



Nexen Inc./OPTI Canada Inc.

**Industrial System Designation Expansion
Long Lake Project**

February 26, 2010



ALBERTA UTILITIES COMMISSION

Decision 2010-092: Nexen Inc./OPTI Canada Inc.

Industrial System Designation Expansion - Long Lake Project

Application No. 1605770

Proceeding ID. 444

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1 INTRODUCTION

1. Nexen Inc. (Nexen) and OPTI Canada Inc. (the Applicants) own the Long Lake Oil Sands Project (Long Lake Project) near Anzac, Alberta. Nexen is the operator of all Long Lake Project facilities. Nexen filed Application No. 1605770 (the Application) with the Alberta Utilities Commission (AUC or the Commission) on January 4, 2010, requesting approval to amend their *Industrial System Designation (ISD)* Order No. 2009-64 to include all electrical facilities previously approved to be included in the ISD, new electrical facilities listed in Application No. 1604848 and 25-kV distribution lines to new water wells outside of the Applicants' Long Lake Project area.

2. On January 25, 2010, Nexen amended the Application to include only the electrical facilities previously approved to be included in the ISD and the new 25-kV distribution lines, pursuant to section 4 of the *Hydro and Electric Energy Act*.

2 DISCUSSION

3. The Long Lake Project is a fully integrated project that combines a SAGD (steam assisted gravity drainage) bitumen recovery facility with an on-site OrCrude Upgrader unit and a gasification facility, all of which are powered by on-site cogeneration facilities.

4. The OrCrude Upgrader unit and the SAGD facility rely on each other for feedstock. The OrCrude Upgrader supplies the gasification unit with the feedstock to produce synthetic gas that is used as fuel for turbines at the cogeneration facility as well as fuel for the on-site once-through steam generators. In turn, the on-site cogeneration facility powers the SAGD and OrCrude Upgrader facilities, as well as other integrated components located off-site. These components include source water well pumps for both fresh and brackish water, wastewater disposal well pumps, and associated equipment.

5. The Applicants own and operate an electrical distribution network of 25 kV which supplies components of the Long Lake Project within the Long Lake Project lease boundary and beyond the Long Lake Project lease boundary, as applied for in Application No. 1601071 and approved in ISD Order No.U2009-64.

6. The Applicants plan to expand the 25-kV network of their ISD to supply electric power to pumps located at three new water wells. The three water wells would be used to provide water to the Long Lake Project for bitumen recovery. The expanded 25-kV distribution network is planned to be in the following locations outside of the Long Lake Project lease boundary:

- Sections 13, 14, 22, 23, 27, 28, 31, 32, 33 of Township 85, Range 5, West of the 4th Meridian; and
- Sections 1, 2 and 36 of Township 85, Range 6, West of the 4th Meridian.

7. The Applicants stated that to ensure that the Long Lake upgrader operates at its designated capacity of 70,000 barrels of bitumen per day, additional bitumen supplies are required resulting in the commissioning of additional well pads to increase extraction volumes. To provide the required volumes of steam to supply the new well pads, water demand for steam generation increases, and therefore, the need for the additional three new water wells.

8. ATCO Electric Ltd. (ATCO) is the regulated electric distributor for the service area in the region where the three new water wells are located. The Applicants stated that their electrical point of supply is approximately 10 kilometres closer than ATCO's nearest point of supply. Because of this proximity, the cost of expanding the Applicants' 25-kV distribution system is less than the tariffs that would be applied for ATCO service.

9. Nexen discussed the routing, need and location of the water wells with ATCO. ATCO provided a Conditional Letter of No Objection (Conditional Letter) regarding the Applicants' intent to build, own and operate the new 25-kV distribution facilities to serve the three new water wells.

10. In the Conditional Letter, ATCO indicated in Condition 5 that should a third party load near or within the designated ISD develop, it may be economical for ATCO to utilize the ISD transmission and/or distribution facilities to serve these third party loads. Subject to any proposed interconnection meeting both ATCO's and the Applicants' requirements, ATCO advocated that it should be allowed a shared use of ISD facilities required to serve system load development.

11. ATCO's Conditional Letter also indicated that it is applicable only for the three water source wells, and in no way does ATCO agree to allow Nexen to serve any other load from the ISD expansion.

12. The Applicants' participant involvement program for the expanded 25-kV distribution system involved providing detailed information regarding the project through meetings with directly affected stakeholders, sending out information packages, and by means of the Long Lake community office in Anzac. The Applicants indicated that no concerns or objections have been expressed by stakeholders regarding the expanded 25-kV distribution system.

3 FINDINGS

13. The Commission notes that the Application is made pursuant section 4 of the *Hydro and Electric Energy Act* and that criteria to grant an ISD are listed in section 4(3) of the *Hydro and Electric Energy Act*, namely:

- (a) the electric system includes a generating unit located on the property of the one or more industrial operations it is intended to serve, there is a high degree of integration of the electric system with one or more industrial operations the electric system forms part of and serves, and there is a high degree of integration of the components of the industrial operations;
- (b) the industrial operations process a feedstock, produce a primary product or manufacture a product;
- (c) there is a common ownership of all of the components of the industrial operations;
- (d) the whole of the output of each component within the industrial operation is used by that operation and is necessary to constitute its final products;
- (e) there is a high degree of integration of the management of the components and processes of the industrial operations;
- (f) the application to the Commission for a designation under subsection (1) demonstrates significant investment in both the expansion or extension of the industrial operations processes and the development of the electricity supply;
- (g) where an industrial operation extends beyond contiguous property, the owner of the industrial operation satisfies the Commission that the overall cost of providing the owner's own distribution or transmission facilities to interconnect the integral parts of the industrial operation is equal to or less than the tariffs applicable for distribution or transmission in the service area where the industrial operation is located.

14. With respect to Criterion 4(3)(a), 4(3)(b), 4(3)(d), and 4(3)(e), the Commission notes that the Long Lake Oil Sands Project is an integrated project that combines a SAGD bitumen recovery facility with an on-site OrCrude Upgrader unit and a gasification facility, all of which are powered by an on-site cogeneration facility. The Commission further notes that the OrCrude Upgrader unit and the SAGD facility rely on each other for feedstock. The OrCrude Upgrader supplies the gasification unit with the feedstock to produce synthetic gas. The synthetic gas is used in the cogeneration facility to fire the turbines and the on-site once-through steam generators. The Commission recognizes that the on-site cogeneration facility powers the SAGD and OrCrude Upgrader facilities, as well as other integrated components located off-site.

15. With respect to Criterion 4(3)(c), the Commission notes that there is a common ownership of all of the components of the industrial operations by Nexen and OPTI Canada Inc.

16. With respect to Criterion 4(3)(f) and 4(3)(g), the Commission acknowledges that the nearest point of supply from ATCO is approximately 10 kilometres further than the Applicants' nearest point of supply. The Commission notes that the new 25-kV distribution system would not be bypassing any existing system or creating duplication of the current system. The Commission further notes that the cost of the Applicants expanding their 25-kV distribution system is less than the tariffs that would be applied for ATCO service. The Commission finds this proposal to be an economical by-pass of the interconnected electric system.

17. The Commission recognizes that the expanded 25-kV distribution system is required to power the three new water wells, necessary for the Long Lake Oil Sands Project's industrial process. The Commission notes that the 25-kV distribution system will be required for the Applicants' own use as part of its industrial system. The Commission is satisfied that this use would meet one of the conditions contained in ATCO's Conditional Letter since the 25-kV distribution system expansion is only to be used to serve the three new water wells.

18. Based on the above, the Commission is satisfied that Applicants have met the required criteria to amend their ISD to expand the 25-kV network of their ISD to supply electric power to pumps located at three new water wells mentioned above.

19. The Commission did not issue a Notice of Application for the Application. The Commission notes that the Applicants conducted a participant involvement program and that there appear to be no outstanding objections or concerns. The Commission further notes that ATCO provided the Applicants with a conditional letter of no objection to the proposed 25-kV network expansion.

20. With regards to ATCO's Conditional Letter, the Commission notes that Section 40(2) of the *Electric Utilities Act* provides that where the Independent System Operator is satisfied that transmission facilities of an industrial system are required to be used for system access service, the Independent System Operator may apply to the Commission for an order. The Commission is of the view that Section 40(2) of the *Electric Utilities Act* addresses concerns similar to those raised in ATCO's Conditional Letter.

21. The Commission has reviewed the Application and determined that it meets the requirements as set out in *Commission Rule 007: Rules Respecting Applications for Power Plants, Substations, Transmission Lines, and Industrial System Designations*.

22. Having considered all of the evidence before it, the Commission finds the requirements under section 4 of the *Hydro and Electric Energy Act* to have been met, and further finds that approving the Application is in the public interest.

DECISION

23. Pursuant to section 4 of the *Hydro and Electric Energy Act*, the Commission approves the Application and grants the approval as set out in Appendix 1 –Industrial System Designation Order No.U2010-082 – February 26, 2010 (the Appendix will be distributed separately).

Dated on February 26, 2010.

ALBERTA UTILITIES COMMISSION

(original signed by)

N. Allen Maydonik, Q.C.
Commissioner