

Source	Section	Comment/Rationale	Suggested Text/Recommendation	Action	Justification
<b>Revised Draft Scope</b>					
GN	Scope, Section 8. The interests in lands, waters and other resources which the Proponent has secured or seeks to secure	According to Article 14 of the Nunavut Land Claims Agreement (NLCA), CGS has administration and control of Untitled Municipal Lands. Any construction on these lands, in this case within the municipal boundaries of the City of Iqaluit, would require approval by CGS. CGS would work with the City to ensure that proper permits, leases or easement agreements are in place to allow the project to proceed. Approval will not be granted by CGS until the City of Iqaluit gives its approval to the proposed works and we would follow proper procedure under the NLCA, including the forwarding of the application to NIRB.	The Government of Nunavut-Department of Community and Government Services should be added to the left column list of interested parties in Section 8 of the Revised Draft Scope. (with "Land Permit" in the right column.)	Change incorporated	
EC	Scope, Section 1) b. iii) Ancillary Infrastructure and Additional Details	<p>The Draft Scope outlines that the temporary camp will include</p> <ul style="list-style-type: none"> <li><i>Disposal of sewage (15 cubic metres per day (m<sup>3</sup>/day)) using a packaged sewage treatment plant;</i></li> <li><i>Disposal of greywater (6 m<sup>3</sup>/day) and drilling brine (1 m<sup>3</sup>/day) through a sump which will then be treated in the sewage treatment plant or stored in a container and shipped offsite.</i></li> </ul> <p>The document does not specify where discharge from the packaged sewage plant will be diverted and which effluent quality standards will be achieved after treatment.</p>	The scope of the assessment should include detailed identification of waste disposal options and fate and effects of any discharges.	No change	The detailed identification of waste disposal options has been previously specified in the EIS Guidelines, Section 6.5 Detailed Project Description (pgs. 22-25)
EC	Scope, Section 1) b. iii) Ancillary Infrastructure and Additional Details	The Draft Scope outlines water utilisation at the Jaynes and Armshow South hydroelectric dam, which is expected to be 765,000 cubic meters per day.	The scope of the assessment should include provision of a water balance for withdrawals and discharges through the life of project.	No change	Provisions of a water balance for withdrawals and discharges through the life of the project has been previously specified in the EIS Guidelines, Section 8.1.6 Hydrological Features and Hydrogeology (pg. 44)

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EC	Scope, Section 1) b. iv) Abandonment, Decommissioning and Reclamation	The Proponent has proposed that at closure, all waste materials will be disposed of either on-site in a landfill or in a facility off-site.	The scope of the assessment should include a full inventory and characterization of waste streams and the associated management and disposal.	No change	An inventory and characterization of waste streams and the associated management and disposal following abandonment or decommissioning, if relevant, has been previously specified in the EIS Guidelines, Sections 9.4.5 and 9.4.6 (pg.71).
EC	Scope, Section 2. Anticipated ecosystemic and socio-economic impacts of the Project	The Draft Scope outlines the potential impacts on the environment and socio-economic features, caused by the project components, activities, and undertakings. The environmental and socio-economic features are listed without specifying which impacts will occur at various phases within the project lifecycle.	The scope should specify that an overview be provided detailing when each of the listed potential impacts will occur and how they will change spatially and temporally throughout the project lifecycle.	No change	The scope outlines the potential impacts as they pertain to the project as a whole. Detailed breakdown of when a specific potential impact may occur has been specified in the EIS Guidelines.
EC	Scope, Section 3. Anticipated Effects of the Environment on the Project	The Draft Scope outlines the potential anticipated effects of the Arctic environment on the project. Further details may be helpful to the Proponent in expanding the scope.	Suggested text could include: specify various factors for climate and meteorology, and what they may affect. Suggested text: <i>3, a. Climate and meteorology, including:</i> <i>i) Climate example A: has potential to affect project component_____ during phase(s) _____.</i> <i>ii) Meteorology example A: has potential to affect project component_____ during phase(s) _____.</i> <i>iii) .....</i>	No change	Guidelines for the identification of the phase in which effects may potentially occur and which component may be potentially affected have been previously requested in the EIS Guidelines, Section 8.1.2.2 (pg. 40).
EC	Scope, Section 4 f. Mitigation measures	The Draft Scope outlines steps which will be taken, including contingency plans, to avoid and mitigate adverse impacts. Within Section 4f), there should be further direction to the Proponent on including monitoring and adaptive management in connection with mitigation measures.	The scope of the assessment should request that the proponent present how mitigation and adaptive management will be used, including a description of monitoring and thresholds for action.	No change	Guidelines for the development of mitigation and adaptive management plans have been requested in the EIS Guidelines, Sections 9.3 and 9.7 (pgs. 68 and 72).
EC	Scope, Section 1) b. iv) Abandonment, Decommissioning and Reclamation	The Draft Scope reclamation section should include management of exposed sediments following dewatering of the impoundment area.	Suggested text: <i>1, b) iv.)Management of exposed sediments following dewatering of the impoundment area</i>	No change	Section 1.b) represents Project components and activities as proposed by QEC. The proper management of exposed sediments in the event that the project is decommissioned is to be addressed in the Proponent's Closure and Reclamation Plan, the requirements of which have been outlined in the EIS Guidelines, Section 9.6 (pgs. 80-81).

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EC-CWS	Scope, Section 1)b. iii)	Although ‘transportation routes’ are included in the Draft EIS Guidelines, they should also be included as Project Components in the Scope of the Project as the routes are part of the Project Description and barging/sealifts would occur through the life of the +40 year project (i.e. it is a part of the spatial scale for assessing impacts to VECs).	The following bullet should be added: <ul style="list-style-type: none"> <li>Water access/transportation routes for sealift of construction and resupply/maintenance materials and equipment from Iqaluit to the sites, and the backhaul of waste from sites to Iqaluit.</li> </ul>	No change	Barging is not proposed for the life of the project, it is only proposed for the construction phase. The identification of ‘transportation routes’ has been previously specified in the EIS Guidelines, Sections 6.5.2 Construction (pg. 24) and 6.5.3 Operation and Maintenance (pg. 27)
TC	Scope, Section 8, pg. 11	Acts should all be italicized, added “2001” to <i>Canada Shipping Act</i> and <i>Transportation of Dangerous Goods Act</i> needs to be added.	Approval(s) under the <i>Navigable Waters Protection Act</i> ; Compliance with the <i>Arctic Waters Pollution Prevention Act, Canada Shipping Act, 2001, Transportation of Dangerous Goods Act</i> and their associated regulations.	Change incorporated	
TC	Table of Contents	It seems redundant to list the table of contents in the table of contents on the same page	Delete table of contents entry from the table of contents	Change incorporated	
<b>Draft EIS Guidelines</b>					
QIA	Dam Design	QIA is concerned with the identification by the Proponent of the many barriers to construction of the Armshow South site as it relates to the design of the dam abutment, penstock route as well as the dam and penstock foundations.	QIA is of the opinion that the Proponent should undertake further studies prior to finalizing the design of the facility at Armshow South and report its findings to all stakeholders.	No change	Section 6.1 Project Design (pgs. 19-20) includes requirements for the Proponent to discuss the design of the proposed Project to reduce the potential impacts to the public, workers and the environment (Section 6.1, bullets e and f)) and it is expected that design limitations would be identified and addressed in detail in this section.
QIA	Sewage and water discharge	QIA has concerns with the treatment of sewage and water discharge as there may be potential effects downstream of the Armshow South site. QEC proposes to treat sewage using a packaged sewage treatment plant and the treated sewage is proposed to be discharged into the Bay of Two Rivers. As the Bay of Two Rivers is a waterbody of significance to Inuit harvesters, it is a concern that treated sewage is proposed for discharge into the Bay of Two Rivers.	QIA recommends an assessment be conducted to determine the potential effect the discharge of treated sewage would have on the ecosystem in and around the Bay of Two Rivers.	No change	Section 8.1.9.2 Aquatic Environment Impact Assessment (pg. 48) of the Revised <i>Draft</i> EIS Guidelines includes the requirement for the Proponent to assess the potential impacts of all components and activities of the Project during all phases on the aquatic ecosystem, which includes the proposed water/wastewater treatment systems.

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QIA	Water discharge from tailrace during the winter	QIA has concerns that QEC’s proposed plans to continuously discharge water to the river in winter will create the conditions for an enlarged persistent ice-covered pool extending further downstream to the tidal flats.	QIA requests that the potential impacts of winter discharge of water into the river on travel, fishing and/or hunting in the area be assessed, and requests that the assessment includes the evaluation of alternatives and proposal of mitigation measures to mitigate/eliminate the potential impacts.	Change incorporated	
QIA	Harvesting and Food Security	Hydroelectric generation is a new technology in Nunavut. There is widespread concern regarding how this type of project could affect local species including fish, whales, clams, birds, etc., wherever a hydro dam is constructed. More specifically however, residents in the three consulted communities shared the same sentiment that if a project were to be constructed at the Armshow South site, community members could potentially lose a vital area that has been used for generations to harvest beluga, seals and most importantly Arctic Char.	QIA requests that clams, as a locally important marine species, be included in baselines studies, impact predictions and become listed as a valued ecosystemic component (VEC). QIA requests QEC to identify how they plan to mitigate any impact to local harvesters and fish habitat including an assessment of potential impact to fish and other species downstream from the dam operations from mercury and other contaminants present in the soils.	Change incorporated	
QIA	Harvesting and Food Security	QEC proposes to build a barge landing in the Bay of Two Rivers for the transportation of construction supplies. The barge landing is proposed in the direct vicinity of Nunngarut’s prime fishing waters. Additionally, QEC proposes to use the area during the open water season, which is also the season when the area is most important to Inuit. Inuit have not been consulted on how this significant impact could be mitigated.	QIA requests that QEC provide a thorough assessment of barge landing locations at Armshow South that takes into consideration impacts to local harvesters during the open water season.	No change	Assessments of barge landing options for both sites have been requested in Section 5.6.3 Alternative Means of Carrying out the Project of the EIS Guidelines (pg.16).

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QIA	Kimmirut Trail and Katannilik Territorial Park access and safety	<p>QEC has proposed to flood the upper lake at the Armshow South site, increasing the level of the lake by 25 meters. It is unclear if Inuit would still have access to the segment of the snowmobile route that lies on upper lake for travel between the communities of Iqaluit and Kimmirut after the project is constructed.</p> <p>QIA hypothesizes that raising the water level of the lake and continuously draining it over the winter months will create a potentially dangerous environment for snowmobile travel. Air pockets may form under the ice due to the varying water levels and as snowmobiles attempt to cross they could potentially fall through the ice.</p> <p>Iqaluit CLARC has stated that because of the topography in the region of the upper lake, it will be nearly impossible and potentially dangerous to find another route to travel between the communities of Iqaluit and Kimmirut.</p> <p>There are community concerns related to the water flowing out from the heat-traced tailraces at both Jaynes Inlet and Armshow South sites due to the importance of ice for travel during the winter and spring</p>	<p>QIA requests that QEC:</p> <ul style="list-style-type: none"><li>• Provide an assessment of the Upper Lake characteristics during the different seasons. For example, QEC should provide information on variance in lake heights, volume, accessibility and ice conditions.</li><li>• Provide an assessment of the impact of outflow of water to the quality and quantity of ice on the lakes, trails and pack ice which takes into account that water will be warmer than the surrounding environment.</li><li>• Develop visual aids such as dioramas to help people understand the significance of the damming of the lakes.</li></ul>	Change incorporated	An assessment of lake characteristics for both sites has been requested in Section 8.1.6.1 Hydrological Features and Hydrogeology (pg. 44) of the EIS Guidelines.
QIA	Project and electricity costs	<p>Community members are under the impression that this project will lower electricity costs for residential users. However, due to the massive capital investment required it may be many years before residents see any reduction in electricity costs. Inuit have stated that they are concerned that electricity rates or taxes will be raised by QEC to help pay for this development.</p>	<p>QIA requests that QEC submit a clear plan on how they will fund this development and also make it clear if at any point residents may see a decrease in electricity prices.</p>	Change incorporated	



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QIA	Project alternatives	Sufficient alternatives have not been presented for the location of the second phase of this project. It is clear to QIA that QEC has not used information gained from consultations with Inuit in communities in developing this project proposal as there are many concerns with regards to the Armshow South site.	<p>QIA requests that the Proponent provide a thorough discussion of the alternative hydro generation sources in the area and also provide an explanation as to why Armshow South was chosen.</p> <p>QIA also requests that the Proponent more fully describe their evaluation of the current and future electricity demand of Iqaluit. This description should also include an assessment of alternative methods of satisfying electrical demand such as implementing energy efficiency retrofits within the community.</p>	Change incorporated	
QIA			QIA requests that the proposed Project be returned to the Proponent for modification based on the fact that it is unclear if the Project will enhance and protect the existing and future well-being of communities if food security and access to the land are compromised. It is also unclear if the Project can be built at Armshow South in a safe manner based on the technical issues present. At this time, QIA and the Iqaluit CLARC have concluded that we will only consider approving any permits for Qulliq Energy Corporation if the Proponent agrees to resubmit the project proposal without the Armshow South hydro dam component.	No change	The NIRB does not have the jurisdiction to return a project proposal for modification once a Review has been initiated. The NIRB must ensure a full and fair review of the project proposal and the Board is confident that the EIS Guidelines will yield the information necessary to support a substantive discussion of the issues raised by the QIA and community members about this aspect of the Project.
GN	Section 5.6 Alternatives	The Alternatives sections should contain a discussion on alternative methods of transportation. Currently the project proposal does not contain any all season road corridors from communities to the site, but over the duration of the project it may become a viable method of transportation.	The Proponent should provide a discussion on the reasons for and against an all season road being constructed, and what circumstances might make this option more likely. If there is a reasonable probability that a road from the project to Iqaluit may be constructed at some point during the life of the project, the Proponent should include an impact assessment of such a road. An impact assessment for any winter roads being constructed to facilitate that building of the transmission line should also be completed.	Change incorporated	This requirement has been previously included in the EIS Guidelines, Section 5.6.3 b) (pg. 16). ‘Access roads’ has been added as an example of ancillary components of the project.
GN	Section 7.5.1 Spatial Boundaries	The rationale for the delineation of the local and regional study areas should be provided.		No change	Has been previously included in the EIS Guidelines, Section 7.5.1 (pg. 26)
GN	Section 7.11 Cumulative Effects Assessment	The most likely development impacts on terrestrial wildlife populations will stem from increased levels of human activities (including harvesting activities) due to improved access.	It would be useful to identify potential cumulative effects of or associated with increased access.	No change	The potential impacts to wildlife due to potential improved access have been identified as an item for assessment in Section 8.1.11.2 Terrestrial Environment (pg. 52) of the EIS Guidelines.
GN	Section 8.1.10.2 Vegetation Impact Assessment	The geographic delineation of the ecosystem and a consideration of impacts at that scale should be provided.		Change incorporated	

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GN	Section 8.1.11.1 Terrestrial Environment Baseline Information		<p>The Government of Nunavut recommends that section 8.1.11.1 be rewritten as follows:</p> <p>a) Identify terrestrial wildlife species that reside within or occasionally use the habitat within the RSA. Focus on terrestrial wildlife that have been identified as VECs and SARA Schedule 1 “species at risk” and any species designated as “special concern”, “threatened”, or “endangered” by COSEWIC. For each species, identify the habitat use within the RSA, identify the typical home range of the species, and delineate the subpopulation boundaries of the individuals that use the RSA. List the species in rank order determined by conservation status, VEC, importance to ecosystem function, and importance to Inuit life and culture.</p> <p>b) Describe the biodiversity within the ecological unit that contains the RSA and describe the importance of the habitat and terrestrial species within the RSA to the biodiversity of the ecological unit and ecosystem function of the ecological unit. This consideration should include both seasonal and annual descriptions of the food chain relationships among terrestrial wildlife species within the RSA and for the ecological unit that contains the RSA.</p> <p>c) Present available published information and/or information resulting from TK studies regarding identified VECs. Include information on:</p> <p>i. Relative seasonal and annual trends in abundance and distribution within the RSA and the ecological unit that contains the RSA;</p> <p>ii. Estimated productive capacity distribution within the RSA and the ecological unit that contains the RSA;</p> <p>iii. Migratory patterns and associated corridors/routes;</p> <p>iv. Define, describe, and delineate any critical habitats contained in the LSA, RSA, and the ecological unit that contains the RSA; and</p> <p>v. Sensitive time periods for species within the RSA.</p> <p>d) Describe the subpopulation trend of identified VECs within the ecological unit that contains the RSA.</p> <p>e) Include information on any disease, parasite, or contaminant loads that could be affecting the health of VEC or species at risk individuals. Indicate whether existing disease, parasite, or contaminant loads are a risk factor for humans.</p> <p>f) Provide details regarding habitat within the LSA and RSA which are important for forage, shelter and reproduction of wildlife VECs and species at risk.</p> <p>g) Identify important and/or protected wildlife habitats in the LSA and RSA as applicable, namely:</p> <p>i. National Parks, Critical Wildlife Areas, Territorial Parks and other areas with legislated protection;</p> <p>ii. Eskers;</p> <p>iii. Calving and post-calving nursing areas;</p> <p>iv. Denning sites;</p> <p>v. Staging areas;</p> <p>vi. Special locations such as salt licks, insect relief areas; and</p> <p>vii. Areas used by females and their young.</p> <p>h) Discuss migration routes, water course crossings, travel corridors and areas important for Inuit harvesting within or in the vicinity of the RSA.</p> <p>i) Provide available information from relevant scientific research and TK on the potential impacts of noise, vibration, dust and dust deposition on terrestrial wildlife VECs; and</p> <p>j) Discuss other pertinent issues identified through public consultation.</p>	Change incorporated	Section re-written based on recommendations.

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GN	Section 8.2 Socio-Economic Environment and Impact Assessment	Add a heading titled “Energy Security” to section 8.2 Socio-Economic Environment and Impact Statement.	<p>The “Energy Security” section should include:</p> <p><b>Baseline Information</b></p> <p>a) Discuss existing sources and supply of energy. Include information regarding:</p> <p>i. The amount of electricity produced per year</p> <p>ii. The amount of fuel consumed in electricity production per year</p> <p>iii. The cost of fuel</p> <p>b) Provide an overview of existing infrastructure and energy services, including:</p> <p>i. The amount of power provided to residential customers, commercial customers, and other customers.</p> <p><b>Impact Assessment</b></p> <p>a) Determine potential impact on the existing energy supply in terms of fuel displaced</p> <p>b) Provide a discussion on the effects of the Project as it relates to the existing infrastructure’s ability to integrate alternative forms of energy production (i.e. wind, solar, waste energy).</p> <p>c) Determine potential impact on energy services as it relates to cost-per-unit of energy and electricity rates paid by Nunavummiut.</p>	Some changes incorporated	A section in Energy Security has been added to the Revised Draft EIS Guidelines, Section 8.2.12. The content of this section has been developed based on GN’s recommended text.
GN	Section 8.2.8 Heritage Resources	The guidelines should clearly define who is authorized to gather this data, and should be included in the guidelines. Proponents cannot produce a summary of sites or display site locations themselves. In Nunavut, archaeological data (site location, site names, etc…) is protected by law and can only be released to an authorized archaeologist through the GN. Only an authorized archaeologist can fill out a Site Data Request to be forwarded to the Territorial Archaeologist Office. Note: the Inuit Heritage Trust is not authorized to release any archaeological information of any nature (site names, location, etc…).	<p>a) The Proponent should secure the services of an authorized archaeologist. A list of consultant archaeologists is available at the Territorial Archaeologist Office.</p> <p>b) List known archaeological sites in the selected areas. The GN can only release this list of sites to an authorized archaeologist by obtaining a formal Site Data Request.</p> <p>The forms can be obtained at the Territorial Archaeologist Office.</p>	Change incorporated	



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GN	Section 9.4.3 Spill Contingency Plan		<p>The Government of Nunavut recommends that section 9.4.3 be rewritten as follows:  The Proponent shall develop a Spill Contingency Plan based on its Environmental Policy which promotes environmental awareness, safety, and the efficient clean-up of potential spill incidents related to the Project. In the Plan, the Proponent shall address potential constraints to timely actions and immediate clean-up of spills which result from logistical and/or weather conditions and provide measures to managing these constraints. The Proponent shall include the following information in its Spill Contingency Plan:</p> <ul style="list-style-type: none"> <li>a) Identification of the requirements of federal and territorial regulations;</li> <li>b) The name, address and job title of the owner or person in charge, management or control;</li> <li>c) The names, job titles and 24-hour telephone numbers for the persons responsible for activating the spill contingency plan;</li> <li>d) A description of the facility including the location, size and storage capacity;</li> <li>e) A description of the type and amount of contaminants normally stored at the location described in paragraph d) (e.g. oil, fuel, hazardous materials, chemicals and other deleterious substances);</li> <li>f) A site map of the location described in paragraph d);</li> <li>g) The steps to be taken to report, contain, clean up and dispose of contaminants in the case of a spill;</li> <li>h) The means by which the spill contingency plan is activated;</li> <li>i) A description of the training provided to employees to respond to a spill;</li> <li>j) An inventory of and the location of response and clean-up equipment available to implement the spill contingency plan. Detailed information on clean-up strategies, technologies and corresponding inventory based on different substances and the environmental conditions where spills might occur;</li> <li>k) The date the contingency plan was prepared;</li> <li>l) A discussion of all potential spill scenarios (on land, water and ice);</li> <li>m) An outline of the duties and responsibilities of key spill response organizations and personnel;</li> <li>n) Details on spill site restoration and remediation (e.g. treatment of contaminated soils).</li> </ul>	Some changes incorporated	Where it was determined that these items were relevant and had not already been addressed in the existing requirements, changes have been incorporated as outlined in the attached revised <i>Draft</i> EIS Guidelines.
AANDC	Alternatives Section 5.6	As part of the alternatives assessment, the proponent should indicate the rationale for selecting the location for each of the proposed project sites, and include an assessment for other sites.	<p>5.6.3 Alternative Locations for the Project</p> <p>The Proponent must outline the selection criteria used to determine the locations of the project, including potential socio-economic and ecosystemic impacts of each location as outlined in Section 7.6. The alternative locations and the rationale used in the location selection process must be provided.</p>	Change incorporated	
AANDC	Section 7.10 (b) vi.	This should also include changes to timing of ice break-up.	vi. Changes to the timing of ice formation and ice breakup.	Change incorporated	
AANDC	Section 7.10 (c)	Climate change impact scenarios should also be run to include relevant hydrology models.	c) It is recommended that the range of future climates considered by the Proponent include hydrology models, scenarios used in the Arctic Impact Assessment Report (ACIA, 2005) as well as those in the relevant Intergovernmental Panel on Climate Change assessments for polar regions (IPCC 2007).	Change incorporated	
AANDC	Section 7.11 (b)	Potential cumulative impacts can occur from any activity in the area, as well as from development activities.	<i>A longer temporal scale (as defined in Section 7.5.2):</i> this will enable the Proponent to consider all activities and developments from the past into the present time and the reasonably foreseeable future for a more accurate analysis of variability and significant long-term effects;	Change incorporated	
AANDC	Section 8.2.10.1	The Proponent should provide baseline information for current utility prices for all categories of users (ie. home-owners, property management firms, government, commercial, private)	<p>8.2.10.1 Baseline Information</p> <p>e) Describe current utility prices for all categories of users (ie. home-owners, property management firms, government, commercial, private)</p>	Change incorporated	Bullet added to Section 8.2.12.1 Energy Security Baseline Information (pg. 64)

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AANDC	Section 8.2.10.2	The Proponent should provide an impact assessment of the potential impact the project will have on utility prices for all categories of users (ie. home-owners, property management firms, government, commercial, private).	8.2.10.2 Impact Assessment e) Discuss potential impacts the project will have on utility prices for all categories of users (ie. home-owners, property management firms, government, commercial, private).	Change incorporated	Bullet added to Section 8.2.12.2 Energy Security Impact Statement (pg. 64)
DFO	8.1.9.2 Impact Assessment	While this section provides good general guidance on impact assessments for the project, since this is a hydroelectric project I feel that some specific guidance related to Hydroelectric project impacts should be added.	r) Evaluate and discuss the potential impacts from the hydroelectric development including: turbine mortality for the turbine type selected and fish species impacted; designs for fish screens to prevent/minimize entrainment of fish; spillway mortality including barotrauma and risks of impacts with flow dissipaters/diffusers; risk of gas bubble disease; operation including impacts from flow ramping (e.g. cycling or pulse between high and low flows to meet changes in demand for electricity) and alternating flows between spillways and powerhouse/tailrace on fish and invertebrate stranding and fish habitat in receiving waters; emergency shut downs and impacts to flows on fish and fish habitat in receiving waters;	Change incorporated	
DFO	9.4.12 Aquatic Effects Management Plan, pg 72	While this section provides good general guidance management of impacts for the project, since this is a hydroelectric project I feel that some specific guidance related to Hydroelectric project impacts should be added	h) Evaluate and discuss mitigation measures and monitoring studies necessary to manage the potential impacts from the hydroelectric development including: turbine mortality for the turbine type selected and fish species impacted; designs for fish screens to prevent/minimize entrainment of fish; spillway mortality including barotrauma and risks of impacts with flow dissipaters/diffusers; risk of gas bubble disease; operation including impacts from flow ramping (e.g. cycling or pulse between high and low flows to meet changes in demand for electricity) and alternating flows between spillways and powerhouse/tailrace on fish and invertebrate stranding and fish habitat in receiving waters; emergency shut downs and impacts to flows on fish and fish habitat in receiving waters;	Change incorporated	
DFO	Section 9.4.14 No Net Loss Plan, pg. 73-74	DFO’s No Net Loss Policy is going to change with the implementation of the new Fisheries Act. This section of the EIS will change before an Authorization is issued for the project. I recommend that an editorial comment/placeholder be written at the top of this section indicating that changes should occur so they should discuss this aspect of the EIS with DFO prior to submittal.	[Editorial Note: When the updated Fisheries Act comes into force it is anticipated that the Policy for the management of Fish Habitat (DFO 1986) will also be updated. DFO’s No Net Loss policy is also expected to change. Please contact the DFO assessor for this project when you are preparing the EIS to ensure you are following the most up to date policy.]	Change incorporated	
DFO	Section 9.4.14 No Net Loss Plan, pg. 73	First paragraph has the wrong date for the Policy for the Management of Fish Habitat (DFO, 1991) The policy is dated 1986	Policy for the Management of Fish Habitat (DFO 1986)	Change incorporated	
DFO	Section 12.0 Literature Cited, pg. 81	Wrong date for the DFO Policy for the Management of Fish Habitat (DFO, 1991) The policy is dated 1986	DFO (Fisheries and Oceans Canada). 1986. Policy for the Management of Fish Habitat. Department of Fisheries and Oceans, Ottawa, Ontario: 32 pp.	Change incorporated	

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EC	Section 8.1.8, Sediment Quality, pg. 46	Due to the changing ability of sediments to bind and release contaminants under changing conditions, sediments have the potential to act as both sink and source for contaminants. This, in turn, has a direct affect on the aquatic environment. Comparable to the baseline information requirements for groundwater and surface water quality, a discussion of chemical characteristics of sediment should include: - baseline levels of contaminants - seasonal variation in sediment quality - comparison to relevant sediment standards / guidelines	Suggested text: 8.1.8 Sediment Quality 8.1.8.1 Baseline Information b) Discussion of chemical characteristics should include baseline levels of contaminants and should be compared to relevant sediment standards / guidelines with identification of those which are naturally elevated. c) Provide discussion on seasonal variations in sediment quality.	Change incorporated	
EC	Section 8.1.9.2 (Aquatic Environment) Impact Assessment, pg. 48	Bullet i) states: This analysis should: Discuss management measures to minimize/mitigate disturbances to fish populations and describe measures to reduce the potential for establishment of invasive species in the area; EC suggests expanding the description of invasive species to include all aquatic flora or fauna	Suggested text: 8.1.9 Aquatic Environment 8.1.9.2 Impact Assessment i) This analysis should: Discuss management measures to minimize/mitigate disturbances to fish populations and describe measures to reduce the potential for establishment of any invasive aquatic species in the area;	Change incorporated	
EC	Section 9.3, Monitoring and Mitigation Plans	Bullet i) states: Each of the monitoring and mitigation plans shall: i) Determine procedures/mechanisms to assess the effectiveness of monitoring programs, mitigation measures and adaptive management programs for areas disturbed by the Project; EC suggests adding an on-going requirement to actively seek to improve the effectiveness of the monitoring programs, mitigation measures and adaptive management programs over the life of the project.	Suggested text: 9.3 Monitoring and Mitigation Plans Each of the monitoring and mitigation plans shall: i) Determine procedures/mechanisms to assess the effectiveness of monitoring programs, mitigation measures and adaptive management programs for areas disturbed by the Project, and include a mechanism to update and improve these programs;	Change incorporated	

Source	Section	Comment/Rationale	Suggested Text/Recommendation	Action	Justification
EC	Section 9.4.9 Explosives Management Plan	The explosives management plan section covers issues associated with blasting products, and Subsection d) states: Discuss best practices to minimize usage and loss rate; Projections of estimated nitrogen loss rates should be provided, including total loadings to the surface waters.	d) Discuss best practices to minimize usage and loss rate, including predicted loss rates and nitrogen loadings to the receiving environment;	Change incorporated	
EC-CWS	Section 8.1.12.2 Birds and Bird Habitat Impact Assessment, pg. 53	Additional potential impacts to migratory birds should be included in this section.	The following bullets should be added: m) Determine potential attraction of birds to Project facilities and infrastructure for roosting and nesting sites.	Change incorporated	
EC-CWS	Section 6.5.1 General Project Description, pg. 21	Water access/transportation routes are only listed under section 6.5.2 Construction but barging/sealift resupply will occur throughout the life of the project and should be listed as a project component.	The following bullet should be added: 6.5.1 d) iii. Permanent and temporary access roads and water access/transportation routes;	Change incorporated	Barging/sealift is proposed to occur during the construction phase only. The changes to the wording were incorporated to enhance the robustness of the EIS Guidelines.
	Section 6.5.3 Operation and Maintenance, pg. 24		The following bullet should be added: 6.5.3 g) <i>Access/Transportation Infrastructure</i> : i. Describe all land, air and water access/transportation routes, including routes and frequency of use;		
TC	Section 5.6.2 Alternative Means of Carrying out the Project, pg. 15	In terms of siting and design options for the dam, there would presumably be some discussion as to whether there are alternate locations the dam could be installed. As well, however, there should be some discussion as to why the Jaynes Inlet Dam would be built first when the Armshow South Dam would be approximately 40km closer to the end-users in Iqaluit, possibly resulting in a smaller impact area over the projects initial duration. It should be clarified in the guidelines that options for the dam siting should include location and time parameters for the two proposed dams.	The EIS shall present alternatives for all Project components, with a focus on the following: a) Siting and design options for the following components of the hydroelectric facility, including: i. Intake; ii. <b>The Dams (and the order in which they are built);</b>	No change	This requirement has been previously included in the EIS Guidelines, Section 5.6.3 Alternative Means of Carrying out the Project (pg. 16).
TC	Section 6.1 Project Design, pg. 17	This single-sentence paragraph is a run-on sentence, recommend revision to ensure clarity.	In addition, the Proponent should provide a comparison of development and operation scenarios of this project with that of a similar project in a non-northern climate regime in Canada. This would emphasize differences in design, construction and operation in the northern environment.	Change incorporated	
TC	Section 6.1 Project Design, pg. 17, 1.e)	Dams should be assessed for hazards so appropriate measures can be taken to warn and protect the public from hazards. Suggest listing public safety as part of 1.e).	Design of Project <b>to ensure public safety and</b> eliminate/reduce the potential impacts to workers and the public under both normal operations and potential accident and malfunction situations;	Change incorporated	

Source	Section	Comment/Rationale	Suggested Text/Recommendation	Action	Justification
TC	Section 6.5.1 General Project Description, pg. 20, 1.c)	It would be best if the general description also provide a drawing or map showing any areas that might experience dewatering due to dam operations.	c) The reservoirs and their management, <b>including areas that will be dewatered as part of operations;</b>	Change incorporated	
TC	Section 6.5.2 Construction, pg. 21, c),i)	Typo, missing “L” in land and proponent should confirm that bathymetric information is available.	Describe all land, air and water access/transportation routes <b>and confirm that adequate bathymetric information is available for the route that will be utilized by barges and vessels;</b>	Change incorporated	
TC	Section 6.5.2 Construction, pg. 21, e),ii)	Should also discuss transmission line water crossings.	Describe line type, length, routing, <b>water crossings</b> , and the interconnection points of the transmission lines;	Change incorporated	
TC	Section 6.5.2 Construction, pg. 21, g),ix)	Clarify bullet; as meaning could otherwise be misinterpreted.	Provide details on the construction methodology, schedule and locations of <b>any</b> airstrips <del>(if applicable)-</del> .	Bullet clarified	Wording of bullet changed to “Provide details on the construction methodology, schedule and locations of <b>all</b> airstrips <b>(if airstrips are proposed as part of the Project).</b> ”
TC	Section 8.1.6.2 Impact Assessment, pg. 44f)	Bullet should be inclusive of water bodies, not just watercourses.	Assess the navigability and safety of <b>the water bodies</b> related to all Project components and activities during all phases;	Change incorporated	
TC	Section 8.1.7.1. Baseline Information, pg.45d)	Baseline information about navigation should also be collected.	Discuss the importance of the waters in the LSA with regards to local harvesting activities and <b>boating/navigation</b> by surrounding communities;	Change incorporated	
TC	Sections 8.2.11 Human Health and Safety 8.2.11.2 Impact Assessment, pg. 62	For a dam project, consideration should also be given to safety regarding sudden water flows and changes in water levels associated with dam operations.	f) Discuss impacts to human safety that may be brought about by changes in water flows and levels throughout dam construction	Change incorporated	
TC	Appendix B-1, 8) <i>The interests in lands, waters and other resources which the Proponent has secured or seeks to secure</i>	Acts should all be italicized, added “2001” to <i>Canada Shipping Act</i> and <i>Transportation of Dangerous Good Act</i> needs to be added.	Approval(s) under the <i>Navigable Waters Protection Act</i> ; Compliance with the <i>Arctic Waters Pollution Prevention Act</i> , <i>Canada Shipping Act, 2001</i> , <i>Transportation of Dangerous Goods Act</i> , and their associated regulations.	Change incorporated	