas should be comparable between VECs and Supporting Topics to allow for large-scale analysis and comparison. Monitoring should not be limited to the project footprint, or single zones etc. (MWL) Study areas should be consistent between EIS materials and technical reports. All study areas should be mapped, listed, and explained in one place in the EIS. As this has not been done it should be required in the first year of a licence should a licence be issued. (MWL)	Ill Advised	Study areas for each VEC have been appropriately determined on a VEC by VEC basis. Generic study areas that are not linked in any way to the VEC and possible pathways of effect from the Project represent poor EA methodology. Monitoring is not limited to the Project footprint, and will take place throughout the local and regional study areas identified for each of the components included in the monitoring plans.
58	EA Approach	The EIS materials need to accurately represent the information derived from the technical reports. This is not so for the technical reports for Keeyask Generation Station. Identification of these gaps or variances is needed before construction would start under a licence, should a licence be issued. Decisions and a plan as to how to have a living, working set of technical reports, and monitoring reports with consistent standards, terminology, methodology, and reporting processes are needed before a licence is issued. (MWL)	Ill Advised	The Partnership's ultimate assessment of the Project is reflected in its final EIS documents. The technical reports are intended to inform the discussion and analysis provided in the final EIS documents and are not a component of the EIS. Technical reports have been provided to participants and others, upon request, in the interests of supporting an open and transparent process. Monitoring reports and any comparison to EIS findings will be done on the basis of the final EIS documents.
59	EA Approach	Ecosystem functions and ecosystem services studies needs to be conducted for the Keeyask project and future projects. Given the life span of this project and the current international research and models for valuating ecosystem services and natural capital, Manitoba Hydro should be required to conduct research with the aim of incorporating these methods into the Keeyask Generation Project, should it be licensed, and into future projects. See Stats Canada fall 2013 report. (MWL)	Ill Advised	There is no requirement under current provincial or federal environmental legislation or related guidance to undertake an ecosystem services study for the purposes of environmental licensing. There is no guidance from Canadian regulatory agencies on how to complete such studies, nor is this standard EA methodology.
60	EA Approach	The assumed application by the proponent of the precautionary approach to Keeyask Generation Project should be reviewed and compared to other hydro electric and energy, mining etc developments. Manitoba Hydro should be required to research, study, and update its methods, and application of the precautionary principle to this project, should it be licensed, and to any future project. (MWL)	Ill Advised	The Partnership has explained in the responses to IRs, its testimony and in final argument how it applied the precautionary approach. The nature of the Precautionary approach is determined by the project and the issues. There is no one size fits all. Ironically, some participants have actually accused the Partnership of being too cautious (e.g., CAC Mercury & Health Experts).

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		The Kaweechiwasihk Kay-tay-ti-suk recommends that the Commission only accept any suggestion that the Keeyask project is not likely to cause significant residual adverse environmental effects or impacts if: 1. The responsible authorities, other regulatory authorities and those responsible for implementing any environmental plans or programs, which authorities should include Kaweechiwasihk Kay-tay-ti-suk: a) acknowledge, recognize and apply the INNINEW KISKAYTOMOWIN (traditional knowledge, including collective wisdom) of Kaweechiwasihk Kay-tay-ti-suk as "expert" knowledge; b) acknowledge and recognize the holders of INNINEW KISKAYTOMOWIN as "experts"; c) accord an importance and value to the contributions of INNINEW KISKAYTOMOWIN that is at least equal to western scientific knowledge; and d) accord recognition to the Kaweechiwasihk Kay-tay-ti-suk as being in possession of "expert" information in respect of INNINEW KISKAYTOMOWIN and to be consulted in this regard. 2. The customary laws, beliefs, values and principles of Inninuwuk in relation to the protection of environmental and heritage resources are acknowledged and are applied as part of the environmental protection, heritage resource protection and monitoring programs associated with the Keeyask Generation Project and in particular, the Customary Law principle of Kwayaskonikiwin (reconciliation and restoration of balance). 3. Measures for the protection of heritage resources must be developed that will address heritage resource protection within Aski and will: a) ensure a direct role to Kaweechiwasihk Kay-tay-ti-suk for the protection and disposition of found non-forensic aboriginal human remains, grave goods and artifacts in a manner substantially similar to the Manitoba-Nisichawayasihk Protocol on Heritage Resources; b) provide a direct role for Kaweechiwasihk Kay-tay-ti-suk in any agreements or activities related to the Churchill River Diversion Archeological Project, particularly regarding and recovery activities in the forebay and reservoir and construction areas of the Keeyask project; and c) protect the proprietary interests and intellectual property values and rights inherent in Inninewsewin, including knowledge of heritage resources, sites of special interest and the uses and location of medicines.		
61	EA Approach		CEC Process	Ultimately, it is up to the CEC to determine how it will make its findings and recommendations with respect to the Project.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
62	EA Approach	Manitoba Hydro shall complete a sustainability assessment for Keeyask, in substance as recommended by Dr. Bob Gibson, prior to constructing and operating Keeyask (CAC) That the CEC apply comprehensive and explicit set of sustainability criteria in its assessment of the Keeyask proposal as a first step; although it cannot provide a basis for concluding that the project is acceptable if the review does not include comparative evaluation of alternatives . (CAC) We ask the CEC to consider the Sustainability Framework which Dr. Amelia Clarke brought to the hearings. Apply it to this EIS, and your deliberations. One question would be whether aspects of the presentations, EIS, and commitments from the proponent contribute to sustainability and sustainable development. Or how many of the EIS elements are looking and sounding like compliance only - on the left side of the Sustainability Framework Chart vs. the right side column where sustainability and sustainable development happen. Dr. Gibson's set of sustainability assessment criteria are light years ahead of the approach which Manitoba Hydro / the proponent took for this EIS. We would ask the CEC to consider carefully the advice and expertise Dr. Gibson and Dr. Clarke brought to the Keeyask hearings. (MWL)	Ill Advised	There is no requirement in law, the Scoping Document, the EIS Terms of Reference or in the mandate issued by the Minister for the CEC process for the Proponent to undertake a separate sustainability assessment of Keeyask. Nor is such an assessment necessary. All of the attributes typically included in such an assessment will be available to the Minister when it makes its final licensing decision through the outcomes of the CEC Process, the Needs For and Alternatives To Review being undertaken by the Public Utilities Board, and the s. 35 Crown consultations.
63	EA Approach	Before a license is recommended, the Partnership be required to revise its EIS taking into account VECs that capture the interconnectedness of the environment and the system-wide nature of the impacts of hydroelectric development with input from the Aboriginal perspective. (PCN)	Already Addressed / Not Required	The Partnership has selected VECs based on their appropriateness in assessing effects of the Keeyask Project. These VECs were selected based on input from a variety of sources, including the First Nation Partners, experts, and comments raised through the public involvement program and by regulators. VECs selected by the Partnership were available for review by the public and regulators long before the EIS was finalized and additional VECs were added as a result of this review. The VECs selected were assessed based on their long term sustainability, in light of past, present and reasonably foreseeable future projects and activities. In addition, each of the Partner First Nations have undertaken their own environmental evaluation based on an Aboriginal worldview.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
64	EA Conclusions	Mino pimatisiwin, 'the good life', 'a life in balance with the land', is never associated with large, environmentally devastating, industrial energy projects. Just as the project is not 'clean and green', it does not reflect the traditional Inniniwak value and concept of mino-pimatisiwin. It does a disservice to traditional knowledge to deploy the term in this way and it should not be used in connection with any aspect of the Keeyask project. The conclusion that the "adverse [effects] for both construction and operation will not be significant" (CEC Keeyask- Panel 4 -heritage p.74) is not consistent with the evidence shown from the traditional users and harvesters of the resource areas who continue to have a strong attachment to the area. (CLFGC)	Already Addressed / Not Required	Each of the communities has undertaken its own environmental evaluation report and arrived at its own conclusions with respect to Project development. In undertaking these evaluations, some of the Partner First Nations - most notably, FLCN - have referenced the concept of Mino Pimatisiwin and assessed the Project's potential effects on this important value. It is certainly within the rights of others to disagree with this assessment. The Partnership's process and rationale for arriving at a finding of no significant residual adverse cumulative effects for different aspects of it assessment is documented in the Response to EIS Guidelines.
65	EA Conclusions	Trading local environmental catastrophe to help avoid global warming runs counter to any defendable ecological ethics. Manitoba Hydro and its partners should not portray their activities as 'clean and green', but publically accept that it is engaged in profit-based destruction of land. (CFLGC)	Already Addressed / Not Required	The Partnership has developed a project that it believes demonstrates environmental and social responsibility to meet the energy needs of Manitobans. Compared to other options, the Keeyask generating station will produce minimal greenhouse gas emissions and the Project has been designed to avoid, minimize or mitigate adverse environmental effects.
66	EA Conclusions	Develop Keeyask in a way that limits damage to the land and water. (FL Youth)	Already Addressed / Not Required	The KHLP is proud to say that this was a key objective in planning for development of the Keeyask Project and it believes this objective has been met.
67	Government Process	The Manitoba Government should ensure its previous acceptance of the recommendation set out in Article 4.1 of the Aboriginal Justice Inquiry Implementation Committee Report is met. Upholding these types of government commitments to Aboriginal communities is important to all Manitobans as well as in building sustainable communities and protecting the environment. (MWL)	Government	Treaty making is solely within the purview of government. As was pointed out in response to CEC question 53 proponents determine pathways of effects and determines which Aboriginal Groups might be negatively affected as they carry out their assessment and consultations. There is in essence a failsafe built into the process in that independent of the proponent's work government engages in a separate consultation exercise and forms it's own conclusion as to whether additional accommodations might be required to deal with issues identified to government. In considering how such recommendation might be implemented a balancing must take place so as not to have a need or requirement for agreement act as a defacto veto over project approval.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
68	Government Process	The Manitoba Government should ensure its obligations under section 18.3 of the Northern Flood Agreement, which seeks to avoid creating inequities within any settlement amongst Status Indians, Non-Status Indians and Métis be considered in relation to the construction and operation of the Project. (MMF) That the Manitoba Government should ensure its obligations under section 18.3 of the Northern Flood Agreement, which seeks to avoid creating inequities within any settlement, be considered in relation to the Keeyask Project. (MMF)	Government	Although this is out of scope, it was pointed out at the hearing that there are agreements which have been entered into by Manitoba Hydro and the Government of Manitoba in Northern Affairs communities adjacent to NFA First Nations which address issue of adverse effects for the benefit of all members of the particular community.
69	Government Process	The NFA must be implemented in its full spirit and intent. The NFA must be implemented in accordance with annual action plans developed jointly by Pimicikamak and Manitoba Hydro, and funded by Manitoba Hydro, through good faith best efforts negotiations and in accordance with the spirit and intent of the NFA. The action plans should provide that to the extent feasible, Pimicikamak should manage and employ its citizens to work on, the implementation programs. The resources required for such management shall be provided by Manitoba Hydro. (PCN) As the Panel heard from Pimicikamak's witnesses, there are many promises made in the NFA that have not yet been implemented. Manitoba Hydro should be not be allowed to construct and operate further hydroelectric development including Keeyask, until it has met its obligations related to its existing projects. (PCN) Manitoba Hydro must not be allowed to unilaterally and arbitrarily set caps on how much it will spend on NFA implementation in any year, which is what it does now. (PCN)	Out of Scope	The NFA, and the implementation and enforcement of its provisions, are not matters within the scope of the CEC in relation to the hearings on the Keeyask Generation Project. Pimicikamak has recourse to the NFA Arbitrator on any matter within the scope of the NFA.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
70	Government Process	That a Needs for and Alternatives to review be required. (Al Ciekiewicz) The final licensing decision of the Minister should be deferred until there has been the opportunity for independent and transparent consideration of the PUB Need for and Alternatives To consideration of the Hydro Preferred Plan (CAC) That the CEC recommend to the Minister that no approval be given for the Keeyask Generation Station until the outcome of the Public Utilities Board hearings regarding the need for this generation station are reported and responded to by the Manitoba government, noting that the need for the Keeyask Generation Project may be refused or modified by the Public Utilities Board review. (Peguis) That the CEC recommend to the Minister that, for any future projects, the "Needs For And Alternatives To" assessment and all interdependent aspects of a project be assessed in a combined cumulative effects assessment process that reviews and analyzes all key aspects of a project which interact in causing impacts. (Peguis) Disclosure of Manitoba Hydro's 50 year and 100 year development plan is needed so that regulators, stakeholders, affected communities, and Manitobans can determine what is intended, and participate in the discussion for energy planning in our province. (MWL)	Out of Scope	While this is outside of the scope of the CEC mandate, this is already a requirement for licensing of the Keeyask Project.
71	Government Process	Statutory provision allowing for/mandating regional (strategic) cumulative effect assessment. (CAC)	Ill Advised	This relates to government regulation and is not specific to the Keeyask Generation Project. However, it has unclear how any single project proponent would ever be in a position to undertake a regional (strategic) cumulative effects assessment given that this type of work is typically led by governments and involves planning future land uses for large regional areas.
72	Government Process	We suggest to the CEC that any future Environment Act proposal for a Hydro project could be workshopped and discussed with stakeholders and affected communities before the EIS is worked up. The question is what are the ways to front end the EIS process so that it will be informed and understandable when released for public review? What changes are feasible? (MWL)	CEC Process	This recommendation relates to government regulatory processes. The Partnership would note that completing a major EIS is a complicated exercise that involves many decisions about overall structure and organization. In the case of Keeyask, these decisions were made by the partners, based on a review of other EIS documents across Canada, the EIS guidelines, advice from experts and, to put it simply, what made the most sense for this Project. As part of the PIP for Keeyask, the EIS structure and contents were explained to participants.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
73	Government Process	That the CEC recommend to the Minister that the Manitoba Government consider how the environmental assessment process should evolve to reflect the government to government relationship between Manitoba and First Nations by, for instance: - Ensuring Aboriginal participation in determining the appropriate model used for environmental assessment; - Nominating panel members for assessment bodies; - Involving First Nations in the initial processes of the scoping of, and development of Terms of Reference for, environmental assessment reviews; and - Involving First Nations in the process of identifying the basis and contents of environmental reports, technical reports, and all requirements of the proponent (Peguis)	Government	This recommendation relates to government regulatory review processes. The Partnership has no comments.
74	Government Process	We recommend to the CEC that they indicate that an EIS for a complex Class Three project of this sort should include: (These probably also apply to any EIS which is referred to hearings.) - an all in glossary with cross references - a listing with location of all maps - an all in Reference or Literature Cited listing - an all in Table of Contents that is easy to find - any listing of technical reports or technical products to be alphabetically and chronologically listed, with updated date on each version issued - a standard for production of DVD that guarantees that DVDs will be useable when they arrive. - (We realize there may be other steps in organizing EIS materials which participants and the CEC identify as improvements.) (MWL)	Government	This recommendation relates to the government requirements for an EIS. The Partnership has no comments.
75	Government Process	Manitoba Hydro must engage in good faith best effort negotiations with Pimicikamak with the intent of sharing with Pimicikamak net revenue from the entire Hydro Project, comparable to other revenue sharing arrangements for mines in BC and Ontario, in order to offset the inequities of financial gains only being offered in respect of, and only being offered to First Nations whose reserves are in the immediate vicinity of, new components of the Hydro Project. (PCN)	Out of Scope	Manitoba Hydro is not a “for profit” entity as that term is generally understood. Manitoba Hydro’s overall revenues are determined on a cost of service basis not on a return on investment basis so there is no pure profit or net revenue available for such distribution beyond the amount determined that should be added to reserves as provided for in The Manitoba Hydro Act . There is also no provision in the Act which would authorize or facilitate such revenue sharing.

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76	Government Process	The Province of Manitoba should take steps towards the equitable sharing of the resources flowing from Hydro development by dedicating a designated percentage of the water rental fees associated with hydroelectric activity to those communities who share the resources and whose treaty and Aboriginal rights may be affected by the use of the Nelson River for hydroelectric development. (CAC)	Out of Scope	This recommendation is related to government policy. The Partnership has no comments.
77	Government Process	Amend legislation to state significance and net positive contribution to sustainability explicitly (legislate the standard) (CAC)	Government	This recommendation is related to government legislation. The Partnership has no comment.
78	Government Process	That for future assessments the CEC require proponents to adopt from the outset an integrated sustainability assessment framework that includes a full justification of need, a full and fair analysis of alternatives, and application of an explicit set of sustainability criteria specified for the case and context. (CAC)	Government	This recommendation relates to government regulatory processes. The Partnership would note that, under the Manitoba Environment Act, the scope of the CEC's review is typically determined by the Minister of Conservation & Water Stewardship and the required scope of a Proponent's assessment is typically determined in advance through EIS Guidelines issued by federal and provincial regulators. In the case of Keeyask, the Manitoba government explicitly chose to have separate processes dedicated to the review of Keeyask environmental effects through the CEC, and Manitoba Hydro's preferred development plan through the Needs For And Alternatives To Review being undertaken by the PUB.
79	Metis Specific	Based on recent court decisions on Métis issues and ongoing discussions between the MMF and the Manitoba Government under the MMF-Manitoba Points of Agreement on Métis Harvesting, the Manitoba Government should evaluate and consider the implications of the ongoing exclusion of the Métis, as a distinct Aboriginal community, from the Northern Flood Agreement with a view to potentially identifying alternative processes to address Métis issues, concerns and outstanding claims. (MMF)	Out of Scope	Recognition of the Métis as a distinct Aboriginal community and their inclusion or not as part of the NFA is beyond the scope of the CEC process for Keeyask.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
80	Metis Specific	It is the MMF's submission that the Commission should withhold its recommendation of the Project for licensing until the following actions are completed in order to ensure the requirements of the Scoping Document are met in relation to the Métis community: 1. Allow the MMF to complete the preliminary baseline and effects assessment work identified within the agreement executed June 21, 2013 within a reasonable time frame (i.e., by end of March 2014); 2. If the results of this work identify effects or indicate impacts are possible, a further impacts assessment process be completed consistent with the processes used for the KCNs and set out in the Scoping Document; 3. Once a more fulsome impact assessment is complete, a MMF-Partnership agreement or arrangement be negotiated in order to address Métis-specific mitigation measures as well as Métis participation in future monitoring in relation to the Project. (MMF)	Ill Advised	The Partnership has already provided thorough documentation on the potential effects of the Keeyask project, including on resource users and other resident in the Keeyask region, including the Métis. To date, there has been no evidence provided by the MMF through the CEC process that this assessment is deficient or that additional or enhanced mitigation measures are required. However, the Partnership has committed that it will work with the MMF to review and discuss any new information that is made available through the MMF-led studies so that it can assess whether enhanced or additional mitigation measures are required. Completion of this work has also been delayed twice now by the MMF, and the Partnership and the MMF have mutually agreed to extend the work to March 31, 2013. A delay of Project licences under these circumstances is not appropriate.
81	Monitoring & Follow-up	That an external, publicly available audit of the project be completed 5 years and 10 years post construction (as recommended for BP3). (CAC)	Already Addressed / Not Required	There is already a high level of scrutiny and accountability associated with the Project. All of the monitoring programs designed by the Partnership are evaluated on an ongoing basis and have a larger evaluation at key project milestones linked to the anticipated timing of project effects on specific VECs. Monitoring and mitigation undertaken for the Project will be reviewed on a regular basis by the Partnership through MAC and by federal and provincial regulators. Technical and plain language monitoring reports will be developed and made publicly available on an annual basis. The Partnership also provides opportunity for public comments and questions on its Website and will undertake public engagement programs on the outcomes of monitoring in each of the partnership communities on an annual basis. Oversight is also provided through monitoring and management conducted by the Resource Management Boards and by each community's efforts to monitor and manage their respective AEA offsetting programs. It is not anticipated that an audit of monitoring programs at a generically specified timeframe would improve upon the level of accountability or transparency of the Partnership's environmental stewardship efforts.
82	Monitoring & Follow-up	That KHLP and/or Manitoba Hydro provide explanations as to how the Research and Development program explicitly connected to the scientific or management uncertainties. (CAC)	Already Addressed / Not Required	These linkages have already been documented in responses to Information Requests submitted by CAC. They are also explicitly noted, where necessary, in the Partnership's EIS documents. In many cases, Manitoba Hydro funds research that may be more generic in nature, but that provides information applicable to addressing challenges at many of its facilities (i.e., it is not specific to circumstances exclusive to new capital projects).

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
83	Monitoring & Follow-up	That KHLP document its organizational learning outcomes and the ensuing management adjustments, if there are any, whether these are from an adaptive management program in an EA, the external research that it funds, or within the context of the environmental management system". (CAC) Ensure monitoring and adaptive management is in place if predictions are shown to be wrong. (C Kennedy-Courcelles)	Already Addressed / Not Required	The KHLP has committed to an extensive monitoring program that includes both Aboriginal Traditional Knowledge and Western Science. The Monitoring Program will determine actual project effects and measure the effectiveness of mitigation measures. This information will then be used to inform adaptive management measures.
84	Monitoring & Follow-up	That the budget for the monitoring Advisory Committee be established to reflect the broad mandate of the MAC (CAC) That the budget for the MAC include funding for the MAC to hire independent technical advisors (CAC) That a dispute resolution mechanism or process be established for the MAC, by agreement of the KHLP, prior to construction or operation (CAC)	Already Addressed / Not Required	The structure and nature of MAC have been negotiated by the Partners as part of the JKDA. Budgets for MAC have already been established through the JKDA negotiations process and reflect the Committee's mandate. These budgets include funding for independent advisors for the KCNs representatives. If the Committee collectively determines a need for additional independent advisors, funding will be made available for this purpose. A dispute resolution for the Partnership has already been established through the JKDA. As noted in testimony and this final argument, the MAC will function on the basis of consensus. The Partnership has a long history of working together and resolving differences through open and honest discussion and it is fully expected that this will continue throughout operations.
85	Monitoring & Follow-up	That in addition to being informed, the public be provided with an opportunity to participate in the evaluation and adjustment phases of adaptive management (CAC)	Ill Advised	This is completely impractical to implement in any meaningful way beyond the mechanisms already in place for public engagement. The public is engaged in determining adaptive management through MAC (in the case of the KCNs) and through regulatory agencies (those charged with managing resources for the public good). Public engagement processes will also be implemented through MAC that provide another avenue for public input into mitigation and monitoring programs. Finally, all information on monitoring outcomes and any changes to monitoring plans or mitigation measures will be made publically available on the Partnership's website, and contact information is available on this site to provide comments. All comments receive a response.
86	Monitoring & Follow-up	That monitoring activities be carried out in accordance with the Moons and Seasons of the Cree calendar, for example, as depicted in Exhibit KK-019. (KK)	Already Addressed / Not Required	Rather than being dictated through licence requirements, this is most appropriately discussed and agreed to among the Partners, and especially among the Partner First Nations, based on each community's plans for its ATK Monitoring Program.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
87	Monitoring & Follow-up	Western Science must be coordinated, harmonized and integrated with ATK to ensure that ATK is not approached as an “add on” to the design, implementation and monitoring of the Keeyask project or as an “add on” to the Environmental Protection Program. (KK) That the ATK monitoring plans be drafted before issuing the license and that proper funding be allocated. (CAC)	Already Addressed / Not Required	The Partnership has already committed that ATK will be an integral component of ongoing Project monitoring and not an "add-on". This commitment is noted in Chapter 8 of the Response to EIS Guidelines, the Preamble to the Environmental Protection Program and the prefaces provided with each of its plans and, most notably, in the ATK Monitoring Commitment Letter filed by the Partnership at the hearing. Funding has been allocated within Project budgets for ATK Monitoring to be implemented for the life of the Project. ATK monitoring plans are already being developed by each of the Partner First Nations. As with those developed for Wuskwatim, they are community-specific and each community will report on these plans and their contents as it deems most appropriate to protect and maintain ownership and confidentiality of its ATK.
88	Monitoring & Follow-up	The Kaweechiwasihk Kay-tay-ti-suk recommend that the Commission recommend that completed community-based ATK Monitoring Programs AND the direct incorporation of ATK into the Environmental Protection Program in a manner similar to the Nisichawayasihk Aski Kitche O’nanakachechikiwuk process as described by D’Arcy Linklater in Exhibits KK-006 through KK-019 and KK-025 and with the result as reflected in Exhibits KK-026 through KK-030 MUST form part of or attachments to the project Licences and so form part of the Licence conditions. (KK) The Kaweechiwasihk Kay-tay-ti-suk recommend that the Commission make an interim recommendation that a process very similar to the Nisichawayasihk Aski Kitche O’nanakachechikiwuk process as described by D’Arcy Linklater in Exhibits KK-006 through KK-019 and KK-025 should be established immediately for the Keeyask Project in order to incorporate the ATK (portions) directly into the Environmental Protection Program. (KK)	Already Addressed / Not Required	The Partnership has already committed that ATK will be an integral component of ongoing Project monitoring and its overall Environmental Protection Program. The partners have worked together to determine an approach that is acceptable to all parties on the basis of this Partnership. Adopting the model used by Nisichawayasihk Cree Nation for the Wuskwatim Generation Project is something that is most appropriately discussed and determined collectively among the Partners, rather than being dictated to the Partner First Nations through Project licences. ATK monitoring plans are already being developed by each of the Partner First Nations for Keeyask. As with those developed for Wuskwatim, they are community-specific and each community will report on these plans and their contents as it deems most appropriate to protect and maintain ownership and confidentiality of its ATK.
89	Monitoring & Follow-up	That the KHLP develop a mutually agreeable process for resolving disputes between ATK and WSK, prior to licensing, construction or operation. (e.g. a place based approach to resolving disputes between ATK and Western science). (CAC)	Already Addressed / Not Required	The Partnership already has a defined process for dispute resolution that is outlined in the JKDA and that has been agreed to among the partners. This has been documented in several IRs and in the Partnership’s testimony. Experience on the Wuskwatim Project and throughout the planning process for Keeyask indicates that the best process for resolving differences has been, and will continue to be, one which brings the partners together in a forum that allows for open and honest discussion and that has the flexibility to collaboratively seek and implement innovative solutions. The Keeyask partners have demonstrated for over 14 years now that they can successfully work together to resolve differences. This is how MAC has functioned for Wuskwatim and it is how the partners on Keeyask will continue to work together through their involvement on MAC.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
90	Monitoring & Follow-up	Manitoba Hydro should be providing rather than 'reducing' "opportunities to use Cree language" at the job site (5-204). The CFLGC recommends that all signs, notices and infrastructure plans should be at least bilingual, English and Inninumowin. Employment opportunities for translators would be created and linguistic competence in Cree for the youth and in-coming workers would only be beneficial. Inninumowin signs could also serve as a remainder on whose lands the Project is to be built. (CFLG)	Already Addressed / Not Required	Manitoba Hydro and the Partner First Nations will determine if and where Cree language is appropriate. The Partnership has already committed to and implemented many important measures to support the use of Cree language as part of the Keeyask Project. The Executive Summary for the Keeyask Generation Project has been translated into Cree, and both oral (CD) and paper (Roman orthography and Cree syllabics) copies are being provided to each household in the Partner First Nations communities. The Keeyask: Our Story video is also available in Cree. Going forward, the Partnership has committed to the translation of its annual Monitoring Overview report - the plain language summary documenting the outcomes of the Environmental Protection Program. All translation is undertaken by members of the Partner First Nations nominated by their communities. In addition, each of the Adverse Effects Agreements with the Partner First Nations include Cree Language programming.
91	Monitoring & Follow-up	To the extent possible, the ininimowin language should be incorporated into the documents related to the KGS, as directed by the KCN partners. (CAC)	Already Addressed / Not Required	The Partnership agrees and has already undertaken steps to address this goal. The Executive Summary for the Keeyask Generation Project has been translated into Cree, and both oral (CD) and paper (Roman orthography and Cree syllabics) copies are being provided to each household in the Partner First Nations communities. The Keeyask: Our Story video is also available in Cree. Going forward, the Partnership has committed to the translation of its annual Monitoring Overview report - the plain language summary documenting the outcomes of the Environmental Protection Program. All translation is undertaken by members of the Partner First Nations nominated by their communities.
92	Monitoring & Follow-up	Require Manitoba Hydro to consider and seek direction from their partners on the application of Cree customary law in the planning, construction, and operation phases of all Hydro-electric development. (CAC) Find that the value and contribution of traditional customary law is of equal importance and value to Western scientific knowledge. (CAC) Find that knowledge holders of traditional customary laws are experts within the scope of their respective field of knowledge. (CAC)	Already Addressed / Not Required	The Partnership and not Manitoba Hydro is developing this Project. Collectively, the partners will determine whether and how traditional customary law should be applied to this Project in a manner that is appropriate to this Partnership and these communities. It is inappropriate for the use of Cree customary law to be mandated in a licence when it is not specifically being requested by the leaders of the Partner First Nations.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
93	Monitoring & Follow-up	Manitoba Hydro should be required to conduct a full-scale environmental assessment at various time-points throughout the project life, with monitoring activities and reports between environmental assessments part of the pattern. Any results different from what is projected in the EIS would be adjusted. Public comments and external independent review of these outcomes is recommended. The challenge is one we have never met before – how to handle 100 years life span of a project. (MWL)	Ill Advised	The purpose of the Partnership's ongoing monitoring program is to assess actual Project effects and the effectiveness of mitigation measures. Like the EIS, this monitoring will take a VEC based approach and will consider VEC sustainability. The results of this monitoring will be reviewed in detail by the partners and regulators and will also be available for public review. The Partnership has also committed to ongoing adaptive management to address effects that are different than predicted or not foreseen. In this circumstance, undertaking regular EAs would be redundant and costly with questionable value to the Partnership's overall environmental protection activities.
94	Monitoring & Follow-up	The environmental protection program should be in a single document, complete with a set of guidelines and reference procedures that bridge with one another, rather than individual documents that do not have a bearing on other environmental protection plans. Each environmental protection plan should be included, with full details as to monitoring plans. This whole should be accessible, used as a guide through construction and operation phases of the project, posted publicly, and updated regularly. (MWL) Environmental monitoring reports should be scheduled and the schedule posted so that the public, communities and stakeholders know before hand what is being monitored, when reports will be available etc. (MWL) Environmental monitoring activities should be conducted for the lifespan of the project, and consistently for all VECs and Supporting Topics. Monitoring Advisory Committee sub committees should be put in place for significant topics or VECs early in the construction or operation phases of the project. Given the 100 year life span of the project mechanisms to update VECs, add VECs, and change the methods, frequency, or type of monitoring for both environmental and social VECs need to be put in place within the first year should a licence be issued. (MWL)	Already Addressed / Not Required	The Environmental Protection Program has been provided as a single document and is publicly available on the Partnership's Website. The program includes an overarching preamble that indicates how the various plans are connected. The plans in the Environmental Protection Program will be used by different parties, conducting different activities and, in some cases, receive regulatory approval from different agencies. The have appropriately been developed as separate plans to reflect this reality to facilitate their implementation and review. The Partnership has also already committed to annual reports documenting the outcomes of its monitoring and to making all of these reports publicly available on its Website. Monitoring plans have been developed to reflect anticipated Project effects. The duration and implementation of each of these plans will be regularly reviewed and will be continue, if required, for the life of the project. There are cases where monitoring a VEC for the life of a project is simply not required - for example, those effects only experienced during construction. ATK monitoring will take place for the life of the Project.
95	Monitoring & Follow-up	That Manitoba Hydro provide their most recent environmental management system compliance audit (CAC)	Out of Scope	This has already been addressed through responses to information requests filed by the CAC. EMS compliance audits are required to be confidential by the auditor and not Manitoba Hydro, to protect its proprietary rights. The corporation's maintenance of its ISO 14001 certification is evidence of its success in the auditing process.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
96	Monitoring & Follow-up	The Partnership reflects upon individual and collective experiences with the Keeyask process, that it articulates those experiences (both internally and publicly) and develops mechanisms by which the lessons learnt can be used to refine methodologies and process for ongoing or future collaborations. (CAC)	Already Addressed / Not Required	As in the Keeyask project where lessons learnt from previous projects (i.e. Wuskwatim) were used, those lessons learnt on Keeyask will be used for improving ongoing processes and future projects.
97	Monitoring & Follow-up	Independent experts should be available to the Monitoring Advisory Committee. (MWL)	Already Addressed / Not Required	Each of the Partner First Nations will be funded to have an independent advisor with them at MAC. If the Committee collectively determines a need for additional independent advisors, funding will be made available for this purpose.
98	Monitoring & Follow-up	The Partnership shall establish an ongoing advisory committee comprised of the KCNs, along with other willing proximate Aboriginal communities, including, the MMF, who live within and use the Nelson watershed for the purpose of providing guidance on the research and monitoring activities set out in any Project license. Reasonable costs associated with the participation of each Aboriginal community in this advisory committee shall be borne by the Partnership based on an annual or multi-year workplan. (This participation may be addressed in the arrangement or agreement reached in the licensing recommendation set out above). (MMF)	Ill Advised	A recommendation to expand MAC or involve other Aboriginal communities or organizations in monitoring is unwarranted and would be extremely difficult to implement since none of these parties have demonstrated that they have a tangible interest in the Project, and are instead using the regulatory review process to advance other issues and concerns. Such a recommendation would also be unacceptable to the Partner First Nations – they are not only Project proponents, but those most affected by the Project's development, those resident in and using those areas most affected by the Project and, therefore, those most appropriate to oversee its Environmental Protection Program.
99	Monitoring & Follow-up	Before a license is recommended, Pimicikamak submits that the CEC should recommend that the Partnership must develop mitigation measures (not just monitoring programs) for effects that the KCNs predict will occur, even if the scientists hired do not agree with those predictions. (PCN)	Ill Advised	The Partners have collectively agreed on how differences between ATK and western science in the EIS predictions will be addressed. Depending on the circumstances, this has involved changes to Project design (e.g., low-head design), enhanced or additional mitigation measures (e.g., the offsetting programs in the adverse effects agreements) or long-term monitoring (e.g., monitoring of open water levels on Split Lake). The Partners are comfortable that the appropriate response has been selected for each individual circumstance.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
100	Monitoring & Follow-up	It is unacceptable that the monitoring plans, presented with such seriously intoned force during Manitoba Hydro's closing arguments, are not already in place, do not allow equal voice of First Nations partners in the final decision making process, and have no independent assessments of ongoing impacts. At a minimum, monitoring plans should be established and implemented before camp and road construction begins. Fox Lake community members argue that monitoring of construction activity occurring at the Keeyask site is in dire need of supervision already. This monitoring should be also be expanded to include a wider diversity of animals and plants that are culturally and economically important to the partner First Nations. The impacts of development for mercury contamination of these species should also be monitored, many of which are excluded from systematic evaluation in the EIS. Monitoring plans should allow equal decision-making powers on behalf of First Nations and Manitoba Hydro. It should be clear that any serious unforeseen heritage or environmental impacts can be used to immediately halt the activity that produces the impact, regardless of the cost. (CFLGC)	Already Addressed / Not Required	Monitoring plans are in place for the Keeyask Infrastructure Project, however, monitoring specific to the Keeyask Generation Station Project can not be implemented until/if the project licence is received and construction begins. The First Nations partners are all represented on the Monitoring Advisory Committee which works on a consensus basis; however, First Nations partners are protected from liability in the Partnership and, as such, final decisions on monitoring remain with Manitoba Hydro in its capacity as Project Manager. Planned western science and ATK monitoring for the Keeyask Generation Station Project will include components that are culturally and economically important to the partner First Nations. There will be an onsite Environmental Officer who has the authority to issue stop work orders upon the occurrence of an environmental incident, or the discovery of a heritage resource, or human remains.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
101	Monitoring & Follow-up	If Keeyask is licensed , commit to fund Pimicikamak to hire necessary experts to interpret the results of both Pimicikamak's own monitoring and the monitoring results of: (i) the monitoring by the Partnership related to Keeyask; and (ii) the CAMP or similar monitoring program results from the entire system. (PCN) If the results of [Pimicikamaks] monitoring demonstrate that there are upstream impacts from Keeyask, the Partnership must address those impacts to the reasonable satisfaction of Pimicikamak. (PCN) Manitoba Hydro is to develop, jointly with Pimicikamak, monitoring programs to monitor the upstream system effects and cumulative effects in Pimicikamak's asserted traditional territory, occurring directly or indirectly from Keeyask. Manitoba Hydro shall fund Pimicikamak's reasonable and necessary costs to engage in any such monitoring, including to hire necessary experts to interpret the results of both Pimicikamak's own monitoring and the monitoring results of the Partnership (in respect of Keeyask) and the CAMP or similar monitoring program in respect of the entire Hydro Project. If the results of monitoring demonstrate that there are upstream impacts from Keeyask on Pimicikamak, the Partnership must address those impacts to the extent possible, following consultation with Pimicikamak. (PCN) If Keeyask is licensed, the Partnership must enter into a funding agreement with Pimicikamak to fund Pimicikamak's engagement in a monitoring program in its traditional territory to monitor potential impacts from Keeyask (PCN)	Out of Scope	The Partnership has demonstrated that there are no discernible effects of the Keeyask Project to water levels and flows in areas upstream of the outlet of Clark Lake. The Partnership remains open to considering any new information that may become available through its ongoing Project monitoring and other Manitoba Hydro-based monitoring activities. It is not considered reasonable or acceptable for the Partnership to be required to fund PCN, or any other Aboriginal community or organization, to oversee its monitoring work, or that of Manitoba Hydro. The results of Partnership monitoring activities will be overseen by regulators and are publicly available, as are the results of the CAMP Program.
102	Monitoring & Follow-up	Develop a Cumulative Effects Monitoring Plan as part of the Environmental Protection Program. (CAC)	Already Addressed / Not Required	The Partnership's monitoring plan, like its EIS, is based on monitoring the health and long-term sustainability of each VEC, along with other environmental components, and considering how this is being affected by Keeyask. If a decline in the health of a VEC or other environmental component is determined, the Partnership will assess whether the decline is a result of Keeyask, some other factor or a combination of both. The Partnership will then determine how to respond and decide whether this response requires input and assistance from others (e.g., from other Project proponents). This approach implicitly takes cumulative effects into account and includes cumulative effects monitoring into the future. There are also comprehensive monitoring programs in place as part of the Wuskwatim and Bipole III projects, and through CAMP, the results of which are available to the KHLP to support the partnership's own findings through its monitoring program.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
103	Monitoring & Follow-up	On January 7, 2014 the proponent indicated in a presentation the Keeyask website would be maintained for the life of the project. There have also been acknowledgements that intended posting of reports, and technical materials for the Keeyask project will be more timely, accessible, and complete than for the Wuskwatim project. We request that the CEC recommend specific requirements of this manner in any licence for the project, should the CEC recommend a licence. (MWL)	Already Addressed / Not Required	The Partnership has already committed to maintaining its Website for the life of the Project and to posting, among other things, annual monitoring reports as they become available.
104	Partnership Arrangements	The current Partnership Model is not the industry best practice from a First Nations perspective. The Partnership Model involves investment of badly needed resources and incurring of debt in the hope of securing moderate or more substantial gains in the future. The Peace of the Braves in Quebec involved a substantial payment of funds before project construction on an annual basis, in order to secure agreement of First Nations communities to the project. No capital costs, debts or investments were needed by the local First Nations in order to gain the benefits of the Peace of the Braves. This project should not go ahead unless communities are given a voting option that presents them with a choice between the two models. The partner communities should be given such a choice in any future projects. The provincial government should consider meeting with all hydro-affected communities in Manitoba, and with Manitoba Hydro and the federal government at a single table, to negotiate a broad modern treaty that would secure appropriate, long-needed benefits allowing the communities to finally begin to move away from the 'mass unemployment and poverty' that has been created by previous Hydro projects and that, without remediation and a new model, will be created by future ones. Previous agreements including the Partnership Agreements could be subsumed into the new treaty. (CFLGC)	Out of Scope	The matters are out of scope at these hearings. The issues raised inappropriately challenge the considerable consultation and decision making rights of the Partner First Nations. Decisions here were taken appropriately. .

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
105	Partnership Arrangements	Communities are now required to use funds allocated to remediate previous social and environmental damage in order to secure benefits from the Partnership Agreement, as well as to take on debt financed by Manitoba Hydro. This significantly reduces for a lengthy period funding that is needed to alleviate desperate local circumstances. All funding for participation in the Partnership should be secured from outside of the existing pockets of financial resources available to the First Nations partners. (CFLGC)	Out of Scope	This recommendation demonstrates a lack of understanding of the financial terms of the JKDA and the terms of the various trust indentures which may be used as a source of funds by Partner First Nations. Funds which First Nations hold in trust are presently invested to produce income for the First Nation. Those funds may not be encroached upon and in the case of TCN and York Factory the trusts are required to adhere to a minimum retained capital threshold under any circumstance. This situation applies for a Keeyask investment. It is merely substituting one income producing investment for another. Whether the First Nation takes the common or the preferred option, the capital invested by the First Nation is protected. Under the preferred option the downside and upside returns are limited, and the $200 million in equity loans are eliminated. The structure has been designed so that there is little or no risk to the Partner First Nations. The monies loaned to the partnership by Manitoba Hydro are without recourse to any of the assets of limited partners or the Partner First Nations. It should also be noted that the Partner First Nations have throughout had the benefit of independent legal, business and financial advice in order to ensure that they and their investments are appropriately protected.
106	Partnership Arrangements	Reexamine the Partnership's decision to make First Nations "in the vicinity" more important than "impacted First Nations" (SFN)	Already Addressed / Not Required	Through its EIS, the Partnership has assessed the effects to all Aboriginal communities potentially affected by Keeyask. Those most affected by the Keeyask Project are those communities in the vicinity of the Project. Given this, it is perfectly acceptable and expected that the Partnership would spend a greater amount of effort working with these communities to assess and mitigate Project effects.
107	Partnership Arrangements	That the CEC hearing be put on hold until the RCMP to resolve Ms. Garson's allegations of missing money related to Keeyask negotiations (Solange Garson)	Out of Scope	Any allegation of this nature is a legal matter and outside the scope of the CEC Mandate.
108	Partnership Arrangements	In order to manage the expectations between the partners and to inform the members of the partner Cree Nations, the KHLP should clarify if this is a transformative relationship or strictly business. (CAC)	Already Addressed / Not Required	The KHLP partners have each signed the Joint Keeyask Development Agreement. This very fulsome agreement clearly outlines the relationship between the Partners and provides clarity to expectations. The nature of the Partnership and the relationship between Manitoba Hydro and the Partner First Nations has also been clearly articulated throughout the course of the CEC Hearings.
109	Partnership Arrangements	An independent audit should be taken of Wuskwatim to determine whether promised benefits were received and to make recommendations to ensure equitable sharing in any future arrangement including considerations of investments in programs deemed by community members to be important for building long term economic opportunities. (CAC)	Out of Scope	The recommendation for an independent audit of Wuskwatim Project benefits is outside the scope of the Keeyask CEC process. An independent review of Wuskwatim Training and Employment initiatives has already been undertaken, namely the Deloitte Report (October 30, 2013). As per the Wuskwatim Project Development Agreement (specifically the Trust Indenture), Nisichawayasihk Cree Nation's Community Involvement Process will be used to determine all uses of Project assets and trust moneys.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
110	PCN Specific	A Land Use and Occupancy Study must be conducted to determine Pimicikamak's connections to, values in, uses and occupancy of the land. An impacts assessment (impacts from Keeyask on the values, connections and uses and occupancy of the land, identified through the LUOS), must be completed before Keeyask may be constructed or operated. Once these Studies are complete, Manitoba Hydro and the Partnership must meet with Pimicikamak to discuss the resulting necessary accommodation and mitigation measures, and must apply such accommodation measures to the extent possible. (PCN)	Ill Advised	The Partnership has already "provided the information on current and proposed use of land and resources by each Aboriginal group (not just the KCN partners) based on information provided by the Aboriginal groups or, where Aboriginal groups did not provide this information, on available information from other sources" (Response to EIS Guidelines Keeyask Federal Guidelines Concordance Table page xxvii). This is documented in the response to Federal Request for Additional Information, CEAA-0014. The conclusions found within that response have not been contradicted by any submissions made by Pimicikamak during this hearing. To the contrary, even in its final submission it does not identify any adverse environmental impacts of the Keeyask Project on Pimicikamak, but speculates about how such adverse environmental impacts, if there are any, would be dealt with. There is not a shortage of evidence about current and proposed use of land and resources by Aboriginal groups or about the potential adverse environmental effects of the Keeyask Project on such uses. As a consequence, there is no need for such a study for the CEC to make its report, nor for such a recommendation to be included by the CEC in its report on the proposed Keeyask Generation Project. The Partnership remains open to considering further mitigation if at any time new information is provided (through monitoring, new studies, or other relevant sources) that additional mitigation measures are required or appropriate. Manitoba Hydro will continue to engage with PCN/Cross Lake through the NFA Article 9 Process.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
111	Physical Environment	That the CEC recommend to the Minister that an assessment of the impacts of climate change upon Valued Environmental Components (including moose, where appropriate) be part of the assessment of the cumulative impacts for any future projects reviewed under the Environment Act. (Peguis) Our favourite recommendation from the Wuskwatim report is the recommendation for a Climate Change plan and strategy. Nothing to a sufficient standard has been provided since 2004. Our efforts will continue until we see Manitoba Hydro paying attention to, planning for, and acknowledging the climate change effects already happening in the regions where our hydro system is located. (MWL) We ask the CEC to consider whether climate change content in the EIS fulfills the Guidelines or not. And we ask the CEC to consider recommendations that would require Manitoba Hydro to provide a climate change strategy and plan, with monitoring for the Keeyask region, in relation to climate change itself, and the effects of climate change on the VECs, on the region, habitat, etc. Certainly the same will be required for any Cumulative Effects Assessment for the Region. It would start with climate before hydro development! (MWL)	Already Addressed / Not Required	The Partnership has considered the potential influence of future climate changes on the Project. In undertaking its analysis with respect to climate change, the Partnership considered CEAA Guidance on how to incorporate Climate Change Considerations into Environmental Assessment. In general, the EIS considered three aspects of climate change: a) The effect of the environment (including climate) on the Project. b) The effect of the Project on the environment (GHG emissions). c) The sensitivity of the effects assessment to climate change. Details are provided in the Partnership's evidence and summarized in its final written argument
112	PIP	The Manitoba Government identify the relevant Aboriginal groups (i.e., First Nations and/or the MMF) a proponent should engage with in undertaking their environment assessment as well as assessing potential project effects as required in a Scoping Document. This identification of relevant Aboriginal communities should occur during or before the finalization of a Scoping Document. The determination of what Aboriginal groups a proponent should engage with should not continue to be left to proponents without guidance from the Manitoba Government. This type of identification process will provide greater clarity to proponents as well as focus any potential disputes between Aboriginal groups (who feel they should be engaged) with the Manitoba Government – not an Aboriginal group and a proponent. (MMF)	Government	This recommendation is for government, but it is unclear why this recommendation is being made. EIS Guidelines issued for major developments, including Keeyask require a proponent to implement a comprehensive public engagement program that includes all affected and interested parties. The Partnership has done this through its Public Involvement Program and the MMF were invited to participate in this program from its very beginning. The MMF have also been funded by the Partnership to undertake a series of Métis specific studies. That the MMF has chosen not to fully participate in the PIP is its decision. In addition to engagement activities undertaken by the Partnership, the MMF and other Aboriginal communities are being consulted through both the federal and provincial s. 35 consultation processes.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
113	RCEA	The final licensing decision of the Minister should be deferred until there has been the opportunity for independent and transparent consideration of a Regional Cumulative Effects Assessment. (CAC) Independent review of cumulative effects of 55 years of hydro-electric development. (SFN) If Keeyask is licensed, a condition on the license should be: An independent regional cumulative effects assessment must be done for the entire area affected by the existing Hydro Project (or in the alternative, for the Nelson watershed), prior to constructing and operating Keeyask, and the scope, content and procedure for which is to be determined through consultations between Manitoba and Aboriginal Nations affected by the Hydro Project, because all of Manitoba Hydro's developments in Northern Manitoba are part of one large, integrated project, that is operated in a coordinated fashion. Such RCEA to be funded by Manitoba Hydro. (PCN) That the CEC recommend to the Minister that the Keeyask Generation Project not be approved until a thorough and independent regional cumulative effects assessment of the Nelson River and Churchill River watersheds, and Lake Winnipeg (including a full and transparent review of the hydroelectric system) is completed. (Peguis) Manitoba Wildlands continues to support the September 2013 motions regarding the regional cumulative effects assessment for the hydro system and region in northern Manitoba. We request the CEC panel consider the support from participants for this and other CEC recommendations in the Wuskwatim, Bipole III reports. Certain of these are relevant in your deliberations. Participants agree with many of the CEC recommendations and share the frustration over repeat recommendations not acted on. (MWL) Prior to construction, an independent regional cumulative effects assessment be completed in relation to the Nelson watershed. The scope and content of this assessment shall be developed in consultation with willing proximate Aboriginal communities, including, the MMF, who live within and use the Nelson watershed. Costs associated with this assessment shall be borne by Manitoba Hydro. (MMF)	Already Addressed / Not Required	The CEC has already recommended that Manitoba Hydro in cooperation with Manitoba look at the cumulative impacts of past hydro development in the Nelson River sub-watershed. The Minister has taken up this advice and the work is underway. Any aspects of this broader work that are relevant to the potential cumulative effects of the Keeyask Generation Project have already been contemplated in the Partnership's approach to cumulative effects assessment and are addressed by the Partnership in its EIS filing. As such, a further recommendation in that regard is not required.

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		An RCEA must also actively engage Aboriginal Nations and other stakeholders in the process from the beginning in order to ensure that the RCEA adequately examines the concerns of those most impacted by hydro development in Manitoba. Unfortunately, it appears that Manitoba Hydro has prepared draft terms of reference for an RCEA without any input from Pimicikamak, the Nation the most impacted by northern hydro development. Unless Aboriginal Nations are involved in the entire RCEA process, including the drafting of the terms of reference, the RCEA will not produce sufficient information to truly understand the ongoing impacts of existing hydro development, from which cumulative impacts of new projects can be assessed. (PCN)		
114	RCEA	That, in the alternative, the CEC recommend to the Minister that as a condition of the approval of the Keeyask Generation Project: - Such regional cumulative effects assessment of the Nelson River and Churchill River watersheds is completed; and - The shortcomings in the cumulative effects assessment done for the Keeyask Generation Project be rectified through completion of a study about the impacts of the hydroelectric system in the north on water flows, levels and quality in the south, including its contribution to the annual flooding of Peguis' lands. (Peguis)	Already Addressed / Not Required	The CEC has already recommended that Manitoba Hydro in cooperation with Manitoba look at the cumulative impacts of past hydro development in the Nelson River sub-watershed. The Minister has taken up this advice and the work is underway. Any aspects of this broader work that are relevant to the potential cumulative effects of the Keeyask Generation Project have already been contemplated in the Partnership's approach to cumulative effects assessment and are addressed by the Partnership in its EIS filing. As such, a further recommendation in that regard is not required. The cumulative effects assessment undertaken for Keeyask represents a comprehensive, project-specific assessment. It is robust and thorough. The Partnership has clearly demonstrated that there are no discernible effects to water levels and flows upstream of the outlet of Clark Lake. This means there are no related overlaps, or cumulative effects, between the effects of Keeyask and any purported effects of hydro-electric development that may occur upstream.
115	RCEA	An RCEA must have sufficient scope and structure in order to produce sufficient information to adequately assess the true effects of Keeyask cumulative with the existing hydroelectric development. (PCN)	Already Addressed / Not Required	The Partnership has demonstrated that the cumulative effects assessment submitted for Keeyask appropriately accounts for the potential effects of all relevant past, present and reasonably foreseeable future project/activities that have the potential to interact with the possible adverse residual effects of Keeyask. This has been accomplished using a VEC-based approach that assesses the significance of effects against the health of each VEC and the long-term sustainability of each VEC, if Keeyask is developed. Any aspects of a broader regional assessment that are relevant to the potential cumulative effects of the Keeyask Generation Project have already been addressed by the Partnership in its EIS filing. As such, a further recommendation in that regard is not required.

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116	RCEA	Pimicikamak further submits that the CEC should recommend that the results of the RCEA also inform possible additional mitigation measures, and changes to the water regime related to the existing Hydro Project (i.e. not limited to Keeyask). (PCN)	Already Addressed / Not Required	Work undertaken to meet Recommendation 13.2 of the CEC's Bipole III Report is being undertaken independent of Keeyask and over a broader geographic region. The Partnership has demonstrated that there will be no discernible changes to water regime in areas upstream of the outlet of Clark Lake.
117	RCEA	That the regulatory review process includes the addition of an operational review process. (Wil Braun) The final licensing decision of the Minister should be deferred until there has been the opportunity for independent and transparent consideration of an Operational Review as proposed by the CEC during the Wuskwatim NFAT (CAC)	Ill Advised	A recommendation of this nature is no longer required. Manitoba Hydro has applied for final licences for Lake Winnipeg Regulation and Churchill River Diversion. The Province of Manitoba has or is engaging in consultation with First Nations as part of the Final Licensing process. The CEC has been directed to hold public hearings into the LWR Final Licence. In addition, Manitoba Hydro and the Province are in the process of responding the to BiPole III recommendation for a Regional Cumulative Effects Assessment for effects flowing from northern hydro development. Annually, Manitoba Hydro reports on licence terms conformance for all its Water Power Act Licences to Water Stewardship, identifying all events where operations were outside the limits established in the licences. The annual reports set out the parameters associated with what constitutes a licence deviation.
118	s. 35 Matters	Recommends that there has been no evidentiary basis for making a determination on potential impacts on Treaty and Aboriginal rights. (CAC) We urge the CEC to consider all Aboriginal rights holders in the Keeyask RSA, LSA and project area. They are all potentially affected by this project (MWL)	Out of Scope	Potential impacts on treaty and Aboriginal rights will be determined by federal and provincial governments through their respective s.35 consultation processes. This was not within the scope of the Partnership's EIS, nor is it within the scope of CEC's review process. The Partnership has, however, fully assessed the effects of the Project on domestic resource use by the Partner First Nations and other Aboriginal communities and this has been demonstrated at the hearings by the Partnership.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
119	s. 35 Matters	The final licensing decision of the Minister should be deferred until there has been the opportunity for independent and transparent consideration of Crown consultations with potentially affected Aboriginal people. (CAC) Prior to licensing, that the Minister conduct consultations with the potentially affected Aboriginal people to ensure that potential impacts on treaty and Aboriginal rights will not be unduly impacted. Potential impacts must be accommodated. Where they cannot be fully accommodated, due consideration should be given to whether the Cree can be adequately compensated, for example through resource revenue sharing. This determination should be made prior to a license being granted and should continue in the face of unforeseen impacts. (CAC)	Out of Scope	While this is outside of the scope of the CEC mandate, this is already a requirement for licensing of the Keeyask Project. It is noted that Crown s. 35 consultations are private, confidential consultations between two governments. Subjecting them to a third party review is not necessary. The appropriate forum for such review, if required, is the courts.
120	Shamattawa Specific	That Manitoba Hydro be required to address past and potential effects of hydroelectric development on SFN through a transparent negotiation process. (SFN)	Out of Scope	Manitoba Hydro has met and continues to meet with the leadership and representatives of SFN on a regular basis to hear their perspectives and to discuss any concerns they may have on a number of issues. SFN has recently identified general concerns with regard to impacts associated with existing developments; Manitoba Hydro has indicated that the Corporation is open to discussing these issues and has asked that SFN provide further information to better understand these concerns. On behalf of the Partnership, Manitoba Hydro remains committed to considering any additional information provided by Shamattawa on the community's use of lands and resources in the Keeyask area.
121	Shamattawa Specific	That the CEC support SFN request to receive hydro - electric benefits through connection of Shamattawa to the Manitoba Hydro electrical grid. (SFN)	Out of Scope	In the Fall of 2012, a Land Line Working Group was established with representation from Shamattawa, Canada, Manitoba and Manitoba Hydro. The purpose of this Working Group is to refine the business case analysis regarding a transmission land line to Shamattawa, including consideration of the costs and benefits from the perspective of all relevant and participating parties. The objective of the Group is to have materials 'shelf ready' in the event that a future funding opportunity becomes available. To date, the analysis of the land line business case has shown it to be significantly cost prohibitive.
122	Shamattawa Specific	Hydro should be directed to explore mechanisms to improve energy affordability and energy efficiency in remote First Nations including Diesel communities such as Shamattawa. (CAC)	Out of Scope	Rates for electricity in the diesel communities, and related issues regarding affordability, are subject to regular review through the Manitoba Public Utilities Board. Manitoba Hydro already works with each of the four diesel communities to enhance energy efficiency at the household and building level (thereby reducing energy costs) under our Power Smart First Nations Program. Under the program efforts are continuing to provide insulation and basic energy efficiency materials to the remote diesel communities.

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123	Socio-economic	The Kaweechiwasihk Kay-tay-ti-suk recommend that the Commission make an interim recommendation that an arrangement for the protection and disposition of found non-forensic aboriginal human remains, grave goods and artifacts in a manner substantially similar to the Manitoba-Nisichawayasihk Protocol on Heritage Resources be established for the Keeyask Project. (KK)	Already Addressed / Not Required	A preliminary draft of the KGP Construction Heritage Resources Protection Plan (HRPP) was submitted to regulators in April 2013. The development of this HRPP was informed by the Manitoba-Nisichawayasihk Protocol on Heritage Resources. As noted in the plan's Preface, the HRPP is intended "to address the visible and tangible presence of the past, to build on the protective measure afforded by the Heritage Resources Act (1986) and to present a culturally appropriate plan in the context of the Project activities….the HRPP presents guidelines and provides additional cultural details regarding the safeguarding of heritage resource and human remains should they be unearthed or discovered during the construction phase of the Project." Furthermore, a cemetery prepared for the reburial of human remains found during the construction and operation of the Project, will be developed in an area selected by TCN, in consultation with the other Project partners.
124	Socio-economic	Intangible cultural heritage should be an integral element of the assessment of impacts and mitigations. Manitoba Hydro had not contracted anyone with expertise in this field; its cultural heritage work is confined to material culture using approaches that are largely outdated. The Inninuwak in Northern Manitoba have a rich heritage that is unique to the world. Many continue to live a hunting based culture, relying on their skills and knowledges of their lands to harvest resources and live according to the cultural values and protocols passed on to them by previous generations. The 2003 UNESCO Convention for the Safeguarding of Intangible Cultural Heritage, should be used as a guiding principle in the environmental process, regulations and monitoring of the Keeyask, and other projects. Elders and harvesters - i.e., the "living cultural heritage" should be involved in the process of establishing protective measures as they can provide continuity, education, capacity; they can also reinforce the language and Inninuwak identity. Transparency, mino pimatisiwin and traditional knowledge can be used to bolster the science and manage the common resources. Community-led inventorying could instigate new policies on ICH management issues.	Already Addressed / Not Required	Inventory of culture in the Partnership's EIS followed the appropriate government policies, regulations and the EIS Guidelines. The Partner First Nations have already begun the process of inventorying 'intangible heritage' through community-led processes and by completion of their evaluation reports, and, through these processes, many interviews with community members have been completed and archived. AEA programming, such as the Keeyask Centre, and those promoting traditional skills knowledge transfer serve to contribute to this record. In the context of the Keeyask Generation EIS (or any published report for that matter), there must be a balance between information provision and intellectual authority and control. Principle # 3 in Appendix 2a of the Response to EIS Guidelines (Common Principles Regarding Inclusion of Aboriginal Traditional Knowledge in the Keeyask Environmental Assessment): 3. "Maintaining Authority and Confidentiality: Aboriginal people have authority and control over their traditional knowledge: Each KCN, together with its knowledge holders, will choose whether the source of its knowledge is to be acknowledged in the EIS document, or to remain confidential." The absence of ATK in some parts of the document in many cases indicates a respect for First Nation intellectual authority and confidentiality.

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		It took generations to learn and to understand the landscape around the Keeyask Rapids; and it will take a lot of new history to understand and learn to navigate the re-created or another landscape after this disturbance. Once the environment of the area is lost; the knowledge of the area is lost and few may have the opportunity to learn what was there. Therefore, the Partnership must develop a process to develop baseline knowledge of intangible cultural heritage in the communities, to assess the impacts of the project, to monitor the impact and to mitigate the impact as presented by Ms Pawlowska-Mainville. Mitigation programs could include funding Elders on the model of the Japanese 'living cultural treasure' model, or funding traditional harvesters on the model of the James Bay and Northern Quebec Agreement (1975). (CFLGC)		
125	Socio-economic	Greater attention needs to be paid to the long-term health impacts to individuals living near hydro electric generation stations, both environmental and social impacts. It is not evident how Manitoba Hydro intends to keep up with the science, analysis, social issues, and future methodologies with respect to human health, and social impacts from this or other generation projects. (MWL) A comprehensive and cumulative public health and well being survey has not been conducted as part of this process, though Fox Lake Cree Nation did sponsor a research project - the SCHIP (Social, Cultural and Health Impacts Project) Report which was subsequently suppressed. The implications of the Keeyask project on the First Nation's health and wellbeing have not been assessed in a systematic, inclusive and culturally appropriate way. A base line study on health and wellbeing should be conducted, with the results made public. Monitoring and follow-up studies, as well at the original study, should be conducted as noted above in a systematic, inclusive and culturally appropriate manner and the results should be made publically available. (CFLGC)	Already Addressed / Not Required	The Partnership has paid a considerable amount of attention to this very important topic, and this is evident through its very comprehensive health assessment, the detailed work undertaken to assess the implications of mercury levels in fish and other wildlife to human health, and the efforts underway to address public safety concerns. This work has been completed collaboratively and includes a consideration of both western science, ATK and community perspectives and concerns. The assessment work adopted a broad definition of health (including framing things in a Cree concept of wellbeing and looking at determinants of health perspective from an aboriginal perspective), contained information on health outcomes such as injury, diabetes, traffic, mental health, and physician visits and health determinants like traditional resource use. It predicted potential health impacts associated with alcohol and drugs, violence, STIs, contamination, mental health, and emergency and health care services. Based on its findings, the Partnership has developed comprehensive mitigation and monitoring mechanisms to address possible effects and is working directly with the Northern Regional Health Authority, the RCMP and a Gillam-based Worker Interaction Subcommittee so that mitigation and monitoring efforts take place at a regional level that considers multiple developments. Monitoring and oversight will also be provided through the MAC and through community-led ATK monitoring programs.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
126	Socio-economic	Although valuable traditional knowledge (TK) has been gathered, there are no baseline data of the role of country food in the local diet; food security and food sovereignty issues have not been directly considered in spite of their everyday importance to local people. The Makeso Sakahican Inninuwak argue that there was extensive loss of caribou from hydro development (CFLGC 2013; FLER 2012:48; Ninan 2012:88). With the arrival of hydro and the loss of caribou, the Inninuwak had to rely on moose for meat. Hydro electric development has not only changed the diet of the Inninuwak from the 1950s and on, they have destroyed much of the caribou and the knowledge associated with caribou. Adding yet another project to the area, would superimpose on the fragility of the caribou, the sturgeon and other animals; a study of the local diet can serve as an indicator of the cumulative impacts of hydro development. Consequently, base line data on the use and value of country food should be gathered before construction begins, ideally through processes overseen by the First Nation partners. (CFLGC)	Already Addressed / Not Required	Fulfilling such a recommendation would depend on the willingness and desire of the Partner First Nations to provide the necessary information. The Partner First Nations indicated that they were not comfortable undertaking either dietary or harvest surveys at the time of completing the EIS - both of which are required for assessing food insecurity. Baseline data on fish consumption patterns are included in the Human Health Risk Assessment and, in this process, the communities shared information on the role of country food in the local diet. Currently, the Preliminary Draft of the Socio-Economic Monitoring Plan includes a food consumption survey to be undertaken in the Partner First Nations communities every 5 years following the start of operations, until mercury levels in fish return to those seen pre-Project. The Partnership, is committed to working with Manitoba Health and the Partner First Nations to discuss options (scope, timing, methodologies) for a country foods or dietary survey, if desired by communities (e.g.. County foods or comprehensive). There are measures in place that have the potential to address food insecurity and these measures reflect the priorities of the Partner First Nations. They include distribution of country foods is an important aspect of food replacement offsetting programs and programming to replace existing opportunities to access and distribute country foods, accompanied by traditional and land skills knowledge transfer, safe trails/waterways to encourage safe harvesting along with other factors such as increased employment and income, and opportunities for community to invest in priority programming as a result of equity payments).
127	Socio-economic	Although Manitoba Hydro insists that it has consulted with leading experts and taken mercury contamination seriously, it acknowledges that its actions will lead to mercury contamination while minimizing the impact, on the one hand, while on the other using a ‘public communication’ strategy as its main mitigation. It will tell people who have relied all their lives on fish, not to eat fish. It will not monitor levels of mercury in humans. This is truly reprehensible, since the risk mercury contamination poses to human health is grave and can hardly be understated. Any individual living in a partner community should be tested if they desire at the proponent’s expense at least once per year for the first twenty years of the project, and only subsequently if material for concern has shown up on any tests. Again, this mercury monitoring program should developed in collaboration with and controlled by partner First Nations. (CFLGC)	Already Addressed / Not Required	The Partnership has sought to be cautious and to find balance in undertaking its Human Health Risk Assessment - some believe it is overly cautious, others that it is not cautious enough. It is the Partnership’s perspective that hair sampling falls under the purview of federal and/or provincial health agencies. The Partnership has committed to working with Manitoba Health and the Partner First Nations to discuss and coordinate options with regard to hair sampling, if it desired by community members. In November of 2012, the Partner First Nations were informed that, if they desired, Health Canada (under the care of Dr. Laurie Chan) would test and communicate results of hair samples.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
128	Socio-economic	That prior to construction, the proponent conduct and study and gather baseline data on: food insecurity, sexually transmitted infections, drug and alcohol misuse, on injury related to motor vehicle accidents. (CAC)	Already Addressed / Not Required	*Food Insecurity:* Fulfilling such a recommendation would depend on the willingness and desire of the Partner First Nations to provide the necessary information. The Partner First Nations indicated that they were not comfortable undertaking either dietary or harvest surveys at the time of completing the EIS - both of which are required for assessing food insecurity. Baseline data on fish consumption patterns are included in the Human Health Risk Assessment and, in this process, the communities shared information on the role of country food in the local diet. Currently, the Preliminary Draft of the Socio-Economic Monitoring Plan includes a food consumption survey to be undertaken in the Partner First Nations communities every 5 years following the start of operations, until mercury levels in fish return to those seen pre-Project. The Partnership, is committed to working with Manitoba Health and the Partner First Nations to discuss options (scope, timing, methodologies) for a country foods or dietary survey, if desired by communities (e.g.. County foods or comprehensive). *Sexually transmitted infections:* Data at the regional level is publically available and can be provided; the Partnership did not have permission to collect community level STI data. Nonetheless, the risk factors for STI transmission are understood by the Partnership and efforts are underway to address the increased risk of STI transmission as a result of a transient workforce through measures at the camp (e.g., STI awareness education, provision of prophylactics). *Drug and alcohol misuse:* Alcohol and drug use patterns are very sensitive quantitative data were not provided nor are they publically available in order to protect the confidentiality of Partner First Nations. Key Person Interviews with local service provided elicited qualitative information regarding perceptions of addiction patterns and the related consequences. This information in conjunction with on-site health care, counseling and referral, and Worker Interaction Sub-committee will assist in tracking and responding to need and changes in addiction patterns. *Injury related to motor vehicle accidents:* This work has been completed. Supplemental filing # 1 included an updated traffic analysis. Information related to number of injuries for PR 280 and PR 391 are included in that material.

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129	Socio-economic	That the proponent develop preventative measures for the spread of infectious disease in the workplace and in regard to crowded housing in communities. (CAC)	Already Addressed / Not Required	This is already being addressed by the Partnership at the Camp through a number of mitigation measures , including: - Camp rules that include a Project Workplace Safety and Health committee; - 24/7 emergency health services through EMS on site (PD SV) - working with the NRHA to secure an on-site public health care professional who would be responsible for the provision or and/or referral to health promotion and risk management programming (including communicable disease education and prevention measures, if required); - a “state of the art’ camp facility with individual dorm rooms and private bathrooms, daily janitorial services and provisions to meet Manitoba Workplace Safety and Health Regulation 217/2006 dealing with air quality and ventilation requirements - processes / protocols established to effectively manage the spread of communicable illness. . Given the remote location of the main camp, it is anticipated all workers will remain at the main camp while on their rotation, and hiring takes place through a Job Referral Service (i.e., no hiring at site). This is expected to minimize effects to housing concerns in Partner First Nations. Existing crowding in housing in Partner First Nations may be addressed over the long-term through each Partner's equity investment income and income generated by First Nations owned businesses participating in the Project. This new income into the community provides opportunities to enhance community infrastructure.
130	Socio-economic	That the proponent develop a mitigation strategy for STI prevention in the workplace (CAC).	Already Addressed / Not Required	The evidence (IR CEC Rd 1 CAC-0081b) indicates that on-site public health nurse would provide services to all site staff and would be responsible for the provision of, and/or referral to health promotion and risk management programming (including communicable disease education and prevention measures, such as availability of prophylactics, if required). There is also ongoing dialogue between the Northern Regional Health Authority and the Partnership to help identify new health care requirements for the Authority’s 5 year Strategic Plan and facilitate a response (including adaptive management), by both the Project and health care providers, to emerging needs. A Worker Interaction Subcommittee will include representatives from Manitoba Hydro, FLCN and the Town of Gillam, as well as community health care providers and other stakeholders and service providers in the Gillam area. This Committee is intended to provide a coordinated approach to addressing worker interaction issues across all of Manitoba Hydro’s projects in the vicinity of the Gillam area and may serve to inform and develop strategies with respect to STI prevention in the workplace and its effects, if any, on FLCN (and other Partner First Nations) and Gillam residents.
131	Socio-economic	That future EIS include the 8 broad areas of health effects. (CAC)	Already Addressed / Not Required	This has already been addressed. The review undertaken by the CAC expert acknowledges that the Partnership adequately covered the content within these categories in its EIS Keeyask.

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132	Socio-economic	The future EIS adopt a broad definition of health (including framing things in a Cree concept of wellbeing and looking at determinants of health perspective from an Aboriginal perspective, the minopimatisiwin concept of well-being). (CAC)	Already Addressed / Not Required	The Partnership acknowledges that 'health' is informed by cultural concepts and experience. Therefore, we agree it goes beyond the biophysical and must be approached holistically – e.g. looking at 'social health' in terms of how an individual might thrive in one's surrounding environment. Community based / cultural perspectives and concepts of health are important in understanding the effects of a project on health. This concept has been applied to the Keeyask Project.
133	Socio-economic	That the CEC require a complete Health Impact Assessment be completed as part of the EIS (CAC)	Already Addressed / Not Required	Little value is added for the CEC, regulators or the partners, in terms of analysis or understanding of necessary mitigation because all of the aspects included in a Health Impact Assessment have already been documented and are contained with the Partnership's EIS. This would be an exercise in reorganizing existing information. It was very made clear in the presentation and cross of the CAC's health experts that the substantive contents of an HIA were included in the EIS. The authors consolidated this information and were able to draw conclusions that, overall, an assessment on community health was well done. While the EIS (SE SV) presents summary findings for the Partner First Nations, for Gillam, and for Thompson, a separate community health assessment was also conducted for each of the Partner First Nations. Due to small population size, data were suppressed in areas deemed sensitive to the community (e.g. STI's) and to protect confidentiality. Given the participation of local and provincial health stakeholders, whose purview is to assess need and respond to emerging health care requirements, on the Worker Interaction Sub-committee (WIS), there is an enhanced ability to assess, monitor, prevent and respond to changing circumstances due to the effects of Keeyask and other projects in the region.
134	Socio-economic	If results of past actions are any measure, Manitoba Hydro has a dismal, indeed repugnant, record when it comes to sharing financial benefits with First Nations and creating prosperity in northern Indigenous communities. The issue is particularly acute because Manitoba Hydro has created very high standard communities for its own employees. Manitoba Hydro should provide material evidence that it will no longer allow the well being of Indigenous communities to be collateral damage in its project and profit picture, but immediately devoting serious resources to local Indigenous community infrastructures: build houses, pave roads and build community facilities that rival the facilities used by its own employees. Such an effort should precede or go in tandem with new dam construction. (CFLGC)	Out of Scope	While on-reserve community infrastructure of the type referenced in this recommendation is the responsibility of the Crown, the Keeyask Project will provide many benefits to the partner First Nations, which could assist them in addressing housing and other concerns within their communities. Where past Manitoba Hydro developments have impacted community infrastructure, Manitoba Hydro has addressed these impacts through settlement agreements or other remedies; Manitoba Hydro has funded or contributed to a number of community works. Manitoba Hydro is a significant driver of the northern Manitoba economy, including northern First Nations, through business and employment opportunities and other means. From the KHLP's perspective, its Keeyask submission provides material evidence that the Keeyask Cree Nations will benefit from the development of the project.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
135	Socio-economic	Housing is a particularly sensitive issue, especially where affluent communities are being built immediately next to impoverished ones. Very simply, it is not acceptable that Manitoba Hydro or the Partnership contemplate inexpensive 'modular units' and full electric rate charges for First Nations citizens and houses with subsidized heating charges for its own employees. It has created, is continuing to create, and this project will exacerbate, a gross inequality at the local level and at the broader, north/south, level. This issue is aggravated by the fact that there is a housing crisis, at least in Tataskweyak, and that poor housing conditions prevail in each of the partner First Nations communities. Manitoba Hydro must establish a policy where for every house it builds for an employee, it will build a similar quality house for First Nations, allocated among the partner communities in a process they decide upon. It must furthermore agree to build houses in an amount that will match its existing housing stock over a ten-year period. Therefore, it must commit to ensuring that there are at least an equal number of Manitoba Hydro employee quality houses available to First Nations family by 2024. In our view, this must be a condition of licensing a new dam, as anything less will pass on the issue to future generations and continue to perpetuate a morally reprehensible situation. (CFLGC)	Out of Scope	While First Nations housing is the responsibility of the Crown, the Keeyask Project will provide many benefits to the Partner First Nations, which could assist them in addressing housing and other concerns within their communities. It would be inappropriate for the CEC to recommend that rate payers of Manitoba, including members of other First Nations, assume the funding responsibilities of the Government of Canada with respect to housing in KCN communities.
136	Socio-economic	Prior to making recommendations on how post-impoundment risks will be managed among community members, the existing risks to the community should be more fully characterized to help ensure that the management of risk does impact nutritional benefits of wild fish consumption. (CAC)	Already Addressed / Not Required	The Partnership is of the opinion that the risks have been assessed rigorously and comprehensively using both technical and ATK studies to inform this characterization. As a result, AEAs were developed to respond to risks, including offsetting programs to replace fishing opportunities (including distribution to community members). A comprehensive Risk Communication Plan is also being developed in consultation with regulators and the Partner First Nations.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
137	Socio-economic	Require the collection of data on distributions of actual fish consumption rates, and measured mercury in blood/hair of consumers of fish from impacted and offset lakes. (CAC)	Already Addressed / Not Required	Currently, the Preliminary Draft of the KGP Socio-Economic Monitoring Plan Partnership indicates a food consumption survey will be undertaken in the KCNs communities every 5 years following the start of operations phase). The Partnership is committed to working with Manitoba Health alongside the KCNs to discuss options (scope, timing, methodologies) for country foods or dietary survey, if desired by communities (e.g.. County foods or comprehensive). The Partnership is also committed to working with Manitoba Health alongside the Partner First Nations to discuss and facilitate the coordination of options with regard to hair sampling, if it desired by community members. In November of 2012, the Partner First Nations were informed that, if they desired, Health Canada (under the care of Dr. Laurie Chan) would test and communicate results of their hair samples. The Partnership has also committed to the testing of mercury levels in fish in proposed offsetting lakes and in catches from selected offsetting lakes for the Healthy Food Fish Programs to be operated under the AEAs.
138	Socio-economic	Current training and employment plans for First Nations citizens on the project do not take into account the debilitating impacts of a racially stratified work force. Manitoba Hydro's methods for counting Indigenous workers effectively hides the fact that many are employed for short periods of time, often leaving the workplace because of explicit and implicit racism, condoned by a structure in which all the highest paying supervisory positions are engaged in by non-Natives, who may or may not be sympathetic to the plight of local Indigenous workers. Much more needs to be done to ensure Indigenous workers in supervisory, management and technical positions. The fact that the Wuskwatim dam was built, leading to Keeyask and then possibly to Conawapa, should have allowed Manitoba Hydro time to develop such a skilled local workforce. The reason it has not is lack of will. The issue affects all Indigenous workers on the site, and no camp will have a successful participation experience of Indigenous workers until this issue is addressed. (CFLGC)	Already Addressed / Not Required	While there are few management positions on any construction site, in the case of the Wuskwatim project, nearly half of the Aboriginal hires were in the skilled trades. Through the negotiation and management of the Keeyask Direct Negotiated Contracts (DNCs), KCN businesses are gaining significant management experience, and with the DNCs, the KCN are able to direct-hire their members, including for management and supervisory positions. In terms of operational employment, Manitoba Hydro has established corporate targets with respect to Aboriginal employees in management and professional positions. These targets are pursued through a range of means, such as succession planning and through funded education and training opportunities, within the Corporation and at various colleges and universities.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
139	Socio-economic	An improved version of the the HNTEI (Hydro Northern Training and Employment Initiative) should be developed to ensure more individuals in the KCNs are qualified to work on the Keeyask project and to gain skills in other sectors. (CAC)	Already Addressed / Not Required	The duration of HNTEI was tied to the availability of funding, which was cost shared by Manitoba Hydro, Manitoba and Canada. The bulk of the funding was expended by 2010 (CAC 88a). While the KHLP is not contemplating establishing a further HNTEI-style training program for the Keeyask Project, there will be on-job-training opportunities and, as described by Ms. Pachal on January 6 (page 6542), contracts on the Keeyask Project will specifically provide for the hiring of a certain number of level one apprentices, which would create additional opportunities for individuals who did not finish their apprenticeships during the course of HNTEI to obtain further work experience. As noted in the response to CEC questions, although the Keeyask Generation Project delay has resulted in a gap between the end of HNTEI and the start of construction, it was and remains anticipated that additional funding from Manitoba Hydro for project related training initiatives will be available in the context of the Conawapa project, which could in turn support trainees hoping to work on Keeyask.
140	Socio-economic	Develop additional training programs for youth including welding and carpentry programs; the youth indicated that training could possibly to begin in the local schools. (CAC)	Already Addressed / Not Required	Manitoba Hydro has established a number of initiatives that support and enhance training and employment opportunities for Aboriginal youth, such as bursaries and scholarships and summer student opportunities. Additionally, through the High School Apprenticeship program, a joint project of Manitoba Hydro (sponsor), the Apprenticeship Branch, Red River College and Frontier School Division, northern youth can receive academic credit and paid, part-time, on-the-job trades training. The program offers a choice of 50 trades, including welding and carpentry. (CAC 0088d)
141	Socio-economic	Although Manitoba Hydro clearly believes it is doing everything it can and treating the situation of local Indigenous women's vulnerability with great seriousness, in our view they have not gone far beyond what has been done in previous projects. Indeed, as presented by Mr. Moose, strategies proposed by Manitoba Hydro for mitigating anticipated impacts differ little from past and almost entirely unsuccessful attempts. Mixed results here will mean young women's lives will be ruined. A specific meeting of local Indigenous women and independent academics and experts with knowledge of the issues should be called and held before the project begins to develop an action plan for Indigenous women; a significant budget to support such a plan should be allocated in advance. One practice not contemplated in the current arrangement is a walk-home program. Such a program would have saved young women in the past and should be contemplated as part of the action plan. (CFLGC)	Already Addressed / Not Required	Manitoba Hydro has already started working with FLCN, the Town of Gillam and local service providers to coordinate measures related to worker interaction in Gillam through a worker interaction subcommittee of the Harmonized Gillam Development process. Details of this sub-committee have described in the Partnership's evidence and testimony at the hearing. The subcommittee will identify mitigation measures to address worker interaction and a related monitoring plan. This monitoring will include accessing existing data collected through monitoring activities by the respective member communities and organizations, as well as any additional monitoring that may be required. The monitoring plan will enable the subcommittee to identify, and seek to address, any trends of concern in a timely manner and within the respective mandates of each of the represented organizations. The development of mitigation and monitoring measures with those most knowledgeable about local circumstances and with the mandate and expertise to take ownership of these measures is expected to lead to better mitigation that is successfully implemented.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
142	Terrestrial Environment	Kaweechiwasihk Kay-tay-a-ti-suk also recommend that the Commission make an interim recommendation to immediately establish such a project for ATK and WSK to work together to recognize and protect Noschimik Atikok, including as a possible outcome of this initiative, the recognition and inclusion of the Noschimik Atikok herd in Manitoba's Conservation and Recovery Strategy for Boreal Woodland Caribou (Rangifer tarandus caribou) and for possible inclusion in an updated Action Plan for Boreal Woodland Caribou Ranges in Manitoba. (KK)	Already Addressed / Not Required	MCWS is the regulatory authority responsible for the determination of boreal woodland caribou populations in the province as described in Manitoba's Conservation and Recovery Strategy for Boreal Woodland Caribou (Rangifer tarandus caribou) and to draft or update action plans for local population ranges. The MCWS biologists who developed these strategies are experts on caribou biology and have been conducting studies and research on caribou in the region for decades. Although it is beyond the mandate of Partnership and the Commission to designate a local boreal woodland caribou population, the Partnership has committed to forming a caribou monitoring sub-committee under MAC. The Partnership is eager to continue discussions with MCWS regarding the further protection and monitoring of all caribou in the region, including the Noschimik Atikok herd as described by Kaweechiwasihk Kay-tay-a-ti-suk or mitiskoskaw utikuk, as it has been identified by Fox Lake Cree Nation (FLCN 2012, p 55).
143	Terrestrial Environment	Kaweechiwasihk Kay-tay-a-ti-suk also recommend that the Commission make an interim recommendation to immediately establish such a project for ATK and WSK to work together to recognize and protect Noschimik Atikok, including as a possible outcome of this initiative, the recognition and inclusion of the Noschimik Atikok herd in Manitoba's Conservation and Recovery Strategy for Boreal Woodland Caribou (Rangifer tarandus caribou) and for possible inclusion in an updated Action Plan for Boreal Woodland Caribou Ranges in Manitoba. (KK) Kaweechiwasihk Kay-tay-a-ti-suk recommend that the Commission recognize the Noschimik Atikok herd as a distinct herd of resident boreal woodland caribou and that appropriate steps be taken to recognize and protect the Noschimik Atikok herd and to identify appropriate measures to mitigate the impacts of the Keeyask Project on the Noschimik Atikok herd. (KK) CAC supports the recommendations of the Kaweechiwasihk Kay-tay-a-ti-suk, that the Noschimik Atikok to be recognized as a distinct group of resident caribou that are near the Keeyask project. (CAC)	Already Addressed / Not Required	Ultimately, it is the responsibility of Manitoba Conservation & Water Stewardship (MCWS) to make a determination as to whether or not the summer resident caribou described in the EIS, or the boreal woodland caribou identified through ATK, should be listed as boreal woodland caribou and included in related recovery plans. To date, no such determination has been made. The Partnership's EIS is cautious and treats these animals as if they are boreal woodland caribou, and appropriate mitigation measures for all caribou potentially affected by the Keeyask Project have been identified in the Response to EIS Guidelines. Additional ATK and Western scientific studies to understand this herd and its relationship to other herds that use the Keeyask region will be undertaken through the Partnership's Environmental Protection Program and through university research being funded by Manitoba Hydro. The Partnership has also committed to forming a caribou coordination sub-committee under MAC and is eager to continue discussions with MCWS regarding the further protection and monitoring of all caribou in the region, including the Noschimik Atikok herd as described by Kaweechiwasihk Kay-tay-a-ti-suk.
144	Terrestrial Environment	Independent and collaborative assessment (with SFN) of migratory movement of the Pen Island caribou herd and the cumulative effects of development on this threatened species. (SFN)	Already Addressed / Not Required	The Pen Islands coastal caribou population is migratory and not defined by SARA, MESA, or OESA as a threatened species. This harvestable population currently consists of about 16,600 animals that move between Ontario and Manitoba. MCWS is currently leading a research study on this herd in partnership with the Fox Lake RMB, York Factory RMB, Split Lake RMB, AANDC, and Manitoba Hydro (Bipole III transmission project). This ongoing research study has been using radio-telemetry to study migratory movements and calving locations since February 2010. This research will continue until, at least, March 31, 2018. The Partnership could ask MCWS to have SFN join in discussions of the research.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
145	Terrestrial Environment	Kaweechiwasihk Kay-tay-a-ti-suk recommends that the Commission acknowledge that the Kaweechiwasihk Kay-tay-a-ti-suk has described the four caribou herds in the study area as known to expert holders of Traditional Scientific Knowledge, being: - Noschimik Atikok , which means “caribou that stay in the bush” and refers to the resident woodland caribou which calve on protected islands and in peatlands in the area of Nelson River; Wapanok Atikok, which means “comes from the east caribou” and refers to the Pen Island herd of woodland caribou which calve on the coastal tundra along the Hudson Bay Coast generally in the area of the Manitoba-Ontario boundary; - Mantayosipi Neyahk Atikok , which means “caribou from the point of land of the River of Strangers” and refers to the caribou in the vicinity of the point of land at the mouth of the “River of Strangers” - being the Churchill River and Cape Churchill - and to the Cape Churchill caribou herd; - Pasko Atikok, which means “no tree caribou” and refers to the Beverly and Quaminirjuak herds of barren ground caribou which are generally encountered during winter migrations into the southern and southeast extent of the range. (KK)	Already Addressed / Not Required	The Partnership's EIS does describe four possible groups of caribou that make use of the Keeyask Local and Regional Study Areas. These groups are similar to the descriptions provided by the KK. Other ATK descriptions, including Cree names, have also been provided by the Partner First Nations (e.g., see descriptions provided in the FLCN Environmental Evaluation Report). The Partnership has committed to the establishment of a Caribou Coordination Committee as a sub-committee of MAC that will have representatives from Manitoba Hydro, the Partner First Nations, government and others. It seems most appropriate that the determination of Cree names and ATK descriptions for these herds be discussed and agreed to among this group, rather than being dictated through a licence condition.
146	Terrestrial Environment	Specifically, the Kaweechiwasihk Kay-tay-a-ti-suk further recommends that the Commission acknowledge that there is sufficient ATK evidence partially supported by recent WSK evidence to suggest that the of caribou referred to as the Noschimik Atikok by the Kaweechiwasihk Kay-tay-a-ti-suk exists as a distinct resident caribou population occupying a range that includes the Keeyask area and that further collaborative work involving Kaweechiwasihk Kay-tay-a-ti-suk, Manitoba Conservation and Water Stewardship, the Canadian Wildlife Service, the Partnership, Manitoba Hydro and the holders of Aboriginal Traditional Knowledge from other First Nations is needed to recognize and protect Noschimik Atikok, including regarding range, population estimates and calving areas, and that such a collaborative ATK-WSK process be included as a specific condition of any Environment Act Licence issued for the Project. (KK)	Already Addressed / Not Required	As part of the EIS, the Partnership characterized in detail caribou populations using the Keeyask local and regional study areas, including the potential for a boreal woodland caribou population to be resident in the local area. This was done using all available ATK and western scientific information. ATK was provided through funded ATK studies designed and implemented by each of the Partner First Nations. For each of the caribou populations, the assessment described range, population estimates and calving areas where known. Further work is committed to under the Partnership's Environmental Stewardship Program, including both ATK and western science monitoring. The Partnership has also committed to the formation of a Caribou Coordination Sub-Committee under the MAC. This forum will be used by the Partnership to continue its work and to collaborate with regulators and others on the protection and monitoring of all caribou in the region, based on both ATK and western science.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
147	Terrestrial Environment	Kaweechiwasihk Kay-tay-a-ti-suk recommend that the Commission recommend taking immediate steps to resolve the differing descriptions of the Noschimik Atikok herd which appear in the materials filed as part of the Bipole III Transmission Project and the Keeyask Generation Project, being the characterization in the Bipole III materials of Noschimik Atikok as “coastal caribou” or the “Gillam Area Pen Island Herd”, and in the materials filed as part of the Keeyask Generation project, being a description of the Noschimik Atikok herd as “summer resident” caribou. (KK)	Already Addressed / Not Required	It would not be appropriate as a condition of licensing to ask the Partnership to resolve differences in the descriptions of caribou herds provided in the EIS materials previously filed by a different proponent for a different project. For the Keeyask Project, the Partnership has taken a precautionary approach and has assessed potential effects to summer resident caribou as if they are boreal woodland caribou. The Partnership will work directly with Manitoba Hydro's Bipole III monitoring team, along with regulators, through the Caribou Coordination Sub-Committee to be established under MAC. Any differences in understanding about the caribou herds using this region can be discussed and resolved through that forum.
148	Terrestrial Environment	Future assessments of boreal woodland caribou sustainability should comply with Environment Canada best practice. (CAC)	Already Addressed / Not Required	The assessment of summer resident caribou not only complied with Environment Canada best practice, it used benchmarks in the assessment that considered both a bottom-up and top-down approach (i.e., considered most influential drivers such as predators) independently from just a single model.
149	Terrestrial Environment	The proponent should undertake two years of radio-telemetry tracking of female resident caribou to resolve questions of the identity of the caribou and to assist in the determination of the extent of the population range of resident caribou. (CAC)	Ill Advised	Radio-collaring has to be done in the summer months, during a time when calving is taking place and risks to the health and safety of females and their young is at its highest. This is of great concern to the elders, the partners and regulators and, for these reasons, radio-collaring of local woodland caribou in the summer was not undertaken and is not advisable in the future.
150	Terrestrial Environment	Fire history and fire predictions or trends as provided in the EIS need to be reviewed, updated and widened. No clear predictions were provided. Climate change was dismissed as a factor in fire history, or future fire trends. We request the CEC to require an independent assessment of fire trends, risks, history and projections in the RSA, LSA, along the Nelson River corridor, and in the project RSA, LSA etc. (MWL)	Already Addressed / Not Required	The Terrestrial Environment Supporting Volume (Section 2.5) clearly recognized the importance of climate in fire history and future fire trends. This information was used to evaluate the sensitivity of the Project effects predictions to future climate change (including climate change related increases in fire disturbance), which is consistent with federal guidance regarding acceptable methods for incorporating climate change into a project effects assessment. The response to CEC undertaking # 10 provides additional information on future fire disturbance was considered in terms of the future pattern of fire disturbance and how this pattern is expected to affect caribou in the Keeyask region.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
151	Terrestrial Environment	That the CEC recommend to the Minister that, as a condition for the license for the Keeyask Generation Project, the Manitoba Government and Manitoba Hydro should establish a joint monitoring (and if necessary, mitigation) program to assess the impacts, if any, of increased moose harvesting in the Keeyask Generation Project Regional and Local Study Areas as a result of declining moose populations elsewhere in Manitoba. (Peguis) That the CEC recommend to the Minister that independent monitoring of moose populations, health, mortality, habitat and sustainability (including of their habitat) in relation to the Keeyask Generation Project be put in place, led by First Nations who hunt in the region where Keeyask Generation Project would be located. (Peguis) That the CEC recommend to the Minister that the Manitoba government establish a province-wide moose monitoring program to monitor, assess and manage moose population health on a province-wide basis. (Peguis)	Already Addressed / Not Required	There is already joint monitoring being undertaken to assess effects of the Project on moose harvest in the Local and Regional Study Areas. The draft Terrestrial Environment Monitoring Plan describes the scope of monitoring programs and this plan will be administered by the MAC. Each of the Partner First Nations will also undertake its own ATK monitoring programs. Monitoring results will be reported by the Partnership on its website, shared with the Split Lake Resource Management Board, and given directly to Manitoba Conservation & Water Stewardship, the authority responsible for managing the provincial moose population. The moose harvest sustainability plan has been developed by the CNP to assist the community in its implementation and monitoring of offsetting programs. The CNP will be responsible for plan implementation in the Split Lake RMA. The potential for increased harvest in the local and regional study areas is considered in the moose harvest sustainability plan, and an uncertainty factor is built into the model to account for unknown domestic harvest. The Partnership does not predict that there will be a further increase in moose harvesting in the region as a result of declining moose populations elsewhere in Manitoba. The moose density in the Split Lake Resource Management is relatively low, at approximately 6 moose per 100km2. This is primarily due to environmental constraints limiting the abundance of this species at the northern limit of its range. In contrast, moose density in accessible, prime, moose hunting areas in southern Manitoba were at 25-30 per 100km2, before population declines began. The overall low density of moose, large travel distanced, and difficult access within the Spilt Lake RMA make it very unlikely that many hunters, either licensed or Aboriginal, will be attracted to the Split Lake Region. If the Partnership is incorrect with its prediction, a change in harvest would occur with or without the Keeyask Project. MCWS will continue to manage and monitor moose populations in the province, using special moose management initiatives, where needed, to take actions for the southern moose populations that are declining rapidly.
152	Terrestrial Environment	Prior to construction, the Project's Moose Harvest Sustainability Plan be updated to include and address any additional information related to the harvesting of moose by other proximate Aboriginal communities, including, the MMF, who live within and use the Nelson watershed. (MMF) That the Project's Moose Sustainability Plan be updated to address any additional information related to the harvesting of moose by other proximate Aboriginal communities, including the Manitoba Métis Federation; and (MMF)	Already Addressed / Not Required	This is not necessary. As noted in evidence, moose harvest by Métis citizens is only permitted through recreational licences. These recreational licences have already been captured in the modelling used to develop the Moose Harvest Sustainability Plan. There is no evidence to suggest that substantial harvest is being undertaken by any other Aboriginal community, other than the Partner First Nations. However, a uncertainty factor has been built into the models used for the plan to account for any potentially unknown harvest activities. Ongoing monitoring of moose harvest will be undertaken by Tataskweyak Cree Nation and by the Split Lake Resource Management Board. If information suggests that updates to the model are required, these will incorporated and the Moose Harvest Sustainability Plan updated.

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	Topic	Recommendations from Hearing Participants	KHLP Response	KHLP Comments
153	Terrestrial Environment	The absence of rehabilitation plans at this stage of project development, coupled with the refusal to engage in rehabilitation for previous projects, leaves a clear impression that Manitoba Hydro is simply not interested in incurring the costs of rehabilitation. By Manitoba Hydro's own admission past rehabilitation efforts have been minimal at best, and in most cases nonexistent. A comprehensive rehabilitation plan integrating past projects and the Keeyask project should be carefully established and implemented. A set funding pocket should be established that sets aside appropriate funds to work for rehabilitation and eventual reconstruction of the socio-ecological landscape. These efforts should meaningfully include the partnering First Nations at every stage of the process. (CFLGC)	Already Addressed / Not Required	The Partnership has already indicated that a vegetation rehabilitation plan for Keeyask will be developed during the course of Project construction once the extent of Project disturbance is fully known. This plan will be made publicly available once it is complete. Funds exist within the Partnership's budget for Keeyask to implement this vegetation rehabilitation plan. It is not appropriate for the Partnership to take on rehabilitation efforts at other Manitoba Hydro facilities.
154	Terrestrial Environment	That the CEC recommend to the Minister that, as a condition of the approval of the Keeyask Project, a more extensive GIS-based mapping analysis be completed to document historic changes to shorelines – including cumulative inundated and dewatered areas – for the entire interconnected Churchill River Diversion (CRD), Nelson River and LWR areas, in order to provide baseline data against which to measure and monitor changes as a result of the Keeyask Project. (Peguis) That the CEC recommend to the Minister that, for any future hydro projects, GIS-based analysis and maps be completed documenting the historic changes to shorelines, in order to provide baseline data against which to measure and monitor changes, including cumulative changes in the interconnected CRD, Nelson and LWR areas. (Peguis) The CEC could consider commissioning a 1:50,000 land and water change/shoreline inundation study of the hydro region in northern Manitoba, to build on the 1:250,000 study presented to the hearings, by a participant. The products should be public, and could be used as a reference for the RCEA. (MWL)	Already Addressed / Not Required	The Partnership completed detailed (i.e., 1:20,000 scale or larger) historical shoreline change mapping for portions of the interconnected Churchill River Diversion and Nelson River areas to support the Wuskwatim and Keeyask Generation Project environmental assessments, with key results derived from this mapping already provided in the associated filed material. In the case of Keeyask, these results contributed to the quantification of cumulative historical terrestrial losses due to past hydroelectric development (the ecosystem diversity and total terrestrial habitat cumulative effects assessments are examples of this) and to develop models to predict peatland disintegration in the reservoir area. These existing datasets will be expanded at a scale of 1:50,000 or larger, as a component of the work to be undertaken to address the CEC's recommendation for a Regional Cumulative Effect Assessment.

APPENDIX C

Summary of AEA Offsetting Programs

KEEYASK
Hydropower Limited Partnership

Keeyask Adverse Effects Agreements – Offsetting Programs

Offsetting Program	Objective/Description of Program
Tataskweyak Cree Nation *(TCN)*	
3.2 *(TCN)* **Keeyask Centre**	To provide space and facilities, primarily related to accommodating staffing requirements and other functions, for the management and administration of the Offsetting Programs, but also including, without limitation, space for display cases, for fish processing and for other needs incidental to the management, administration and implementation of the Offsetting Programs.
3.3 *(TCN)* **Access**	To provide Members with substitute opportunities to hunt, fish and trap for food and to carry out associated customs, practices and traditions integral to their distinctive cultural identity within the Split Lake Resource Management Area (SLRMA). The Access Program addresses the loss of meaningful opportunities to sustain TCN's distinctive cultural identity on the waters of the Nelson River and on land within the SLRMA adjacent to the Nelson River.
3.4 *(TCN)* **Land Stewardship**	To provide opportunities for TCN to show respect for the land in a manner consistent with traditional TCN values and to assist TCN in caring for the land within the SLRMA.
3.5 *(TCN)* **Healthy Food Fish**	To provide opportunities for Members to continue to fish and to provide a supply of wholesome food fish to Members in order to replace fish which may no longer be available to Members as a result of increased methyl-mercury levels in fish caused by the Keeyask Project in the reach of the Nelson River between the Kelsey Generating Station dam and the Keeyask Generating Station dam.
3.6 *(TCN)* **Traditional Lifestyle Experience**	To provide opportunities for young adult Members to experience a traditional lifestyle during one (1) cycle of seasonal activities on the land.
3.7 *(TCN)* **Traditional Knowledge Learning**	To replace opportunities for members for traditional learning that will be lost due to development of the Keeyask Project. Has two parts, namely: (a) the opportunity for traditional learning created through the Access Program; and (b) opportunities for traditional learning provided for students primarily at, or through, the Keeyask Centre.
3.8 *(TCN)* **Cree Language**	To strengthen the cultural identity of TCN and Members by creating an opportunity for adult Members to learn to speak Cree, or to improve their Cree language skills.
3.9 *(TCN)* **Traditional Foods**	To provide opportunities for Members to gather and share traditional foods. This program is to be implemented and operated in conjunction with the Access Program, and will create opportunities for gathering and sharing traditional foods by resource harvesters, in keeping with the customs and traditions of TCN and members.
3.10 *(TCN)* **Museum & Oral Histories**	To provide a substitute opportunity for TCN and Members to maintain the historical connection to the land that will be destroyed when the Keeyask Project is built
War Lake First Nation *(WLFN)*	
3.2 *(WLFN)* **Distribution Centre**	To provide a building for War Lake on Reserve for space and facilities related to fish processing, storage and distribution.

Offsetting Program	Objective/Description of Program
3.3 *(WLFN)* **Community Fish**	To provide a supply of wholesome food fish to Members from War Lake and Atkinson Lake, in order to replace fish which may no longer be available to Members to consume as a result of risks of increased methyl-mercury levels caused by the Keeyask Project in fish in the reach of the Nelson River between the dam of the Kelsey Generating Station and the dam of the Keeyask Generating Station.
3.4 *(WLFN)* **Improved Access**	To provide Members with substitute opportunities to fish and to carry out other customs, practices and traditions integral to their distinctive cultural identity in a vital part of their homeland.
3.5 *(WLFN)* **Traditional Learning / Lifestyle**	To provide opportunities for young adult Members to experience a traditional program at Atkinson Lake.
3.6 *(WLFN)* **Cree Language**	To strengthen the cultural identity to War Lake by creating an opportunity for adult Members to learn to speak Cree, or to improve Cree language skills.
3.7 *(WLFN)* **Museum and Oral Histories**	To provide a substitute opportunity for War Lake and Members to maintain the historical connection to the land that will be destroyed when the Keeyask Project is built.
Fox Lake Cree Nation *(FLCN)*	
3.2 *(FLCN)* **Gathering Centre**	To provide a permanent substantial presence for Fox Lake in the Gillam community from which Fox Lake will be able to administer and implement the Offsetting Programs to manage Keeyask Adverse Effects. It will provide space and facilities, staff areas, offices, storage areas and meeting room, all of which will are needed in order for FL to manage and administer the Offsetting Programs and accommodate citizens participating in such offsetting programs.
3.3 *(FLCN)* **Youth Wilderness Traditions**	To provide opportunities for young adult Citizens to experience a traditional lifestyle over a year cycle of seasonal activities
3.4 *(FLCN)* **Cree Language**	To strengthen the cultural identity of Fox lake and Citizens by creating an opportunity for adult Citizens to learn to speak Cree or to Improve their Cree language skills.
3.5 *(FLCN)* **Gravesite Restoration**	To restore, re-consecrate and protect community gravesites in and around the Gillam area.
3.6 *(FLCN)* **Alternative Justice**	To make a contribution towards the development of a program model that will provide an alternative method of resolving situations involving the justice system and Citizens.
3.7 *(FLCN)* **Crisis Centre & Wellness Counselling**	To make a contribution towards the development and implementation of a wellness counseling program and the establishment of a crises shelter for Citizens.
3.8 *(FLCN)* **Lateral Violence & "Where do we go from here"**	To host a series of discussions and workshops to assist Citizens to prepare to participate in the proposed Keeyask Project. The Lateral Violence component of the program is meant to address individual behaviours and attitudes in order to assist individual Citizens to identify and participate in the opportunities that are being made available in connection with the Keeyask Project. The "Where Do We Go From Here" component addresses similar manners but with respect to groups, such as families, in order that those groups may collectively maximize their participation associated with the Keeyask Project.

Offsetting Program	Objective/Description of Program
3.9 *(FLCN)* **Alternative Resource Use**	To provide opportunities for Citizen resource users, whose resource use area may experience Keeyask Adverse Effects, to access alternate resource areas, within the Fox Lake Resource Management Area, to pursue their traditional activities.
York Factory First Nation *(YFFN)*	
3.2 *(YFFN)* **Resource Access and Use:** Objectives and General Description	(a) to offset some of the potential effects on resource harvesting and access caused by Keeyask Adverse Effects and to enhance York Factory's connection with the York Factory Resource Management Area (YFRMA), including at the Hudson Bay coast; (b) to enhance the traditions of harvesting and sharing country foods among Members, in order to strengthen community cohesion and help the community better cope with changes brought on by Keeyask Adverse Effects; and (c) to address the potential for mercury methylation in fish by replacing the domestic supply of fish currently taken from on-system lakes and rivers that have the potential to be affected by Keeyask Adverse Effects.
3.3 *(YFFN)* **Environmental Stewardship:** Objectives and General Description	To provide York Factory with the capacity to monitor and assess potential environmental changes resulting from Keeyask Adverse Effects, including potential environmental changes resulting from implementation of Offsetting Programs.
3.4 *(YFFN)* **Cultural Sustainability:** Objectives and General Description	To strengthen the cultural identity of Members in order to enhance York Factory's ability to deal with the potential changes brought about as a result of Keeyask Adverse Effects, including both environmental and social and cultural changes.