

# **Turning Point Generation**

**Canyon Creek Pumped Hydro Energy Storage Project** 

August 2, 2018

# **Alberta Utilities Commission**

Decision 22934-D01-2018 Turning Point Generation Canyon Creek Pumped Hydro Energy Storage Project

Proceeding 22934 Applications 22934-A001 and 22394-A002

August 2, 2018

# Published by the:

Alberta Utilities Commission Eau Claire Tower, 1400, 600 Third Avenue S.W. Calgary, Alberta T2P 0G5

Telephone: 403-592-8845

Fax: 403-592-4406

Website: www.auc.ab.ca

Calgary, Alberta

Turning Point Generation Canyon Creek Pumped Hydro Energy Storage Project Decision 22934-D01-2018
Proceeding 22934
Applications 22934-A001 and 22934-A002

## 1 Decision summary

1. In this decision, the Alberta Utilities Commission must decide whether to approve applications from Turning Point Generation, to construct and operate a power plant and hydro development designated as the Canyon Creek Pumped Hydro Energy Storage Project. After consideration of the record of the proceeding, and for the reasons outlined in this decision, the Commission finds that the project is in the public interest having regard to the social, economic, and other effects of the project, including its effect on the environment.

### 2 Introduction

- 2. Turning Point Generation (Turning Point) filed applications with the Alberta Utilities Commission seeking an approval to construct and operate a power plant and to construct and operate a hydro development in the Hinton area, pursuant to sections 9, 10 and 11 of the *Hydro and Electric Energy Act*. These applications, registered on October 31, 2017 as applications 22934-A001 and 22934-A002, designate the proposed power plant and proposed hydro development as the Canyon Creek Pumped Hydro Energy Storage Project (project).
- 3. On November 27, 2017, the Commission issued notice of the applications for Proceeding 22934, directing any person who had concerns about or objections to the project, or who wished to support the project, to file a submission by December 18, 2017.
- 4. The Commission received submissions of support for the project from Prairie North Const. Ltd., Quadra Logistic Group Ltd., E&S Mechanical Ltd., Wayfinder Corporation, Energy Storage Canada, and the Yellowhead Member of Parliament. The submissions stated that the project would be beneficial to the local area and the province by providing reliable and environmentally-friendly power and by creating jobs.
- 5. The Commission also received a submission from the Gunn Métis Local 55 which opposed the project.
- 6. The Commission issued a notice of hearing on March 27, 2018, which scheduled a hearing for May 29, 2018, in Edmonton, Alberta.
- 7. On April 28, 2018, the Gunn Métis Local 55 filed a submission indicating that it had reached an agreement with Turning Point and that it wished to withdraw its statement of intent to participate.

- 8. In response to the Gunn Métis Local 55's withdrawal of its statement of intent to participate, the Commission issued a notice of hearing cancellation on April 20, 2018, as no other parties had submitted objections to the project.
- 9. On April 27, 2018, West Fraser Mills Ltd. (West Fraser) filed a statement of intent to participate in the proceeding. West Fraser submitted that the proposed project would be located within its forest management area and would require that lands be withdrawn from the area. This would result in the permanent loss of productive forest land base which West Fraser described as having negative long-term consequences and for which it would have to be compensated before it would consent. In addition, West Fraser stated that the penstock line would involve multiple road crossings, including one of its main haul roads. It stated that it only recently became aware of the size of the penstock line while assessing how to accommodate road crossings. West Fraser submitted that it was actively working with Turning Point to come to an agreement on the crossings.
- 10. In its April 30, 2018 response to West Fraser's statement of intent to participate, Turning Point submitted that it was working towards an agreement with West Fraser for the land withdrawal, including compensation, and that it understood that West Fraser's consent is a requirement of the Alberta Environment and Parks' (AEP) land disposition granting process. It stated that it was also working with West Fraser to meet West Fraser's road crossing standards and requirements. Turning Point requested that the Commission dismiss West Fraser's statement of intent to participate and defer the matter to the AEP approval processes.
- 11. The Commission issued a letter on May 14, 2018, indicating that West Fraser had the potential to be affected by the project and declining Turning Point's request to dismiss the statement of intent to participate. Because West Fraser stated that it did not intend to participate in a hearing on the matter, the Commission did not set out further process, but stated that it would consider West Fraser's submission when making its decision.

## 3 Legislative scheme

12. The respective legislative schemes for hydro developments and power plants are described below.

### 3.1 Hydro developments

- 13. Under sections 9 and 10 of the *Hydro and Electric Energy Act*, the Commission may approve the construction and operation of a hydro development. However, no approval may be issued unless it is authorized by an enactment. These sections state in part:
  - **9** (3) When the Commission receives an application for an order approving the construction of a hydro development, the Commission shall make any investigation, make any inquiry and hold any hearings it considers necessary or desirable in connection with the application.

(5) Subject to subsection (9), when the Commission does not refuse an application to construct a hydro development it shall, after dealing with the matters mentioned in subsection (3), report on it to the Lieutenant Governor in Council.

(6) On a report being received by the Lieutenant Governor in Council pursuant to subsection (5), the Executive Council shall cause a Bill to be prepared for the authorization of an order of the Commission for construction of the hydro development by the Legislature.

...

- (8) On Royal Assent being given to a Bill for the authorization of an order of the Commission for the construction of a hydro development, the Commission shall, by order, approve the construction of the hydro development and may make its approval subject to any conditions that it is empowered to impose under this Act and the regulations.
- (9) The Commission shall not approve the construction of a hydro development unless there is an Act authorizing an order of the Commission for the construction of the hydro development.
- **10** (1) No person shall operate a hydro development unless the Commission, by order and with the authorization of the Lieutenant Governor in Council, has approved the operation.
- (2) The Lieutenant Governor in Council may make the Lieutenant Governor in Council's authorization under subsection (1) subject to any terms and conditions the Lieutenant Governor in Council considers necessary or desirable.
- 14. A hydro development may trigger an environmental impact assessment process under the *Environmental Protection and Enhancement Act*, the *Canadian Environmental Assessment Act*, 2012, or both acts. The proposed hydro development did not trigger an environmental impact assessment process under either of these acts.¹ Further, as no environmental impact assessment report was required for the proposed hydro development under the *Environmental Protection and Enhancement Act*, the proposed hydro development is not a water management project as defined in the *Natural Resources Conservation Board Act*.² As a result, the *Natural Resources Conservation Board Act* does not apply to the proposed hydro development.

### 3.2 Power plants

- 15. The Commission is also responsible for regulating the construction and operation of power plants in Alberta. Section 11 of the *Hydro and Electric Energy Act* states that no person shall construct or operate a power plant without prior approval from the Commission.
- 16. When considering an application for a power plant, the Commission is guided by sections 2 and 3 of the *Hydro and Electric Energy Act*.
- 17. Section 2 lists the purposes of the *Hydro and Electric Energy Act* in relation to the generation of electric energy, as follows:
  - to provide for the economic, orderly and efficient development and operation, in the public interest, of the generation of electric energy in Alberta
  - to secure the observance of safe and efficient practices in the public interest in the generation of electric energy in Alberta

<sup>&</sup>lt;sup>1</sup> Exhibit 22934-X0036, Appendix 1 and Exhibit 22934-0107.

<sup>&</sup>lt;sup>2</sup> Natural Resources Conservation Board Act, section 1(j).

- to assist the government in controlling pollution and ensuring environment conservation in the generation of electric energy in Alberta
- 18. Section 3 of the *Hydro and Electric Energy Act* requires the Commission to have regard for the purposes of the *Electric Utilities Act* when assessing whether a proposed power plant is in the public interest. The purposes of the *Electric Utilities Act* include the development of an efficient electric industry structure and the development of an electric generation sector guided by competitive market forces.<sup>3</sup>
- 19. Section 3 of the *Hydro and Electric Energy Act* further directs that the Commission shall not have regard for whether a proposed power plant "is an economic source of electric energy in Alberta or to whether there is a need for the electric energy to be produced by such a facility in meeting the requirements for electric energy in Alberta or outside Alberta." As such, in the following assessment of whether the proposed power plant is in the public interest, the Commission has not had regard for whether there is a need for the proposed power plant.

### 3.3 Public interest

- 20. The Commission's public interest mandate is found in Section 17 of the *Alberta Utilities Commission Act*, which states:
  - 17(1) Where the Commission conducts a hearing or other proceeding on an application to construct or operate a hydro development, power plant or transmission line under the *Hydro and Electric Energy Act* or a gas utility pipeline under the *Gas Utilities Act*, it shall, in addition to any other matters it may or must consider in conducting the hearing or other proceeding, give consideration to whether the construction or operation of the proposed hydro development, power plant, transmission line or gas utility pipeline is in the public interest, having regard to the social and economic effects of the development, plant, line or pipeline and the effects of the development, plant, line or pipeline on the environment.
- 21. In Decision 2001-111,<sup>4</sup> the Commission's predecessor, the Alberta Energy and Utilities Board (Board), explained its approach to assessing whether the approval of a power plant is in the public interest, as follows:

The determination of whether a project is in the public interest requires the Board to assess and balance the negative and beneficial impacts of the specific project before it. Benefits to the public as well as negative impacts on the public must be acknowledged in this analysis. The existence of regulatory standards and guidelines and a proponent's adherence to these standards are important elements in deciding whether potential adverse impacts are acceptable. Where such thresholds do not exist, the Board must be satisfied that reasonable mitigative measures are in place to address the impacts. In many cases, the Board may also approve an application subject to specific conditions that are designed to enhance the effectiveness of mitigative plans. The conditions become an essential part of the approval, and breach of them may result in suspension or rescission of the approval.

<sup>&</sup>lt;sup>3</sup> Electric Utilities Act, Section 5.

EUB Decision 2001-111: EPCOR Generation Inc. and EPCOR Power Development Corporation 490-MW Coal Fired Power Plant, Application 2001173, December 21, 2001.

In the Board's view, the public interest will be largely met if applications are shown to be in compliance with existing provincial health, environmental, and other regulatory standards in addition to the public benefits outweighing negative impacts.<sup>5</sup>

22. The Commission is of the view that this approach to assessing whether a proposed hydro development or power plant is in the public interest remains consistent with the purpose and intent of the statutory scheme, and that it provides an effective framework for the assessment of projects that are the subject of multiple jurisdictions and require multiple approvals or authorizations.

#### 3.4 **Information and other requirements**

23. Rule 007: Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments applies to applications to the Commission for the construction and operation of hydro developments and power plants that are governed by the Hydro and Electric Energy Act. Applications must meet the informational and other requirements set out in Rule 007 and the applicant must also receive all approvals required pursuant to other applicable provincial and federal legislation.

#### 4 Discussion

#### 4.1 **Project**

- 24. Turning Point proposed to construct and operate the project, located approximately 13 kilometres northeast of the town of Hinton, in a forest management area adjacent to the Obed Mountain coal mine, which is currently being reclaimed.
- 25. Turning Point described the concept of pumped hydro storage as follows:

Pumped hydro energy storage (PHES) is the concept of utilizing water to store energy. While many PHES projects are in operation around the world the concept is relatively novel in Alberta and so deserves a brief explanation here. Water is pumped from a lower reservoir to an upper reservoir when power requirements are low. When power is needed, for instance at peak power demand times or when the wind stops blowing in Alberta, the water is allowed to flow back down to the lower reservoir through turbines to generate power. The process can be repeated, for instance on a daily basis.<sup>6</sup>

26. The project would consist of two purpose-built reservoirs, a power house, a pump house and a pipe, referred to as a penstock, that would connect the two reservoirs. The project would be located in sections 23, 24, 25, 26, 27, 28, 29, 31, and 32 of Township 52, Range 24, west of the Fifth Meridian. The power house and pump house would be located in the northeast quarter of Section 23, Township 52, Range 24, west of the Fifth Meridian. The project location is shown in Figure 1 below.

EUB Decision 2001-111, page 4.

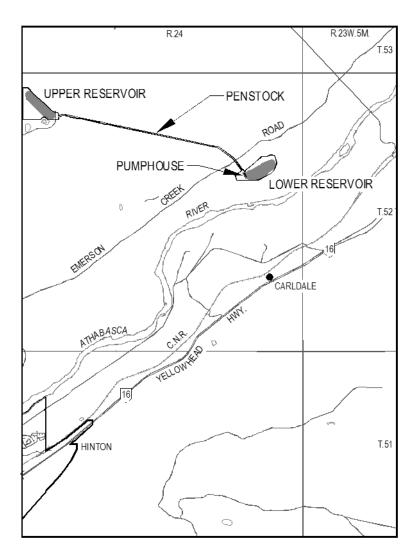


Figure 1 – Proposed project location

- 27. The power plant would have a total generating capability of 75 megawatts (MW). Turning Point stated that it had not finalized the selection of the make and model of the generators but that preliminary design indicated the power plant would consist of three 25-MW Pelton turbines. Preliminary design also indicated the pump house would consist of four 16-MW three-stage horizontal axis pumps. The project would have a total storage capacity of 37 hours.
- 28. The upper and lower reservoirs, which are part of the hydro development, would each have a surface area of 40 hectares and a water holding capacity of 2,750,000 m<sup>3</sup>. The reservoirs would be created by utilizing existing topography and building a berm of less than 15 metres. The penstock connecting the reservoirs would consist of a buried steel water pipeline, approximately seven kilometres in length and 2.5 metres in diameter.
- 29. Turning Point submitted that the entire hydro development would operate as an isolated, closed-loop system and would not be connected to existing natural water bodies. Water would be sourced from the Athabasca River to initially fill the reservoirs. A small amount of water would be required from time to time to replace water lost through evaporation and leakage.

30. The power plant would be connected to the Alberta Interconnected Electric System by a 138-kilovolt transmission line. Turning Point indicated that the interconnection would be the subject of a separate application.

# 4.2 Environmental and noise impacts

- 31. Turning Point submitted that in its site selection, preliminary design, and layout of the project, it intended to avoid and mitigate potential impacts on existing waterbodies and a nearby recreational trail. As the project would utilize an existing disturbed area adjacent to the Obed Mountain coal mine, it would use existing roads where possible to mitigate environmental impacts.
- 32. Turning Point filed correspondence from the Canadian Environmental Assessment Agency confirming that a federal environmental impact assessment is not required,<sup>7</sup> and correspondence from AEP confirming that a provincial environmental impact assessment is not required.<sup>8</sup>
- 33. Turning Point retained CharettePellPoscente Environmental Corp. to prepare an environmental evaluation report for the project. The report identified the potential environmental impacts of the project and proposed mitigation measures to limit impacts as much as possible.
- 34. The report indicated that the project spans three Natural Subregions across two Natural Regions. The upper reservoir would by located within the Subalpine Subregion of the Rocky Mountain Natural Region. The penstock would span the Upper Foothills and Lower Foothills subregions of the Foothills Natural Region. The lower reservoir would be sited within the Lower Foothills Subregion of the Foothills Natural Region. The project falls within the Upper Athabasca Region for which a regional land use plan has yet to be developed.
- 35. The report indicated that the penstock would be routed to minimize creek crossings and impact on fish habitat and would require one creek crossing of an unnamed tributary to Canyon Creek. Brook Trout and Rainbow Trout are documented within the project area, however no fish or spawning activity has been documented in the unnamed tributary.
- 36. The report identified five wetlands within the project area and two additional wetlands adjacent to the project boundaries. The project would remove 26.38 hectares of wetland area. The report submitted that "A replacement plan, mitigation strategies, and a reclamation plan for adjacent and/or temporarily disturbed wetlands, will be included in the Wetland Assessment and Impact Report (WAIR), which must be provided as part of the *Alberta Water Act* application package." Turning Point indicated that it had filed an application to AEP for approval under the *Water Act* in early 2018.
- 37. The report indicated that a detailed reclamation plan would be developed and implemented once the project is no longer in operation. The objective of the reclamation plan would be to return the project area to a combination of upland and aquatic habitat. Turning Point

<sup>&</sup>lt;sup>7</sup> Exhibit 22934-X0107, Attachment 2 CEAA Clearance Letter.

<sup>&</sup>lt;sup>8</sup> Exhibit 22934-X0036, Environmental Evaluation Report, Appendix 1, PDF page 88.

<sup>&</sup>lt;sup>9</sup> Exhibit 22934-X0036, Environmental Evaluation Report.

<sup>&</sup>lt;sup>10</sup> Exhibit 22934-X0036, Environmental Evaluation Report, PDF page 27.

Exhibit 22934-X0091, Canyon Creek AEP review letter for PP17, PDF page 1.

would have to obtain a reclamation certificate from AEP. Interim reclamation would also occur during the operation phase of the project to reclaim areas disturbed during construction.

- 38. The report further stated that wildlife studies were conducted and that four amphibian species, 64 bird species and 21 mammal species were identified in the project area.
- 39. Turning Point also submitted the environmental evaluation report and a wildlife report entitled "Bighorn Wildlife Assessment of Terrestrial Wildlife Resources" to AEP wildlife and fisheries biologists for review. Turning Point provided the Commission with a table containing the AEP biologists' comments and Turning Point's response to the comments, including any follow-up action required.<sup>13</sup>
- 40. Turning Point stated it would complete a construction plan and operations maintenance and monitoring plans, but that construction and operational details necessary to complete these plans are not yet available and that it intended on drafting these plans once all key input factors are known (e.g., regulatory conditions, major equipment selection). Turning Point committed to submitting these documents to the Commission and other regulatory agencies, such as AEP, upon completion. Specifically, Turning Point undertook to provide the construction plan at the earlier of 90 days prior to starting construction or within 60 days of approval by AEP. Turning Point identified a number of conditions and commitments that it would include in its construction plan around mitigation measures and pre-construction wildlife survey methodology for which the Commission had issued information requests.<sup>14</sup>
- 41. Turning Point retained RWDI Air Inc. to prepare a noise impact assessment (NIA). In the NIA, RWDI Air Inc. found that "cumulative noise levels including the Project will comply with nighttime PSL [permissible sound level] at the 1.5km Criteria boundary and that LFN [low frequency noise] concerns are not expected to be generated by the Project." There are no residences within 1.5 kilometres of the project.

### 4.3 Social impacts

42. Turning Point filed a socio-economic impact assessment report that found that the negative social impacts to the town of Hinton and the surrounding area would be insignificant, and that the dominant effects of the project, such as employment, economic activity, and increased tax base, are positive and also contribute towards the government of Alberta's goals for emissions reductions. Turning Point submitted that the project is expected to employ approximately 300 persons during construction and that in the long term, it will employ six people on site for operations and maintenance activities. Turning Point stated that much of the services and supplies for the project will be sourced locally.

8 • Decision 22934-D01-2018 (August 2, 2018)

\_

<sup>&</sup>lt;sup>12</sup> Exhibit 22934-X0007, Environmental Report Wildlife Study.

Exhibit 22934-X0091, Canyon Creek AEP review letter for PP17, PDF pages 3 to 12.

<sup>&</sup>lt;sup>14</sup> Exhibit 22934-X0106, Information Request 3 response, PDF pages 4 to 5.

<sup>&</sup>lt;sup>15</sup> Exhibit 22934-X0008, Noise Impact Assessment, PDF page 14.

- 43. Turning Point filed a visual impact assessment showing visual representations of the project upon completion. It stated that the visual impact to the public would be minimal and that the only portion of the project visible from common public locations, such as Highway 16, would be portions of the penstock right-of-way clearance.
- 44. Turning Point submitted that the project would be constructed in accordance with the requirements of the dam safety regulations<sup>16</sup> and the Canadian Dam Safety Association Guidelines.<sup>17</sup> It added that:

The Project involves the construction of dams, a potential public safety hazard. Detailed Project Design is to be completed by Professional Engineers in accordance with good engineering practice including adherence to the Dam Safety Regulations. In accordance with the Dam Safety Regulations a qualified Professional Engineer will re-assess to the satisfaction of a Dam Safety Officer the applicability of the Dam Safety Regulation once the project is constructed. The results of this re-assessment will determine the appropriate requirements for maintenance, inspections, monitoring and reporting under the Dam Safety Regulation in order to minimize the risk to public. 18

- 45. Turning Point received *Historical Resources Act* approval from Alberta Culture and Tourism on March 29, 2017.
- 46. Turning Point stated that it conducted a comprehensive participant involvement program for the project which was designed to "identify potentially affected parties, share information about the project and provide a means for parties to express concerns, exchange information, and potentially resolve concerns either through information sharing or mitigation measures."<sup>19</sup>
- 47. Turning Point submitted that there were no private landowners or residents within 800 metres of the project, with the nearest residence located approximately 1.9 kilometres from the project. It added that industrial facilities such as oil and gas and mining accounted for most of the titled or registered interests within 2,000 metres of the project. Turning Point notified parties within 2,000 metres of the project and included residents of the community of Carldale which is located immediately outside this area. It also consulted with representatives from local jurisdictions, including the Town of Hinton and Yellowhead County. In addition, an open house for the project was held on April 29, 2017.

<sup>18</sup> Exhibit 22934-X0021, PDF page 10.

<sup>&</sup>lt;sup>16</sup> In Alberta, dams are regulated under the *Water Act* and dam safety requirements are set out in Part 6 of the *Water (Ministerial) Regulation*.

<sup>&</sup>lt;sup>17</sup> Exhibit 22934-X0021.

<sup>&</sup>lt;sup>19</sup> Exhibit 22934-X0023, Participant Involvement Program Report, PDF page 2.

- 48. Turning Point stated that it consulted with AEP and the Aboriginal Consultation Office (ACO) about consultation with First Nations in the area of the project. In its pre-consultation assessment, the ACO determined that the project required Level 3, extensive consultation,<sup>20</sup> with two First Nations, the Aseniwuche Winewak Nation (AWN) and the O'Chiese First Nation (OCFN). As a result, Turning Point prepared and submitted a consultation plan to the ACO for approval. After the consultation plan was approved, Turning Point provided information packages to the AWN and the OCFN. The AWN and OCFN conducted visits to view the project area and site, and completed their own reviews. After review, the AWN concluded they had no site-specific concerns. The OCFN did not express any site-specific concerns or objections. Turning Point indicated that the ACO had determined that the consultation process was satisfactory and issued a Consultation Adequacy Decision on June 19, 2017. Turning Point also consulted with the Gunn Métis Local 55.
- 49. Turning Point anticipated that construction of the project would take approximately one and a half years and submitted that the commercial operations date for the project is July 31, 2020. Turning Point expects that the project would operate for more than 30 years. It stated however that similar projects have been able to extend their operating life, such that a more than 50 year operation life is possible.

# 5 Findings

- 50. Subject to the specific comments and conditions set out below, the Commission has determined that the technical, siting, environmental and noise aspects of the project have been met.
- 51. The Commission is satisfied that Turning Point's participant involvement program meets the requirements of Rule 007. Based on the information filed in this proceeding, Turning Point provided potentially affected stakeholders and the AWN, OCFN and Gunn Métis Local 55 with sufficient information to understand the project and its potential implications and sufficient opportunity to express concerns about the project. Other than the concerns of West Fraser discussed below, the Commission considers that there are no outstanding concerns with the potential impacts of the project.
- 52. The Commission acknowledges the concerns outlined by West Fraser and that both Turning Point and West Fraser indicated they were working towards an agreement on road crossings and the withdrawal of timber lands from the forest management area. West Fraser indicated that it did not want to participate in a hearing on the applications. Given that West Fraser's consent is required for AEP to issue a land disposition for the project, the Commission is satisfied that Turning Point will take steps to resolve West Fraser's concerns.

10 • Decision 22934-D01-2018 (August 2, 2018)

Under the Government of Alberta's Guidelines on Consultation with First Nations on Land and Natural Resource Management, Level 3, extensive consultation is required for projects that potentially have high impacts on treaty rights and traditional uses.

- 53. The closest residence is approximately 1.9 kilometres from the project. Turning Point has demonstrated that any visual impacts from the project are minimal and that it considered social impacts when designing and siting the project. Turning Point has obtained *Historical Resources Act* approval from Alberta Culture and Tourism, and also indicated that the project would result in positive social benefits, including job creation. The Commission also recognizes the letters of support for the project filed in this proceeding. Accordingly, the Commission finds that the social impacts of the project are minimal.
- 54. The Commission is satisfied that the noise impact assessment submitted by Turning Point fulfills the requirements of Rule 012: *Noise Control*.
- 55. With respect to dam safety, Turning Point has indicated that it will comply with the *Water Act* requirements and the dam safety requirements set out in Part 6 of the *Water (Ministerial) Regulation*. The Commission is therefore satisfied that adherence to these requirements will ensure public safety in relation to the establishment of the proposed reservoirs will be protected.
- 56. The Commission accepts that by siting the project adjacent to a disturbed area, the Obed Mountain coal mine, potential environmental impacts of the project are reduced. Further, the project is designed as a closed-loop system that is not connected to existing natural water bodies, which serves to mitigate some environmental impacts of the project. However, water for the project will be sourced initially from the Athabasca River to fill the reservoirs, along with small amounts of water required from time to time to replace water lost through evaporation and leakage. As a water licence under the *Water Act* is required to draw water from the Athabasca River, the Commission need not assess the potential impacts of this withdrawal on the Athabasca River. Such an assessment will be conducted by AEP.
- 57. Nevertheless, given that the project will flood approximately 80 hectares of land to create the reservoirs and will require the construction of a seven kilometre penstock, in making its decision, the Commission must assess the potential environmental impact on the land in question and the wetlands in the area, and whether these impacts have been adequately mitigated. The potential environmental impacts of the proposed project are set out in the environmental evaluation report submitted by Turning Point in support of its applications. This report also sets out mitigation measures for the proposed project. AEP fish and wildlife biologists have reviewed the project and have made comments on the proposed mitigation measures. Turning Point has committed to undertaking a number of follow-up actions in response to comments made by AEP biologists. Turning Point specified that it will provide reclamation details, stream crossing details, and instream work timing restrictions in the project's construction plan. The construction plan will also include specific details around wildlife mitigation and wildlife survey methodology.

- 58. The Commission requested a copy of Turning Point's proposed construction plan and proposed operations, maintenance, and monitoring plans. Turning Point responded that it could not file a copy of these plans because it had not completed detailed design of the project, had not selected major equipment and manufacturers, and had not determined equipment specifications and construction equipment details, operational limitations of the project, and seasonal environmental constraints. Turning Point added that it would prepare these plans once it received regulatory approvals for the project. Although the Commission does not generally review construction plans, it requested Turning Point's construction plan because the level of detail in the environmental evaluation report was insufficient in some areas.
- 59. Turning Point has committed to providing the construction plan to AEP and to the Commission, and to include the specific details on mitigation measures and pre-construction wildlife survey methodology, sought by the Commission. However, given the nature of the mitigation measures to be included in the construction plan, and to ensure adequate mitigation is implemented, the Commission attaches the condition set out below to any approval that will be issued for this project.
- 60. The Commission also expects that the applicant will comply with all applicable requirements for conservation and reclamation of the project site under the *Environmental Protection and Enhancement Act* at the end of the project's life, including the requirement to obtain a reclamation certificate. However, if for any reason, at the time of decommissioning, there are no statutory reclamation requirements in place for hydro developments or power plants, the applicant must submit a reclamation plan to the Commission for its review and approval. As a result, the Commission attaches the condition set out below to any approval that will be issued for this project.
- 61. The Commission finds that should an approval be issued for this project, it would be subject to the following conditions:
  - Turning Point must submit to the Commission a copy of its construction plan and of correspondence from AEP indicating that it has reviewed the construction plan and has no outstanding concerns with the plan, within 60 days of AEP completing its review and prior to the start of construction.
  - The applicant shall comply with current applicable reclamation standards at the time of decommissioning. If no legislative requirements pertaining to reclamation are in place at the time of decommissioning, the applicant must submit a reclamation plan to the Commission for approval.
- 62. The Commission finds that with the implementation of the proposed mitigation measures outlined in the applications and the implementation of the above-noted conditions, the environmental effects from construction and operation of the project can be adequately mitigated.
- 63. Based on the foregoing, the Commission considers the project to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

### 6 Decision

- 64. Given that the Commission has decided that approval of the applications is in the public interest and the project may be approved under sections 9, 10 and 19 of the *Hydro and Electric Energy Act*, it will provide a copy of this decision to the Lieutenant Governor in Council in accordance with Section 9 (5) of the *Hydro and Electric Energy Act*. The Commission will only issue an approval for the construction of the hydro development with the above-noted conditions if it is authorized to do so by an act authorizing the issuance of the approval, and will issue an approval for the operation of the hydro development if the Lieutenant Governor in Council has authorized the issuance of such an approval.
- 65. Pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves the power plant application with the above-noted conditions. The Commission will issue the power plant approval once it is authorized to issue the hydro development approval.

Dated on August 2, 2018.

### **Alberta Utilities Commission**

(original signed by)

Anne Michaud Vice Chair

(original signed by)

Neil Jamieson Commission Member

(original signed by)

Joanne Phillips Commission Member