



**AltaGas Holdings Inc.**

**AltaGas Kent Energy Plant**

**March 20, 2015**

**Alberta Utilities Commission**

Decision 3547-D01-2015

AltaGas Holdings Inc.

AltaGas Kent Energy Plant

Proceeding 3547

Application 1611035-1

March 20, 2015

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## **1 Introduction**

1. AltaGas Holdings Inc. (AltaGas) filed an application with the Alberta Utilities Commission for approval to construct and operate a 95-megawatt (MW) natural gas-fired power plant (power plant), and a permit and licence to construct and operate a 13.8-kilovolt (kV)/144-kV step-up substation, collectively designated as the AltaGas Kent Energy Plant (project), in the Cold Lake area. This application was filed pursuant to sections 11, 14 and 15 of the *Hydro and Electric Energy Act* and was registered on November 30, 2014 as Application 1611035-1 in Proceeding 3547.
2. On December 19, 2014, the Commission issued information requests to AltaGas pertaining to environment, noise and the participant involvement program. AltaGas responded to the information requests on January 16, 2015.
3. The Commission issued a notice of application to potentially affected parties on December 19, 2014 regarding the proposed project. In the notice of application, the Commission directed any person who had concerns about or objections to the application, or who wished to support the application, to file a submission by January 23, 2015. The Commission also published the notice in the Cold Lake Sun and the Bonnyville Nouvelle on January 6, 2015. The Commission extended the deadline for submissions to February 27, 2015 to allow sufficient time for parties with updated addresses to respond to the notice.

## **2 Discussion**

4. AltaGas proposed to install two 47-MW simple-cycle natural gas-fired SPRINT turbine generators and a 13.8-kV/144-kV step-up substation, designated as the AltaGas Kent 328S substation, located in the northeast quarter of Section 13, Township 62, Range 3, west of the Fourth Meridian.
5. The proposed project would be located adjacent to the existing AltaGas Kent Energy Gas Plant and the proposed power plant would be operated as a peaker plant, generating approximately 200,000 MWh/year of electricity during times of high power demand. The AltaGas Kent 328S substation would be used to transform each generator's output voltage to the transmission voltage level of 144 kV.
6. AltaGas stated that the proposed power plant would connect to the Alberta Interconnected Electric System via a new switching station, designated as the Kent 3483 substation, and a new 144-kV transmission line. AltaGas also stated it has been meeting with the Alberta Electric System Operator (AESO) and ATCO Electric Ltd. to discuss these facilities.

ATCO Electric Ltd. will file an application for the Kent 3483 substation, 144-kV transmission line and interconnection to the Alberta Interconnected Electrical System.

7. AltaGas stated that it is in the process of applying for *Environmental Protection and Enhancement Act* approval to Alberta Environment and Sustainable Resource Development (ESRD) pursuant to the *Environmental Protection and Enhancement Act* and the *Water Act*.

8. AltaGas stated that Alberta Culture did not require a historical resources impact assessment and *Historical Resources Act* clearance was obtained on June 11, 2014.

9. AltaGas stated that a groundwater supply study still had to be conducted for the proposed project to determine if there is an adequate supply of local groundwater available to service the proposed power plant. Groundwater would be filtered and demineralized for the SPRINT water injection feature in the generators and for turbine washing. AltaGas is in the planning stages for a hydrogeologic field investigation to be completed in the first quarter of 2015. The investigation “will involve exploratory drilling and aquifer evaluation to determine if a suitable aquifer is present beneath the site to support the water supply demands of the proposed project.”<sup>1</sup> Upon completion of the investigation, a groundwater supply evaluation report will be completed, which “will summarize the field investigation results and will characterize the potential effects on other nearby users, if any exist within the aquifer unit being evaluated.”<sup>2</sup> AltaGas stated that if a suitable aquifer is present at the proposed project site, an application for a groundwater diversion licence would be prepared in accordance with the *Water Act* licence. It also stated that the local residents were notified of AltaGas’s plans to use a groundwater supply.

10. AltaGas stated that if an adequate supply of groundwater is not available, provisions would be made to truck in demineralized water from a source during hours of operation in the summer. AltaGas also stated that the proposed power plant could operate without demineralized water for the SPRINT feature, but not to its full capability.

11. AltaGas consulted with the Wildlife Management Unit of the ESRD Operations Division Resource Management Branch on January 8, 2014. The Wildlife Management Unit recommended that AltaGas conduct a pre-construction survey for wildlife in the spring to ensure species of concern are not present.

12. AltaGas stated that it planned to survey an area at least 1,000 metres from the edge of all disturbances to create a buffer. AltaGas explained that this buffer would be created to identify the presence of nesting sites of sensitive raptor species and other bird species that have ESRD-recommended year-round setbacks of up to 1,000 metres. AltaGas submitted that whether it would be able to complete the survey with a 1,000-metre buffer would be dependent on whether landowners and occupants grant AltaGas access to their lands. Should access not be granted, AltaGas would discuss an appropriate buffer with the Wildlife Management Unit. If any species of concern are found, AltaGas committed to consulting with the Wildlife Management Unit to discuss whether mitigation measures should be implemented.

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<sup>1</sup> Exhibit 3547-X0001, Information Response, PDF page 18.

<sup>2</sup> Exhibit 3547-X0001, Information Response, PDF page 18.

13. AltaGas stated that the proposed project would be developed in accordance with the Lower Athabasca Regional Plan (LARP) and that the following frameworks in place under the LARP are applicable to the proposed project: the Lower Athabasca Region Air Quality Management Framework for Nitrogen Dioxide (NO<sub>2</sub>) and Sulphur Dioxide (SO<sub>2</sub>),<sup>3</sup> the Lower Athabasca Regional Surface Water Quality Management Framework for the Lower Athabasca River,<sup>4</sup> and the Lower Athabasca Region Groundwater Management Framework.<sup>5,6</sup>

14. AltaGas submitted that an air quality assessment was completed for the proposed project, which indicated that the maximum predicted one-hour and annual average ground level NO<sub>2</sub> concentrations and the maximum predicted one-hour and 24-hour ground level particulate matter (PM<sub>2.5</sub>) concentrations are below the respective *Alberta Ambient Air Quality Objectives*.

15. To assess the environmental noise impacts of the proposed power plant, AltaGas submitted a noise impact assessment, completed by Nu Nennè-Stantec Inc., dated November 2014. The noise impact assessment identified the predicted cumulative sound levels of the proposed project at 14 dwellings within 1.5 kilometres of the proposed project boundary. The cumulative sound level included the ambient sound level, the noise impact of existing energy related facilities in the study area as well as the noise impact of the proposed project.

16. At the most impacted dwelling, R04, the sound level contribution from the proposed project alone is 38 dBA, and the resultant predicted cumulative sound level is 46 dBA daytime and 40 dBA nighttime. The permissible sound level values at this dwelling (R04) are 50 dBA L<sub>eq</sub> daytime and 40 dBA L<sub>eq</sub> nighttime. The cumulative sound levels at the most impacted dwelling are predicted to meet the permissible sound level requirements. The noise impact assessment concluded that the predicted cumulative sound level values of the proposed project are below the daytime and nighttime permissible sound level values at all residential receptor locations assessed. AltaGas committed to managing noise issues and promptly responding to any noise complaints, should they arise.

17. AltaGas developed a project-specific participant involvement program to ensure that the stakeholders, including the Cold Lake First Nations, were informed about the proposed project and concerns were identified and considered in project decisions. As a part of its consultation program, AltaGas notified landowners, occupants, residents, industries, local authorities and interested parties within 2,000 metres of the proposed project. AltaGas also consulted with landowners, occupants and residents within 800 metres of the proposed project and held an open house on June 25, 2014. AltaGas stated that there were no outstanding concerns from any landowner regarding the proposed project.

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<sup>3</sup> Lower Athabasca Region Air Quality Management Framework for Nitrogen Dioxide (NO<sub>2</sub>) and Sulphur Dioxide (SO<sub>2</sub>), [http://esrd.alberta.ca/focus/cumulative-effects/cumulative-effects-management/management-frameworks/documents/LARP\\_Framework\\_AirQuality\\_FINAL.pdf](http://esrd.alberta.ca/focus/cumulative-effects/cumulative-effects-management/management-frameworks/documents/LARP_Framework_AirQuality_FINAL.pdf).

<sup>4</sup> Lower Athabasca Region Surface Water Quality Management Framework for the Lower Athabasca River, [http://esrd.alberta.ca/focus/cumulative-effects/cumulative-effects-management/management-frameworks/documents/LARP\\_Framework\\_SurfaceWaterQuality\\_FINAL.pdf](http://esrd.alberta.ca/focus/cumulative-effects/cumulative-effects-management/management-frameworks/documents/LARP_Framework_SurfaceWaterQuality_FINAL.pdf).

<sup>5</sup> Lower Athabasca Region Groundwater Management Framework, [http://esrd.alberta.ca/focus/cumulative-effects/cumulative-effects-management/management-frameworks/documents/LARP\\_Framework\\_GroundwaterMgt\\_FINALv2.pdf](http://esrd.alberta.ca/focus/cumulative-effects/cumulative-effects-management/management-frameworks/documents/LARP_Framework_GroundwaterMgt_FINALv2.pdf).

<sup>6</sup> Exhibit 3547-X0001, Information Response, PDF pages 21 to 23.

18. On January 26, 2015, Mr. James T. Miller filed a statement of intent to participate. In his submission, Mr. Miller expressed concerns about the proposed power plant, including emissions, dust control and increase of traffic on Range Road 431. On February 18, 2015, Mr. Miller filed a letter stating his concerns had been resolved and, as such, had no objections to the construction of the AltaGas Kent Energy Plant. No other objections to the proposed power plant and step-up substation were received.

### 3 Findings

19. The Commission is satisfied that the application meets the information requirements stipulated in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*.

20. AltaGas has also applied for a permit and licence to construct and operate the 13.8-kV/144-kV AltaGas Kent 328S step-up substation. Step-up substations are normally an integrated part of power plants and, as a result, the Commission considers the construction of the AltaGas 328S substation to be a part of the proposed power plant construction.

21. The Commission accepts that minimal environmental impacts are expected from the proposed project. The Commission is satisfied with AltaGas's method of properly using local groundwater to service the proposed power plant and AltaGas's alternative method in the event adequate groundwater is not available.

22. The Commission is satisfied with AltaGas's commitment to conduct a pre-construction survey for wildlife to ensure species of concern are not present, and with its commitment to implement the necessary steps in the event species of concern are found. Any approval would be conditional upon AltaGas upholding these commitments. The Commission also accepts AltaGas's approach to creating a 1,000-metre buffer area for identifying the presence of nesting sites of sensitive raptor species and other bird species. Such approach is reasonable in the circumstances. However, should AltaGas not be granted access to the applicable lands, any approval would be conditional upon AltaGas conducting the surveys to the satisfaction of the Wildlife Management Unit.

23. The Commission understands that the proposed project will be developed in accordance with the LARP and that air emissions from the proposed project are expected to be compliant with the *Alberta Ambient Air Quality Objectives*.

24. The Commission is satisfied that the noise impact assessment submitted by AltaGas fulfills the requirements of Rule 012: *Noise Control* and that the predicted cumulative sound levels for all receptors will be below the daytime and nighttime permissible sound level.

25. AltaGas's participant involvement program was satisfactory to the Commission. The Commission also finds that a hearing is not required because there are no outstanding public or industry objections or concerns and it considers that its decision will not directly and adversely affect the rights of a person pursuant to Section 9 of the *Alberta Utilities Commission Act*.

26. The Commission has also determined that the technical, siting, emissions, environmental and noise aspects of the proposed power plant have been met.

27. Based on the foregoing, the Commission considers the proposed project to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

#### **4 Decision**

28. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants AltaGas the approval set out in Appendix 1 – Power Plant Approval 3547-D02-2015 – March 20, 2015, to construct and operate the AltaGas Kent Energy Plant (Appendix 1 will be distributed separately).

Dated on March 20, 2015.

#### **Alberta Utilities Commission**

*(original signed by)*

Anne Michaud  
Commission Member