

Review Comment Table

Board:	MVLWB
Review Item:	Bluefish Power Generation Facility - Draft Water Licence - MV2020L4-0005
File(s):	MV2020L4-0005
Proponent:	Northwest Territories Power Corporation
Document(s):	Updated Work Plan (1 MB) Draft Water Licence (1 MB)
Item For Review Distributed On:	Nov 17 at 14:24 Distribution List
Reviewer Comments Due By:	Dec 3, 2020
Proponent Responses Due By:	Dec 10, 2020
Item Description:	<p>The purpose of this draft Water Licence is to allow reviewers to comment on possible conditions. These draft materials are not intended to limit, in any way, the scope of reviewers' comments.</p> <p>The Board is not bound by the contents of the draft Licence and will make its decision at the close of the proceeding on the basis of all the evidence and arguments filed by all parties. Please note that review comments and recommendations on the draft Licence must not introduce new evidence at this point in the proceeding.</p> <p>The Work Plan has been updated to reflect the cancellation of the Public Hearing. Please review as the dates have changed.</p> <p>Using the Online Review System (ORS), reviewers are invited to submit comments and recommendations on the documents linked below by the review comment deadline specified. Please clearly indicate which condition you are commenting on.</p> <p>All documents that have been uploaded to this review are also available on our public Registry. If you have any questions or comments about the ORS or this review, please contact Board staff identified below.</p>
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Comment Summary

Northwest Territories Power Corporation (Proponent)				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	General File	Comment (doc) (Submitted after Due Date) Bluefish - Draft Water Licence - MV2020L4-0005- NTPC Comment Table Recommendation		
GNWT - ENR - EAM (Environmental Assessment and Monitoring): Central Email GNWT				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
17	General File	Comment (doc) ENR Letter with Comments and Recommendations Recommendation		
1	Topic: Scope, Part A, Condition 1	Comment ENR notes the scope of the Water Licence includes depositing waste (Part A Condition 1). ENR's understanding is that NTPC is not requesting the authorization for the direct or indirect deposit of waste to waters, as part of the Bluefish Hydroelectric Facility project. This is also evident from Part F, Condition 15 which states "The Licensee shall not discharge Waste, including Wastewater, to any Watercourse, or to the ground surface within 100 metres of the Ordinary High-Water Mark of any Watercourse." Recommendation 1) ENR recommends NTPC confirm whether the proposed project includes the direct, 1) or indirect, deposit of waste to waters, as outlined in the Waters Act.	Dec 10: No deposit of waste is required.	

2	None	<p>Comment None</p> <p>Recommendation 2) Should NTPC respond that the deposit of waste to waters is not part of project activities, ENR recommends reference to the deposit of waste be removed from the scope of the Water Licence.</p>	<p>Dec 10: NTPC agrees with this recommendation.</p>	
3	Topic: Relevant Legislation	<p>Comment Part A, Condition 3 refers to the Mackenzie Valley Resource Management Act. ENR notes the use of water and deposit of waste by the project is subject to the Waters Act.</p> <p>Recommendation 1) ENR recommends Part A, Condition 3 remove the reference to the Mackenzie Valley Resource Management Act.</p>	<p>Dec 10: NTPC agrees with this recommendation</p>	
4	Topic: Definition of Power Generation Facilities	<p>Comment The proposed definition of "Power Generation Facilities" appears to be derived from the definition in the current licence; however, the current licence includes "trailraces" whereas the proposed definition includes "trailer-".</p> <p>Recommendation 1) ENR recommends NTPC clarify if trailraces should still be included in the definition of Power Generation Facilities as is written in the current licence.</p>	<p>Dec 10: NTPC agrees with this recommendation.</p>	
5	Topic: Definition of Waste	<p>Comment The draft licence does not include the definition of "waste" despite this term being defined in the Standard Water Licence Conditions and Schedules, and used throughout the draft Water Licence.</p> <p>Recommendation 1) ENR recommends the definition of waste be included in the defined terms of the Water Licence.</p>	<p>Dec 10: NTPC agrees with this recommendation.</p>	
6	Topic: Water Withdrawal Source	<p>Comment Part D, Condition 1, states: "The Licensee shall only obtain Water for the Project from the McCrea River and Yellowknife River. The Licensee may withdraw and return up to 55 cubic metres per second (m³/s) of Water from</p>	<p>Dec 10: Part D, Condition 1, should state;The Licensee shall only regulate water from the McCrea River at the</p>	

		<p>this source." ENR notes this condition isn't clear as it identifies two rivers in the first sentence but then the second sentence appears to only identify "this source" which is singular. Further, ENR understands this condition to be derived from the Water Licence Application form under which Section 7 states: "Use, divert and store water from the McCrea River and the Yellowknife River to the Duncan and Bluefish Lakes." and "Quantity of water used and returned to source is between 10 and 55 m3 /s." However, Section 1.1.3 of the OMS Manual Volume 1 explains that water intake is from Bluefish Lake.</p> <p>Recommendation 1) ENR recommends NTPC clarify whether it would be more accurate to state that the source of water withdrawal is Bluefish Lake.</p>	<p>outlet of Duncan Lake and regulate or divert water from the Yellowknife River at the outlet of Bluefish Lake. Diversion of water shall not exceed 55 m3/s.</p>	
7	None	<p>Comment None</p> <p>Recommendation 2) ENR recommends that Part D, Condition 1 be clarified to identify the waterbody where the withdrawal station is located.</p>	<p>Dec 10: See response to ENR#7.</p>	
8	Topic: Water Intake Screen	<p>Comment Condition D.4 of the current licence states "The Licensee shall install and maintain a guard on all water intakes to prevent entrainment of fish in accordance with the Fisheries Act and any other applicable legislation." Similarly, Standard Water Licence Condition Part D, Condition 6 states "The Licensee shall construct and maintain the Water intake(s) with a screen designed to prevent impingement or entrapment of fish." ENR notes it isn't clear why the draft licence does not include a condition to this effect.</p> <p>Recommendation 1) ENR recommends a condition be included in the Water Licence to ensure water intakes are installed to prevent entrainment of fish.</p>	<p>Dec 10: NTPC would agree to the addition of such a condition</p>	

9	Topic: Progressive Reclamation Notification	<p>Comment The Standard Water Licence Condition Part I, Condition 7 is not included in the draft Water Licence. This condition requires: "Beginning [enter date, including the year] and no later than every [enter date] thereafter, the Licensee shall provide written notification to the Board and an Inspector of any approved Progressive Reclamation that will be conducted in the upcoming year". Notification shall include the name and contact information for the individual responsible for overseeing the Progressive Reclamation. Written notification shall be provided to the Board and an Inspector if any changes occur." It is indicated that the rationale for this condition is to allow the Inspector to plan a site visit if necessary. ENR notes it is possible that progressive reclamation occur during the term of this Water Licence, and therefore these conditions should be included in the Water Licence.</p> <p>Recommendation 1) ENR recommends Standard Water Licence Condition Part I, Condition 7, be included in the Water Licence.</p>	<p>Dec 10: NTPC would agree to the addition of such a condition</p> <p>Dec 10: Please disregard above response. NTPC feels this condition is not required as progressive reclamation should not occur under the term of this licence and this additional submission would be a waste of resources. This condition is more suited to mining operations.</p>	
10	Topic: Part I, Condition 2	<p>Comment Part I, Condition 2 of the draft Water Licence requires: "Three years prior to the expiry date of this licence, or a minimum of two years prior to the end of operations, whichever occurs first, the Licensee shall submit to the Board, for approval, an Interim Closure and Reclamation Plan." ENR notes the rationale for this condition listed in the Standard Water Licence Conditions is to ensure additional information gathered over the life of a project can be incorporated into the Closure and Reclamation Plan. Since the Bluefish</p>	<p>Dec 10: NTPC would agree to this change</p>	

		Power Generation Facility is a long-term project, interim updates should be at the discretion of the Board with a final plan required prior to the end of operations. Recommendation 1) ENR recommends the Water Licence require a revised Interim Closure and Reclamation Plan at the discretion of the Board (in addition to Part I, Condition 1).		
11	None	Comment None Recommendation 2) ENR recommends the Water Licence require a Final Closure and Reclamation Plan a minimum of two years prior to the end of operations.	Dec 10: NTPC would agree to this change	
12	Topic: Closure and Reclamation Standard Conditions	Comment Several Standard Water Licence Conditions are not included in the draft Licence including, Part I, Conditions 9 (Closure and Reclamation Completion Report), 10 (Post-Closure and Reclamation Monitoring and Maintenance Plan) and, 11 (Performance Assessment Report). ENR notes that if it is possible there is a trigger for a Final Closure and Reclamation Plan within the term of the Licence, these conditions should also be included, but would not be triggered unless NTPC proceeded into final closure. Recommendation 1) ENR recommends Standard Water Licence Conditions Part I, Conditions 9, 10 and, 11 be included in the Water Licence.	Dec 10: NTPC agrees to this comment	
13	Topic: Operations, Maintenance and Surveillance Manual	Comment The draft Water Licence does not require the submission and approval of the Operations, Maintenance and Surveillance Manual despite the Standard Water Licence Condition (Part F, Condition 3 and 4) requirements related to Operations and Maintenance Plans. Recommendation 1) ENR recommends the Water Licence require the	Dec 10: NTPC does not support his change as additional approval for the Operations, Maintenance and Surveillance Manual is not required as 2 Operations, Maintenance and	

		submission and approval of the Operations, Maintenance and Surveillance Manual, similar to the standard of submission and approval of Operation and Maintenance Plans.	Surveillance Manuals were submitted as part of the WL application.	
14	Topic: Conditions Applying to Modifications	<p>Comment In review of the Standard Water Licence Conditions, GNWT-ENR disagreed with the removal of conditions applying to modifications. ENR therefore disagrees with the removal of conditions applying to modifications from the draft Water Licence.</p> <p>Recommendation 1) ENR recommends conditions related to modifications (Part E of the current licence, or similar) remain in the new Water Licence.</p>	<p>Dec 10: NTPC does not support this change, as the definition of a modification is not clear. If any changes in operations occur that require changes in the WL NTPC will apply for an amendment at that time.</p>	
15	Topic: NTPC Datum	<p>Comment The current Water Licence, Schedule 1, Item 1, a requires: "A listing of the recorded daily and monthly water levels in metres (NTPC Datum at Bluefish Lake Dam and NTPC Datum at Duncan Lake) at Bluefish and Duncan Lakes Dam Reservoirs". The draft Water Licence Schedule 1, Item 1, b, is almost the same but does not specify NTPC Datum at Bluefish Lake Dam and NTPC Datum at Duncan Lake.</p> <p>Recommendation 1) ENR recommends Schedule 1, Item 1, b, be written as is in the current Water Licence, specifying NTPC Datum at Bluefish Lake Dam and NTPC Datum at Duncan Lake.</p>	<p>Dec 10: NTPC agrees with this recommendation.</p>	
16	Topic: Defined Terms	<p>Comment ENR notes there are some defined terms that are not found within the rest of the draft Water Licence; for example, seepage and sump.</p> <p>Recommendation 1) ENR recommends the list of defined terms be limited to terms that are written in the Water Licence.</p>	<p>Dec 10: NTPC agrees with this recommendation.</p>	

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	Scope, Part 1- Scope	<p>Comment (Submitted after Due Date) Scope, Part 1- Scope requires updated wording to clearly define the Bluefish Facility and scope of water licence. With the current wording the source and use of water is not clearly defined. Also, Scope Part 1, c) "Depositing of Waste to .; and" is not required as the facility does not deposit waste, it diverts and stores water for hydroelectric purposes. The proposed wording in the recommendation clearly defines the sources and uses of water for the Bluefish Facility and should be updated as such to avoid legal issues throughout the term of the licence</p> <p>Recommendation Scope, Part 1- Scope should be updated to: This Licence entitles the Licensee to use water for the Class II hydroelectric power undertaking at the Bluefish Power Generation Facility. The scope of this Licence includes the following: a) Store and divert water from the McCrear River at Duncan Lake and store and divert water from the Yellowknife River at Bluefish Lake and associated uses. b) Operation and maintenance of the Power Generation Facilities; and c) Associated Closure and Reclamation activities.</p>		
2	Scope, Part 3- Legislation Subject to Change	<p>Comment (Submitted after Due Date) Scope, Part 3- Legislation Subject to Change states : "This Licence is issued subject to the conditions contained herein with respect to the use of Water and the deposit of Waste in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Any</p>		

		<p>change made to the Mackenzie Valley Resource Management Act or Waters Act] and/or the Waters Regulations that affects licence conditions and defined terms will be deemed to have amended this Licence."</p> <p>Recommendation NTPC would like the Board to clarify how the deeming provisions would work</p>		
3	<p>Defined Terms- Aquatic Effects Monitoring Program (AEMP</p>	<p>Comment (Submitted after Due Date) Defined Terms- Aquatic Effects Monitoring Program (AEMP) currently states: "Aquatic Effects Monitoring Program (AEMP) - includes the Mercury Monitoring Program (MMP) that is designed to monitor changes in mercury concentrations in Water, sediment, and fish tissue. " Discussions throughout the engagement process, Online Review and the Technical Session resulted in interventions from Department of Environment and Natural Resources Government of the Northwest Territories (ENR) and Tlicho Government (TG) regarding the inclusion of a Slimy Sculpin Mercury Monitoring study which NTPC had committed to completing as requested. Neither ENR or TG requested an AEMP in their interventions and ENR stated, "Although satisfied with NTPC's reasoning for not requiring an AEMP, ENR is of the opinion that further mercury monitoring is warranted." For clarity the Aquatic Effects Monitoring Program (AEMP) term should be removed and replace with Mercury Monitoring Study (MMS) which better represents the study requested by ENR and TG and agreed upon by NTPC. The definition of the MMS removes reference to monitoring of water or sediment as the interventions made it clear that only a slimy sculpin monitoring</p>		

		<p>program is required and water and sediment have not been a component of the previous mercury monitoring at Bluefish since new dam was installed.</p> <p>Recommendation The Aquatic Effects Monitoring Program (AEMP) definition should be removed as it is not applicable in this licence and does not accurately represent the mercury monitoring requested by Department of Environment and Natural Resources Government of the Northwest Territories (ENR) and Tlicho Government (TG) in their interventions (dated 20 October and 19 October respectively). For clarity a Mercury Monitoring Study (MMS) definition should be included instead which should state: Mercury Monitoring Study (MMS)- designed to monitor changes in mercury concentrations in slimy sculpin and if required game fish tissue</p>		
4	<p>Defined Terms- Bluefish Lake Dam</p>	<p>Comment Submitted after Due Date) Defined Terms- Bluefish Lake Dam currently states "Bluefish Lake Dam - the permanent structure (including Spillway, membrane, and abutments) at the outlet of Bluefish Lake to be operated under this Licence." There is no membrane in the new dam and this term should be removed. A definition for Duncan Lake Dam should also be added.</p> <p>Recommendation Definition should be updated to state: Bluefish Lake Dam- The permanent structure including spillways and abutments at the outlet of Bluefish Lake to be operated under this Licence. An additional definition for Duncan Lake Dam should also be added that states: Duncan Lake Dam- The permanent structure including spillway and abutments at the outlet of Duncan Lake to be operated under this Licence.</p>		

5	Defined Terms- Engineer of Record	<p>Comment (Submitted after Due Date) Defined Terms- currently includes "Engineer of Record - a qualified Professional Engineer who is responsible for the design and performance of the Dam(s)." This term has not been included in any of NTPC's water licence's to date. The Canadian Dam Safety Association (CDA) Guidelines 2013 mention only Review, Design, and Dam Safety/Surveillance engineers. It is noted that the Design Engineer must be consulted during new construction or making improvements to existing dams when deviating from initial design specifications. A CDA technical bulletin in 2019 for applying dam safety guidelines to mining dams defined the Engineer of Record as: "The Engineer of Record is often the Design Engineer, but this is not always the case. The Design Engineer is responsible for the design of the dam, up to and including the construction that is completed while the EOR provides ongoing support. The Design Engineer for a dam often transitions into becoming the EOR. However, there are cases where the EOR may oversee the activities of a Design Engineer working under their direction and there are cases where the EOR was not involved in the design but provides ongoing support after construction has been completed. In the latter case, the EOR has to take the necessary measures to become familiar with the design, construction, performance, and operation of the dam. The EOR will either be a consultant to the Owner or a member of the Owner's staff. In some cases, an Owner may designate someone who takes on the role of the EOR but is not named as the EOR (for example they might be referred</p>		
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		<p>to as a Dam Safety Engineer)." NTPC would like to note that in the CDA Guidelines the Engineer of Record is a term directed at mining dams which is a different undertaking than the Bluefish hydroelectric dams. Also, the engineer who developed the design for a dam and the engineer that is responsible for maintaining the performance of the dam is two separate engineers for all NTPC dams. Keeping this definition under one term could results in legal issues when defining accountability for design and maintenance of NTPC dams moving forward and set a precedent for other NTPC water licence's which could cause legal issues as well.</p> <p>Recommendation For legal clarity and applicability to the NTPC hydroelectric dams the Engineer of Record definition should be divided into two separate definitions which would apply to two separate engineers; Dam Safety Engineer and Dam Design Engineer. Dam Safety Engineer- a qualified Professional Engineer who is responsible for maintaining the Dam(s) as per the design from the dam design engineer.Dam Design Engineer- a qualified Professional Engineer who is responsible for the design of the Dam(s)</p>		
6	<p>Defined Terms- Power Generation Facilities</p>	<p>Comment (Submitted after Due Date)Defined Terms- Power Generation Facilities currently states "Power Generation Facilities- means the Duncan Lake Reservoir and control structure, McCrea River, Yellowknife River, Bluefish Lake Dam and associated Bottom Outlet and overflow Spillway, and the Bluefish forebay, penstock, intake, powerhouses and trailer -" This wording needs to be updated to align with other definitions of the Bluefish Hydro facility throughout</p>		

		<p>the water licence</p> <p>Recommendation Definition should be updated to state: Power Generation Facilities- means the Duncan Lake Dam and Reservoir, Bluefish Lake Dam and Reservoir, and the Bluefish penstocks, intake, powerhouses and tailraces</p>		
7	Defined Terms- Water Supply Facilities	<p>Comment (Submitted after Due Date) Defined Terms- Water Supply Facilities currently states "Water Supply Facilities - the area(s) and structures designed to collect and supply Water for the Project."</p> <p>Recommendation This definition is not required at it does not apply to this licence and the term is not used anywhere in the licence. Definition should be removed</p>		
8	Part D: Water Use- Condition 1- Water Source and Maximum Volume	<p>Comment (Submitted after Due Date) Condition currently states- "The Licensee shall only obtain Water for the Project from the McCrea River and Yellowknife River. The Licensee may withdraw and return up to 55 cubic metres per second (m3/s) of Water from this source."The wording of this condition is somewhat vague when describing the Bluefish operations and infrastructure.</p> <p>Recommendation For clarity condition should be updated to state: The Licensee shall only regulate water from the McCrea River at the outlet of Duncan Lake and regulate or divert water from the Yellowknife River at the outlet of Bluefish Lake. Diversion of water shall not exceed 55 m3/s.</p>		
9	Part E: Construction- Condition 1 and 2	<p>Comment (Submitted after Due Date) Reference to "Waste" should be removed from these conditions as the proposed use does deposit waste to water</p> <p>Recommendation Remove or Wastes</p>		

		from Part E: Construction Conditions 1 and 2		
10	Part E: Construction-Condition 4- Construction Records	<p>Comment (Submitted after Due Date)Reference to "all structures" is too vague and should be replaced with construction records for the dam specifically.</p> <p>Recommendation For clarity condition should be updated to state: The Licensee shall maintain records of Construction materials for the Bluefish Lake Dam and make them available at the request of the Board or an Inspector</p>		
11	Part E: Construction-Condition 5- Geochemical Records	<p>Comment (Submitted after Due Date) Reference to "Bluefish Power Generation Facility" is too vague and should be replaced with geochemical records for the dam specifically.</p> <p>Recommendation For clarity condition should be updated to state: The Licensee shall maintain geochemical records of Construction materials for the Bluefish Lake Dam and make them available at the request of the Board or an Inspector.</p>		
12	Part E: Construction-Facility Dams-Condition 6- Engineer of Record	<p>Comment (Submitted after Due Date) As outlined in Comment 5 NTPC recommends the removal of the term "Engineer of Record" from the Bluefish WL.</p> <p>Recommendation Condition should be updated to Dam Safety Engineer- . The Licensee shall retain a Dam Safety Engineer for the Bluefish Power Generation Facilities</p>		
13	Part E: Construction-Facility Dams-Condition 7- Dam Classification	<p>Comment (Submitted after Due Date) The review of the classification of all dams is part of the Comprehensive Dam Safety Review as per the CDA Guidelines. The classification of the dams would only change if major works were completed or if major changes occurred in the basin. These changes would be captured</p>		

		<p>in the Annual Inspections outlined in Part F: Condition 9 and the classification review will be completed as part of the Comprehensive Dam Safety Review outlined in Part F Condition 10</p> <p>Recommendation NTPC recommends this condition is removed as it is already covered under Part F: Condition 9 and Condition 10 and is not required as per CDA guidelines.</p>		
14	Part E: Construction-Facility Dams-Condition 8-Quantifiable Performance Objectives	<p>Comment (Submitted after Due Date)As outlined in Comment 5 NTPC recommends the removal of the term "Engineer of Record" from the Bluefish WL.</p> <p>Recommendation Condition should be updated to refer to Dam Safety Engineer rather than Engineer of Record.</p>		
15	Part F: Waste and Water Management-Condition 1	<p>Comment (Submitted after Due Date) Reference to "Waste" should be removed as the proposed use does not deposit waste to water.</p> <p>Recommendation Remove Waste and from Part F: Waste and Water Management- Condition 1</p>		
16	Part F: Waste and Water Management - Management and Monitoring Plans- Conditions 3 and 4	<p>Comment (Submitted after Due Date)Part F: Waste and Water Management - Management and Monitoring Plans- Conditions 3 and 4 refers to the Incineration General Operational Plan which is already included in the Waste Management Plan, as is current practice for other projects</p> <p>Recommendation For efficiency Part F: Waste and Water Management - Management and Monitoring Plans Conditions 3 and 4 related to the Incineration General Operational Plan should be removed, as it is already included in the Waste Management</p>		

		Plan, as is current practice for other projects		
17	Part F: Waste and Water Management Operational Structures and Facilities- Condition 6- Minimum Flow	<p>Comment (Submitted after Due Date) Condition currently states- " The Licensee shall maintain a minimum flow of six cubic metres per second in the Yellowknife River between Bluefish Lake and Prosperous Lake." The wording of this condition is somewhat vague when describing the Bluefish operations and infrastructure. It also does not account for a minimum flow amount approved by Fisheries and Oceans to maintain fish habitat in the spillway</p> <p>Recommendation For clarity condition should be updated to state: The Licensee shall maintain a minimum flow of six cubic metres per second in the Yellowknife River Below the Bluefish Powerhouses and above the inlet to Prosperous Lake. A minimum flow of 0.75 cubic metres per second shall be maintained in the spillway between the Bluefish Dam and the Yellowknife River below the Bluefish Powerhouses.</p>		
18	Part F: Waste and Water Management Operational Structures and Facilities- Condition 7- Reservoirs Operation Plan	<p>Comment (Submitted after Due Date) Submission dates have been moved from June 30 and December 31 in the existing licence to June 1 and December 1 in the draft licence. NTPC requests that the due dates remain the same as in the existing licence as June 1 is too early to capture the spring data required to properly forecast the next 6 months and for the winter date remaining at December 31 would be more efficient for reporting as it aligns with reporting for other NTPC water licence's. Also, condition refers to "reservoir levels above mean sea level ." when it should refer to the NTPC datum.</p> <p>Recommendation NTPC requests that the condition be updated to state: The Licensee shall submit to the Board, prior</p>		

		to June 30 and December 31 of each year, a Reservoirs Operation Plan for the next six-month period. The Plan shall show the forecasted monthly average river inflow and outflow values in cubic metres per second and subsequent reservoir levels in the NTPC Datum.		
19	Part F: Waste and Water Management Inspection of Structures and Facilities- Condition 8- Inspection of Facilities	<p>Comment (Submitted after Due Date) This condition refers to the "Operation Maintenance System Manual". This should be updated to "Operations Surveillance and Maintenance Plan</p> <p>Recommendation For clarity condition should be updated to state: The Licensee shall conduct inspections of the Bluefish Power Generation Facilities as outlined in the Operations Surveillance and Maintenance Plan or as otherwise directed by an Inspector or the Board. Records of these inspections shall be made available to the Board or an Inspector upon request.</p>		
20	Part F: Waste and Water Management Inspection of Structures and Facilities- Condition 9 Annual Geotechnical Inspection	<p>Comment) Submitted after Due Date) The term "geotechnical" should be removed from this condition. A geotechnical inspection involves drilling and determining the geotechnical conditions of the engineered structures. This is not required on an annual basis by the CDA Guidelines and is not practical to include as a condition. NTPC hires a third-party engineer to complete Annual Inspections for all its dams. The completion of a full third-party annual inspection report for all dams is in exceedance of the requirements of the CDA Guidelines but NTPC has adopted this as part of its Dam Safety Management Program for an additional factor of safety for all dams. This condition should refer to this annual inspection. Also the wording for 9 a) should be updated slightly as it will be</p>		

		<p>very difficult and in some cases not possible to inform the inspector before events exceed design criteria and NTPC sees no value in informing the inspectors before inspections occur as no results will be available at that point.</p> <p>Recommendation For clarity condition should be updated to state: Annual Inspection- The Licensee shall ensure that inspections of all Engineered Structures are conducted annually, and following any events that exceed design criteria, by a Professional Engineer. The Licensee shall: a) One week after events that exceed design criteria occur, provide written notification to an Inspector; and b) Within 90 days of completing the inspection, submit the Professional Engineers full Inspection Report to the Board and an Inspector. The Report shall include: i. a covering letter from the Licensee outlining an implementation plan to respond to any recommendations made by the Professional Engineer, including rationale for any decisions that deviate from the Professional Engineers recommendations; and ii. a summary of any actions taken by the Licensee to address the recommendations made following the previous years inspection.</p>		
21	Part F: Waste and Water Management Inspection of Structures and Facilities- Conditions 10 and 11	<p>Comment <(Submitted after Due Date)The word "Comprehensive" should be added in front of the "Dam Safety Review" referred to in Conditions 10 and 11. This is in alignment with the CDA Guidelines and will help to differentiate this undertaking from the annual inspections</p> <p>Recommendation Add Comprehensive before Dam Safety Review in the text and titles for Part F: Waste and Water</p>		

		Management Inspection of Structures and Facilities- Conditions 10 and 11.		
22	Part G: Aquatic Effects Monitoring	<p>Comment (Submitted after Due Date) Part G: Aquatic Effects Monitoring should be renamed to Mercury Monitoring Study (MMS) for the reasons outlined in Comment ID 3</p> <p>Recommendation Part G should be renamed to Part G- Mercury Monitoring Study (MMS) to accurately represent the mercury study requested by Department of Environment and Natural Resources Government of the Northwest Territories (ENR) and Tlicho Government (TG) in their interventions and agreed upon by NTPC.</p>		
23	Part G: Aquatic Effects Monitoring- Conditions 1-5 and Schedule 2	<p>Comment (Submitted after Due Date)Condition currently refers to Mercury Monitoring Program (MMP), this should be replaced with Mercury Monitoring Study (MMS) to accurately represent the mercury study requested by Department of Environment and Natural Resources Government of the Northwest Territories (ENR) and Tlicho Government (TG) in their interventions and agreed upon by NTPC.</p> <p>Recommendation For clarity any reference to the Mercury Monitoring Program (MMP) in Part G Conditions 1-5, Schedule 2 and anywhere else in the licence should be updated to Mercury Monitoring Study (MMS).</p>		
24	Part G: Aquatic Effects Monitoring- Condition 3- MMP Re- evaluation Report	<p>Comment (Submitted after Due Date)Condition currently states: :Three years following implementation of the MMP Design Plan, and every three years thereafter, or as directed by the Board, the Licensee shall submit to the Board, for approval, an MMP Re-Evaluation Report. " The wording of "every three years thereafter" is not required as the</p>		

		<p>Board will recommend whether the study needs to continue based on the results submitted so "as directed by the Board" is all that is required in this condition. The three year timing from the start of the licence is congruent with the TG recommendation of waiting a few years for the study and removing the "every three years thereafter" will not tie the submission to a three year period but only when it is required.</p> <p>Recommendation Condition should be updated to state: Three years following implementation of the MMS Design Plan, or as directed by the Board, the Licensee shall submit to the Board, for approval, an MMS Re-Evaluation Report.</p>		
25	<p>Part G: Aquatic Effects Monitoring- Condition 4- MMP Design Plan Revised</p>	<p>Comment (Submitted after Due Date)Condition should make it clear that a revised MMS Design Plan will only be required if the study is still ongoing</p> <p>Recommendation Condition should be updated to state: Every three years following implementation of the MMS Design Plan, or as directed by the Board, the Licensee shall submit to the Board, for approval, a revised MMS Design Plan if the study is still ongoing.</p>		
26	<p>Part G: Aquatic Effects Monitoring- Condition 5- MMP Annual Report</p>	<p>Comment (Submitted after Due Date) The MSS Annual Report should be renamed to MMS Scheduled Report to clarify that it will be required only while the study is ongoing not annually throughout the term of the licence. Some additional wording of replacing "thereafter" with "within the timeframe identified in the approved MMS Design Plan" will also further clarify this</p> <p>Recommendation Condition should be updated to Scheduled Report and state: Beginning March 31, 2021 and no later than March 31 of each year within the timeframe identified in the approved</p>		

		MMS Design Plan, the Licensee shall submit to the Board, for approval, a MMS Scheduled Report. The Report shall be in accordance with the requirements of Schedule 2, condition 1.		
27	Part I: Closure and Reclamation-Condition 1- Closure and Reclamation Plan	<p>Comment (Submitted after Due Date) Unlike a mine or other more temporary use of water this facility will not be entering closure and reclamation throughout the term of this licence. If for some exceptional circumstance part of the facility required closure NTPC would issue a notification to the Board as the water licence would need an amendment. At this time the Board could request an Interim Closure and Reclamation Plan. For this reason the requirement for NTPC to submit an Interim Closure and Reclamation Plan 2 years from the start of the licence should be removed and the plan should be required at the Boards request. This is in line with the ENR recommendation which stated, "ENR recommends the Water Licence require a revised Interim Closure and Reclamation Plan at the discretion of the Board (in addition to Part I, Condition 1)."</p> <p>Recommendation NTPC recommends that the condition be updated to state: Interim Closure and Reclamation Plan- At the discretion of the Board the Licensee shall submit to the Board, for approval, an Interim Closure and Reclamation Plan. The Plan shall be in accordance with the requirements of Schedule 3, condition 1</p>		
28	Part I: Closure and Reclamation-Condition 2- Closure and	<p>Comment (Submitted after Due Date) As outlined above NTPC has recommended that an Interim Closure and Reclamation Plan is only required at the discretion of the Board. An Interim Closure and Reclamation Plan will not likely be</p>		

	Reclamation Plan- Update	<p>required so for simplicity and in line with ENR recommendations a Final Closure and Reclamation Plan should be all that is required to capture the changes in the facility over the term of the licence. This is in line with ENR recommendations which stated "ENR recommends the Water Licence require a Final Closure and Reclamation Plan a minimum of two years prior to the end of operations"</p> <p>Recommendation NTPC recommends that the condition be updated to state: Final Closure and Reclamation Plan- Three years prior to the expiry date of this Licence, or a minimum of two years prior to the end of operations, whichever occurs first, the Licensee shall submit to the Board, for approval, a Final Closure and Reclamation Plan.</p>		
29	Part I: Closure and Reclamation- Condition 3- Progressive Reclamation	<p>Comment (Submitted after Due Date) This condition is directed at mining operations (progressively reclaiming drills sites etc.) and does not apply to NTPC hydroelectric facilities.</p> <p>Recommendation This condition does not apply to NTPC hydroelectric facilities and should be removed.</p>		
30	Schedule 2: Conditions Applying to Aquatic Effects Monitoring	<p>Comment (Submitted after Due Date) As outlined in comment 3 the term Aquatic Effects Monitoring (AEMP) should be replaced with Mercury Monitoring Study (MMS</p> <p>Recommendation NTPC recommends that Schedule 2 be updated to state Schedule 2: Conditions Applying to the Mercury Monitoring Study</p>		
31	Schedule 2: Conditions Applying to Aquatic Effects	<p>Comment (Submitted after Due Date) As outlined in comments 23 and 26 the "MMP Annual Report" should be referred to as MMS Scheduled Report</p> <p>Recommendation Update MMP Annual Report to MMS Scheduled Report</p>		

	Monitoring-Condition 1			
32	Schedule 2: Conditions Applying to Aquatic Effects Monitoring-Condition 1 e)	<p>Comment (Submitted after Due Date) The wording in this condition should be more specific to the scope of the Mercury Monitoring Study as the interpretation of results should be focused on comparing the monitoring results to applicable guidelines. Also reference to the Project should be removed as the mercury monitoring is related to the construction of the new dam in 2012 which is not included in this licence.</p> <p>Recommendation NTPC recommends that the condition be updated to state: An interpretation of the results, including an evaluation of mercury levels and trends over time and compared to CIFA guidelines;</p>		
33	Schedule 2: Conditions Applying to Aquatic Effects Monitoring-Condition 1 f)	<p>Comment (Submitted after Due Date)The wording of this condition should be more specific to the scope of the Mercury Monitoring Study and include analysis of historical mercury monitoring results for Bluefish Lake.</p> <p>Recommendation NTPC recommends that the condition be updated to state: An analysis that integrates the results of historic monitoring of mercury in fish in Bluefish Lake;</p>		
34	Annex A: Surveillance Network Program- Part B Site Descriptions and Monitoring Requirements- (SNP) 735-1 (active)	<p>Comment (Submitted after Due Date) Description of location should be more specific.</p> <p>Recommendation Location should be updated to state Bluefish Powerhouse #1 (P107)</p>		

35	Annex A: Surveillance Network Program- Part B Site Descriptions and Monitoring Requirements- (SNP) 735-2 (active)	<p>Comment (Submitted after Due Date) Description of location should be more specific.</p> <p>Recommendation Location should be updated to state Bluefish Powerhouse #2 (P106)</p>		
36	Annex A: Surveillance Network Program- Part B Site Descriptions and Monitoring Requirements- (SNP) 735-3 and 735-4 (active)	<p>Comment (Submitted after Due Date) Some minor formatting changes are required for clarity</p> <p>Recommendation SNP) 735-3 and 735-4 (active) should be separated into two tables for consistency with the other SNP Monitoring sites, and to reflect the fact that the locations are far apart. Also move ahead of SNP 735-5 in the document</p>		
37	Annex A: Surveillance Network Program- Part B Site Descriptions and Monitoring Requirements- (SNP) 735-6 (active)	<p>Comment (Submitted after Due Date) This gauge is measuring flow/ water level that NTPC has no control of and are not related to the operation of the facilities at Bluefish or Duncan Lake. The gauge was installed to possibly assist in the forecasting for the system, but this site is prone to backwater effects due to icing for most of the winter months and it is questionable as to the usefulness of the data for operational decisions. It may be discontinued as a NTPC sponsored site or be relocated to a different site</p> <p>Recommendation Given that this gauge is measuring flow/ water level that NTPC has no control of, was installed for forecasting only, has issues with data reliability and may be discontinued or relocated it should be removed from the Surveillance Network Program</p>		

