

August 29, 2016

Via Email ([lmanning@lawsonlundell.com](mailto:lmanning@lawsonlundell.com))

Lewis L. Manning  
Lawson Lundell LLP  
Bow Valley Square 2  
3700, 205 – 5th Avenue SW  
Calgary, Alberta T2P 2V7

Dear Mr. Manning:

**Re: Enel Dispute Regarding Construction Contribution Costs  
Castle Rock Ridge Connection Project**

Further to the June 30, 2016 written dispute submitted by Enel Alberta Wind Inc., General Partner of the Castle Rock Ridge Limited Partnership, attached is the Decision of the Alberta Electric System Operator, made pursuant to Section 103.2 of the ISO rules, subsection 5(2).

Sincerely,

*“Original Signed By”*

Heidi Kirrmaier  
Vice-President, Regulatory

Public

## INDEPENDENT SYSTEM OPERATOR

IN THE MATTER OF the ISO rules, Section 103.2, *Dispute Resolution* and the ISO tariff, Section 8, *Construction Contribution for Connection Projects*;

AND IN THE MATTER OF a dispute submitted to the Independent System Operator, operating as the Alberta Electric System Operator, by Enel Alberta Wind Inc., General Partner of the Castle Rock Ridge Limited Partnership, on June 30, 2016 regarding the construction contribution costs charged in respect of the classification of participant-related costs for the Castle Rock Ridge connection project.

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DECISION OF THE ALBERTA ELECTRIC SYSTEM OPERATOR

AUGUST 29, 2016

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## I. BACKGROUND

### (a) Introduction

1. On June 30, 2016, Enel Alberta Wind Inc. (“Enel”), General Partner of the Castle Rock Ridge Limited Partnership, submitted a written dispute (“Dispute”) to the Alberta Electric System Operator (“AESO”) pursuant to the Independent System Operator (“ISO”) rules Section 103.2, *Dispute Resolution*, regarding the AESO’s classification of participant-related and system-related costs for the Castle Rock Ridge (“CRR”) connection project, AESO Project No. 462 (the “CRR Connection”) and the resulting participant-related costs that Enel was charged and paid.
2. Enel claims that it was required to pay for transmission facilities that were far in excess of the minimum requirements to serve Enel’s needs for the CRR Connection.<sup>1</sup> It also claims that the costs paid by Enel are in contravention of section 8 of the 2011 ISO tariff, *Construction Contribution for Connection Projects* (as well as subsection 9.3 c) iii) of the previous 2006 ISO tariff)<sup>2</sup> and that Enel is entitled to a refund for such costs as well as Enel’s carrying costs (i.e., interest).
3. ISO rules Section 103.2, subsections 4 and 5(2), require the following:
  - (a) Within 10 business days of receiving a written dispute, the AESO General Counsel must respond in writing to the disputing market participant to acknowledge receipt of the written dispute and identify the AESO vice president accountable for handling the dispute.
  - (b) The accountable AESO vice president must, within 30 business days of the acknowledgment being issued, review the dispute and advise the market participant in writing of the AESO decision, including reasons, regarding the matter in dispute.
4. The required acknowledgment was delivered to counsel for Enel by email on July 15, 2016, and Heidi Kirrmaier, Vice-President Regulatory was identified as the vice president accountable for the Dispute.

### (b) Relief Requested by Enel

5. Enel has requested the following relief:<sup>3</sup>
  - (a) “an immediate refund in the amount of \$20.3M for the costs incurred by Enel for construction of SATR System facilities in excess of those Participant-related facilities required to interconnect CRR;”
  - (b) “in the alternative, an immediate refund of \$14.4M, plus an additional refund of \$7.9M when the AUC disposes of the application for the Southern Alberta

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<sup>1</sup> Dispute, Executive Summary, page 1.

<sup>2</sup> *Ibid*, page 1.

<sup>3</sup> Dispute, page 1.

Transmission Reinforcement (“SATR”) Project for the portion from CRR to Chapel Rock (“CRR-CR”); and”

- (c) “a refund of Enel’s carrying costs in the amount of \$7,258,266 for the advance that Enel made to the AESO to fund the construction of System facilities since 2011.”

**(c) Preliminary Matter**

6. As discussed in more detail below, Enel contends that the minimum need for the CRR Connection was either a 138 kV or a single 240 kV transmission line. The CRR Connection is a double circuit 240 kV transmission line. The AESO has previously acknowledged that a single circuit 240 kV transmission line was the size that Enel required.<sup>4</sup> Consequently, Enel’s customer contribution has been adjusted and reduced by the AESO’s estimate of the incremental cost of the second 240 kV circuit, which is \$5.7 million. Contemporaneously with the issuance of this Decision, the AESO is initiating payment of a \$5.7 million refund by the transmission facility owner (“TFO”), AltaLink Management Ltd. (“AltaLink”), on behalf of AltaLink L.P.
7. As a result, the remaining amount of Enel’s request for refund is \$14.6 million, plus interest. Similarly, the remaining amount of Enel’s alternative request for refund is \$16.6 million, plus interest.

**(d) Overview of the AESO’s Obligations Related to the Transmission System**

8. The AESO has broad duties and obligations, including a duty to provide system access service on the transmission system; a duty to direct the safe, reliable and economic operation of the interconnected electric system; and a duty to assess the current and future needs of market participants and plan the capability of the transmission system to meet those needs.
9. These duties and obligations are prescribed by the *Electric Utilities Act* (“EUA”), the *Transmission Regulation* (“TReg”) and other related regulations. The relevant provisions of the EUA and the TReg, discussed below, were in effect at all times material to the Dispute.

**(i) The AESO’s Transmission System Planning Obligations**

10. The AESO’s transmission system planning obligations are prescribed by sections 17 and 33 of the EUA and section 8(a) and (b) of the TReg.
11. Section 17 of the EUA provides:

17. The Independent System Operator has the following duties:

- (i) to assess the current and future needs of market participants and plan the capability of the transmission system to meet those needs;

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<sup>4</sup> December 4, 2015 letter from the AESO to Enel, Dispute, Appendix C, TAB 29.

12. Section 33 of the EUA provides:

33. The Independent System Operator must forecast the needs of Alberta and develop plans for the transmission system to provide efficient, reliable and non-discriminatory system access service and the timely implementation of required transmission system expansions and enhancements.

13. Section 8(a) and (b) of the TReg:

8. In forecasting the needs of Alberta under section 33(1) of the Act, the ISO

(a) must anticipate future demand for electricity, generation capacity and appropriate reserves required to meet the forecast load so that transmission facilities can be planned to be available in a timely manner to accommodate the forecast load and new generation capacity,

(b) must make assumptions about future load growth, the timing and location of future generation additions, including areas of renewable or low emission generation, and other related assumptions to support transmission system planning,

14. Pursuant to section 10(1)(a) of the TReg, the AESO must prepare a 20-year transmission system plan. Section 10(2) requires the AESO to identify the transmission facility projects it proposes to initiate within 5 years of the date of the plan and within 5 years of each update of the plan.

15. When the AESO determines that a transmission system expansion or enhancement is or may be required to meet the needs of Alberta and is in the public interest, section 34(1) of the EUA requires the AESO to prepare and submit to the Commission for approval a needs identification document (“NID”), which must also meet the applicable requirements of section 11 of the TReg.

(ii) *The AESO’s System Access Service Obligations*

16. Pursuant to section 28 of the EUA, the AESO is the sole provider of system access service on the transmission system.

17. Section 29 of the EUA requires the AESO to provide system access service “in a manner that gives all market participants wishing to exchange electric energy and ancillary services a reasonable opportunity to do so”. [emphasis added]

18. Related to this duty is the obligation, pursuant to section 33 of the EUA, for the AESO to forecast the needs of Alberta and develop plans for the transmission system to provide efficient, reliable and non-discriminatory system access service and the timely implementation of required transmission system expansions and enhancements.

19. In Decision 3473-D02-2015,<sup>5</sup> the Commission found that “a market participant seeking a new connection to the transmission system has no inherent guarantee that it will receive system access service by a specified target in-service date”.<sup>6</sup> The Commission’s conclusion was based on subsection 5 of Section 2 of the ISO tariff, which provides:

Service Not Guaranteed

5(1) The ISO must take reasonable precautions to guard against system access service limitations, reductions and interruptions, but cannot and does not guarantee uninterrupted system access service.

(2) Interruptions may be caused by events including:

- (a) scheduled or planned facility maintenance activities;
- (b) construction, commissioning and facility testing activities;
- (c) unscheduled or unplanned emergency equipment maintenance or other emergencies;
- (d) events of force majeure;
- (e) breaches of obligations owed to the ISO by its suppliers or market participants; or
- (f) as otherwise expressly allowed by a rate or rider in the ISO tariff.

(3) The ISO must make reasonable efforts to restore system access service as soon as practicable after a limitation, reduction or interruption, except where the limitation, reduction or interruption is due to the market participant failing to comply with the ISO tariff.

20. Specifically, the Commission stated:

150. Subsection 5 of Section 2, particularly Subsection 5(2)(b), would apply to a market participant who has not yet signed a system access service agreement and makes it clear that interruptions attributable to construction, commissioning and facility testing activities may interrupt the provision of system access service. Therefore, a market participant seeking a new connection to the transmission system has no inherent guarantee that it will receive system access service by a specified target in-service date.<sup>7</sup>

21. Target in-service dates can be delayed or remain uncertain as a result of the AESO’s obligation to plan transmission expansions and enhancements to meet the needs of Albertans.

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<sup>5</sup> Decision 3473-D02-2015, *Compliance with Directions 5 through 8 from Decision 2014-242, Module 2*.

<sup>6</sup> *Ibid*, at para 150.

<sup>7</sup> *Ibid*.

22. Certain areas of the province represent planning challenges. For example, in the SATR NID,<sup>8</sup> the AESO pointed out that as of “November 2008, the AESO interconnection queue contained wind requests totalling 11,500 MW in the province of which 7,500 MW was requested in the southern planning region.”<sup>9</sup> The AESO also pointed out the challenge of developing a ten-year transmission plan for southern Alberta that “could deliver up to 2,700 MW of additional wind interconnections and yet be flexible enough to accommodate the geographically dispersed 7,500 MW of interconnection requests.”<sup>10</sup>
23. Transmission system planning in circumstances such as SATR is complex, and must be dynamic in order to respond to changes in forecast demand for electricity and growth in generation capacity.
24. Although the AESO has an obligation to provide market participants with a reasonable opportunity to obtain system access service, and to provide for the timely implementation of required transmission system expansions and enhancements, these obligations must be assessed in light of the complexities and challenges associated with forecasting the needs of Alberta and planning the transmission system to meet those needs.

*(iii) The AESO’s Customer Contribution Policy*

25. The AESO’s Customer Contribution Policy is intended to assign to a market participant the cost of connection project facilities that will not provide a benefit to the transmission system. Such costs are classified as participant-related and the market participant is responsible to pay for them in order for the connection facilities to be constructed and the market participant to obtain system access service. Fundamentally, the Customer Contribution Policy is founded in the regulatory principle of cost causation.
26. The Customer Contribution Policy has been considered by the Commission and its predecessor, the Alberta Energy and Utilities Board (“EUB”), in several decisions, and was most comprehensively discussed in EUB Decision 2005-096:<sup>11</sup>

... the generator contribution policy described in the *Transmission Regulation* may be considered more of a bottom-up approach, in the sense that the generator’s local interconnection facility costs are determined first and deemed to be the customer-related costs associated with the interconnection. Any further residual incremental system enhancement or upgrade costs not fitting the definition of a local interconnection facility cost are deemed to be system-related, and thus excluded from the contribution policy.

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<sup>8</sup> *Application of the Alberta Electric System Operator for Approval of its Southern Alberta Transmission Reinforcement Needs Identification Document*, Application No. 1600862, Proceeding 171, which led to Decision 2009-126. [SATR NID]

<sup>9</sup> *Ibid*, at pdf 29.

<sup>10</sup> *Ibid*, at pdf 29.

<sup>11</sup> Alberta Energy and Utilities Board [EUB], Decision 2005-096, *Alberta Electric System Operator, 2005/2006 General Tariff Application* [Decision 2005-096].

The Board notes that the first step in the application of any contribution/investment policy is to classify costs as either system-related or customer-related.<sup>12</sup>

The mechanism to classify costs as system-related or customer-related was set out in Article 9.2 of the existing AESO Tariff's Terms and Conditions. Article 9.2 reflects the framework established by the Board in Decision 2001-6.

Under Article 9.2, the determination of whether a proposed interconnection project would be classified as system-related or customer-related depended on whether the proposed project was radial to the existing transmission system. If a proposed interconnection was radial, new interconnection facility costs were generally designated as customer costs. Alternatively, if all or a portion of a new interconnection project completed a looped configuration in conjunction either with existing transmission system facilities or in conjunction with system upgrades expected to be built within the next 5 years, the looped portion of a new interconnection project was deemed to be a system-related cost. Article 9.2 also allowed for the customer to pay for the cost of advancing any portions to be looped within the subsequent 5 year period.<sup>13</sup>

The Board also notes that the AESO has an explicit obligation under Subsection 4(2) of the *Transmission Regulation* to identify all transmission facility projects which the AESO proposes to initiate through a needs application within 5 years from the release of each update of its long term transmission system plan. Additionally, in respect of each project so identified, the AESO is required to provide the anticipated implementation schedule for the project. The Board considers that since detailed information must now be provided as required in Subsection 4(2), the AESO should be able to objectively assess whether a cost arising from a new interconnection warrants system or customer cost treatment.<sup>14</sup>

27. Most notably, the Board directed the AESO to “approach any situation in which there may be ‘shades of grey’ in [the cost classification] exercise, with the position that a debatable interconnection project cost should be presumed initially to be customer-related unless clearly demonstrated otherwise.”<sup>15</sup>

**(e) Overview of Facts Surrounding the Customer Contribution Charged to Enel**

28. This overview of facts is generally broken into time periods, based on the following events, when:
- (a) the AESO and Enel<sup>16</sup> (and its predecessor, Wind Power Inc., (“WPI”) the prior holder of Commission approvals for the Castle Rock Ridge Wind Farm) considered 138 kV connection options, during 2005 to early 2008;

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<sup>12</sup> *Ibid*, page 47.

<sup>13</sup> *Ibid*, page 48.

<sup>14</sup> *Ibid*, page 49.

<sup>15</sup> *Ibid*, page 49.

<sup>16</sup> Wind Power Inc. was the predecessor owner of the Castle Rock Ridge Wind Farm.

- (b) the AESO decided to proceed with 240 kV transmission development and advanced the SATR NID application, during early 2008 to September 2009;
  - (c) the AESO decided to proceed with double circuit 240 kV transmission line development from Goose Lake to Crowsnest (Chapel Rock) via interconnections with the proposed Fidler 312S substation, and filed the CRR Connection NID application and amendment, all following approval of the SATR NID and up to December 2011;
  - (d) the AESO filed its SATR NID amendment application for the Goose Lake to Chapel Rock transmission line alternatives (including Alternative 2 via CRR), from December 2012 to January 2014; and
  - (e) Enel requested a redetermination of its CRR construction contribution costs, from about January 2015 to February 2016.
29. References to Enel in this Decision should be taken to mean WPI, as may be applicable during the relevant time period.
- (i) Early 138 kV Connection Proposals*
30. As noted above, during the period 2005 to early 2008, the AESO and Enel considered connection options for CRR that involved 138 kV transmission facilities.
31. Enel and AltaLink L.P. entered into a construction commitment agreement on April 18, 2006,<sup>17</sup> which described transmission facilities, proposed at the time, as a 138 kV breaker at Goose Lake 103S substation, and 7.2 km of single circuit 138 kV transmission line. The cost was estimated to be \$3,080,000, with a customer contribution of \$2,980,000 plus GST.
32. Also on April 18, 2006, Enel deposited with AltaLink the \$2,980,000 (plus GST) customer contribution.<sup>18</sup>
33. Shortly thereafter, on April 20, 2006, the AESO informed stakeholders that forecasted control problems associated with the anticipated development of various wind power projects would impact the reliability of the Alberta Interconnected Electric System (“AIES”), and therefore capped connections of wind generation at 900 MW total on the AIES until mitigation measures are established. The AESO noted that “increased mitigation measures will come at some cost, and therefore the allocation of these increased costs must also be determined.”<sup>19</sup>
34. In January of 2007, the AESO provided Enel with a draft interconnection proposal for discussion,<sup>20</sup> which indicated a planned 138 kV radial interconnection at a new

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<sup>17</sup> Dispute, Appendix C, TAB 02.

<sup>18</sup> Dispute, Appendix A, Interconnection Proposal Chronology.

<sup>19</sup> Alberta Electric System Operator, Letter re: Wind Integration Study and Reliability Threshold (April 20, 2006), at page 2. <online: [http://www.aeso.ca/downloads/FINAL\\_COVER\\_\(3\).pdf](http://www.aeso.ca/downloads/FINAL_COVER_(3).pdf)>

<sup>20</sup> Dispute, Appendix C, TAB 03.

- Highway 785 117S substation, which would operate at 240/138 kV, and would interconnect the Highway 785 wind farm (235 MW). A 240 kV transmission line would extend from the 117S substation, connecting to the 240 kV bus of the Goose Lake 103S substation. The 117S substation and transmission lines were not pursued in any further documents or applications.
35. During a meeting on January 22, 2008, voltage options of 138 kV and 240 kV were discussed.<sup>21</sup> Minutes of this meeting with the AESO indicate that Enel was evaluating the 240 kV interconnection option to CRR. On February 1, 2008, the AESO provided Enel with two high level cost estimates and simplified single line diagrams for two interconnection options: (i) a 138 kV option, consisting of a breaker and 4 km of 138 kV transmission line from the proposed Highway 785 substation to CRR; and (ii) a 240 kV option consisting of a breaker and 4 km of 240 kV transmission line from the proposed Highway 785 substation to CRR.<sup>22</sup>
36. In a meeting held February 26, 2008,<sup>23</sup> the AESO advised Enel of the SATR project that would loop several 240 kV transmission facilities in southern Alberta, which the AESO had planned to file on May 30, 2008. The meeting minutes note that the filing was delayed, since the AESO had not made a decision on whether to proceed with a voltage of 138 kV or 240 kV for the SATR project. The meeting minutes provided by the AESO on March 10, 2008 indicated that Enel was still evaluating the proposed 240 kV interconnection for CRR, and further noting that the AESO planned to deliver a final interconnection proposal to Enel on June 30, 2008. Action Item A8 from these meeting minutes notes that confirmation from Enel regarding its interconnection voltage remained outstanding.<sup>24</sup>
37. Following the meeting on February 26, 2008, neither Enel nor the AESO made any further proposals for any connection options at 138 kV.

*(ii) The AESO's Decision to Proceed with 240 kV Transmission Development*

38. On November 24, 2008, AltaLink provided two cost estimates to the AESO, based solely upon voltages of 240 kV; an estimated customer cost between \$13,971,801 for a 3-breaker ring bus at CRR ("Option 1"), and \$14,786,949 for a 4-breaker ring bus at CRR.<sup>25</sup>
39. On December 2, 2008, Enel wrote to the AESO accepting the proposal to proceed with Option 1, on the following two conditions:<sup>26</sup>

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<sup>21</sup> Alberta Electric System Operator, Meeting Minutes January 22, 2008 - Project Minutes RP-05-462, (issued February 25, 2008).

<sup>22</sup> Dispute, Appendix C, TAB 04.

<sup>23</sup> Dispute, Appendix C, TAB 05, Meeting Minutes, February 26, 2008.

<sup>24</sup> Dispute, Appendix C, TAB 05, at pdf 3.

<sup>25</sup> Dispute, Appendix C, TAB 09, at pdf 5-18.

<sup>26</sup> Dispute, Appendix C, TAB 06.

- (a) Customer Contribution – Enel stated that the facilities proposed were larger than that required to serve CRR, and requested that the AESO classify the “Excess” as system-related costs. Enel defined “Excess” as anything beyond a single 240 kV 795 kcmil circuit line and one 240 kV breaker plus all necessary components to interconnect to the AIES;
  - (b) Transmission line routing – Enel proposed using the existing right-of-way and path of transmission line 514L.
40. On December 15, 2008, the AESO wrote to Enel, enclosing a connection proposal which identified the following transmission components:<sup>27</sup>
- (a) construction of approximately 1 km of double circuit transmission line using 2 x 1033 kcmil conductors in and out from the new 240 kV double circuit lines between Goose Lake 103S and a future Crowsnest substation;
  - (b) construction of a 3-breaker ring bus substation adjacent or close to the planned CRR wind farm substation;
  - (c) installation of a remedial action scheme;
  - (d) additions of appropriate protection, control and communication facilities to support system and generation facilities operation; and
  - (e) addition of a phasor measurement unit.

The AESO’s proposal also included the following system developments associated with the SATR project:<sup>28</sup>

- (a) augmenting Goose Lake 103S to accommodate two new 240 kV double circuit transmission lines; and
- (b) the construction of 8.5 km of 240 kV double circuit transmission lines from Goose Lake 103S to CRR, using 2x1033 kcmil conductors.

The AESO estimated the total Customer Contribution at \$13,947,544.<sup>29</sup>

41. The AESO’s December 15, 2008 Customer Contribution Decision (“CCD”) confirmed that a “138 kV interconnection is no longer an option due to proposed 240 kV development around Pincher Creek area”.<sup>30</sup>
42. On December 19, 2008, Enel accepted and acknowledged the proposal, but retained its right to contest the dollar amount of the Customer Contribution, on December 19, 2008.<sup>31</sup>

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<sup>27</sup> Dispute, Appendix C, TAB 07, at pdf 1.

<sup>28</sup> *Ibid.*

<sup>29</sup> *Ibid.*, at pdf 2.

<sup>30</sup> Dispute, Appendix C, TAB 11, at pdf 13-19.

43. On December 30, 2008, the AESO filed with the Commission the AESO's Application for the SATR NID, which identified the need to integrate 2,700 MW of wind interest over the following 10-year period in southern Alberta.<sup>32</sup> The AESO recommended a 240 kV looped system to meet the need identified in the SATR NID.
44. The AESO's Preferred Alternative was designated as Alternative 1A with three stages of development; stage 1 proposed to be in-service in 2013, stage 2 proposed to be in-service in 2016 and stage 3 proposed to be in-service in 2017. The stage 2 development included the Crowsnest - Goose Lake 240 kV double circuit transmission line. The AESO also proposed specified milestones for the components of stages 2 and 3 that would need to be met before the TFO could commence construction of the related transmission facilities. The purpose of the milestones was to determine the certainty of the need for a transmission facility.
45. On February 6, 2009, the AESO provided a response to Enel's December 2, 2008 letter and proposed conditions. The AESO confirmed that it had filed the SATR NID Application in which it had "proposed a high capacity 240 kV double circuit line from Goose Lake 103S substation to a new 500/240 kV Crowsnest substation utilizing 2 x 1033 conductors". The AESO advised Enel that it considered the configuration to be "the minimum requirements to meet good transmission practice for interconnection to the 240 kV line in the area, and that any other configuration was not an option".<sup>33</sup> Because of these minimum requirements, the AESO classified all of the elements for the proposed CRR interconnection as "customer costs". With respect to Enel's second proposed condition, the AESO noted that a final decision regarding a particular route would be taken by AltaLink in consultation with landowners.<sup>34</sup>
46. On September 8, 2009, the Commission issued Decision 2009-126 approving the AESO's SATR NID and in particular, Alternative 1A, staged development and the use of milestones.<sup>35</sup> No specific route or configuration was mandated by the Commission.

*(iii) The Proposed Fidler Transmission Development Plan and the CRR Connection NID*

47. During a meeting on November 3, 2009, the AESO informed Enel that it was considering a new development plan to build new double circuit from Goose Lake to Fidler and later from Fidler to Crowsnest. This would be instead of building the Goose Lake to Crowsnest transmission line, south of the reservoir.

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<sup>31</sup> Dispute, Appendix C, TAB 7, at pdf 3.

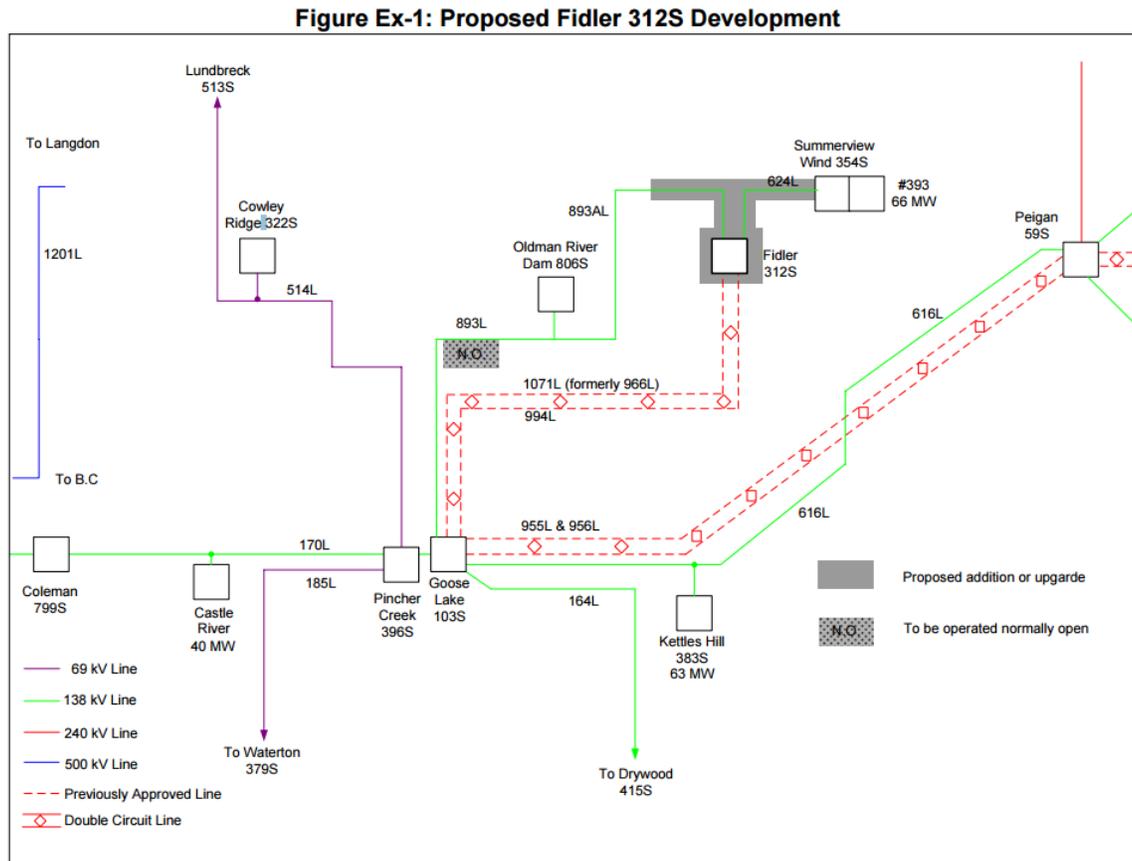
<sup>32</sup> SATR NID.

<sup>33</sup> Dispute, Appendix C, TAB 09, at pdf 2.

<sup>34</sup> *Ibid.*

<sup>35</sup> Decision 2009-126, at para 206.

48. On June 16, 2010, the AESO filed an application with the Commission for approval of the Fidler 312S 240/138 kV Substation NID.<sup>36</sup>
49. In the Fidler Substation NID application, the AESO presented the following diagram, entitled “Proposed Fidler 312 Development”, as follows:<sup>37</sup>



50. On August 13, 2010, the AESO filed with the Commission an application for approval of the Castle Rock Ridge 205S Substation and Transmission Line NID.<sup>38</sup> The requested in-service date for the facilities was September 2011, which would connect the Castle Rock Ridge 205S substation with the proposed Fidler 312S substation. The application stated:<sup>39</sup>

The proposed connection involves the development of a collector substation designated Castle Rock Ridge 205S, located near the Customer’s generating facilities, to serve as a point of connection for the Customer’s generation facility to the high voltage transmission system. The proposal also includes

<sup>36</sup> Application of the Alberta Electric System Operator for Approval of the Fidler 312S 240/138 kV Substation Needs Identification Document, Application No. 1606281, Proceeding 690. [Fidler Substation NID]

<sup>37</sup> Ibid, Executive Summary at pdf 9.

<sup>38</sup> Application of the Alberta Electric System Operator for Approval of the Needs Identification Document for the Castle Rock Ridge 205S Substation and Transmission Line Development, Application No. 1606460, Proceeding 778.

<sup>39</sup> Ibid, at pdf 4.

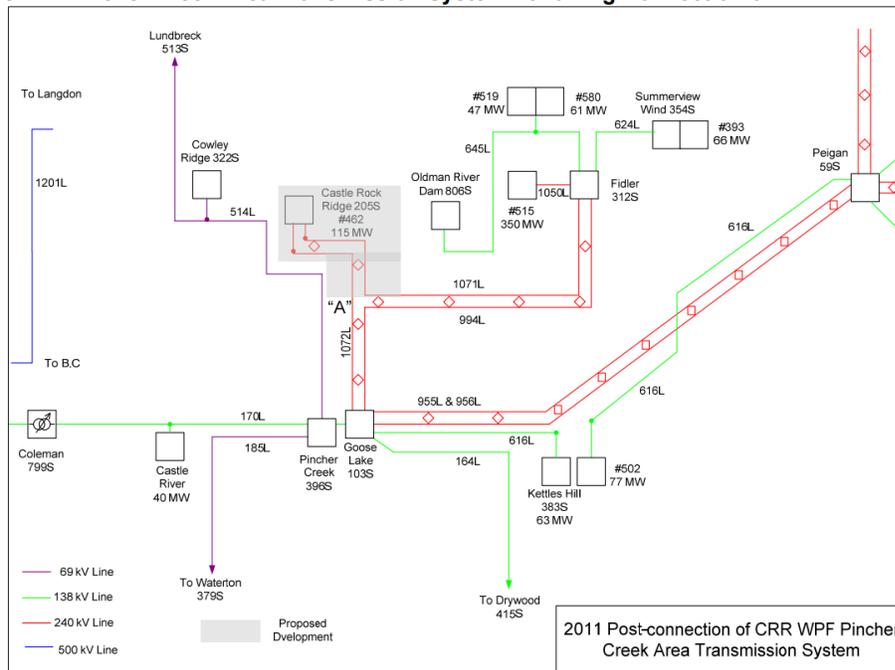
the expansion of the AIES 240 kV transmission network to connect the proposed substation to the existing network, via the development of a short 240 kV transmission line, that will also be used to facilitate future customer connects in the area.

51. The AESO submitted that the TFO, the AESO and the customer (Enel) did not identify any other feasible options for detailed consideration. The customer connection was in part dependent on the outcome of the Fidler 312 S substation and transmission line developments:<sup>40</sup>

The requested connection in-service date does not necessarily require the completion of the proposed Fidler 312S substation, but does require the southern portion of the associated transmission line development, designated as 1071L.

52. The proposed configuration of the connection was outlined as follows in the NID application:<sup>41</sup>

**Figure 1-2: Pincher Creek Area Transmission System Following Connection of CRR WPF in 2011**



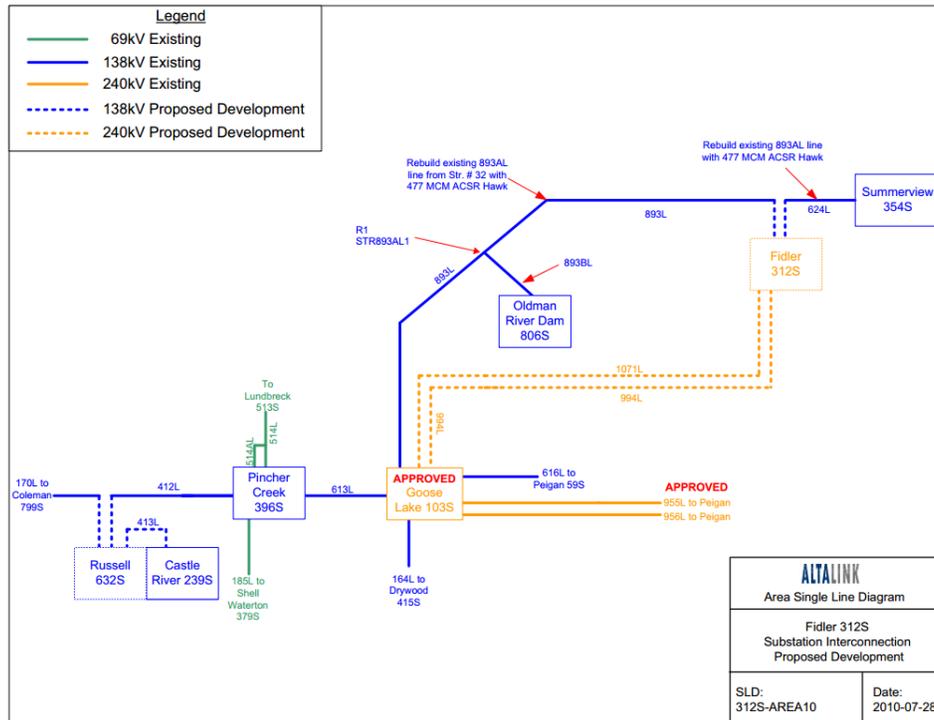
53. On October 10, 2010, AltaLink filed an application<sup>42</sup> for approval to construct and operate certain transmission facilities, including the Fidler 312S substation and a new phase 1 double circuit 240 kV transmission line from the Fidler substation to the existing Goose Lake 103S substation. Phase 2, which was not applied for, would be a 240 kV double circuit transmission line from the Fidler substation to Chapel Rock.

<sup>40</sup> *Ibid*, at pdf 7.

<sup>41</sup> *Ibid*, at pdf 19, Figure 1-2; see also AUC Proceeding ID 778, Ex. 0005.00.AML-778.

<sup>42</sup> Application No. 1606667, Proceeding 690.

AltaLink’s application included a single line diagram indicating the extent of the proposed phase 1 facilities:<sup>43</sup>

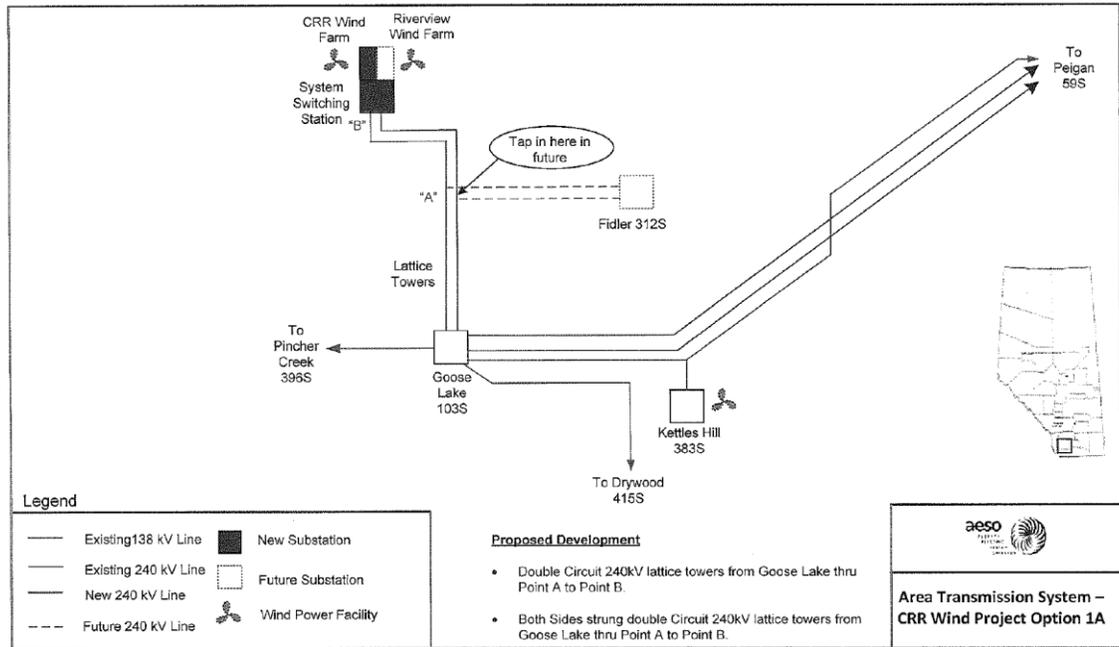


54. On April 29, 2011, Enel emailed the AESO to confirm the near completion stage of the CRR wind farm construction and express concern regarding the possible delay that would be caused by a public hearing for the Goose Lake to Fidler applications and CRR’s dependency on its approval.
55. In a letter dated May 13, 2011 to the AESO’s President and Chief Executive Officer, Enel requested that the AESO take necessary steps to resolve the delay in the 2011 in service date for the CRR Connection, identified in the Fidler Substation NID.
56. In a letter to Enel, dated May 19, 2011, the AESO acknowledged that the October 2011 in service date was unachievable given that Proceeding No. 690 was scheduled for an August 2011 public hearing. The AESO also noted that CRR’s interdependency with the Fidler Substation NID application and AltaLink’s facility application was adversely impacting CRR’s in service date.
57. In a meeting with Enel and AltaLink on July 13, 2011, the AESO presented two alternatives for the CRR interconnection, Alternative 1A and Alternative 2A.<sup>44</sup> The following is the diagram for Alternative 1A provided by the AESO:<sup>45</sup>

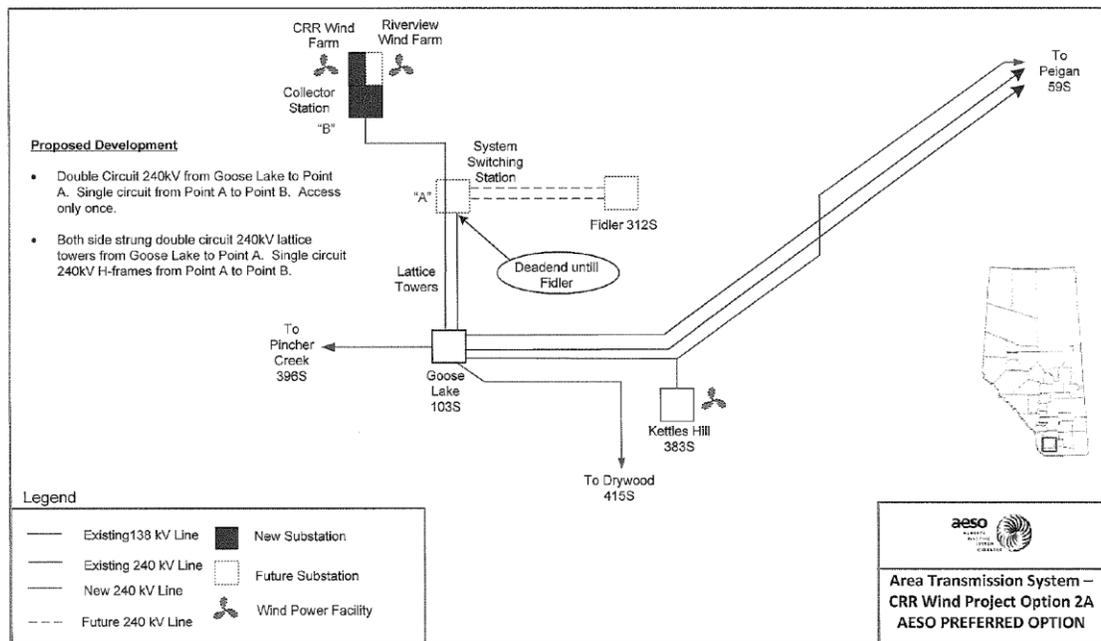
<sup>43</sup> AltaLink Management Ltd., Ex. 0082.00.AML-690, Appendix A 0- SLD and Site Plans, at pdf 2.

<sup>44</sup> Dispute, Appendix C, TAB 13.

<sup>45</sup> *Ibid*, at pdf 6.



58. The AESO also provided a diagram for Alternative 2A, which was the AESO's preferred option:<sup>46</sup>



59. The AESO noted that because several connection applications had been removed from the queue, the system component from Point A to CRR no longer applied, and that the cost of building the line from Point A to CRR would be a customer cost.<sup>47</sup>

<sup>46</sup> *Ibid*, at pdf 7.  
<sup>47</sup> *Ibid*, at pdf 2.

The AESO stated that the switching station (either at CRR in Alternative 1A, or at Point A in Alternative 2A), was required to connect at 240 kV.<sup>48</sup>

60. Alternative 1A, with a forecast in-service date of May 2012, had an estimated total customer cost of \$30.7 million (+20/-10%). Alternative 2A, with a forecast in-service date of October/December 2012, carried an estimated customer cost of \$25.0 million (+/-30%). The AESO noted that Alternative 2A may incur further delays due to the need for new facility applications, and seasonal delays in construction. A table presented by the AESO showed that the incremental cost from of Alternative 1A compared to Alternative 2A, based on the above-described estimates provided by the TFO, was \$5.7 million.
61. Enel informed the AESO and AltaLink of its decision to select Alternative 1A in a Status Update July 14, 2011 prepared by Enel:

Following the meeting with the AUC summarized below and: a) considering that the cost differential is not very significant compared to the loss of revenue due to the delay and, b) considering the high risk underlying Scenario 2A calling for a public hearing, Pascal Brun [of Enel] called the AESO back to tell them to concentrate only on Scenario 1A and to submit the amendment as soon as possible.

62. The AESO confirmed by email dated July 18, 2011 that Enel had chosen to proceed with Alternative 1A.<sup>49</sup>
63. Consequently, the AESO filed with the Commission an amendment to the CRR NID application on August 4, 2011. The NID amendment noted that Enel had completed construction of CRR and had requested connection to the transmission system as close to the original September 2011 in-service date as could be achieved.<sup>50</sup> The AESO stated that it had determined that the proposed connection, at the time of filing, was solely required to provide system access service to CRR. Accordingly, in the amendment, the AESO deemed the entirety of the approximately \$25 million in connection project costs as customer-related costs, in accordance with the ISO tariff. The AESO also removed the reference to the dependency of the CRR Connection on the in-service date of the Fidler 312S substation.
64. On September 26, 2011, the AESO provided responses to Commission information requests (“IR”) concerning the CRR NID. The IR response to AUC-AESO-3 outlined the AESO’s justification for classifying various costs associated with the CRR NID as system-related or participant-related under the ISO tariff:

AltaLink’s amended Castle Rock Ridge application includes facilities designed to meet the need identified in two of the AESO’s need identification documents, specifically:

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<sup>48</sup> *Ibid.*

<sup>49</sup> Dispute, Appendix C, TAB 15, at pdf 1.

<sup>50</sup> Alberta Electric System Operator, Ex. 0054.00.AESO-778.

- the portion of 240kV transmission line (and associated facilities) from Goose Lake 103S substation to Point A1 formed part of the approved SATR NID and the AESO has deemed the associated \$17.8 million cost to be system related in accordance with the AESO tariff; and
- the portion of 240kV transmission line from Point A to, and including, the proposed Castle Rock Ridge 205S substation (and associated facilities) forms part of the Castle Rock Ridge NID and the AESO has deemed the associated \$25.2 million cost to be customer related in accordance with the AESO tariff.<sup>51</sup>

65. The AESO's IR response to AUC-AESO-4 summarized the rationale for proceeding with a high capacity double-circuit 240 kV transmission line, and noting in particular Enel's choice to proceed with Alternative 1A, despite higher participant-related costs:

During preparation of the amendment applications, the AESO advised the customer that the \$25.2 million cost of the proposed development identified in the Castle Rock Ridge NID would be customer related. The AESO also advised the customer that, given the proposed amendments, a less expensive option would be to construct a system switching station at Point A and a single circuit 240kV line on H-frame structures from the switching station to the wind farm. A disadvantage of this option would have been that costs already incurred on the project, such as consultation, initial engineering and design and material procurement would be included in the single circuit option costs. Furthermore, AltaLink advised that the related re-work in respect of the single circuit option would result in further delaying the already delayed in-service date. After having considered both options, the customer chose to retain the double circuit 240 kV option from Point A to the wind farm understanding that the costs thereof would be fully customer contributed.<sup>52</sup> [emphasis added]

66. On October 6, 2011, Enel submitted a letter to the Commission in Proceeding 778 supporting the approval of the amended CRR NID application, noting that cooperative efforts between Enel, AltaLink and the AESO resulted in "the amendment of the AESO's need application and AltaLink's corresponding facilities application."<sup>53</sup>
67. On November 1, 2011, the Commission approved the amended CRR NID application, as filed, and issued the applied-for permits and licences.<sup>54</sup>

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<sup>51</sup> Alberta Electric System Operator, Ex. 0061.01.AESO-778, at pdf 4.

<sup>52</sup> *Ibid*, at pdf 5-6.

<sup>53</sup> Enel Alberta Wind Inc., Letter to AUC re: Proceeding ID No. 778 Ex. 0066.01.ENEL-778.

<sup>54</sup> Decision 2011-439.

68. On December 1, 2011, the Commission issued Decision 2011-468 and denied the AESO's Fidler Substation NID application and AltaLink's facilities application. The Commission held that the need for the Fidler interconnection and for the Fidler to Chapel Rock transmission line had not been previously approved by the Commission in the SATR NID approval, on account of material differences in the "means, manner or technical solution" approved in the SATR NID and the means, manner or technical solution proposed by the AESO in the Fidler Substation NID.<sup>55</sup>

69. In May 2012, CRR commenced commercial operation.

*(iv) Goose Lake to Chapel Rock NID Amendment*

70. On December 14, 2012, the AESO filed an application to amend the SATR NID for, among other things, a 240 kV double circuit transmission line from Goose Lake to Chapel Rock via either (i) Fidler 312S substation or (ii) via Castle Rock Ridge 205S substation ("Alternative 2").<sup>56</sup> The AESO's preferred alternative was Alternative 2.

71. On January 27, 2014, the Commission approved the NID amendment application for Alternative 2.

*(v) Enel's Request for a Redetermination of CRR Connection Costs*

72. In a letter to the AESO dated January 16, 2015, Enel requested a reconsideration of the classification of the CRR Connection costs.<sup>57</sup>

73. In a letter dated February 19, 2015,<sup>58</sup> the AESO informed Enel that the project costs for the CRR Connection were appropriately classified as participant-related in accordance with the ISO tariff, on the basis that:

- The 2011 ISO tariff provisions in effect at the time of the permit and licences being issued required the ISO to apply the construction contribution provisions in effect at the time.<sup>59</sup>
- Section 8(3)(2) of the 2011 ISO tariff required that the connection substation, and new radial transmission lines with only one transmission source, be classified as participant-related.<sup>60</sup>
- The commercial operation date of the CRR Connection project was May 1, 2012.<sup>61</sup>
- Looped transmission facilities to the CRR substation were not identified in:<sup>62</sup>

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<sup>55</sup> Decision 2011-468, at para 80.

<sup>56</sup> Application 1609122, Proceeding 2349.

<sup>57</sup> Dispute, Appendix C, TAB 25.

<sup>58</sup> Dispute, Appendix C, TAB 27.

<sup>59</sup> *Ibid*, at pdf 1.

<sup>60</sup> *Ibid*, at pdf 2.

<sup>61</sup> *Ibid*, at pdf 2.

- The AESO's 2009 or 2012 Long-Term Transmission Plans; or
  - Any NID applications filed with the AUC.
- The AESO acknowledged that although its amended NID application for the Goose Lake to Chapel Rock Amendment to the SATR NID Approval, filed on December 14, 2012, included looped transmission facilities to the CRR substation, the AESO determined that the application of construction contribution provisions is not revised to reflect later system developments except in accordance with section 9 of the ISO tariff.<sup>63</sup>
  - The AESO stated that "If the option [in the Goose Lake SATR Amendment] which receives permit and licence would result in looped transmission facilities to the CRR substation, the costs of the CRR radial transmission facilities may be reclassified as system-related in the future."<sup>64</sup>
74. In a letter dated September 24, 2015 to the AESO's President and Chief Executive Officer, Enel requested further consideration of the AESO's position expressed in its February 19, 2015 letter regarding the classification of participant-related connections costs and Enel's construction contribution.<sup>65</sup>
75. In an October 8, 2015 meeting between Enel and the AESO, Enel requested the AESO to reconsider the classification of connection costs for CRR.
76. In a letter to Enel, dated December 4, 2015, the AESO set out its reconsideration of the CRR Connection project costs, noting that the 240 kV double circuit lines were transmission facilities in excess of the minimum size required to serve Enel.<sup>66</sup> The AESO determined that a single circuit was all that was required. The AESO stated that, in accordance with subsection 3(3) of Section 8 of the 2011 ISO tariff, it had reclassified the incremental cost of such facilities as system-related, and that a refund of \$5.7 million was due from the AESO to Enel.<sup>67</sup> The AESO further determined that Enel may be eligible for further refunds, in the event that the following conditions are satisfied:<sup>68</sup>
- In the event the CRR to Chapel Rock ("CRRCR") transmission line is completed before May 2032. Assuming an in-service date of October 2018 for the CRR to Chapel Rock transmission line, Enel would be eligible for a further refund of \$5,699,975, due 90 days after the Commission issues a permit and licence for the construction and operation of the facilities; and

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<sup>62</sup> *Ibid*, at pdf 2.

<sup>63</sup> *Ibid*, at pdf 3.

<sup>64</sup> *Ibid*, at pdf 3.

<sup>65</sup> Dispute, Appendix C, TAB 28.

<sup>66</sup> Dispute, Appendix C, TAB 29, at pdf 1.

<sup>67</sup> *Ibid*, at pdf 1.

<sup>68</sup> *Ibid*, at pdf 1-2.

- In the event that the CRRCR project is completed and the AESO proceeds with a “double in-out” configuration into the CRR substation, half the cost of the CRR substation and all of the costs of the in-out transmission line at the substation would be reclassified as system-related. Assuming an in-service date of October 2018 for the CRRCR transmission line, Enel would be eligible for a further refund of \$4,309,898, due 90 days after the Commission issues a permit and licence for the construction and operation of the facilities.

77. On February 18, 2016, in a letter advising Enel of corrections and clarifications to December 4, 2015 letter, the AESO noted that the immediate refund of \$5,700,000 for the incremental cost of the 240 kV double circuit was calculated from Point A to Enel’s interconnection, not from Goose Lake 103S. The AESO accordingly corrected the calculation of the potential future refund of \$5,699,975 to be \$5,765,545, following further review of cost allocations, assuming a single in-out configuration at the CRR interconnection.<sup>69</sup> The AESO also corrected the potential future refund of \$4,309,898 to be \$5,312,073, assuming a double in-out configuration at the CRR interconnection.<sup>70</sup> The AESO invited Enel to either confirm that the \$5.7 million refund was acceptable, or to elect to proceed to the second step of the dispute resolution process under Section 103.2 of the ISO rules.

## II. ISSUES RAISED BY THE DISPUTE

78. The issues raised by the Dispute are:

- (a) What governs the AESO’s classification of participant-related and system-related costs for the purpose of determining the amount of a customer contribution for connection projects?
- (b) Did the construction contribution costs paid by Enel exceed costs that qualify as participant-related costs under the applicable requirements?
- (c) Is Enel entitled to a further adjustment to its construction contribution costs, and if so, what is the further refund amount?
- (d) In the event that Enel is entitled to a further refund, is it entitled to be paid interest?

## III. AESO CONCLUSIONS

### (a) What Governs the Classification of Construction Contribution Costs?

79. The customer contribution provisions of the applicable ISO tariff approved by the Commission govern the AESO’s classification of participant-related and system-

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<sup>69</sup> Dispute, Appendix C, TAB 29, at pdf 2.

<sup>70</sup> *Ibid.*

related costs for the purpose of determining the amount of a market participant's construction contribution for connection projects.

80. Section 8 of the 2011 ISO tariff is applicable to the classification of project construction costs for the CRR Connection as either participant-related or system-related.

**(b) Do Enel's Costs Exceed those that Qualify as Participant-Related?**

81. Taking into account the \$5.7 million construction contribution adjustment respecting the incremental costs for the second 240 kV circuit and the corresponding refund to Enel, Enel's construction contribution costs for the CRR Connection do not exceed the costs that qualify as participant-related.

**(c) Is Enel Entitled to a Further Adjustment and Refund?**

82. No.

**(d) Is Enel Entitled to Interest?**

83. Enel is not entitled to interest in respect of the \$5.7 million construction contribution refund.

**IV. AESO ANALYSIS**

**(a) What Governs the Classification of Construction Contribution Costs?**

84. The classification of construction contribution costs is made in accordance with the AESO's Customer Contribution Policy as set out in the Commission approved ISO tariff, in effect or applicable at the relevant time.

85. It appears that Enel agrees. As noted above, Enel contends that the construction contribution costs paid by it are in contravention of section 8 of the 2011 ISO tariff, *Construction Contribution for Connection Projects* (as well as subsection 9.3 c) iii) of the previous 2006 ISO tariff).<sup>71</sup>

86. Subsection 7(1) of section 8 of the current ISO tariff, *Construction Contributions for Connection Projects*, states:

7(1) The ISO must calculate the construction contribution in accordance with the construction contribution provisions of the ISO tariff in effect on the date on which the Commission issues permit and licence for the connection project.

87. A substantially similar provision was contained in subsection 7(1) of section 8 of the ISO tariff that was in effect when Enel began construction of its wind-powered generating facilities in April 2010.

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<sup>71</sup> Dispute, Executive Summary, page 1.

88. The Commission issued Permit No. U2011-386 and Licence No. U2011-387 for the CRR Connection on November 1, 2011. Therefore, the construction contribution provisions that apply to the CRR Connection are those of the 2011 ISO tariff which became effective on July 1, 2011.
89. Subsections 3(2) and 3(3) of section 8 identify project construction costs that will be classified as participant-related (the same costs were referred to as “customer-related” in previous tariffs) and as system-related.
90. Subsection 3(2) includes the following provisions:
- 3(2) Participant-related costs will be those costs related to a contiguous connection project including costs associated with:
- (a) the connection substation for the point of delivery or point of supply, including in out line configurations, where required;
- (b) new radial transmission lines, including double-radial configurations, with only one (1) transmission source from the transmission system to the connection substation; ....
91. These provisions apply to the substation and transmission line associated with the CRR Connection for which Enel has paid a construction contribution.
92. Subsection 3(3) of Section 8 identifies certain costs that will be classified as system-related. In particular, it includes the following provisions:
- 3(3) System-related costs will be those costs related to a connection project including non-contiguous components of the project and any costs associated with:
- ...
- (b) radial transmission facilities which, within five (5) years of commercial operation, are planned to become looped as part of a critical transmission development or regional transmission system project:
- (i) in the ISO’s most recent long-term transmission system plan;
- (ii) in a needs identification document filed with the Commission; or
- (iii) as the ISO reasonably expects will be required in the future; .... [emphasis added]
93. To identify whether subsection 3(3)(b) applies to the CRR Connection, the AESO has again reviewed the relevant facts of the CRR Connection, which are:
- (a) The commercial operation date of the CRR Connection was May 1, 2012.
- (b) Looped transmission facilities to the CRR substation were not included as part of a transmission system project in the *AESO 2009 Long-term Transmission Plan* (released June 2009).

- (c) Looped transmission facilities to the CRR substation were not included as part of a transmission system project in any needs identification document filed with the Commission prior to commercial operation of the CRR Connection project. In particular, the following needs identification documents did not include a plan to loop transmission facilities to CRR within five years of Enel achieving commercial operation on May 1, 2012:
- the SATR NID, filed December 30, 2008;
  - the Castle Rock Ridge 205S Substation and Transmission Line Development NID, filed August 13, 2010, and amended August 4, 2011; or
  - the Fidler 312S 240/138 kV Substation NID filed June 16, 2010.
94. The AESO did not expect transmission facilities to the CRR substation to be looped within five years at the time CRR was constructed and entered commercial operation.
95. Consequently, the radial transmission line (in/out) to the CRR substation was correctly classified as participant-related under the provisions of subsection 3(2)(b) of section 8 of the 2011 ISO tariff.
96. The AESO acknowledges that an amended NID filed with the Commission included looped transmission facilities to the CRR substation. In particular, the *Goose Lake to Chapel Rock Amendment to the Southern Alberta Transmission System Reinforcement (SATR) Needs Identification Document Approval* filed on December 14, 2012 and approved in Decision 2014-004,<sup>72</sup> included looped transmission facilities to the CRR substation. However, the application of construction contribution provisions to a connection project is not revised to reflect later system developments, except in accordance with section 9 of the ISO tariff.
97. Subsection 2 of section 9 of the 2011 ISO tariff, *Changes to System Access Service After Energization*, contemplates the occurrence of events which may result in future adjustments to construction contributions and includes the following provisions:
- 2(1) The ISO may decide that certain events warrant an adjustment to the construction contribution that had previously been determined by application of the ISO's construction contribution provisions to a connection project.
  - 2(2) Events which may result in construction contribution adjustments include: ...
    - (b) one or more additional market participants using facilities originally installed for any existing market participant, resulting in sharing of facilities as provided for in subsection 3 below;

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<sup>72</sup> Decision 2014-004, *Alberta Electric System Operator, Goose Lake to Chapel Rock Southern Alberta Transmission Reinforcement Needs Identification Document Amendment*.

...

(d) facilities previously classified as participant-related being reclassified as system-related ....

98. In the event that the construction of future transmission facilities is approved by the Commission to meet the need approved in Decision 2014-004 and would result in looped transmission facilities to the CRR substation, the costs of the CRR radial transmission facilities may, in the future, be reclassified as system-related in the future.

99. Also, if one or more connection projects are constructed and connect to the transmission system through the facilities originally installed to connect CRR , the construction contribution paid by Enel will be reviewed and potentially adjusted in accordance with subsection 2(2)(b) of section 9 of the 2011 ISO tariff. At this time there are no projects in the AESO connection queue (other than Enel's Riverview Wind Farm connection project) that would connect through the facilities installed as part of the CRR Connection project.

**(b) Do Enel's Costs Exceed those that Qualify as Participant-Related?**

100. Enel contends that the minimum facilities for the CRR Connection were a single 138 kV transmission line with 477 kcmil conductor on H frames with one breaker or, a single 240 kV transmission line with 477 kcmil conductor on H frames with one breaker.<sup>73</sup>

101. Enel's position regarding 138 kV facilities ignores the AESO's legislated obligations to:

(a) Assess the current and future needs of market participants and plan the capability of the transmission system to meet those needs.<sup>74</sup>

(b) Forecast the needs of Alberta and develop plans for the transmission system to provide efficient, reliable and non-discriminatory system access service and the timely implementation of required transmission system expansions and enhancements.<sup>75</sup>

(c) Make assumptions about future load growth, the timing and location of future generation additions, including areas of renewable or low emission generation, and other related assumptions to support transmission system planning.<sup>76</sup>

102. Enel acknowledges that in January 2008, the AESO informed Enel that the AESO was considering a 240 kV connection because it was developing a plan for the Southwest

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<sup>73</sup> Dispute, at para 49.

<sup>74</sup> *Electric Utilities Act*, SA 2003, c. E-5.1 [EUA], s. 17(h).

<sup>75</sup> EUA, s. 33(1).

<sup>76</sup> *Transmission Regulation*, Alta Reg 86/2007, s. 8(b).

Development Plan, which became SATR.<sup>77</sup> The AESO was then considering a 240 kV connection based on system requirements in the Pincher Creek region. The AESO's December 15, 2008 CCD confirmed that a "138 kV interconnection is no longer an option due to proposed 240 kV development around Pincher Creek area".<sup>78</sup>

103. The AESO discussed its forecast for additional wind generation in the SATR NID Application and the NID:

The AESO has determined, in accordance with its statutory mandate, that the proposed reinforcements are required to principally respond to the anticipated development of wind generation in Southern Alberta. The AESO has concluded that a number of transmission system constraints in the region significantly limit the capabilities of the current transmission system in the region, as well as its incremental ability to deliver additional generation on a firm basis to Alberta Interconnected Electric System (AIES) load, irrespective of the location of such wind generation in Southern Alberta.<sup>79</sup> [emphasis added]

For the reasons set out in this Application and the Southern Alberta NID, the AESO is now recommending the construction of a 240 kV looped system that will enable the ultimate connection of up to 2,700 MW of wind power currently proposed for interconnection throughout the region. The Southern Alberta NID is structured in a flexible and staged manner, thus enhancing the AESO's ability to respond to the development pattern of wind generation, and to better ensure the prudent management of the associated costs of this significant transmission reinforcement.<sup>80</sup>

As discussed in Section 2, the AESO forecast for additional wind generation in Alberta is up to 3,400 MW by the year 2017, with up to approximately 2,700 MW (80 percent of 3,400 MW) anticipated in southern Alberta. Therefore, this transmission planning analysis considers 2,700 MW of possible new wind interconnections in southern Alberta by 2017.<sup>81</sup>

The ten-year forecast of 2,700 MW of additional wind interconnections in southern Alberta is less than the total wind capacity requested in the AESO interconnection queue. As of November 2008, the AESO interconnection queue contained wind requests totaling approximately 11,500 MW in the province of which 7,500 MW was requested in the southern planning region. The latest AESO generation interconnection queue is shown in Appendix A.<sup>82</sup>

The challenge for the AESO was to develop a ten-year transmission plan for Southern Alberta which could deliver 2,700 MW of additional wind interconnections and yet be flexible enough to accommodate the geographically dispersed 7,500 MW of interconnection requests.<sup>83</sup>

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<sup>77</sup> Dispute, at para 42.

<sup>78</sup> Dispute, Appendix C, TAB 11, at pdf 13-19.

<sup>79</sup> SATR NID, para 2, at pdf 1.

<sup>80</sup> SATR NID, para 10, at pdf 3.

<sup>81</sup> SATR NID, page 11, at pdf 28.

<sup>82</sup> SATR NID, page 12, at pdf 29.

<sup>83</sup> SATR NID, page 12, at pdf 29.

104. Given the forecast need for a 240 kV system to meet the regional needs of market participants, a 138 kV connection was not an option. Therefore, there is no basis for Enel's contention that the minimum facilities for the CRR Connection involved a single 138 kV transmission line and associated facilities.
105. As noted above, Enel alternatively contends that the minimum facilities for the CRR Connection were single 240 kV transmission line with 477 kcmil conductor on H frames with one breaker.
106. The CRR Connection was based on the selection by Enel of one of two 240 kV connection alternatives presented by the AESO to Enel on July 13, 2011 in a meeting amongst Enel, the AESO and AltaLink. The following were classified as participant-related costs:
- Alternative 1A – the 240 kV Castle Rock Ridge 205S substation with 3-breaker ring bus close to the Castle Rock Ridge wind power facility; installation of a Remedial Action Scheme; approximately 5.5 km of 240 kV double circuit transmission line using 2 x 1030 kcmil ACSR conductors from Castle Rock Ridge 205S substation to Point "A" strung on H-frame towers; and appropriate protection, control and communications facilities to support system and generation facility operation. In July 2011, the participant-related costs, based on Total Project Costs for this option, were estimated to be \$21,080,000.<sup>84</sup> This option had a forecast ISD of May 2012.<sup>85</sup>
  - Alternative 2A, which was the AESO's Preferred Option, consisted of approximately 5.5 km of 240 kV single circuit transmission line from Castle Rock Ridge 205S substation to Point "A", strung on H-frame towers. Under Alternative 2A, a switching station would have been required at Point "A", in addition to breakers at the CRR substation, to serve both the CRR connection as well as Enel's proposed Riverview project. Accordingly, a 3 breaker ring bus was a necessary component of Alternative 2A. The participant-related costs, based on the preliminary total project costs for this option, were estimated to be \$13,388,000.<sup>86</sup> There was no need to better refine this preliminary estimate because Enel decided to accept Alternative 1A. Alternative 2A had a later forecast ISD than Alternative 1A, of October-December 2012, because it would require a new consultation process and facility application, face a seasonal construction delay,<sup>87</sup> and the single circuit transmission facilities were not already available to the TFO.
107. As stated in the July 14, 2011 Status Update prepared by Enel, Enel selected Alternative 1A for the following reasons:

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<sup>84</sup> Dispute, Appendix C, TAB 13, at pdf 4, Draft Meeting Notes.

<sup>85</sup> *Ibid*, at pdf 3.

<sup>86</sup> *Ibid*, at pdf 5.

<sup>87</sup> *Ibid*, at pdf 3.

Following the meeting with the AUC summarized below and: a) considering that the cost differential is not very significant compared to the loss of revenue due to the delay and, b) considering the high risk underlying Scenario 2A calling for a public hearing, Pascal Brun [of Enel] called the AESO back to tell them to concentrate only on Scenario 1A and to submit the amendment as soon as possible.<sup>88</sup>

108. As a result, the CRR Connection was constructed in accordance with Alternative 1A and Enel was charged the participant-related costs set out in the August 3, 2011 CCD, which were updated in the September 30, 2013 CCD,<sup>89</sup> based on the Final Cost Report estimate prepared by AltaLink on January 17, 2013. The Final Cost Report estimated the costs of constructing the CRR Connection at completion to be \$47,780,884, of which the 2013 CCD determined \$21,234,515 to be system-related costs, and \$26,546,369 to be participant-related costs.
109. Taking into account the \$5.7 million refund to Enel respecting the incremental costs for the second 240 kV circuit, the AESO concludes that the CRR connection facilities do not exceed costs that qualify as participant-related under Subsection 3(2) of Section 8 of the 2011 ISO tariff, *Construction Contributions for Connection Projects*, and that the remaining participant-related costs for the CRR Connection have been calculated in accordance with the 2011 ISO tariff.
110. Enel's remaining request for refund of its participant-related costs for the CRR Connection in the amount of \$14.6 million (and \$16.6 million in the alternative) is denied.

**(c) Is Enel Entitled to a Further Adjustment and Refund?**

111. Based on the analysis and conclusion for Issue (b), above, Enel is not entitled to a further adjustment and refund for the CRR Connection.

**(d) Is Enel Entitled to Interest?**

112. Subsection 6 of Section 9 of the current ISO tariff requires the AESO to determine the amount of an adjustment to a construction contribution in accordance with the ISO tariff in effect at the time a connection project was constructed. For the CRR Connection, that would be the 2011 ISO tariff. Subsections 4(3) and 4(4) of Section 9 of the 2011 ISO tariff provide that refunds arising from an adjustment will be paid by the TFO, without interest:

4(3) The market participant will pay any resulting increase in construction contribution to the owner of the transmission facilities and the owner of the transmission facilities will refund any resulting decrease in customer contribution to the market participant.

4(4) Adjustments are charged or refunded without interest.

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<sup>88</sup> Dispute, Appendix C, TAB 14, at pdf 2.

<sup>89</sup> Dispute, Appendix C, TAB 24, at pdf 6-7.

113. Therefore, Enel is not entitled to interest on the \$5.7 million construction contribution refund. If Enel were entitled to a further refund, Enel would, similarly, not be entitled to interest.

**V. AESO DECISION**

114. Based on the AESO's analysis and conclusions for Issues (a) and (b), above, the AESO has determined that Enel is not entitled to the relief it has claimed.

Issued this 29th day of August 2016 by Heidi Kirrmaier, Vice-President, Regulatory