

Reque sted By	Directed To	IR# 1st level (1, 2, 3 ...)	IR# 2nd level (a, b, c ...)	IR# 3rd level (i,ii,iii ...)	Round	Attachment s (if any)	Subject	Preamble	Question	Reference	
PUB	TYPLAN	1			n/a		Socio-Economic		Please elaborate on the reasons the socio-economic impact of the PDP would be less than suggested by the Statistics Canada model.	Typlan Report, page iii	<p>TyPlan Response</p> <p>A generally accepted principle of input output modeling is that the direct benefits of any project will occur in the jurisdiction in which the expenditures are made. The Statistics Canada Interprovincial Input Output Economic Simulation Model is based on the allocation of expected project expenditures (purchase of goods and services) and the location goods and services are produced (i.e. within province, in rest of Canada or in other countries) based on statistical evidence collected over time. Conversely, the Manitoba Hydro (MH) input output modeling (IOM) approach to project benefits was based on allocating the purchase of goods and services within the model based on recent experiences with similar projects (Wuskwatim Generating Station), which reviewed all of the contracts awarded, and their origins (i.e. provincial or rest of Canada, or in other countries). The difference between the approaches lies in a) the assumptions made b) in the case of the MH IOM, how the contracts are allocated within the model (i.e. provincial or rest of Canada). The key issue to consider regarding the analysis relates to MH allocation based on current procurement expectations in the marketplace and the potential retention of non-provincial suppliers, for example of an out of province civil contractor. Traditional procurement would generally support provincial contractors (and hence more provincial benefits) as supported by the Statistics Canada model, but in today's marketplace common practice would result in civil contractors being selected from out of province. Regardless of where the contractor is located, it is likely that a significant portion of the expenditures (e.g. wages paid to workers, purchases of materials and other consumables used by the project) made by the contractor in the course of providing this service would occur in the local area. The MH IOM analysis assumes that, if a contractor comes from out of province, all of the expenditures made by the contractor in the course of providing the service occurs outside of Manitoba. This is the reason why the socio-economic impact of the PDP in Manitoba (based on the MH IOM) is less than that suggested by the Statistics Canada model.</p> <p>Socio-economic benefits evaluated in this review considered both construction and operational benefits. The PDP generates greatest employment of all options throughout construction (up to year 2030), and post 2030 over the life of the project also supports operational employment. Other resource alternatives (all gas) exhibit lower capital investment (less employment and less benefits) during the initial years of the plan, creating less short term employment but ongoing employment post 2018 as a result of capital reinvestment as new plants have to be built (refer to exhibit 15 of socio-economic report). A key differentiating factor considered as part of the socio-economic review, relates to the principle of economic "rent" which considers the geographic and socio-economic characteristics of where such employment would be secured, namely in the case of the PDP (as opposed to the all gas plan), in regions of high unemployment (northern Manitoba), where the economic rents would be the greatest.</p> <p>Leakages are specific to the assumptions and results of the input output modeling.</p> <p>The NFAT MAE references D.Burgess and O.Zerbe and Moore. In addition to reviewing the referenced articles additional literature referenced included "Decomposing the Social Discount Rate (Helen Scarborough) and Valuing the Future: The Social Discount Rate in Cost Benefit Analysis Visiting Research Paper: Australian Government Dr. Mark Harrison (April 2010). Reference is also provided in regard to BC Hydro's real dollar discount rate of 5.5%, consistent with BC Hydro's current planning rates, as well as a 6% real dollar discount rate consistent with the rate used for evaluation of alternatives in BC Hydro's Integrated Resource Plan and in Volume 1 Section 5 Needs for, Purposes of, and Alternatives to the project.</p> <p>No. The displacement of other investment in Manitoba (even if not in Manitoba) other than what was requested as part of the NFAT review of alternatives is not part of the TyPlan stated scope of work. Our reporting does however note that Manitoba Hydro has a mandate for economic development and has long been recognized as a key economic driver of the provincial economy.</p>
PUB	TYPLAN	2	a		n/a		Socio-Economic	The Typlan report states that "Provincial and Canadian wide benefits are driven for the most part from construction benefits (employment) and a lesser extent operational employment jobs which are local." Further, the MA-BCA was performed based on a 78-year NPV.	How does the timing of socio-economic benefits relate to the timing of costs to be incurred over the lifetime of the project? How does this contrast with alternatives that have a lower capital cost but shorter lifespan, such as an all-gas scenario as described on page 28 of the report?	Typlan Report, page iv, page 28	
PUB	TYPLAN	2	b		n/a		Socio-Economic	The Typlan report states that "Provincial and Canadian wide benefits are driven for the most part from construction benefits (employment) and a lesser extent operational employment jobs which are local." Further, the MA-BCA was performed based on a 78-year NPV.	How do the leakages of socio-economic benefits during construction compare to the leakages of long-term benefits?	Typlan Report, page iv, page 28	
PUB	TYPLAN	3	a		n/a		Socio-Economic	The Typlan report states that "The 6% real discount rate chosen for the PDP, based on a social cost of capital, is reasonable based on literature reviewed."	Please indicate what literature was reviewed and explain your reasoning in concluding that a 6% discount rate is reasonable based on the social cost of capital.	Typlan Report, page iv; page 51	
PUB	TYPLAN	3	b		n/a		Socio-Economic	The Typlan report states that "The 6% real discount rate chosen for the PDP, based on a social cost of capital, is reasonable based on literature reviewed." In Chapter 13, page 6 of 74, of the NFAT Filing, Manitoba Hydro states that "The greater the weight of outside borrowing relative to displacement of other investment, the lower will be the discount rate."	Please advise whether your answer is impacted by the fact that Manitoba Hydro's debt is guaranteed by the Province of Manitoba. Should the socio-economic analysis consider possible displacement of other investment in Manitoba, even if such investment would not be made by Manitoba Hydro?	Typlan Report, page 51; NFAT Filing, Chapter 13, Page 6 of 74	

Reque sted By	Directed To	IR# 1st level (1, 2, 3 ...)	IR# 2nd level (a, b, c ...)	IR# 3rd level (i,ii,iii ...)	Round	Attachment s (if any)	Subject	Preamble	Question	Reference	TyPlan Response
PUB	TYPLAN	4			n/a		Socio-Economic	The Typlan report states that "[Manitoba Hydro's] Project Execution Plan defines and expands on internally accepted project management techniques required for effective project delivery, a key lesson learned from Wuskwatim."	Please file, or have Manitoba Hydro file, the Project Execution Plan as CSI.	Typlan Report, page 11	The Project Execution Plan is CSI. A copy is available from MH. The project execution plan presents a standard project management framework, consisting of discrete plans for each knowledge area.
PUB	TYPLAN	5			n/a		Socio-Economic	The Typlan report states that "while such costs are assumed "sunk costs" on the project, the KIP will create significant benefits to northern and aboriginal peoples."	Please confirm whether the socio-economic benefits flowing from the Keeyask Infrastructure Project ("KIP") would still exist if Manitoba Hydro did not proceed with Keeyask.	Typlan Report, page 12	Socio-economic benefits would be derived from the ongoing construction of the Keeyask Infrastructure Project (KIP). However such benefits for First Nations would not be optimized, if such employment was not transferred to the construction of the Keeyask Generating Station (KGS), and potentially the Conawapa Generating Station.
PUB	TYPLAN	6	a		n/a	yes	Socio-Economic	The Typlan report states that "The treatment of many purchases (identified in the IO expenditure categories) as leakages, as presented by MH, may result in understating the impact of the projects in Manitoba, while overstating the impact in Canada. This is due to the fact that margins embedded in the purchase cost of these goods and services may not have been attributed to Manitoba producers who may be providing services such as transport or wholesaling."	Please confirm whether Manitoba Hydro treated all out-of-Province purchase as resulting in 100% leakage or whether some benefit was attributed to Manitoba. If so, please elaborate on percentages.	Typlan Report, page 20	A generally accepted principle of input output modeling is that the direct benefits of any project will occur in the jurisdiction in which the expenditures are made. The Statistics Canada Interprovincial Input Output Economic Simulation Model is based on the allocation of expected project expenditures (purchase of goods and services) and the location goods and services are produced (i.e. within province, in rest of Canada or in other countries) based on statistical evidence collected over time. Conversely, the Manitoba Hydro (MH) input output modeling (IOM) approach to project benefits was based on allocating the purchase of goods and services within the model based on recent experiences with similar projects (Wuskwatim Generating Station), which reviewed all of the contracts awarded, and their origins (i.e. provincial or rest of Canada, or in other countries). The difference between the approaches lies in a) the assumptions made b) in the case of the MH IOM, how the contracts are allocated within the model (i.e. provincial or rest of Canada). The key issue to consider regarding the analysis relates to MH allocation based on current procurement expectations in the marketplace and the potential retention of non-provincial suppliers, for example of an out of province civil contractor. Traditional procurement would generally support provincial contractors (and hence more provincial benefits) as supported by the Statistics Canada model, but in today's marketplace common practice would result in civil contractors being selected from out of province. Regardless of where the contractor is located, it is likely that a significant portion of the expenditures (e.g. wages paid to workers, purchases of materials and other consumables used by the project) made by the contractor in the course of providing this service would occur in the local area. The MH IOM analysis assumes that, if a contractor comes from out of province, all of the expenditures made by the contractor in the course of providing the service occurs outside of Manitoba. This is the reason why the socio-economic impact of the PDP in Manitoba (based on the MH IOM) is less than that suggested by the Statistics Canada model. The percentage break down is presented on the attached file (Manitoba. Project. xlxs)
PUB	TYPLAN	6	b		n/a	yes	Socio-Economic	The Typlan report states that "The treatment of many purchases (identified in the IO expenditure categories) as leakages, as presented by MH, may result in understating the impact of the projects in Manitoba, while overstating the impact in Canada. This is due to the fact that margins embedded in the purchase cost of these goods and services may not have been attributed to Manitoba producers who may be providing services such as transport or wholesaling."	On a percentage basis, what portion of the benefits of out-of-Province purchases should be attributed to Manitoba? If you are in a position to quantify, please do so.	Typlan Report, page 20	The results of the Statistics Canada Input Output Economic Simulation Model (attached Impact of Keeyask Generating Station Tables 1, 2, 3,4) provides the Stats Canada Model results and provides such information.
PUB	TYPLAN	7	a		n/a		Socio-Economic		Please advise whether work performed in Manitoba by an employee of an out-of-Province employer is counted as a Manitoba benefit of a Rest-of-Canada (ROC) benefit.	Typlan Report, pages 21-22	The MH IOM assumes work performed in Manitoba by an employee of an out of Province contractor would be a rest of Canada benefit.
PUB	TYPLAN	7	b		n/a		Socio-Economic		Does it make any difference whether the employee is a Manitoba resident or resident of another jurisdiction?	Typlan Report, pages 21-22	It is dependent upon the original assumption made in the IOM (refer to IR#1).
PUB	TYPLAN	7	c		n/a		Socio-Economic		Is there are minimum time duration as to when an employment benefit will be counted as a Manitoba benefit or an ROC benefit? E.g., if someone works on the construction project inside Manitoba for a year or more, would it be considered a Manitoba benefit even if they are employed by an out-of-Province employer?	Typlan Report, pages 21-22	No. The model is "static" and based on the initial assumption the modeler assumes. If assumed out of province then that assumption holds throughout the entire construction period.
PUB	TYPLAN	8	a		n/a		Socio-Economic	The Typlan report states that "A target of 630 person years of employment for members during construction has been identified within the JKDA."	Would you anticipate any other significant aboriginal employment during construction aside from the KCN jobs target as set out in the JKDA? If so, please elaborate.	Typlan Report, page 33	MH has committed to the 630 person years of employment which will be monitored via both the Advisory Group on Employment (AGE) and Construction Advisory Committee (CAC). While targets will (should) be met via contractors involving First Nations, other opportunities may become available and should be highlighted via both the AGE and CAC discussions as the project roles out, to optimize such opportunities.

Reque sted By	Directed To	IR# 1st level (1, 2, 3 ...)	IR# 2nd level (a, b, c ...)	IR# 3rd level (i,ii,iii ...)	Round	Attachment s (if any)	Subject	Preamble	Question	Reference	TyPlan Response
PUB	TYPLAN	8	b		n/a		Socio-Economic	The Typlan report states that "A target of 630 person years of employment for members during construction has been identified within the JKDA."	What, if any, are the challenges to achieving significant aboriginal employment in a northern construction locale such as Keeyask and Conawapa?	Typlan Report, page 33	As noted in table 8 of the TyPlan report, a number of initiatives or measures can be deployed to optimize aboriginal employment. Such initiatives and directives include: a proactive approach to planning, establishment of benefit agreements, identification of skill sets and establishment of comprehensive education and training. Implementing the opportunity via community ratification, clear mandates and performance measures, outlined in the benefits agreement via setting out requirements, have all been met by MH. Experience suggests retention of aboriginal employment, as well as ongoing absenteeism and quality of work has resulted in conflicts between commitments made in agreements and the contractors objectives to complete such works. Again both the AGE and CAC should /will be utilized to manage this relationship.
PUB	TYPLAN	9			n/a		Socio-Economic	The Typlan report states that "The KCN's have the opportunity to negotiate up to \$203.1 million of direct negotiated contracts (DNC) related to the Keeyask project."	What, if any, are the challenges in meeting aboriginal contracting targets in northern construction?	Typlan Report, page 33	Assurance made by either KCN's contracting firms or employees to meet the requirements of the contractors work and schedule commitments.
PUB	TYPLAN	10			n/a		Socio-Economic	<p>The Typlan report states that "During the period 2001 to 2010, the KCN's received \$33.75 million of these funds to train their members."</p> <p>Previous reports dealing with major northern construction, such as Justice Berger's report on the Mackenzie Valley Pipeline, have commented on the temporary nature of construction and the disappearance of a significant portion of the available work in northern communities once construction is complete.</p> <p>Although the JKDA has a construction jobs target of 630 person-years, the operational 20-year target 146 jobs, which need not relate to Keeyask.</p>	<p>Do you expect the training activities to have any significant long-term benefits beyond the duration of construction, given the northern location of the Keeyask and Conawapa sites? If so, please elaborate.</p> <p>What is a realistic long-term operational employment gain as a result of Keeyask? Of the PDP as a whole?</p>	Typlan Report, page 33	Training for and the resultant construction employment undertaken throughout construction of the Keeyask Generating Project (and potentially) the Conawapa Generating Station, will provide jobs for more than 15 years. Subsequent to the construction of either or both projects, such skill sets can potentially be transferred to other resource development projects in the north or other projects throughout Manitoba. Post project completion employment will be dependent upon market conditions. From an operational perspective, MH has made commitments to provide 146 operational jobs, which the established skill sets and training originally provided via the JKDA, can be transferred.
PUB	TYPLAN	11			n/a		Socio-Economic	The potential pressure of local employees moving to work on the KGS appears to be seen as a negative externality to be mitigated, and the construction camp will be located at a distance from First Nations communities to reduce potential interactions.	Please confirm that the preamble is correct, and reconcile this with the fact that job training and jobs for KCN members are seen as tangible socio-economic benefit. If KCN members obtain training but, subsequent to Keeyask construction, have to move out of the community to pursue jobs matching their skill set, how does this impact the net socio-economic benefit?	Typlan Report, page 37	The preamble is correct in that many remote project site developments, concern is voiced by local First Nations regarding the resultant potential negative externalities (drug and alcohol abuse, interactions and altercations etc.) creating social issues. The provision of a world class construction camp (with supporting facilities) forms a mitigative measure to reduce such interactions and negative social effects. Job training and employment is a tangible socio-economic (economic) benefit. Post Keeyask construction (and Conawapa construction) First Nations may have to move out of their community to obtain work. Whether First Nation or other, the nature of such major recourse development jobs in northern environs, requires employees to be flexible regarding such interim moves to construction sites.
PUB	TYPLAN	12	a		n/a		Socio-Economic	The Typlan report states that "Scaling the gas options to reflect the Keeyask Generating Project construction costs (\$2.2 billion) enables a comparison of economic impacts."	Please explain your rationale for scaling the gas option to Keeyask cost in the comparison rather than assuming that the cost differential would be used for non-energy infrastructure spending in the Province of Manitoba.	Typlan Report, page 75	Input output modeling is a static tool which uses known construction cost inputs (by stated commodity) to derive economic impact estimates for specific projects. The comparison made in our reporting is that if the equivalent expenditure was made on a gas option the relative benefits derived (from the Input output modeling) would be less than those associated with constructing Keeyask at an equal cost. We note that the purchase of gas turbines represents a considerable component of the total cost in the gas option, and since the turbines would be imported into the province, most of the economic impact would occur outside the province.
PUB	TYPLAN	13	b				Socio-Economic	The Typlan report states that "Scaling the gas options to reflect the Keeyask Generating Project construction costs (\$2.2 billion) enables a comparison of economic impacts."	Please file your socio-economic analysis with respect to gas (in a similar format to Appendix C if possible), providing a breakdown between construction benefits and ongoing benefits.	Typlan Report, page 75	No IOM modeling was not undertaken. We simply compared the multipliers of both options (by commodity) applied them to the \$2.2 billion to make a direct comparison.
PUB	TYPLAN	14					Socio-Economic		Please explain why all direct jobs should take place in Manitoba, in particular in the instance where goods are manufactured and sourced from other parts of Canada.		Please refer to IR #1.

Reque sted By	Directed To	IR# 1st level (1, 2, 3 ...)	IR# 2nd level (a, b, c ...)	IR# 3rd level (i,ii,iii ...)	Round	Attachment s (if any)	Subject	Preamble	Question	Reference	TyPlan Response
PUB	TYPLAN	15	a				Socio-Economic	Typlan states that "The economic displacement effects of increasing rates identify that the lower income households, seniors with limited incomes will be most impacted, whereas the middle and upper class will adjust spending habits via savings or disposable income. The literature does not quantify the magnitude of potential effects, but confirms that federal, provincial and local programs (including utilities), designed to reduce the effects of increased energy prices on low-income households and the poor is the preferred solution. This solution is directed towards energy efficiency and reduction initiatives."	To the extent that additional government benefits are derived from higher rates, please explain what the implications are to Manitoba ratepayers and the Manitoba Economy as a result of economic displacement impacts?	Typlan Report, page 44	Except for those directly effected (lower income households, seniors with limited income) the additional costs to Manitoba ratepayers is absorbed via a reduction in disposable household income. By providing for programs to mitigate such increases and assuming residents use them to their fullest extent, the effect on the overall economy can be minimized. Increased focus and implementation of energy efficiency programs (DSM) for all Manitobans (especially for lower income households), is the approach most utilities are pursuing to limit impacts to their provincial economies.
PUB	TYPLAN	15	b				Socio-Economic	Typlan states that "The economic displacement effects of increasing rates identify that the lower income households, seniors with limited incomes will be most impacted, whereas the middle and upper class will adjust spending habits via savings or disposable income. The literature does not quantify the magnitude of potential effects, but confirms that federal, provincial and local programs (including utilities), designed to reduce the effects of increased energy prices on low-income households and the poor is the preferred solution. This solution is directed towards energy efficiency and reduction initiatives."	To what extent has Typlan' analysis measured economic impact related to the reduction in expenditures from Manitoba ratepayers from higher rates and a related lower level of disposable income.	Typlan Report, page 44	Our reporting identified that minimizing such effects is predominantly undertaken via energy efficiency initiatives such as DSM and that except for those directly impacted, rate increases are absorbed via a reduction in disposable income and reallocation of purchases. To limit such effects on overall economic expenditures throughout the province should focus on such energy efficiency programs enabling residents to focus on reducing consumption and costs, and retaining current disposable income levels.
PUB	TYPLAN	15	c				Socio-Economic	Typlan states that "The economic displacement effects of increasing rates identify that the lower income households, seniors with limited incomes will be most impacted, whereas the middle and upper class will adjust spending habits via savings or disposable income. The literature does not quantify the magnitude of potential effects, but confirms that federal, provincial and local programs (including utilities), designed to reduce the effects of increased energy prices on low-income households and the poor is the preferred solution. This solution is directed towards energy efficiency and reduction initiatives."	To what extent are the need for enhanced provincial programs targeting low income customers to combat increased rates reflected in the analysis of gross benefits?	Typlan Report, page 44	The need for enhanced provincial programs targeting low income customers to combate increased rates is a recommendation of the report, they are not evaluated in the analysis of gross benefits, as literature reviewed does not provide quantification.
PUB	TYPLAN	16	a				Socio-Economic	Typlan states that "The MH distribution of jobs is not reasonable, given that all direct jobs should take place on Manitoba. As well, the overall percentage of jobs in Manitoba appears to be very low given the significant investment taking place in Manitoba. If one were to allocate all the direct jobs from the MH IOM study to Manitoba, the overall percentage of jobs in Manitoba would increase from 33% to 57%, which seems to be a more reasonable estimate."	To what extent are there imports to support the direct construction and operations of the Dams and Transmission Investments?	Typlan Report, page 26	As noted a generally accepted principle of input output modeling is that the direct benefits of any project should be incurred in the jurisdiction in which the project is located. MH based on experience with Wuskwatim Generating Station, suggests the majority of jobs will be out of province jobs. This may be reasonable but it should have been explicitly stated in the MH reporting . Key out of province commodity purchases relate to the turbines (for both the hydro and gas options). It is noted that for the gas options the turbines represent a significant component to the overall project cost
PUB	TYPLAN	16	b				Socio-Economic	Typlan states that "The MH distribution of jobs is not reasonable, given that all direct jobs should take place on Manitoba. As well, the overall percentage of jobs in Manitoba appears to be very low given the significant investment taking place in Manitoba. If one were to allocate all the direct jobs from the MH IOM study to Manitoba, the overall percentage of jobs in Manitoba would increase from 33% to 57%, which seems to be a more reasonable estimate."	How reasonable is it to assume that all the direct jobs are in Manitoba when large direct expenditures are made on equipment [manufacturing equipment/turbines/computers/control systems that are most likely procured from outside Manitoba]?	Typlan Report, page 26	A generally accepted principle of input output modeling is that the direct benefits of any project should be incurred in the jurisdiction in which the project is located. The Statistics Canada Interprovincial Economic Simulation Model assumes such in its calculations, however it is reasonable to assume that when large direct expenditures (equipment, manufactured products) are procured out of province (as noted in the MB IOM) there would be less indirect and induced employment than that stipulated in the Statistics Canada Input Output Economic Simulation model results. The key is the interpretation and assumptions in the model. It is acknowledged that in today's marketplace, major construction projects are delivered by out of province or international civil contractors, which supports MH assumptions that it would result in out of Province employment. The MH IOM reporting should have clearly clarified such assumptions.

Reque sted By	Directed To	IR# 1st level (1, 2, 3 ...)	IR# 2nd level (a, b, c ...)	IR# 3rd level (i,ii,iii ...)	Round	Attachment s (if any)	Subject	Preamble	Question	Reference	
PUB	TYPLAN	17	a			yes	Socio-Economic		Please provide a further breakdown of Table 5 related to the initial capital construction of Keeyask, with the ongoing operations of the facilities based on the MBS.	Typlan Report, page 26	<p style="text-align: center;">TyPlan Response</p> <p>Table 5 was derived from the Statistics Canada Interprovincial Model results. A copy of the Statistics Canada model is provided.</p> <p>The time frame for the ongoing operating costs are based on the reference concepts and the economic and financial evaluations outlined in the NFAT business case.</p> <p>A generally accepted principle of input output modeling is that the direct benefits of any project should be incurred in the jurisdiction in which the project is located. The Statistics Canada Interprovincial Economic Simulation Model assumes such in its calculations, however it is reasonable to assume that when large direct expenditures (equipment, manufactured products) are procured out of province (as noted in the MB IOM) there would be less indirect and induced employment than that stipulated in the Statistics Canada Input Output Economic Simulation model results. The key is the interpretation and assumptions in the model. It is acknowledged that in today's marketplace, major construction projects are delivered by out of province or international civil contractors, which supports MH assumptions that it would result in significant out of Province employment. The MH IOM reporting should have clearly clarified such assumptions.</p> <p>Refer to Manitoba Projects.xlsx excel spreadsheet.</p> <p>A comparative assessment was only undertaken on the Keeyask Generating Station. The intent was to illustrate the relative differences of the results of MH IOM and the Statistics Canada's Interprovincial Input Output Economic Impact Simulation Model. Similar runs can be undertaken, however each run of the model requires additional fees to undertake and interpret.</p> <p>Other utilities follow a similar approach towards such sunk costs in the development of their projects (BC Hydro's Site C for example). From a private sector perspective such costs would represent part of the financial reporting. How they should be considered in this context we do not stipulate, simply that they exist and they were incurred at the expense of the people of Manitoba.</p> <p>The MA-BCA were based on the reference scenarios in which assumptions (on load forecasting DSM, MISO etc.) were defined. Any change in the assumptions would materially change the outcomes as the MA-BCA is solely based on the stated reference scenarios.</p>
PUB	TYPLAN	17	b				Socio-Economic		Please indicate the time frame used for the ongoing operating costs captured in the analysis.	Typlan Report, page 26	
PUB	TYPLAN	18					Socio-Economic		Please explain the rationale for allocating all the direct jobs to Manitoba (if not all of the goods and services are sourced in Manitoba) and the contention that the percentage of jobs in Manitoba being 57% versus 33% is a more reasonable estimate?	Typlan Report, page 26	
PUB	TYPLAN	19				yes	Socio-Economic	The treatment of many purchases as leakages may tend to understate the impact of the project in Manitoba, while overstating the impact in other provinces. the results might be in part from the fact that the margins embedded in the purchase cost of these goods and services may not have been attributed to Manitoba producers who may be providing services such as transportation or wholesaling.	Please provide a breakdown of the total capital costs that are to be incurred/sourced in Manitoba versus Canada and International and indicate what % of the international costs may relate to economic activity in Manitoba that has not been captured in the modeling.	Typlan Report, page23	
PUB	TYPLAN	20	a				Socio-Economic		If readily available, please provide the same level of comparative detail in Table 5 for the Conawapa GS and & 750 MW with the MBS IOM.	the	
PUB	TYPLAN	21					Socio-Economic	Typlan has stated on page 57 that "While bequest value is significant and not monetized in context to this review, one also has to consider the initial sunk costs that are not reflected in the evaluation."	Please explain how the initial sunk costs that are not reflected in the economic evaluation should be considered.	Typlan Report, page 57	
PUB	TYPLAN	22					Socio-Economic	Typlan states on page 77 that "the MA-BCA was based on the reference scenarios assuming a 78-year net present value metric. It is noted that while sensitivity analysis was undertaken for all of the alternatives, there still remains key assumptions within the economic, financial and sensitivity analysis (future load forecasting, the effect of demand side management, drought exposure, export sales and provincial revenues etc.), that would materially affect the outcome of this review."	Please elaborate on the potential impact of changes to key assumptions on the outcome of the review.	Typlan Report, page 77	