

**Mining and Lands Tribunal**  
Tribunal des Mines et des Terres



**ISSUE DATE:** July 18, 2019

**CASE NO.:** LR 001-17

**PROCEEDING COMMENCED UNDER** section 11 of the *Lakes and Rivers Improvement Act*, R.S.O. 1990, c. L. 3, as amended

**Applicant:** Lizard Creek Power Inc.  
**Respondent:** Ministry of Natural Resources and Forestry  
**Subject:** An Inquiry as to Whether the Refusal of Approval for the Location of the Proposed Dam and Hydroelectric Facility is Fair, Sound and Reasonably Necessary to Achieve the Purposes of the Act  
**Property Address/Description:** UTM NAD 83, Zone 17, 5119078N 384022E  
Lizard Creek System, North Shore Township  
**MLT Case No.:** LR 001-17  
**MLT Case Name:** Lizard Creek Power Inc. v. Ontario (Natural Resources and Forestry)  
**Heard:** December 3 to 7, 10, 11 and 13, 2018 in Toronto, Ontario, and in writing

**APPEARANCES:**

**Parties**

**Counsel**

Lizard Creek Power Inc.

R. Douglas Elliott  
N. Joan Kasozi  
Sakina Babwani

Ministry of Natural Resources and Forestry

Zachary D'Onofrio  
Jane Thompson

**REPORT DELIVERED BY MAUREEN CARTER-WHITNEY AND HELEN JACKSON**

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## REASONS

### Background

[1] Lizard Creek Power Inc. (“LCPI” or “Applicant”) proposes a dam and hydroelectric facility (“Project”) to be located at UTM NAD 83 Zone 17, 5119078N 384022E within the Lizard Creek System, in the North Shore Township, 20 kilometres southeast of the City of Elliot Lake (“Site”). On June 2, 2017, the Minister of Natural Resources and Forestry (“Minister”) received from LCPI an application for approval of the location of the Project (“Application”) under s. 14 of the *Lakes and Rivers Improvement Act* (“*LRIA*”). On December 15, 2017, the Minister issued a Notice of Intention to Refuse Location Approval (“*NIRLA*”) under s. 11(1) of the *LRIA*.

[2] On December 21, 2017, LCPI requested an inquiry into this matter, pursuant to s. 11(4) of the *LRIA* (“*Inquiry*”). As set out in s. 11(10), the purpose of the *Inquiry* is to inquire as to whether the refusal of approval for the location of the Project is fair, sound and reasonably necessary to achieve the purposes of the *LRIA*. Maureen Carter-Whitney, Vice-Chair of the Mining and Lands Tribunal (“*Tribunal*”), and Helen Jackson, a Member of the *Tribunal*, were appointed *Inquiry Officers* under s. 11(6) of the *LRIA*. Pursuant to s. 11(6), the *Inquiry Officers* were directed to inquire as to whether the refusal of location approval is fair, sound and reasonably necessary to achieve the purposes of the *LRIA*.

[3] Pursuant to s. 11(8) of the *LRIA*, LCPI and the Ministry of Natural Resources and Forestry (“*MNRF*” or “*Crown*”) were parties to the *Inquiry*. On September 12, 2018, the *Inquiry Officers* asked the parties to advise as to whom the Notice of *Inquiry* should be provided so that anyone with a direct interest in the matter would be made aware of the *Inquiry* and could seek to be added as a party to the proceeding, in accordance with s. 11(7) and (8) of the *LRIA*. On September 28, 2018, the *Inquiry Officers* received responses from LCPI and the Minister identifying persons to whom, in their respective views, notice of the *Inquiry* should be provided.

[4] In the Notice of *Inquiry* issued on October 5, 2018, the *Inquiry Officers* sought to

identify persons with a direct interest in the matter and who might wish to be a party to the proceeding, and requested submissions from any such persons by November 2, 2018, stating the nature of their direct interest in the matter and providing other information as requested in the Notice. The Inquiry Officers provided the Notice of Inquiry to the persons identified by LCPI and the Minister, and directed LCPI to give general notice of the Inquiry in three local newspapers.

[5] On October 15, 2018, Paul Norris, President of the Ontario Waterpower Association (“OWA”), responded to the Notice of Inquiry, seeking to take part in the Inquiry as a party and providing submissions in support of this request. However, as set out in their Order, dated November 20, 2018, the Inquiry Officers determined that the OWA had not demonstrated that it had a direct interest in this Inquiry and, therefore, did not add the OWA as a party under s. 11(8) of the *LRIA*.

[6] The Inquiry hearing took place in the City of Toronto on December 3 to 7, 10, 11 and 13, 2018. The Inquiry Officers received closing legal submissions in writing after hearing the oral evidence. While the parties provided a very detailed List of Issues, the Inquiry Officers have re-framed and considered these issues as set out below.

[7] At the beginning of the proceeding, the Inquiry Officers made a procedural determination permitting Rick Roberts to testify as a witness for LCPI at the Inquiry. The Inquiry Officers provided their reasons for this disposition orally, as follows:

- The Inquiry Officers accept that Counsel for the Applicant made an error in omitting to include Mr. Roberts as a witness and provide his witness statement along with the expert witnesses. Counsel for the Applicant has taken responsibility for this mistake. The Ministry [MNRF] has not established that it will be unduly prejudiced by Mr. Roberts’ evidence. As President of the Applicant, Mr. Roberts has a key role in this matter, and counsel for the Applicant has indicated that the evidence he seeks to provide is factual evidence previously provided in a brief of facts earlier in the proceedings and is therefore not a surprise to the Ministry. Insofar as it relates to the chronology of events and the content of discussions in meetings, this

information is already included in the evidence submitted. The Inquiry Officers are satisfied that it is possible to address any potential prejudice to the Ministry. Regarding the concern that some of Mr. Roberts' evidence may be put forward as opinion evidence, the Inquiry Officers will deal with any objections by counsel for the Ministry as they arise.

[8] For the reasons set out below, the Inquiry Officers recommend that the Minister approve the location of the proposed dam, subject to the conditions set out at paragraph 125.

## **ISSUES**

[9] The issue before the Inquiry Officers is whether the intended refusal of approval of the Application is fair, sound and reasonably necessary to achieve the purposes of the *LRIA*. The sub-issues to be addressed, as defined by the Inquiry Officers, are:

1. whether the Inquiry Officers may consider the issues raised by MNRF that were not set out in the NIRLA and not communicated to the Applicant until after the Inquiry was initiated;
2. whether the potential impacts of the Project on the water levels upstream of the constriction identified as R-1 have been identified for the purposes of the *LRIA*;
3. whether the potential biological impacts of the Project upstream of R-1 have been identified for the purposes of the *LRIA*;
4. whether the Aboriginal consultation undertaken by LCPI was adequate in respect of potential impacts upstream of R-1;
5. whether an adverse inference should be drawn from the fact that MNRF did not call Erin Nixon as a witness;
6. whether the Inquiry Officers have jurisdiction under s. 11(11) of the *LRIA* to consider making the recommendations requested by LCPI; and

7. whether conditions are appropriate if the Inquiry Officers recommend that LCPI be granted a conditional approval.

## RELEVANT LEGISLATION

[10] The relevant legislative provisions are as follows:

### *Lakes and Rivers Improvement Act*

2 The purposes of this Act are to provide for,

- (a) the management, protection, preservation and use of the waters of the lakes and rivers of Ontario and the land under them;
- (b) the protection and equitable exercise of public rights in or over the waters of the lakes and rivers of Ontario;
- (c) the protection of the interests of riparian owners;
- (d) the management, perpetuation and use of the fish, wildlife and other natural resources dependent on the lakes and rivers;
- (e) the protection of the natural amenities of the lakes and rivers and their shores and banks; and
- (f) the protection of persons and of property by ensuring that dams are suitably located, constructed, operated and maintained and are of an appropriate nature with regard to the purposes of clauses (a) to (e).

11 (1) If the Minister intends to refuse an approval that he or she is empowered to give under this Act or to make an order directing any act that will incur costs, the Minister shall, before refusing the approval or making the order, give notice of the intention to the person asking for the approval or to whom the order would be directed.

11 (4) If the Minister receives a request for an inquiry within the time set out in subsection (3), the Minister shall cause an inquiry to be held and shall consider the inquiry officer's report before making a decision respecting an approval or the making of an order.

11 (10) The inquiry officer shall inquire as to whether the refusal of approval or the proposed order is fair, sound and reasonably necessary to achieve the purposes of this Act.

11 (11) The inquiry officer shall report to the Minister,

- (a) setting out the findings of fact;

(b) stating the officer's opinion on the merits and the reasons for that opinion; and

(c) setting out the officer's recommendations.

11 (13) Sections 6 to 16, 21, 21.1, 22 and 23 of the *Statutory Powers Procedure Act* apply, with necessary modification, to an inquiry under this section.

11 (14) The Minister, after considering the report, may,

(a) in the case of a request for approval, grant the approval requested or a modified version of it or refuse to grant the approval; or

(b) in the case of a proposed order, make the order proposed or a modified version of it or refrain from making the proposed order.

14 (1) No person shall construct a dam in any lake or river in circumstances set out in the regulations without the written approval of the Minister for the location of the dam and its plans and specifications.

14 (2) An application for approval of the location of a dam must be made in writing and must be accompanied by,

(a) a diagram showing the proposed location of the dam, any area to be flooded and the land of persons other than the applicant that may be affected by the flooding; and

(b) a statement showing the purpose, type and size of the dam, whether the dam will be temporary or permanent, the quantity of water to be held, and the rate of flow of water that may be diverted.

14 (3) If the location of a dam has been approved, an application for approval of the plans and specifications of the dam must be made in writing and must be accompanied by,

(a) the number of copies of the plans and specifications that the Minister requires up to a maximum of three copies, such plans and specifications showing full details of the dam, including any spillways, sluiceways, channels and other associated structures, and the maximum elevation at which the water will be held under normal operating conditions;

(b) a report on the design of the dam and a map showing the location and size of the watershed above the dam; and

(c) particulars of the nature of the foundation on which the dam is to be constructed with reports of all boring or test pits.

14 (4) The Minister may require any person submitting an application under this section to provide any additional information that the Minister considers pertinent.

14 (5) The Minister may approve the location or the plans and specifications of a dam subject to such conditions or with such changes as the Minister considers advisable to further the purposes of this Act.

[...]

14 (7) The Minister may refuse to grant an approval for the location of a dam if the Minister is of the opinion that the construction of the dam at that location would not coincide with the purposes of this Act.

## **WITNESSES**

[11] The Inquiry Officers heard evidence from 10 witnesses over the course of the hearing.

[12] In addition to calling Mr. Roberts as a lay witness, as noted above in the Background section, LCPI called the following expert witnesses who were qualified by the Inquiry Officers to provide opinion evidence, as follows:

- Mathieu Lemay, as an expert engineer with expertise in hydraulics;
- Tami-Joy Sugarman, as an expert in environmental assessment and regulatory permit and approval procedures for waterpower projects in the Province of Ontario (“Ontario”);
- Kai Markvorsen, as an expert in environmental assessment and regulatory permit and approval procedures for waterpower projects in Ontario; and
- William Touzel, as an expert in environmental assessment and regulatory permit and approval procedures for waterpower projects in Ontario.

[13] MNRF called five expert witnesses, all MNRF staff, who were qualified to provide opinion evidence in the following manner:

- Chris Marr, as an expert in environmental assessment and regulatory permit and approval procedures for waterpower projects in Ontario;
- Derek Goertz, as an expert in biology, environmental assessment and impact assessment;
- Dr. Rich Pyrce, as an expert in hydrology;

- Henry Haemel, as an expert in hydrology, hydraulic engineering and hydraulic modeling; and
- Robert Schryburt, as a water resources engineer with expertise in hydrology, hydraulics and regulatory approvals.

### **SITE DESCRIPTION, BRIEF CHRONOLOGY AND SUMMARY OF POSITIONS**

[14] Over the course of the Inquiry, the Inquiry Officers heard extensive evidence about the chronology of this matter from many of the witnesses. The Inquiry Officers have considered all of this evidence but include here only a brief summary of the most pertinent events leading up to the Inquiry hearing. In discussing the issues in these reasons, the Inquiry Officers will refer to additional relevant evidence provided.

[15] The watershed in question can be described as follows:

- Furthest upstream is Lillie Lake, which flows into Upper Lizard Lake (sometimes referred to in the documentation as Lizard Lake) – these two lakes are at the same water elevation and are sometimes referred to as the “upper lakes”.
- Water from these lakes flows through a natural constriction designated as R-1, at an elevation of 233.0 metres above sea level (“masl”), into Lower Lizard Lake.
- Lower Lizard Lake flows through a natural constriction designated as R-2, into Lizard Creek.
- Lizard Creek goes through an elevation drop, and subsequently discharges into the Serpent River.
- Partway down Lizard Creek, the proposed rock fill dam and control structure is located at S-1.

The area of Lizard Creek between S-1 and R-2 will be inundated and will have a new

water level elevation and new shoreline as part of the Project. A slight change to the existing shoreline will occur between R-2 and R-1. The Applicant contends that above R-1, that is, in the upper lakes, implementation of the Project will not induce the water level in the upper lakes to rise above the existing high water mark.

[16] In 2005, Mr. Roberts, President of Cantech Construction Ltd. (“CCL”), applied to develop the Project and was selected as Applicant of Record for the Site; later that year, CCL initiated discussions with Aboriginal communities identified by MNRF (known as the Ministry of Natural Resources at that time) and submitted a Plan of Development (“POD”) to MNRF. In 2006, LCPI was formed to continue with the process of developing the Project; Mr. Roberts is the president of LCPI. MNRF provided final review comments on the POD to LCPI in March 2006, and issued conditional Applicant of Record (“AOR”) status to LCPI in February 2008 and formal AOR status in July 2009.

[17] In November 2009, LCPI applied to the Ontario Power Authority (“OPA”), now known as the Independent Electricity System Operator (“IESO”), for a Feed-in-Tariff (“FIT”) contract under which the Ontario government would purchase power from LCPI exclusively at a fixed rate. The OPA awarded a FIT power purchase contract to LCPI in April 2010, with a deadline to reach a Commercial Operation Date (“COD”) by April 2014. Since that time, LCPI has been required to obtain extensions of this COD and currently has an extension that will expire in October 2019.

[18] As required, LCPI proceeded to undertake an Environmental Assessment (“EA”) process according to the Class EA for Waterpower Projects document (“Class EA document”). The lead ministry for this process was the Ministry of the Environment, Conservation and Parks (as it is now named) and the role of MNRF was to provide comments on draft EA submissions. To assist with the Project’s EA process, LCPI retained IBI Group Consulting Engineers (“IBI”) in 2006 to begin to collect data and information to support the EA process. LCPI also retained Niblett Environmental Associates Inc. (“Niblett”) in 2009 to assist with the Natural Heritage work for the EA. After LCPI received AOR status, it issued Notice of Commencement of the EA in July 2009. MNRF had an opportunity to review and provide comments on LCPI’s

Environmental Screening Report (“ESR”) in November 2010 and July 2011. In August 2011, LCPI issued a Statement of Completion of the EA. However, discussions between MNRF and LCPI continued concerning the EA hydrology, biology and Aboriginal consultation submissions.

[19] In 2012, LCPI started the process of seeking approvals under the *LRIA*. This is a two-step process, requiring that an applicant first apply for location approval under s. 14(2) of the *LRIA*. Once MNRF has approved the location of a dam, the applicant may seek approval of the plans and specifications of the dam under s. 14(3) of the *LRIA* and at this stage must provide: plans and specifications showing full details of the dam, including any spillways, sluiceways, channels and other associated structures, and the maximum elevation at which the water will be held under normal operating conditions; a report on the design of the dam and a map showing the location and size of the watershed above the dam; and particulars of the nature of the foundation on which the dam is to be constructed with reports of all boring or test pits. LCPI retained the following consultants to assist it in the application process: WESA/BluMetric (“Blumetric”) to assist in the process of seeking these approvals and HydroSys Consultants (“HydroSys”) to undertake hydrology and hydraulics studies.

[20] In October 2013, LCPI submitted an application for location approval. At the request of MNRF, LCPI subsequently submitted two resubmissions of its application for location approval in December 2015 and May 2017. Over the period from 2013 to 2017, there were many meetings and communications between MNRF and LCPI and its consultants to discuss unresolved issues with respect to the Application. Despite extensive discussions and correspondence between the parties in the fall of 2017, the Minister issued the NIRLA in December 2017 and LCPI requested this Inquiry.

[21] It is LCPI’s position that it has satisfied all of the requirements for location approval set out in the *LRIA* and in MNRF’s July 2017 *LRIA* Administrative Guide (“Administrative Guide”) and July 2015 Location Approval for Dams Technical Bulletin (“Bulletin”). It is MNRF’s position, however, that LCPI has not yet satisfied these requirements for a number of reasons, including the following: the ESR and the EA do

not coincide with the Application under the *LRIA*; no approval under the *LRIA* can be issued until the changes to the Project's headpond area and Zone of Influence ("ZOI") have been properly addressed in an EA; the adequacy of Aboriginal consultation would have to be assessed by MNRF before any approval could be issued; and further consultation may be required based on the delineation of the headpond and assessment of potential impacts associated with it.

## **EVIDENCE, SUBMISSIONS, ANALYSIS AND FINDINGS**

### **Sub-issue No. 1: Whether the Inquiry Officers may consider the issues raised by MNRF that were not set out in the NIRLA and not communicated to the Applicant until after the Inquiry was initiated**

[22] The NIRLA discussed in some detail two reasons why the Minister intended to refuse the Application: uncertainty regarding areas to be flooded; and insufficient hydrological data. This was prefaced by a statement that the Application does not satisfy requirements under the *LRIA* and MNRF's Administrative Guide and Bulletin "including, but not limited to" the reasons set out.

[23] LCPI submits that, in addition to the two reasons addressed in the NIRLA, MNRF raised additional issues at the Inquiry concerning the adequacy of Aboriginal consultation and insufficient biological data. While LCPI maintains that it met all of the additional requirements raised by MNRF after the NIRLA was issued, LCPI submits that, in the interest of justice and fairness, the Inquiry Officers should disregard issues that did not form the basis for the NIRLA. MNRF responds that LCPI was not treated unfairly when the sufficiency of Aboriginal consultation was addressed at the hearing, asserting that, had MNRF decided to approve the location of the Project, it would have had to ensure that the Crown's obligations concerning Aboriginal consultation had been met. MNRF further submits that all issues relevant under the *LRIA* are referred to in the NIRLA, including the assessment of impacts.

#### *Findings on Sub-issue No. 1*

[24] Under s. 11(10) of the *LRIA*, the Inquiry Officers are required to inquire as to

whether the refusal of approval is fair, sound and reasonably necessary to achieve the purposes of the *LRIA*. These purposes, set out in s. 2 of the *LRIA* and excerpted in full above, focus on the public interest and include: managing and protecting lakes and rivers; protecting public rights in or over the waters of lakes and rivers; managing and perpetuating fish, wildlife and other natural resources dependent on the lakes and rivers; and protecting the natural amenities of the lakes and rivers and their shores and banks. The Inquiry Officers are further required, under s. 11(11) to make a report to the Minister that includes their opinion on the merits, the reasons for that opinion and their recommendations. On the basis of this report, the Minister has the discretion to decide to grant or refuse the request for location approval.

[25] The Inquiry Officers find nothing in the legislative framework that confines us to considering only the reasons provided in the NIRLA in forming an opinion on the merits and making recommendations to the Minister. On the contrary, the relevant provisions provide the Inquiry Officers with a broad mandate to consider the Application in the context of all of the different purposes set out at s. 2 of the *LRIA*. Furthermore, the wording of the NIRLA itself stated that, in MNRF's view, the Application had not met the applicable requirements for reasons beyond those identified in the NIRLA. After the Inquiry process commenced in December 2017, MNRF did raise issues that were not specifically addressed in the NIRLA, concerning the sufficiency of biological data above R-1 and the adequacy of Aboriginal consultation.

[26] In order for the Inquiry Officers to fulfill their role under the *LRIA*, it is appropriate for them to assess all of the key issues and evidence relevant to whether the MNRF's proposed refusal of location approval is fair, sound and reasonably necessary to achieve the purposes of the *LRIA*.

**Sub-issue No. 2: Whether the potential impacts of the Project on the water levels upstream of the constriction identified as R-1 have been identified for the purposes of the *LRIA***

[27] The issue of whether the potential impacts of the Project on the water levels upstream of R-1 have been identified for the purposes of the *LRIA* is central in this

Inquiry. The Inquiry Officers heard extensive evidence relating to the hydrology of this area, in addition to evidence from multiple witnesses about the discussions between the parties with respect to this issue throughout the EA and Application processes.

[28] In addressing this issue, the parties noted the information an applicant must provide in the location approval process. These requirements are set out at s. 14(2) of the *LRIA*, which states that an application for location approval must be accompanied by: a diagram showing the proposed location of the dam; any area to be flooded and the land of persons other than the applicant that may be affected by the flooding; and a statement showing the purpose, type and size of the dam, whether the dam will be temporary or permanent, the quantity of water to be held, and the rate of flow of water that may be diverted.

[29] The Bulletin provides further detail concerning location approval submission requirements. Of particular relevance in this matter, the Bulletin states at s. 4.2 that, for the purposes of location approval, upstream flooding limits may be based on the top-of-dam evaluation and that a backwater analysis may be required as part of the subsequent plans and specification approval process. At s. 4.3, the Bulletin requires a project description explaining, at a minimum: the purpose, type and size of the dam; whether the dam will be temporary or permanent; the quantity of water to be held; and the rate of flow of water that may be diverted. The Bulletin also requires the submission of EA results, preliminary drawings and a preliminary operating plan.

[30] In the context of these information requirements, it is MNRF's position that LCPI has failed to properly show the area to be flooded and the quantity of water to be held by the Project. MNRF also points to inconsistencies in information in the EA and Application documents. MNRF submits that, without a firm understanding of the area to be flooded and the quantity of water to be held, LCPI has not been able to demonstrate that the application coincides with the purposes of the *LRIA*.

[31] LCPI, however, submits that the Project coincides with the purpose of *LRIA*, including the protection of the natural amenities of the lakes and rivers and their shores

and banks. LCPI further submits that it provided sufficient hydrological data to MNRF in each of its three location approval submissions. LCPI further submits that post development hydrological results and the hydraulic impact of the dam have been clearly delineated in the Application and that Mr. Lemay used worst-case scenario assumptions where more precise data was unavailable. LCPI asserts that this was a reasonable approach and that more precise data would not reduce flooding or advance the purposes of the *LRIA*.

[32] LCPI's submissions in this regard are based on the testimony of Mr. Lemay, a professional engineer employed by HydroSys, who became involved as a consultant on the Project in 2015. Mr. Lemay stated that he is a specialist in hydraulic modelling and has 15 years of experience in hydraulics and hydrology applied to natural systems, dam systems and waterways. He wrote in his witness statement that he was tasked with designing a dam within the parameters set out in the EA, noting that the Project's hydraulic works will define the future hydraulic conditions (water levels and velocities) within the ZOI of the Project once it is built and in operation. In his evidence, Mr. Lemay also spoke to the need to define the headpond as part of the Application, stating that could be done by using the top-of-dam elevation contour or a backwater model. He said that the backwater model was more refined and computed what the water level would be rather than assuming it to be the top-of-dam elevation, and therefore he chose the backwater model method.

[33] Mr. Lemay provided his opinion that the hydraulic studies and design he had produced for the Application were accurate, consistent with the ESR and sufficiently detailed for the purposes of the *LRIA*. He said that, consistent with the ESR, the areas to be flooded are limited to the area between the dam and R-1, the operating range of the dam would be within the normal low to high water level range of the upper lakes, and below the high-water mark of the upper lakes above R-1. He stated that the high water mark is normally defined by the water level observed during the two-year return flood and, for this Site, the Blumetric Hydrology Final Report stated that the two-year return flood is 29.1 cubic metres per second ("m<sup>3</sup>/s"). He added that the analysis of the data available for Upper Lizard Lake showed that its water elevation exceeded 234.5

masl three out of five years of monitoring. In Mr. Lemay's opinion, and based on his hydraulics analysis, the water levels in the upper lakes will be the same before and after construction of the Project if the discharge exceeds the two-year return flood or if the elevation of the upper lakes exceeds 234.5 masl and, therefore, the Project would have no effect on the water level in the upper lakes under these conditions.

[34] He noted that one objective of his work was to set the proposed dam crest elevation so that upstream water levels would stay within the normal high range of water level fluctuation of the upper lakes. It was his evidence that the Project would control water levels upstream of R-1 at an operating level of 233.4 masl and within an operating range from a low water level of 233.1 masl to a high water level of 233.7 masl. Mr. Lemay noted that the body of the ESR set out the operating range as 233.0 masl to 233.6 masl but Appendix G to the EA, concerning hydrology, set the operating range as 233.1 masl to 233.7 masl. He testified that he adopted the latter range as he viewed it as more conservative, and concluded that the area to be flooded by the Project (above and beyond the natural condition of the river system) is located between the dam and R-1, and is below the high water mark above R-1.

[35] Mr. Lemay testified that while a dam or other type of control structure on a river or stream normally operates within a set range, floods do occur and result in a greater amount of water than the facility normally experiences and a flood level above the normal operating band. He stated that the areas to be flooded have been detailed in the EA and Application documents under Inflow Design Flood ("IDF") condition, which results in higher water levels than in normal operations of the dam. Mr. Lemay said that the upper and lower levels of the operating band were set at the beginning of the Project and he designed a control structure in accordance with the operating band that is designed for a flood based on the IDF condition.

[36] LCPI submits that a one-dimensional steady state flow model was a standard and appropriate method for undertaking the hydraulic study of the Lizard Creek system. LCPI refers to Mr. Lemay's evidence that unsteady state flow modeling of natural conditions and natural inflows are not used in this type of situation (except in the case of

flood management), submitting that steady state flow modeling gives accurate and satisfactory results and that Mr. Haemel gave evidence that this is the most commonly used approach. LCPI asserts that the effect of lakes and storage elements is to lower peak flows and, therefore, to lower water levels. LCPI notes Mr. Lemay's opinion evidence attesting to the validity and accuracy of the data, analysis, application, results and conclusions of his reports, and that LCPI was not provided with any contrary or rebutting engineering reports during the Application process.

[37] LCPI submits that it was a proper assumption for Mr. Lemay to use constant flow throughout the entire study reach in his work, noting his evidence that in standard practice, the calibration of the model with different expansion/contraction coefficients would have led to the same conclusions as the one presented in the report, and that the lower the expansion/contraction coefficients, the more conservative the model will be in the assessment of the impact of the Project. LCPI also notes Mr. Lemay's evidence that his analysis was conservative in that it assumed the worst-case scenario to guard against unexpected flooding.

[38] LCPI submits that neither the *LRIA* nor the Bulletin contain a definition of "flooding", but notes that the LCPI and MNRF expert witnesses defined flooding as "water flowing on to areas that were not normally wet." LCPI asserts that its witnesses related this definition to observations about the natural high-water mark, natural shorelines, natural riverbanks and terrestrial vegetation. LCPI contends that its experts' reports sufficiently delineated the area to be flooded with enough certainty to satisfy s. 14(2)(a) of the *LRIA* and submits that the Project will not result in flooding upstream of R-1. LCPI disagrees with MNRF's position that changes in the natural fluctuations in the water levels in the upper lakes constitute flooding; submitting that: given that there are natural fluctuations each year, it is not clear how such fluctuations could be precisely predicted let alone delineated; there will be no change to the natural shoreline in the upper lakes; and there is nothing in the *LRIA*, its regulations, case law or industry practice that defines flooding by reference to duration, frequency and timing of fluctuating water levels below the high water mark.

[39] LCPI characterizes MNRF's submission that "flooding" includes changes in the timing, frequency and duration of natural fluctuations below the high-water mark as a strained and unusual definition of flooding. LCPI submits that the natural fluctuations that occur in the upper lakes in current natural conditions are highly variable, as demonstrated by the hourly data from data logger DL-1, which is located at R-1 to measure water levels. LCPI further submits that it is not possible to predict the precise future fluctuations in natural conditions based on historical data, only the natural range of such fluctuations, and that any future fluctuations will occur within this natural range. LCPI asserts that its experts' studies take into account these fluctuations and show that there will be no more than negligible impact post development as result of any changes in fluctuations, and that this is consistent with the manner in which the environment in the upper lakes has already adapted to naturally fluctuating water levels caused by heavy spring rainfall, occasional drought or the presence of beaver dams.

[40] LCPI emphasizes Mr. Lemay's evidence that there is no uncertainty with respect to the areas to be flooded as a result of the dam, and that both the EA and Application documents clearly identified the areas to be flooded. LCPI submits that there are no inconsistencies between the EA and Application documents, and maintains that while the area between the dam and R-1 will be flooded to levels above the natural condition, the dam will not cause water levels to rise above the natural high water mark upstream of R-1. It is LCPI's position that the extent of the headpond and the area to be flooded were clearly defined in the ESR and carried forward in all three of its location approval Applications.

[41] MNRF submits that it issued the NIRLA after LCPI refused to address its concerns, alleging that LCPI repeatedly requested a decision on the Application during the location approval process, continuing to present previously-submitted information to MNRF in different formats and requesting review comments, even while aware of the outstanding information that MNRF still required.

[42] MNRF further submits, based on the testimony of its own expert witnesses, that the information in the Application was based on questionable modelling and lacked the

survey data required and, therefore, that LCPI failed to assess the potential impacts of the Project and did not demonstrate that the Project would coincide with the purposes of the *LRIA*. During the hearing, MNRF put forward evidence concerning numerous critiques, to which LCPI responded as set out below. Ultimately, the parties have different views on how to characterize the extent of the headpond above R-1 and whether there would be flooding in the upper lakes above R-1.

[43] MNRF states that, during its review of the Project's Draft ESR, it raised a concern that the Project's ZOI may not have been well defined. MNRF's letter to Mr. Roberts of July 9, 2010, providing review comments, described the ZOI as "the area where the proposed alteration in physical criteria is discernible from natural conditions" and specified that to determine the appropriate ZOI for the Project, MNRF required a description of the operation based on the "proposed flow regime, including magnitude, timing, frequency, duration, and rates of change." MNRF further states that it requested sufficient information to understand the Project's impacts on the natural hydrological regime and natural environment, asserting that it needs to know how changes to the flow magnitude, timing, frequency, duration and rates of change may have an impact on the natural environment. Based on evidence provided by Mr. Marr, MNRF submits that its role as a regulator includes reviewing applications by requiring proponents to demonstrate that the potential impacts associated with a project have been sufficiently addressed. It is MNRF's position, based on the evidence of its various witnesses, that LCPI has never addressed these outstanding concerns.

[44] In response, LCPI submits that the ZOI is not a precisely defined term and, while used initially in the Project's EA process, its use has been abandoned since. The evidence of Ms. Sugarman, Mr. Markvorsen and Mr. Touzel addressed the ZOI term. Ms. Sugarman referred to the ZOI definition in the glossary of the October 2008 version of the Class EA document, which guided the EA process for the Project. It states that the ZOI is the "immediate area beyond the site directly affected by the project." Ms. Sugarman also referred to the term "zone of impact", noting that these two terms were sometimes mixed up. Mr. Markvorsen confirmed that the term ZOI has been removed from the current version of the Class EA document and as a defined term in its glossary,

and has been replaced with the term “zone of impact”. Mr. Touzel explained the removal of the ZOI language from the Class EA document, testifying that this term had become problematic because different proponents, ministries and professional service providers interpreted it differently. Mr. Markvorsen noted that the term ZOI could encompass any effect at all whereas “zone of impact” speaks more precisely to negative impacts.

[45] LCPI asserts that there is no legal requirement to provide MNRF with ZOI information but adds that, if it was a requirement at the EA stage, LCPI satisfied it. This was largely an issue of semantics. LCPI contends that all of the required studies above R1 were completed and showed either no impact or “low to negligible” impact, and that such levels of impact are insufficient grounds for MNRF to refuse location approval with no evidence to the contrary. In addition, LCPI submits that MNRF has acknowledged and communicated to LCPI that timing, frequency, duration and rates of change are widely variable within a certain range in the natural condition upstream of R-1. LCPI further submits that it has provided evidence, specifically through Mr. Lemay’s testimony, to show that the Project will not result in discernable change to variability in timing, frequency, duration and rates of change outside of the natural range.

[46] MNRF submits, based on the evidence of Dr. Pyrcce and Mr. Lemay, that the proposed operating range for the Project is entirely above the control relied on by LCPI at R-1, and so the headpond would extend into the upper lakes. MNRF further submits that the operation of the dam at the proposed operational level would alter the natural water level regime and result in water levels that are different from natural conditions in terms of timing, frequency and duration of the water level changes. MNRF notes Dr. Pyrcce’s opinion evidence that this constitutes flooding and may give rise to impacts that are relevant to MNRF’s evaluation of the Application with respect to the purposes of the *LRIA*. MNRF further notes Dr. Pyrcce’s testimony that, without sufficient survey data and a properly verified HEC-RAS model (HEC-RAS being the computer program used to model the hydraulics of water flow), LCPI failed to demonstrate the quantity of water to be held and the area to be flooded by the Project as required by the *LRIA*.

[47] MNRF notes Mr. Schryburt's evidence that while preliminary or conceptual drawings relating to the engineering of the dam are appropriate at the location approval stage, the diagram provided at the location approval stage showing the area to be flooded by a dam cannot be preliminary or conceptual because MNRF must determine the impacts of the proposed dam. Mr. Schryburt testified that MNRF advised LCPI that the entire headpond would have to be mapped so that impacts associated with the changes in water levels could be evaluated before the Project received location approval. MNRF adds that, notwithstanding that direction, LCPI's response on December 13, 2017 was to provide information already submitted: a map (labeled as Figure SK-06) on which a line was drawn around the upper lakes, with no additional survey information. MNRF asserts that this response did not address its request for mapping, noting Mr. Schryburt's concern that the line showed the high and low operating levels of 233.1 masl and 233.7 masl as coinciding with the flood level of 234.5 masl and remained open at five locations. It was Mr. Schryburt's evidence that both temporary and permanent increases in water level can be considered flooding, and that raising the water level beyond normal conditions in terms of magnitude, frequency, duration or timing can constitute flooding, whether above or below the high water mark, and that the area to be flooded is synonymous with the project's headpond.

[48] The parties take different positions as to the extent of work and survey data required at the location approval stage under the *LRIA*. MNRF contends that LCPI did not provide it with information, including proper survey data, its staff requested while reviewing the Application, and questions the reliability of data that LCPI collected and used. MNRF asserts that any delay experienced by LCPI during the location approval process arose from its refusal to obtain proper survey data to support the Application, despite the fact that MNRF had been asking LCPI to delineate the headpond properly from 2010 until the NIRLA was issued in 2017. MNRF refers to Mr. Marr's evidence concerning MNRF's time and work dedicated to helping LCPI through the regulatory process as well as Dr. Pyrcce's testimony about the significant amount of time he spent reviewing the Application and providing feedback.

[49] In response, LCPI submits that while more precise field measurement data could

have been gathered to delineate the area to be flooded, the measurements taken were reasonable and in accordance with industry standards. Based on Mr. Lemay's evidence, LCPI contends that, where its experts had to make assumptions or extrapolations, they assumed the worst-case scenario in order to not minimize potential flooding to be caused by the proposed dam. LCPI further contends that Mr. Lemay's report shows higher water levels than are actually likely to occur. LCPI asserts that Mr. Haemel acknowledged that Mr. Lemay's work outlined a worst-case flooding scenario. LCPI submits that, contrary to the direction in the Bulletin that information provided at the location approval stage should be of a preliminary nature, MNRF sought information at a level of detail that would be more appropriate at the plans and specifications stage.

[50] It is MNRF's view that LCPI provided inadequate data, noting Dr. Pyrce's testimony that while he was satisfied by the quality of the data collected by the data recorder at DL-1, he was not confident in the discharge data that Mr. Roberts collected. Dr. Pyrce questioned whether LCPI obtained discharge data in high flow conditions, saying he would expect to see flow measurements taken during spring peak flows. MNRF also submits that LCPI refused requests to provide a detailed longitudinal profile and satellite imagery.

[51] LCPI responds that this information was not necessary, indicating Mr. Lemay's opinion evidence that satellite imagery and additional longitudinal profiles were not required, and the data used was sufficient in quantity and quality to assess the potential impact of the Project with a high degree of certainty. Mr. Lemay, who provided a longitudinal profile in his May 2017 Report, testified that MNRF staff did not understand the hydraulic behaviour of the system and the hydraulic modeling. He stated that the objective of the hydraulic modeling is to understand the hydraulic impacts of the proposed Project. To achieve this objective, field measurements and analysis were focused on the understanding of the R-2 and R-1 locations, which present clear hydraulic controls that dictate the water levels in the system.

[52] MNRF submits that standard survey practices were not used in collecting flow data, noting Mr. Schryburt's opinion that a proper survey had not been completed

upstream of R-1 so it was impossible to properly delineate the Project's headpond. Mr. Schryburt testified that, downstream of R-1, LCPI used a combination of Ontario Land Surveyor ("OLS") benchmarks, a hand-held Global Positioning System and a laser-level to measure elevations, and he was concerned that LCPI's techniques would increase the margin of error and be less accurate because of lengthy distances between surveyed points and the dense forest in the area. In response, LCPI points to documents indicating that MNRF had confirmed to LCPI that OLS surveys were not required at the location approval stage. LCPI also refers to Mr. Lemay's evidence that LCPI's method of gathering data was accepted and had a small margin of error compared to the OLS benchmarks on the Site.

[53] MNRF refers to Mr. Haemel's evidence that HEC-RAS software can be run in steady state mode, which is appropriate where there are no storage elements along a stretch of a river, or unsteady state mode, which is appropriate when storage elements such as lakes, reservoirs or side channel storage areas such as wetlands are present. He testified that while LCPI used the steady state mode to create its HEC-RAS model, the unsteady state mode would have been more appropriate due to various storage elements present along the reach. LCPI, in response, puts forward Mr. Lemay's evidence that an unsteady state flow model would have required a greater number of assumptions than were used for the steady state flow model, and emphasizes the evidence of both Mr. Lemay and Mr. Haemel that the results of an unsteady state flow simulation can only lead to a smaller flooded area, which would not be the more conservative approach. LCPI submits that Mr. Lemay took into account that storage elements along Lizard Creek could have an effect on the flow in his analysis of the measured water levels at R-1 and in his sensitivity analysis.

[54] MNRF also submits that LCPI used too many assumed cross-sections, asserting that this is contrary to the HEC-RAS manual. MNRF notes Mr. Haemel's testimony that LCPI made a number of assumptions in its modelling, which meant that the model failed to accurately reflect baseline conditions. Mr. Haemel's gave evidence that a hydraulic model must represent existing conditions accurately in order to be reliable. MNRF asserts that the uncertainty concerning the cross-sections along with other unexplained

assumptions has resulted in the headpond not being delineated accurately. MNRF further asserts that, without having a surface area delineated for the headpond, the volume of water to be held could also not be determined.

[55] LCPI responds by noting Mr. Lemay's evidence that the cross-sections selected were the most appropriate for flow measurement to accurately inform the pre-development hydrological system flows and post-development hydraulic impact assessment of the Project. Mr. Lemay testified that the number of measured cross-sections was adequate to study the reach because: the cross-sections are located either in areas that will be flooded by the dam or in lake areas; the hydraulic gradient is flat; and the number of cross-sections used in those areas will not influence the model results. He concluded that the observed water levels were of sufficient quantity and quality for the hydraulic modeling of the upstream reach.

[56] MNRF contends that Mr. Lemay ignored warning level messages generated by the HEC-RAS software, noting Mr. Haemel's testimony that all of the cross-sections in the model had warning messages, in some cases up to six such messages at one cross-section. LCPI, however, refers to Mr. Lemay's testimony that it is not out of the ordinary to see these types of warnings and he considered all of them but, according to common practice, he did not list all of the software warnings he received.

[57] MNRF refers to Mr. Haemel's evidence on the importance of properly calibrating a hydraulic model and his discussion of the steps involved, noting that Mr. Haemel was not satisfied with any of the four stages of LCPI's calibration and, therefore, had little confidence in the outputs of Mr. Lemay's model. LCPI, however, asserts that the model is properly calibrated above R-2, according to industry standards, and that Mr. Haemel did not demonstrate that the model is not representative of existing conditions above R-2.

#### *Findings on Sub-issue No. 2*

[58] The Inquiry Officers have undertaken a comprehensive and thorough review of the evidence, including the extensive technical reports, and submissions provided by

LCPI and MNRF during the hearing process, in order to come to the findings on Sub-issue 2. The Inquiry Officers find that a significant obstacle in the interactions between the parties has been many instances of unclear reporting and communication, apparent in the extensive correspondence provided. For example, the discussions between the parties concerning the delineation of the headpond and the definition of flooding reflect the different and somewhat intransigent viewpoints of the two parties.

[59] MNRF advised LCPI to conduct biological and elevation surveys on the area upstream of R-1 where the proposed alteration in physical criteria would be discernible from natural conditions that include changes to water levels with respect to their magnitude, timing, frequency and duration. It was MNRF's view that raising the water level beyond normal conditions in terms of magnitude, frequency, duration or timing would be considered flooding, whether above or below the high water mark, and that the area to be flooded would be the same as the project's headpond. LCPI took the position that there is no alteration in the physical criteria discernible from natural conditions above R-1 and, therefore, has not explicitly provided any further description or accounting of the changes to water levels above R-1 with respect to their magnitude, timing, frequency and duration. LCPI relies on its model results, which predict that there can be no impact to the environment of the upper lakes because the changes to the water level regime in the upper lakes due to the Project is predicted by the model to be within the natural fluctuation of the water level of the upper lakes. In Figure SK-06, LCPI refers to the upper lakes as 'Natural Reservoir'. Ultimately, LCPI does not clearly acknowledge whether they consider the upper lakes to constitute part of the 'headpond'. However, it is clear that the Project depends on operating water levels that extend into the area of the upper lakes.

[60] LCPI takes the position that its approach was appropriate and scientifically defensible; however, LCPI was not able to effectively communicate the validity of its approach in a manner that could easily be reviewed by MNRF from a regulatory perspective, bringing the parties to this hearing.

[61] It would have been helpful if LCPI or MNRF had retained a third-party consultant

or other suitable professional to conduct an independent peer review when it became evident that the relationship between MNRF and LCPI had deteriorated. In the view of the Inquiry Officers, there has not yet been a thorough and thoughtful assessment of LCPI's hydraulic model due to the parties wrangling over the above-noted issues instead of cooperating on a proper review. As a result, this aspect of the Project regulatory review has not been properly accomplished. Nevertheless, based on a comprehensive review of the documentation and evidence provided at the hearing, the Inquiry Officers find that the information provided by LCPI is sufficient to meet the requirements of the *LRIA* and the Bulletin for the purposes of location approval, noted above in paragraphs 28 and 29, subject to the Conditions as described in paragraph 125 of the Inquiry Officers' recommendations. Detailed reasons are provided below.

[62] Mr. Lemay stated that he used worst-case or conservative assumptions in conducting the modelling where more precise data was unavailable. Mr. Haemel, under cross-examination, agreed that if Mr. Lemay's assumptions are incorrect, the area to be flooded could be smaller but would not be larger. That is, the predicted water levels would be lower, but not higher (which relates to the area to be flooded). The Inquiry Officers rely on Mr. Haemel's evidence that the worst-case, or conservative, assumptions used by Mr. Lemay in the modelling, if incorrect, would not result in higher water levels than predicted. The Inquiry Officers find that the use of worst-case, or conservative, assumptions was a reasonable approach to the modelling and that more precise data would not reduce flooding or further advance the purposes of the *LRIA*. On this basis, the Inquiry Officers deem acceptable Mr. Lemay's choice of a steady state flow model, the use of assumed cross-sections, the calibrations he undertook and the treatment of error messages. Notwithstanding the concerns expressed by MNRF about the reliability of some of the data collected and used, the Inquiry Officers find it to be adequate for the purposes of Mr. Lemay's studies and modelling.

[63] The Inquiry Officers accept Mr. Lemay's evidence that the Project design was intended to: follow the guidance provided in the ESR; mirror the natural fluctuations in the water levels in the upper lakes; and never approach the two-year return flood value or water level in the upper lakes due to the Project of 234.5 masl. The Inquiry Officers

also accept that the headpond where water is proposed to be actively stored has been accurately identified as below R-1; however, in the Inquiry Officers' view, LCPI did not adequately acknowledge that the water level in the upper lakes was an integral part of the Project design, even though the fluctuation of water levels in the upper lakes due to the Project was predicted to be within the natural range of fluctuation of these lakes, nor did LCPI appropriately delineate the extent of the upper lakes, although this flaw did not affect the hydraulic model results. The Inquiry Officers turn now to address MNRF's concerns about whether the Project would raise the water level in the upper lakes beyond normal conditions in terms of magnitude, frequency, duration or timing and whether that should be considered to be flooding.

[64] The July 2011 ESR prepared by IBI clearly lays out the headpond inundation at s. 4.1.6. The ESR, at s. 4.1.6.1 states that seasonally, at low flow, existing water levels in the upper lakes are at the same water elevation, but Lower Lizard Lake is approximately 600 millimetres ("mm") to 1000 mm lower. During periods of high flow the levels in the upper lakes and Lower Lizard Lake are about the same. At s. 4.3.1, regarding the hydrology at the Site, the ESR concludes that the impacts will generally be limited to the water bodies and flows in the systems between R-1 at the inlet of Lower Lizard Lake upstream and where Lizard Creek enters the Serpent River downstream. The ESR further concludes that the natural high water level in the upper lakes during peak flows should not change significantly as a result of the Project, as follows:

Water levels in lower Lizard Lake and Lizard Creek upstream of the control structure, will be controlled at operating level of 233.400 mCGD, within an operating range of a lower water level of 233.100 mCGD and a high water level of 233.700 mCGD. This operating range is within the normal low to high water range of Lillie and Lizard Lakes as measured on site over a two year period correlated to benchmarks set by an OLS. The natural high water level in Lillie and Lizard Lakes during peak flows should not change significantly. In the current natural state, Lillie and upper Lizard share a typical lake level with no flow restriction from one to the other.

[65] The hydrology at the Site is discussed in Mr. Lemay's December 2015 HydroSys Engineering Report, "Hydraulic Impacts of the Hydropower Facility" ("2015 Engineering Report") at s. 2.3. It describes Lizard Creek as a small watershed, which results in

more erratic water levels and flows in comparison to larger watersheds where there is natural attenuation over a larger geographical area. The report states that low flows on Lizard Creek have been observed to be very low and LCPI has developed a good relationship between water levels and measured flow so that Mr. Lemay deemed the use of measured data to be more appropriate than to use data transposed from other watersheds. The 2015 Engineering Report presents available flow measurement data for the years 2012, 2013 and 2014, and notes that 2013 was selected for this study because it presents high peak flows and sufficiently long dry periods. At s. 3.3, the report addresses the storage curve (presented in Figure 2) for Lizard Creek's upstream reservoir, which incorporates both Lower Lizard Lake and Upper Lizard Lake and is used to study ramping rates. The figure provides the headpond volume for various water levels, including between 233.1 masl to 233.7 masl, and demonstrates that, as the water level in the reservoir increases from 233.3 masl to 233.4 masl, the headpond volume is almost doubled.

[66] The Inquiry Officers find the model results set out in s. 4.3 of the 2015 Engineering Report to be very helpful in coming to the findings for this sub-issue. At s. 4.3.1, Figure 10 shows modelled pre- and post-construction water levels upstream of R-1. The figure demonstrates that: when the reservoir level is at the bottom of the operating range and flows are less than  $3 \text{ m}^3/\text{s}$ , lake levels upstream of R-1 will be the same prior to and after construction; lake levels above R-1 remain within the typical operating range for all water levels of the headpond and flows below  $3 \text{ m}^3/\text{s}$ ; and when flows are greater than  $12 \text{ m}^3/\text{s}$ , the water levels are the same prior to and post construction. It further states that, when considering a particular discharge, the greatest difference between pre- and post-construction water levels is 10 centimetres ("cm") over all ranges of flow above  $3 \text{ m}^3/\text{s}$  and the reservoir level setting. As presented in the ESR, the 2015 Engineering Report concludes that such a fluctuation in water level falls within the natural range of water level fluctuation for the upper lakes and is therefore considered to have no environmental effect. The report adds that this assessment is consistent with the ESR and will be confirmed through post-construction monitoring.

[67] Also helpful is the HydroSys Dam Operating Plan for Location Approval dated

May 2017 (“Dam Operating Plan”). At s. 3.1, concerning water levels and flow, the Dam Operating Plan states that under normal conditions, operational reservoir levels are to be maintained between 233.1 masl and 233.7 masl and that the powerhouse, with a maximum discharge of 3 m<sup>3</sup>/s, is the sole structure able to adapt to natural variation of inflows. The Dam Operating Plan further states that: when natural inflows are lower than 3 m<sup>3</sup>/s, the operation of the powerhouse will control the headpond water levels and water level fluctuations in the reservoir will be limited to ± 100 mm/day (10 cm/day); and when inflows are greater or when the powerhouse is shut down, the headpond levels will adapt to the natural inflows. The Dam Operating Plan provides that in an extreme IDF event, the design of the overflow weir is such that the totality of the flow is evacuated over the weir while the powerhouse is not in function; however, if the powerhouse is available to pass flow, it will be used to reduce upstream water levels.

[68] Section 4.2 of the Dam Operating Plan, addressing operation under normal conditions, states that at all times, when installed equipment permits, water level fluctuation will be kept at less than ± 100 mm/day. The Dam Operating Plan also notes that when incoming flows exceed the capacity of the powerhouse or water levels are outside the normal operating range, water levels may rise or fall by more than 100 mm/day, but this would occur under natural conditions, independent of facility operations.

[69] Attached to the Dam Operating Plan as Appendix B is the May 2017 version of the HydroSys Engineering Report, “Hydraulic Impacts of the Hydropower Facility” (“2017 Engineering Report”). At s. 2.2.1.1, outlining the objectives and approach of the hydraulic model of the upstream reach, the 2017 Engineering Report states that the normal high water mark for a natural site is typically defined as the water level observed during a two-year return flood. This study relied on the data in the Blumetric Hydrology Final Report that the two-year return flood is 29.1 m<sup>3</sup>/s. The analysis of the data available in Upper Lizard Lake showed that water elevation exceeded 234.5 masl three years out of five years of monitoring. Therefore, the 2017 Engineering Report concluded that the dam crest setting must be low enough to result in the same water level to be predicted by the modelling in Upper Lizard Lake and Lillie Lake under pre

and post construction conditions when the flow is greater than 29.1 m<sup>3</sup>/s or when the water level exceeds 234.5 masl.

[70] At s. 2.2.3, the 2017 Engineering Report looks at the comparison of the existing and the proposed condition, and determines, as shown in Figure 2.15, that in the low flow condition (flow < 10 m<sup>3</sup>/s), the water level in Upper Lizard Lake is slightly higher than the existing condition (prior to the Project) but well below the high water level of Upper Lizard Lake. In this scenario, the entire reach from Upper Lizard Lake (the upper lakes) to the control structure (the dam at S-1) was predicted to have the same water elevation. Figure 2.16 shows the situation modelled under high flow condition (flow > 10 m<sup>3</sup>/s). In this scenario, the constrictions at R-1 and R-2 act to restrict water flow, such that the water level in Upper Lizard Lake (the upper lakes) is higher than the water level in Lower Lizard Lake, which in turn, is higher in the inundated area below the R-2 constriction to the dam structure (at S-1). This modelled scenario also shows that the water levels in Upper and Lower Lizard Lake are predicted to be the same in both pre- and post-construction.

[71] Having reviewed the evidence on the hydraulic impacts of the Project, the Inquiry Officers rely on the findings provided in the engineering reports, as described in the paragraphs above, to determine that the hydraulic modelling adequately predicts that the changes to the water levels in the upper lakes due to the presence of the Project will be within the range of natural fluctuations in these upper lakes. The Inquiry Officers accept the analysis that the change in water levels (including timing, frequency and rate of change) due to the Project in comparison with the natural conditions will consist of water level fluctuations of less than 10 cm per day under most conditions. The Inquiry Officers understand from the evidence that at flows greater than 12 m<sup>3</sup>/s the water levels in the upper lakes are predicted to be the same prior to and post construction, and that very high flows will overtop the dam, so there is no expected change to water level of the upper lakes during high inflow events as a result of the presence of the dam. The Inquiry Officers accept that any changes to the natural range of water levels in the upper lakes above R-1 as a result of the Project will be within 10 cm per day and accept the assessment of impact from the ESR that determined that this change to the water

level in the upper lakes is negligible, particularly in light of the natural variability of the water level in the upper lakes. This is in an environment subject to fluctuating water levels as the natural state of affairs.

[72] Regarding MNRF's concerns about inconsistent terminology among and within the EA and location approval Application documents, the Inquiry Officers find that this was partially a result of changing terminology (such as the change from the use of ZOI to zone of impact in the revised Class EA document), refinement of the Project plans, improvements in the data and responses to questions from MNRF. Furthermore, it is not surprising that there might be some inconsistencies in such a large number of documents prepared over a lengthy period of time in response to the requests to improve the documents.

[73] Overall, the Inquiry Officers find the modelling conducted and the output of that modelling to be reliable and sufficient for the purposes of analyzing the hydraulic system and predicting the impacts of the presence of the dam, including the impacts in the upper lakes above R-1, given that the modelling is conservative and reflects the worst-case scenario. The Inquiry Officers further find that the hydraulic modelling conducted respects the assumptions in the ESR and that the Application documents provide a sufficient indication of 'the area to be flooded' and the 'quantity of water to be held', as required by s. 14(2) of the *LRIA*.

[74] Based on the reasons above, therefore, the Inquiry Officers find that the potential impacts of the Project on the water levels upstream of R-1 have been sufficiently identified to ensure that the Project will achieve the purposes of the *LRIA*, including the protection of the natural amenities of the lakes and rivers and their shores and banks (s. 2(e)).

[75] However, as has been described earlier, a peer review of the hydraulic model has not been undertaken to date. The Inquiry Officers, therefore, recommend that the Minister include conditions in that regard, as set out further in paragraph 125 below. The Inquiry Officers recommend that the hydraulic model be updated with the water level data that has been collected since the last model iteration and a peer review be

conducted prior to the Plans and Specifications stage.

**Sub-issue No. 3: Whether the potential biological impacts of the Project upstream of R-1 have been identified for the purposes of the *LRIA***

[76] The Inquiry Officers now turn to the issue of whether the potential biological impacts of the Project in the upper lakes have been identified for the purposes of the *LRIA*, noting that this issue is considered on the basis of their finding on Sub-Issue No. 2 that LCPI's hydraulic modelling is generally reliable and sufficient in order to analyze the hydraulic system and predict the impacts of the Project on the water levels in the upper lakes above R-1. MNRF's assessment of biological impacts was based on its concerns about the extent of the headpond and potential for flooding upstream of R-1 and their assertion that LCPI has failed to properly define the timing, frequency, and rates of change of the water levels in the upper lakes due to the Project. The biological impacts due to the Project were identified in the EA in relation to changes in water levels as these have the potential to impact the biological conditions.

[77] LCPI repeats its position that the changes to the water levels above R-1 will remain within the natural range of fluctuation currently experienced by the system and, therefore, there will be no impacts or negligible impacts due to the Project. LCPI reviewed the EA and Application process, noting that: its biology consultant Niblett submitted studies requested by Mr. Goertz, MNRF biologist, in relation to fisheries, wetlands and other communities; Mr. Goertz undertook to review those studies to ensure that they conformed with MNRF's requirements; and Mr. Goertz reviewed and approved the studies, which formed the basis of LCPI's Post Construction Monitoring Plan ("PCMP"). LCPI notes that Mr. Goertz asked that additional biological studies be conducted above R-1, and submits based on the evidence that these studies revealed low to negligible impacts, and no impact on Blanding's Turtle. LCPI further submits that Niblett spent more than 40 person-hours conducting wetland studies above R-1. LCPI observes that Mr. Goertz initially approved all biological studies and agreed that additional studies were not required.

[78] Mr. Markvorsen testified that Niblett's April 2017 PCMP is detailed and

comprehensive, especially relative to plans for other similarly sized projects at the location approval stage. He stated that Niblett staff considered Mr. Goertz's comments in order to satisfy his concerns and MNRF information requirements, and that the PCMP addresses each component of potential natural heritage impacts, including turtles, birds and wetlands.

[79] MNRF, however, submits Mr. Goertz's evidence that LCPI's biological work was based on erroneous or preliminary hydrological information, which led him to conclude that the potential biological impacts of the Project had not been properly assessed. Mr. Goertz gave evidence that, based on the information provided to him prior to December 2017, he had been under the impression that there would be no change to frequency, duration and timing of water levels above R-1. He testified to his understanding that, late in the Application process, LCPI confirmed that there would be changes to the frequency, duration and timing of water levels above R-1 but that LCPI considered these to be negligible. Mr. Goertz explained that the fact those changes would occur below the high water mark does not mean that the environmental impact of those changes don't have to be considered by LCPI.

[80] At the hearing, Mr. Goertz testified that once he understood that there would be changes to the frequency, duration and timing of water levels above R-1, he formed the opinion that the biological studies and surveys conducted above R-1 were insufficient and did not address issues such as determining the functions of the wetlands in the upper lakes and whether species at risk were present above R-1. Mr. Goertz provided his opinion that changes to the timing, duration and frequency of water levels, regardless of whether those changes occur below or above the high water mark, can have environmental impacts and should be considered. He stated that to properly assess the potential impacts of the Project, it would be necessary to understand how increases and decreases in water levels would relate to natural conditions, as well as the timing of those changes.

[81] In particular, Mr. Goertz referred to Figure 2 of a December 13, 2017 memo from HydroSys, which illustrates anticipated pre- and post-construction water levels below

and above R-1. Mr. Goertz testified that Figure 2 demonstrates a predicted drop in water level of about 30 cm above R-1 during the month of July and stated that this change in water level could have an impact on important ecosystems such as the wetlands around the upper lakes. It was his opinion evidence, at the hearing, that it would be impossible for LCPI to assess the impacts of such a change in water level on the environment, and particularly on low-lying wetland areas located below the high water mark, with the information collected by LCPI. Mr. Goertz stated that LCPI had only identified that there are wetlands in the area, but had not studied the function of those wetlands.

[82] MNRf observes that LCPI's only attempt to map the headpond upstream of R-1 was in the Figure SK-06 that it provided in December 2017, which showed the 233.1 masl, 233.7 masl, and 234.5 masl contours all to be coincident. MNRf submits that it is not possible that a change in water level of nearly 2 metres ("m") would produce no change in surface area of the upper lakes, especially considering that Mr. Goertz testified that the low-lying marshy areas around the upper lakes are located below the high water mark.

[83] Mr. Goertz provided evidence about his concerns that LCPI had not completed proper biological assessments to identify the potential impacts of the Project in the upper lakes, particularly for Blanding's Turtle, and testified that there is a high probability of this species being present in wetlands in the area of the upper lakes. It was his view that LCPI should do a full biological assessment to establish a baseline of which species are in the wetlands connected to the upper lakes prior to the Project being developed, in order to understand what impacts the Project may have on habitat for endangered species.

[84] In response, LCPI asserts that Mr. Goertz did not advise of any concerns about his understanding of the hydrology above R-1 in advance of the NIRLA being issued, and questions his evidence that he realized in December 2017 that he had been misled or mistaken about the hydrology. Regarding Figure 2 of the December 13, 2017 HydroSys memo, LCPI submits that this diagram was included in LCPI's two previous

location approval applications, to which Mr. Goertz had access. LCPI further submits that in stating that this figure demonstrates a drop in water level of about 30 cm during the month of July, Mr. Goertz is not taking into account the existing impact of beaver dams in the natural condition.

[85] LCPI notes Mr. Markvorsen's evidence that Niblett's studies in the upper lakes gathered information about wetland delineation and species at risk, including Snapping Turtle and Blanding's Turtle. He said that the latest version of the PCMP, dated April 2017, was included as part of the 2017 location approval submission and is intended to document LCPI's commitments to post-construction monitoring for the Project. Mr. Markvorsen noted that the PCMP addresses each natural heritage component, such as turtles, birds and wetlands to ensure that the assumptions and results of the EA process are confirmed. He explained that the Niblett biologists had conducted directed studies in the upper lakes to address uncertainties and also had made incidental observations while in the area, in a manner that corresponded with the lack of significant impacts anticipated upstream of R-1.

[86] Regarding Blanding's Turtle specifically, Mr. Markvorsen testified that Niblett considered the Blanding's Turtle sightings on a highway to the west of the Site but none of the Niblett studies identified Blanding's Turtle in the turtle habitat assessed. He noted that Niblett and Mr. Goertz determined in 2014 that no further surveys were required; however, the PCMP does require a monitoring plan for both Blanding's Turtle and Snapping Turtle and if they are confirmed to be in the area near the Site, the protection of their habitat is easily incorporated into the Project. LCPI anticipates that if the Project has any impact on the environment above R-1, it will be negligible based on the modelled effects of fluctuation; however, some preliminary data has been collected in order to compare with post-construction monitoring data.

### *Findings on Sub-issue No. 3*

[87] As discussed above, the Inquiry Officers have found that LCPI's hydraulic modelling is generally reliable and sufficient in order to analyze the hydraulic system and predict the impacts of the Project on the water levels in the upper lakes above R-1,

and indicates that the water levels above R-1 will remain within the natural range of fluctuation currently experienced resulting in negligible impacts on the biology of the upper lakes, at most. As described in Sub-issue No. 2, the evidence showed that the change in water levels due to the Project, from what would occur naturally, is limited to approximately 100 mm/day.

[88] The evidence shows that the biological studies that informed the EA process are the basis upon which the Project and its hydraulics have been developed, with the assumption that if the existing condition is not altered, that is, if the change to the water levels remains below the natural high water mark, then there can be no further impact than that which exists at the baseline. During the hearing, LCPI provided information on Niblett's fieldwork done above R-1, over the period from 2008 to 2012, including wetland surveys and turtle nesting and area searches.

[89] Having reviewed the April 2017 PCMP, the Inquiry Officers find it to be detailed, comprehensive and thorough. The PCMP includes, at Figure 1, a map of the Project post-construction monitoring study area, which includes the boundaries of Upper Lizard Lake, Lillie Lake and connected wetlands in the Headpond Study Area. The PCMP addresses the work done above R-1, including in a Wetlands Post-Construction Monitoring Plan Module at Appendix XIII. The module seeks to ensure that the wetland habitat above R-1 responds to the Project as predicted and to monitor for potential unforeseen effects to wetlands; it states that the main objective for monitoring wetlands above R-1 is to confirm that the wetlands have not been affected by the inundation or operation of the Project through documenting whether wetland boundaries have changed and whether the wetlands structure has changed. The module further sets out a summary of anticipated effects, as follows:

Negligible effects will occur on the wetlands (wetland plant composition and function) upstream of R-1. Water levels will remain at 233.1-233.6 masl...range, which is within the typical normal range of Upper Lizard and Lillie Lake determined by on-site data logger information. The operations of the hydro plant will be designed to match incoming flows to the upper lakes mimicking natural fluctuations seasonally and after rainfall events. Summer growing season will see hydro operation only running when rainfall inflow to the upper lakes allows the plant to run. Otherwise natural conditions will see the level drop in periods of drought

or fluctuate when thunderstorms or major rainfall events occur. Daily fluctuations when the plant is running full will be 25-50 mm with the lake levels allowed to rebound. The existing wetland areas above R-1 are subject to a range of water levels from 233.1-234.3 annually. Existing beaver dams have artificially elevated water levels for some wetlands...above the normal lake levels, therefore water level will not be effected.

[90] The Inquiry Officers are satisfied that the April 2017 PCMP and the biological studies and surveys undertaken during the EA and Application processes are adequate, based on the Inquiry Officers' finding that the Project will cause no more than negligible changes to the natural range of water levels in the upper lakes above R-1. However, the Inquiry Officers are of the view that, as was requested by MNRF, LCPI should undertake an elevation survey of the 'Natural Reservoir'. As described in Sub-issue No. 2, the evidence showed that the upper lakes form the natural reservoir for the Project, and thus the Inquiry Officers are of the view that this area should be properly delineated and is necessary to inform the PCMP, and recommend to the Minister that this be a condition of approval, as recommended in paragraph 125.

[91] On that basis, the Inquiry Officers find that the potential biological impacts of the Project upstream of R-1 have been sufficiently identified for the purposes of the *LRIA*, and in particular the management, perpetuation and use of the fish, wildlife and other natural resources dependent on the lakes and rivers (s. 2(d)).

**Sub-issue No. 4: Whether the Aboriginal consultation undertaken by LCPI was adequate in respect of potential impacts upstream of R-1**

[92] LCPI puts forward the evidence of Mr. Roberts and Ms. Sugarman regarding its Aboriginal consultation efforts over the years of the EA and Application processes. LCPI submits that it carefully logged and completed this consultation process by notifying the interested Aboriginal communities about the Project and providing them with required information, attending meetings and continuing communication throughout the Application process. LCPI notes MNRF's position that the Aboriginal consultation process was not completed because the Serpent River First Nation ("SRFN") ordered that it stop and requested financial assistance. LCPI further notes Mr. Marr's testimony in cross-examination that MNRF was aware of this situation but took no steps to resolve

SRFN's concerns because the duty to consult was delegated to LCPI. LCPI submits that Mr. Marr himself was not involved in the Aboriginal consultation and refers to documentary evidence that Sheila Walsh, MNRF's First Nations Liaison, was assigned to the Project and was satisfied with LCPI's consultation efforts, also noting that MNRF did not call Ms. Walsh as a witness.

[93] LCPI submits that it does not owe a duty to halt projects when ordered to do so by an Aboriginal community and that it owes no duty to provide financial support to Aboriginal communities. LCPI asserts that only the Crown may delegate the procedural aspect of its duty to consult and cannot call up on LCPI to resolve land claims or ensure that Aboriginal communities are adequately resourced. LCPI further asserts that Mr. Marr agreed in cross-examination that the ultimate responsibility for the duty to consult with Aboriginal communities lies with the Crown. LCPI submits that although there was little or no evidence of any effort to consult on the part of the Crown, it now seeks to fix LCPI with fault for inadequacies for which the Crown bears responsibility.

[94] LCPI cites the ruling of the Supreme Court of Canada in *Haida Nation v. British Columbia (Minister of Forests)*, [2004] 3 S.C.R. 511 ("*Haida Nation*") at paragraph 53, for the proposition that the Crown may only delegate a procedural aspect of consultation to an industry proponent and retains the ultimate legal responsibility for consultation and accommodation because the honour of the Crown cannot be delegated. LCPI submits that it would be unfair and unreasonable to allow MNRF to rely on an alleged argument of insufficient Aboriginal consultations as a legitimate ground for refusal, and further submits that, in any event, the extensive consultation undertaken by LCPI was adequate.

[95] MNRF refers to Mr. Marr's evidence that the requirement to conduct meaningful Aboriginal consultation is a constitutional obligation outside of the *LRIA*, and further refers to his evidence concerning the role of Aboriginal consultation in the *LRIA* process and MNRF's concerns about LCPI's Application in this regard. Mr. Marr stated that MNRF staff had concluded that the extent of upstream flooding was unclear from LCPI's submissions, and that this uncertainty could pose challenges in properly understanding

and conveying impacts during consultation with interested Aboriginal communities. MNRF submits that, had it been disposed to approve the location of the Project, it would have had to ensure that the Crown's obligation had been met before it had issued the approval.

[96] MNRF asserts that, while its concerns about Aboriginal consultation arise in relation to the delineation of the ZOI and the area to be flooded, the issue of Aboriginal consultation also arises pursuant to the *Constitution Act, 1982*, and should be considered by the Inquiry Officers in its recommendation to the Minister. MNRF contends that there is evidence to indicate that concerns with the adequacy of the Aboriginal consultation may exist given that Aboriginal groups expressed concerns with the Project, and that the ZOI and headpond are different from what was presented during consultation. Furthermore, MNRF notes evidence tendered by LCPI that it was not required to provide funding to Aboriginal communities, responding that the case law suggests that funding is sometimes required for meaningful consultation. MNRF submits that while the Crown would have to review the sufficiency of consultation if a decision were taken to approve the Project location, the responsibility for undertaking consultation rested with LCPI once it was delegated that duty.

#### *Findings on Sub-issue No. 4*

[97] An applicant for location approval under the *LRIA* is expected to consult with Aboriginal communities identified by MNRF, as set out at section 1.7 of the Bulletin. This consultation begins prior to the location approval process because it is also part of the Class EA process. The consultation continues when an application reaches the location approval stage: the Administrative Guide states that applications under the *LRIA* may trigger the Crown's duty to consult and the Crown may delegate certain procedural aspects of its duty to consult to *LRIA* applicants; and the Bulletin notes that while the duty to consult rests solely with the Crown, MNRF may delegate procedural aspects of consultation to third party proponents (and did so in this case, to LCPI), who are expected to involve Aboriginal communities who may be directly affected by or have an interest in the construction of a new dam and develop an engagement approach

specific to these interests.

[98] During the hearing, the Inquiry Officers received into evidence detailed records and testimony concerning LCPI's efforts to engage with and consult several identified Aboriginal communities: SRFN; Sagamok First Nation; Mississauga First Nation; and several Métis groups represented by the Métis Nation of Ontario. In the view of the Inquiry Officers, these efforts were diligent and sufficient to meet LCPI's obligation to conduct the procedural aspects of the Crown's duty to consult. The Inquiry Officers accept LCPI's evidence, documented in its Aboriginal consultation logs, about its extensive efforts to consult over a lengthy period of time, and further accept that Ms. Walsh was satisfied with LCPI's consultation efforts. While SRFN did not always choose to engage in the consultation process, LCPI made its best efforts to engage them and provide information in accordance with its obligation to fulfill the procedural aspects of the Crown's duty to consult. Ms. Nixon did not specifically reference concerns about LCPI's Aboriginal consultation efforts in the NIRLA, regarding her reasons for refusing the location approval request. The identified Aboriginal communities all received notice of the Inquiry and no one representing those communities sought to attend or provide evidence at this Inquiry.

[99] In its submissions, MNRF's main concern with LCPI's Aboriginal consultation relates to the issue of whether the information that LCPI has provided through the location approval process, about the delineation of the ZOI, the area to be flooded and potential impacts, is different than the information provided during the consultation over the course of the EA process. However, as set out above, the Inquiry Officers have found that the water levels above R-1 will remain within the natural range of fluctuation that is already experienced with no more than negligible impacts on the upper lakes. As a result, the Project as outlined at the hearing is not significantly different than what was presented during the EA process and any potential impacts would be consistent with those known during the consultation with the identified Aboriginal communities.

[100] The Inquiry Officers accept MNRF's submission that if it had decided to approve the location of the Project, it would have taken measures to ensure that the Crown's

duty to consult had been met before issuing the approval. Therefore, the Inquiry Officers recommend that the Minister include the proposed recommendation put forward by LCPI, which would require LCPI to continue consultation with the Identified Aboriginal Communities and to provide updates as the development moves forward and throughout the term of operations.

**Sub-issue No. 5: Whether an adverse inference should be drawn from the fact that MNRF did not call Erin Nixon as a witness**

[101] Ms. Nixon, the Resources Operations Supervisor for the Sault Ste. Marie District of MNRF, issued the NIRLA because she had been delegated the authority under s. 14 of the *LRIA* to approve or refuse the approval for the location of a dam. LCPI contends that the Inquiry Officers should draw an adverse inference from the decision of the MNRF not to call Ms. Nixon as a witness at the hearing.

[102] Citing case law, LCPI states that the law of adverse inference allows the Inquiry Officers, in certain circumstances, to presume that a party failed to call a particular witness because that witness would not have helped that party's case. LCPI submits that, as the individual who decided to issue the NIRLA, only Ms. Nixon could provide direct evidence regarding why MNRF issued the NIRLA. LCPI notes that Dr. Pyrcce acknowledged during his testimony that he did not recommend that LCPI's Application for location approval be denied, but only advised Ms. Nixon that he required additional information. LCPI further notes that Mr. Haemel, who played no role in the decision to issue the NIRLA, testified that the dam could have been built.

[103] It is LCPI's position that MNRF shielded Ms. Nixon from cross-examination and LCPI was not able to test her credibility and whether the basis for her decision was sound and reasonable. LCPI submits that this poses a problem because Ms. Nixon held an erroneous belief that no studies were conducted above R-1, citing email documentation put in evidence at the hearing. LCPI also submits that Ms. Nixon decided to issue the NIRLA even after her immediate supervisor, Deb Weedon, expressed concerns about taking this action, and appeared to favour asking LCPI for additional information. LCPI asserts that because Ms. Nixon exercised greater

discretion than the MNRF experts that testified at the hearing, her evidence was central but MNRF failed to call her, even after LCPI requested that she be called as a witness. LCPI submits that MNRF did not call Ms. Nixon and Ms. Weedon as witnesses because they would not have supported MNRF's case.

[104] MNRF responds that there are no grounds for the Inquiry Officers to draw an adverse inference, submitting that Ms. Nixon exercised a statutory power of decision and, like a tribunal member or a judge on appeal, a statutory decision-maker provides his or her reasons but does not typically attend to defend the decision. MNRF cites the Ontario Divisional Court in *Agnew v. Ontario Assn. of Architects* (Div. Ct.), 1987 CanLII 4030 (ON SC), submitting that this decision addresses reasons why judges and tribunal members are not normally expected to testify about their decisions. MNRF compares the position of the Inquiry Officers to that of Ms. Nixon when she made her decision.

[105] MNRF asserts that there is no cause to draw any adverse inference from Ms. Nixon's absence from the hearing and notes that LCPI made no effort to call Ms. Nixon as a witness. MNRF states that, as the statutory decision-maker, it is not required and would not be normal for Ms. Nixon to attend the hearing to testify on behalf of MNRF; rather, the technical experts on whose advice she relied are in a better position to provide evidence to the Inquiry Officers on the technical merits of the Application. Regarding the email from Ms. Weedon to Ms. Nixon, MNRF submits that it demonstrates Ms. Nixon's independence in the face of political pressure and indicates that her decision was based on the technical advice of MNRF experts. MNRF notes that the purpose of the Inquiry is to determine the technical merits of the Application and not what was in Ms. Nixon's mind or in the minds of her superiors.

[106] In reply, LCPI rejects MNRF's comparison of Ms. Nixon to a judge, submitting that she was not independent or impartial because she managed the MNRF site release process and was directly involved in all communications and meetings between LCPI and MNRF. Observing that Ms. Nixon received all of the Application information and distributed it to MNRF staff, LCPI questions what information she provided to the various government actors and how she coordinated their work. LCPI notes, in

particular, that Mr. Goertz stated that he learned about the issue of fluctuations above R-1 one day before the NIRLA was issued.

[107] Regarding MNRF's assertion that the MNRF experts are in a better position to assess the merits of the Application before the Inquiry Officers, LCPI states that Dr. Pyrce testified that he did not advise Ms. Nixon to issue a NIRLA and could not provide answers regarding why she did so. LCPI contends that none of MNRF's witnesses participated in discussions chaired by Ms. Nixon regarding the ZOI during the EA process, and submits that Mr. Marr's evidence was not the best evidence, noting that he was unable to answer a question, which Ms. Nixon or one of her superiors could have answered, about the statement in the NIRLA that it was indiscernible whether the Project could be built. LCPI asserts that Ms. Nixon exercised discretion beyond her advice from the experts, noting that Dr. Pyrce's evidence that he did not recommend that the location approval be refused and that Ms. Nixon was not available to testify as to why she did not follow the advice of the experts.

*Findings on Sub-issue No. 5*

[108] The Inquiry Officers find no basis on which to draw an adverse inference from the fact that Ms. Nixon was not called as a witness at the hearing. LCPI cited *O.P.T. v. Presteve Foods Ltd.*, 2015 HRTO 675 (CanLII), in which the Human Rights Tribunal of Ontario found that the failure to call a witness who has material and direct knowledge of disputed facts "may" allow the Tribunal to draw an adverse inference that the witness would not have been supportive of that party's case. The Inquiry Officers note the use of the word "may"; a tribunal has discretion as to whether or not an adverse inference is drawn. In this case, the Inquiry Officers accept MNRF's submission that it chose to provide opinion evidence on the technical merits of the Application, noting that it was up to MNRF to determine how to call its case. Furthermore, Ms. Nixon's reasons for refusing the Application were set out in the NIRLA, and the parties provided the Inquiry Officers with extensive documentary evidence and correspondence that reflected her role in the process.

[109] Regarding LCPI's submission that MNRF's intention was to shield Ms. Nixon

from cross-examination, it was open to LCPI to call her as a witness under summons. If LCPI was of the view that Ms. Nixon's evidence was crucial, the opportunity to examine her was available.

**Sub-issue No. 6: Whether the Inquiry Officers have jurisdiction under s. 11(11) of the *LRIA* to consider making the recommendations requested by LCPI**

[110] LCPI asks the Inquiry Officers to make a number of recommendations to the Minister. In addition to asking them to recommend that location approval be granted without conditions, LCPI requests the following proposed recommendations for the reasons set out:

1. That the Minister ensure that none of the persons who were involved in the decision to issue the NIRLA should participate in decisions regarding the further approval of the Project, to avoid an appearance of bias. To the extent that this strains resources available to the North-East Region office, qualified staff should be made available to assist. Further processing of approvals should be completed on a fair and expeditious basis without reviving objections made during the location approval process.
2. That the Inquiry Officers make a finding that the delays in this Project from 2013 to present were caused by MNRF and not LCPI. This finding is needed for LCPI to obtain additional required extensions from the IESO.
3. To the extent that the IESO lacks the authority to grant extensions of time from completion for a period of five years, that the Minister should recommend to his Cabinet colleague, the Minister of Energy, Northern Development and Mines, to extend the time for completion for the Project to 2024 to compensate for the delays by MNRF since 2013.
4. That the Minister should compensate LCPI for the costs of this hearing and the additional costs the proponent has incurred in professional expenses since 2013. If the IESO or the Minister of Energy, Northern Development and Mines are unable or unwilling to extend the time to complete the Project to

allow for the delays since 2013, resulting in an inability to complete the Project within the available time, that compensation should include compensation for the lost profits and revenues reasonably anticipated from the Project. The quantum of compensation should be determined through a process of negotiation or mediation. If no agreement is reached, the Minister and LCPI should identify an arbitrator who will be empowered to conduct an arbitration to fix the quantum of fair compensation.

[111] In its initial submissions, LCPI seeks a recommendation from the Inquiry Officers that the Minister compensate it for costs (recommendation 4); LCPI does not frame this as a request for the costs of Inquiry pursuant to the *Statutory Powers Procedure Act* (“*SPPA*”) or the Tribunal’s Procedural Rules (“Rules”). However, in response to a request by the Inquiry Officers for further submissions on costs, LCPI relies upon s. 17.1 of the *SPPA*, which sets out the circumstance in which a tribunal may order a party to pay all or part of another party’s costs in a proceeding, and further relies upon the Rules.

[112] In requesting compensation, LCPI refers to the delays in processing the Application and the new issues raised by MNRF after the NIRLA was issued, and submits that MNRF’s conduct was unreasonable and unnecessarily delayed the proceedings. MNRF contests LCPI’s submission that MNRF was the cause of the delay in this matter, asserting that any delay LCPI experienced arose because it refused to obtain proper survey data to support the Application despite MNRF’s requests. MNRF notes that LCPI was required to make three location approval submissions because the first two were deemed incomplete, and LCPI repackaged and resent Application materials. MNRF asserts that its staff contributed a considerable amount of time and work in reviewing the Application and providing feedback, and that any loss of time or money by LCPI was due to its own refusal to respond to MNRF’s requests.

[113] MNRF submits that several of LCPI’s proposed recommendations are beyond the scope of the Inquiry Officers’ jurisdiction. Regarding the requested recommendations that persons involved in the decision to issue the NIRLA not

participate in future approval decisions and that the Minister recommend to the Minister of Energy, Northern Development and Mines that the time for completion of the Project be extended to 2024, MNRF submits that LCPI is asking the Inquiry Officers to comment on the procedure going forward, rather than on the merits of the Application currently at issue, and attempting to impose conditions on MNRF staff reviewing the Application, even though conditions on an approval are only properly directed at an applicant.

[114] Regarding LCPI's proposed recommendation 4 concerning costs, MNRF asserts that it is also beyond the jurisdiction of the Inquiry Officers. MNRF submits that s. 17.1 of the *SPPA* does not apply to this Inquiry, noting that s. 11(13) of the *LRIA* specifies that the sections of the *SPPA* that apply to an inquiry under s. 11 of the *LRIA* are s. 6 to 16, 21, 21.1, 22 and 23, none of which allow the Inquiry Officers to award costs. MNRF further submits that the Rules apply only to proceedings before the Tribunal that commenced on or after February 5, 2018 while this Inquiry was referred to the Tribunal on December 28, 2017, and that *Procedural Guidelines for Hearings Before the Mining and Lands Commissioner* ("Hearing Guidelines"), which apply to this Inquiry, only allow costs for matters under Part VI of the *Mining Act*. MNRF suggests that LCPI's apparent request for a civil remedy is outside of the scope of recommendations available to the Inquiry Officers under s. 11 of the *LRIA*.

#### *Findings on Sub-issue No. 6*

[115] The mandate and role of the Inquiry Officers under the *LRIA* is set out at s. 11(10): to inquire as to whether the refusal of approval or the proposed order is fair, sound and reasonably necessary to achieve the purposes of the *LRIA*. The focus of the Inquiry is the decision to refuse location approval. On a plain reading of the legislative provision, s. 11(10) confines an inquiry to the question of only whether or not the **decision to refuse the approval** is fair, sound and reasonably necessary to achieve the purposes of the *LRIA*. Therefore, the Inquiry Officers agree with MNRF that they do not possess the jurisdiction to make recommendations 1, 2 and 3 requested by LCPI (cited above).

[116] With respect to recommendation 4 concerning LCPI's request that the Minister pay its costs, the Inquiry Officers similarly find, for the same reasons about the specific mandate conferred on them in s. 11(10) of the *LRIA*, that it is beyond their jurisdiction to recommend that the Minister compensate LCPI for costs. Regarding LCPI's request for costs pursuant to the *SPPA*, the *LRIA* clearly sets out the sections of the *SPPA* that apply to an inquiry under the *LRIA* at s. 11(13), and it does not include s. 17.1 of the *SPPA*, which provides for the powers of a tribunal to make costs orders. As a result, as MNRF points out, the Hearing Guidelines do not provide for costs to be ordered for proceedings under the *LRIA*; in addition, the *Procedural Rules – Mining and Lands Commissioner*, which apply to all proceedings before the Tribunal that began on or after February 5, 2018, only provide for costs to be ordered pursuant to s. 17.1 of the *SPPA*. Therefore, the Inquiry Officers further find that they do not have the power to award costs.

**Sub-issue No. 7: Whether conditions are appropriate if the Inquiry Officers recommend that LCPI be granted a conditional approval**

[117] The Inquiry Officers asked the parties for submissions on appropriate conditions, should they consider recommending that LCPI be granted a conditional approval pursuant to s. 14(5) of the *LRIA*.

[118] LCPI provided examples of location approval conditions issued by the Wawa District and Cochrane District of MNRF, noting that the conditions were based on the results of the respective EAs and commitments stated in their ESRs. LCPI submits that if the Inquiry Officers decide to recommend that the Minister include conditions in a location approval, the following would align with the purposes of the *LRIA* and with conditions imposed on other applicants for location approval:

- (a) The construction and operation of the Project is to be in accordance with the ESR dated July 2011 presented on behalf of LCPI by IBI. As per the July 2011 ESR, the Environmental Monitoring Program will be an adaptive management approach and will include all study areas identified in the ESR and the 2012 expanded study areas.

- The normal controlled operating water levels upstream of the dam are to be as stated in the July 2011 ESR as follows:
    - 1) normal maximum controlled operating level at 233.70 masl;
    - 2) normal minimum controlled operating level at 233.10 masl; and
    - 3) legal controlled operating range of 0.60 m.
  - The minimum discharge in to the bypass reach (the ecological flow) is to be 0.065 m<sup>3</sup>/s, or the whole of system flows if the natural system flows fall below the 0.065 m<sup>3</sup>/s threshold.
  - Facility operations to be Run of River (no changes or manipulation to natural water levels and/or flows) during sensitive fisheries windows as per the July 2011 ESR.
- (b) LCPI to continue consultation with the Identified Aboriginal Communities and to provide updates as the development moves forward and throughout the term of operations.
- (c) LCPI to provide a Hydraulic Impact Assessment, Dam Hazard Potential Classification and anticipated IDF values at Plans and Specifications Approvals (LCPI asserts that these conditions have been satisfied).
- (d) LCPI to provide detailed Plans and Specifications to MNRF for approval prior to commencing construction.
- (e) LCPI to provide OLS legal survey delineating the complete area to be occupied by the Project including the area to new inundation to satisfy land lease requirement prior to commercial operations.
- (f) LCPI to provide a Final Operating Plan prior to commercial operations.

[119] MNRF, however, repeats its submission that the Inquiry Officers should not recommend that location approval be granted, even with conditions, due to its position

on the issues discussed above. On this basis, MNRF did not make submissions concerning any potential conditions, even in the alternative. MNRF submits that, if the Tribunal wishes to consider a conditional approval, it would request input into the contents and drafting of any such conditions.

*Findings on Sub-issue No. 7*

[120] As discussed above, the Inquiry Officers have made findings that: the water levels above R-1 will remain within the natural range of fluctuation that is already experienced and the change to water levels in the upper lakes due to the Project is less than 10 cm/day, conservatively estimated; these water level changes will have no more than negligible impacts on the biological conditions in the upper lakes; and the April 2017 PCMP and the biological studies and surveys undertaken during the EA and Application processes are adequate.

[121] Given their findings and all of the evidence and submissions reviewed in this matter, the Inquiry Officers find that MNRF's refusal to approve the Project's location is not fair, sound or reasonably necessary to achieve the various purposes of the *LRIA*, pursuant to s. 10(11) of the *LRIA*. Based on the evidence, the Inquiry Officers find that the Project will achieve the purposes in s. 2 of the *LRIA*, including: the management, protection, preservation and use of the waters of the lakes and rivers of Ontario and the land under them; the protection and equitable exercise of public rights in or over the waters of the lakes and rivers of Ontario; the protection of the interests of riparian owners; the management, perpetuation and use of the fish, wildlife and other natural resources dependent on the lakes and rivers; the protection of the natural amenities of the lakes and rivers and their shores and banks; and the protection of persons and of property by ensuring that dams are suitably located, constructed, operated and maintained and are of an appropriate nature with regard to the purposes previously noted.

[122] Under s. 14(5) of the *LRIA*, the Minister may approve the location or the plans and specifications of a dam subject to such conditions or with such changes as the Minister considers advisable to further the purposes of the *LRIA*. In the Inquiry Officers'

opinion, it is appropriate to recommend a conditional approval. The Inquiry Officers provide the following recommendations and commentary:

- The Inquiry Officers find that it is appropriate to recommend that the conditions proposed by LCPI (and set out above) in relation to location approval be included.
- In addition, the Inquiry Officers recommend that the hydraulic model be updated with the water level data that has been collected throughout the study area since the last model iteration, and that this updated model undergo a peer review. This updated model is intended to confirm that the hydraulic modelling appropriately reflects the operation of the Project and the potential impacts to water levels in the upper lakes, and to provide input to the next phase of approval.
- As LCPI has not undertaken an elevation survey of the 'Natural Reservoir', the Inquiry Officers recommend that this be done prior to the next phase of approval.

[123] The Inquiry Officers note MNRF's request that it be given the opportunity to provide input into the contents and drafting of any such conditions in a recommended conditional approval. However, MNRF was provided with an opportunity to provide submissions concerning appropriate conditions and the Inquiry Officers find it appropriate to make these recommendations and leave the drafting of conditions to the Minister.

## **CONCLUSION**

[124] To conclude, the Inquiry Officers find that the intended refusal of the Application is not fair, sound and reasonably necessary to achieve the purposes of the *LRIA*.

## **RECOMMENDATIONS**

[125] The Inquiry Officers recommend that the Minister approve the location of the

proposed dam, subject to the following conditions:

- The construction and operation of the Project is to be in accordance with the ESR dated July 2011 presented on behalf of LCPI by IBI. As per the July 2011 ESR, the Environmental Monitoring Program will be an adaptive management approach and will include all study areas identified in the ESR and the 2012 expanded study areas.

The normal controlled operating water levels upstream of the dam are to be as stated in the July 2011 ESR as follows:

- (1) normal maximum controlled operating level at 233.70 masl;
- (2) normal minimum controlled operating level at 233.10 masl; and
- (3) legal controlled operating range of 0.60 m

The minimum discharge in to the bypass reach (the ecological flow) is to be 0.065 m<sup>3</sup>/s. Or the whole of system flows if the natural system flows fall below the 0.065 m<sup>3</sup>/s threshold.

Facility operations to be Run of River (no changes or manipulation to natural water levels and/or flows) during sensitive fisheries windows, as per the July 2011 ESR.

- LCPI is to continue consultation with the Identified Aboriginal Communities and to provide updates as the development moves forward and throughout the term of operations.
- LCPI is to provide a Hydraulic Impact Assessment, Dam Hazard Potential Classification and anticipated IDF values at Plans and Specifications Approvals (LCPI asserts that these conditions have been satisfied).
- LCPI is to provide detailed Plans and Specifications to MNRF

for approval prior to commencing construction.

- LCPI is to provide OLS legal survey delineating the complete area to be occupied by the Project including the area to new inundation to satisfy land lease requirement prior to commercial operations.
- LCPI is to provide a Final Operating Plan prior to commercial operations.
- LCPI is to update the hydraulic model with the water level data throughout the study area that has been collected throughout the study area since the last model iteration, and this updated model is to undergo a peer review. This updated model is intended to confirm that the hydraulic modelling appropriately reflects the operation of the Project and the potential impacts to water levels in the upper lakes, and to provide input to the next phase of approval.
- LCPI is to undertake an elevation survey of the 'Natural Reservoir', prior to the next phase of the approval.

*"Maureen Carter-Whitney"*

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*"Helen Jackson"*

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**Mining and Lands Tribunal**

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