



Imperial Oil Resources Limited

Nabiye Project - Cogeneration Plant, Transmission Facilities,
and Industrial System Designation

September 2, 2010

ALBERTA UTILITIES COMMISSION

Decision 2010-431: Imperial Oil Resources Limited

Nabiye Project - Cogeneration Plant, Transmission Facilities, and Industrial System Designation

Application No. 1605716

Proceeding ID. 427

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**IMPERIAL OIL RESOURCES LIMITED
NABIYE PROJECT - COGENERATION PLANT,
TRANSMISSION FACILITIES, AND
INDUSTRIAL SYSTEM DESIGNATION**

**Decision 2010-431
Application No. 1605716
Proceeding ID. 219**

1 INTRODUCTION

1. Imperial Oil Resources Limited (Imperial Oil or Applicant) filed an application with the Alberta Utilities Commission (AUC or Commission) requesting the following electric facility approvals and orders related to the Nabiye Project, which will be an expansion to Imperial Oil's existing Cold Lake Operations in the Cold Lake area:

- Approval to construct and operate a cogeneration plant;
- Permit to construct and a licence to operate a 144 kV transmission line from the Nabiye substation to the existing MahNo 909S substation;
- Permit to construct and a licence to operate the Nabiye 942S substation at the Nabiye Project site;
- Permit and licence to modify the existing MahNo 909S substation;
- An amendment to Connection Order No. U2007-198 to approve the interconnection of these electric facilities to the Alberta Interconnected Electric System (AIES); and
- An amendment to Order No. U2006-207 to designate the proposed electric facilities at the Nabiye Project as part of the existing Industrial System Designation (ISD).

2. The application was registered on December 10, 2009, as Application 1605716 (Application).

3. Imperial Oil currently operates 13 phases of commercial bitumen production from the following four sites at its Cold Lake oil sands operations: Leming, Maskwa, Mahihkan, and Mahkeses. These sites currently produce an average of 154,000 barrels of bitumen per day.

4. In 2004, Imperial Oil received regulatory approval for three additional phases (14-16) of commercial bitumen production in an area known as Nabiye. The Nabiye Project is located within Imperial Oil's approved lease area located in Townships 64, 65, and 66, Ranges 2, 3, 4, and 5, West of the 4th Meridian, approximately 30 kilometers northwest of Cold Lake, as shown in Figure 1. The Nabiye Project would consist of a plant (the Nabiye plant), where the bitumen processing facilities will be located, and a network of well pads (the Nabiye field) connected via roads, pipelines, and power lines. Once completed, the Nabiye Project would increase bitumen production by an additional 30,000 barrels per day.

5. The general locations of the proposed electric facilities at the Nabiye Project, which include a cogeneration facility, a new substation and a new transmission line, are also shown in Figure 1 and are further described in the next section.

2 APPLICATION

Electric Facilities

6. The cogeneration plant will be located in legal sub division (LSD) 10, Section 23, Township 66, Range 3, West of the 4th Meridian. It will include two gas turbine generator sets equipped with heat recovery steam generators to generate electricity as well as steam. Each generator will be driven by a General Electric 7EA natural gas-fired combustion turbine, with nominal output of 85 Megawatts (MW), for a total nominal output of 170 MW. Steam will be piped and sent to be used in the bitumen production process. Electric energy will be routed to a new substation.

7. The new substation (to be designated Nabiye 942S) will be located at the Nabiye plant site and at the same LSD as, and adjacent to, the new cogeneration plant. This substation will house two transformers (one for each generator) to step the generator's voltage (13.8 kilovolts (kV)) up to 144 kV. It will also house four 144/25 step-down transformers to feed electric energy to the Nabiye field and the bitumen producing plant, and six 144-kV circuit breakers. Surplus electric energy, (i.e. electric energy in excess of that required by the Nabiye plant and field), will be sent to the existing Mahihkan North (MahNo 909S) substation, approximately 13 kilometres away, via a new 144-kV transmission line.

8. The new 144-kV transmission line will connect the new Nabiye 942S substation to the existing MahNo 909S substation. The transmission line route will follow the main Nabiye access corridor from the Nabiye plant for approximately 6 kilometres. This corridor, which will include not only the transmission line but also the main access road and buried pipelines, will be approximately 83 metres wide. The transmission line will then run west for approximately 7 kilometres, to the existing Mahihkan North substation, on a 20-metre wide rights-of-way. Figure 1 also shows the general location of this transmission line. The transmission line will be supported on single-pole structures and will be equipped with a single 795 ACSR Drake conductor per phase designed to carry the full capacity of the cogeneration plant.

9. A new termination bay and a 144-kV circuit breaker will be installed at the existing MahNo 909S substation in order to accommodate the new transmission line.

Connection to the AIES

10. Imperial Oil filed copies of the Interconnection Proposal and the Functional Specifications prepared by the Alberta Electric System Operator (AESO) in support of its Application for the connection of the Nabiye cogeneration plant.

11. The Interconnection Proposal, which is dated November 2009, was the result of Imperial Oil's request to increase its current Supply Transmission Service tariff (STS) of 67 MW to 150 MW once the proposed Nabiye cogeneration plant becomes operational in the second quarter of 2013.

12. In the Interconnection Proposal, the AESO's review of the Cold Lake area affirms that the area transmission system is at capacity and that the connection of Imperial Oil's Nabiye cogenerating plant cannot be accommodated before new transmission reinforcements in the Cold Lake area are in place. Until then, Imperial Oil will remain at its current STS of 67 MW. If Imperial Oil chose to connect its cogeneration plant prior to the Cold Lake area reinforcements being in place, its connection would be subjected to a Remedial Action Scheme.

13. The Interconnection Proposal also indicates that the AESO is developing a Need Identification Document that would address all the transmission reinforcements within the area and that the targeted in-service date for all the reinforcements in the Cold Lake area is by the last quarter of 2012.

14. The Interconnection Proposal provides the AESO's steady-state and transient analysis of the performance of the transmission system under different contingency situations and for the forecast year 2012. Steady-state results of this analysis show that under normal operating system conditions and with the Cold Lake area system reinforcements, the AIES can accommodate the connection of the cogeneration plant. Also, transient analysis results indicate that, with the Cold Lake area system reinforcements, no adverse effects were detected due to the proposed generator connection.

15. The Interconnection Proposal also indicates, as an estimate, that the connection cost would be \$193,837. Of these costs, \$169,693 is deemed to be customer-related and subject to the AESO's customer contribution policy.

Electric System to be designated

16. By AUC Order U2006-207, Imperial Oil's electric facilities currently installed and operating in the Cold Lake area, namely the Leming, Maskwa, Mahihkan, and Mahkeses bitumen production sites, were designated as an industrial system pursuant to section 4 of the *Hydro and Electric Energy Act*.

17. In this Application, Imperial Oil is also requesting an amendment to Order U2006-207 for a designation of the proposed electrical generation, transmission, and distribution facilities related to the Nabiye Project to be included as part of the Cold Lake industrial system, pursuant to section 4 of the *Hydro and Electric Energy Act*.

18. The Applicant has also requested that the Commission make rules exempting the electric energy produced from and consumed by the proposed industrial system from the *Electric Utilities Act* and its Regulations, pursuant to section 117 of the *Electric Utilities Act*.

19. The area of the proposed Nabiye Project to be added to the existing Cold Lake industrial system is shown in Figure 1.

Public Consultation

20. The Applicant notified all potentially directly and adversely affected persons within 2,000 metres of the proposed cogeneration plant, as well as those within 800 metres of the proposed substation and from the edge of the proposed transmission line rights-of-way. The Applicant also notified First Nations, Métis Nations, other oil and gas companies in the area, municipal government, other government agencies, and those parties that may have an interest in the scope or extent of the ISD, including the AESO and ATCO Electric Ltd. (AE).

21. The Applicant states that there are no residents or private landowners within 2,000 metres of the proposed cogeneration plant or within 800 metres of the proposed transmission facilities. The Applicant also states that it has had ongoing consultation with trappers affected by the proposed Nabiye Project and has negotiated compensation agreements with them.

Noise and Environmental Impacts

22. Imperial Oil filed a Noise Impact Assessment (NIA) indicating that the maximum predicted sound levels at a distance of 1.5 kilometres was below the night-time Permissible Sound Level of 40 dBA L_{eq} set out in *AUC Rule 012: Noise Control (Rule 012)*.

23. Imperial Oil provided details of nitrogen oxides atmospheric emissions (NO_x) from the cogeneration plant demonstrating compliance with the current *Alberta Source Emissions Standard*. Specifically, the cogeneration NO_x emission rate of 0.22 kg/MWh is below the annual intensity limit of 0.3 kg/MWh specified in the *Alberta Air Emission Standards for Electricity Generation (December 2005)* for natural gas-fired cogeneration power plants larger than 60 MW. Also, the cogeneration NO_x emission rate of 121 kg/hr is also below the NO_x emission limit of 133 kg/hr, in accordance with the *CCME National Emission Guidelines for Stationary Combustion Turbines*. The cogeneration plant does not emit sulphur dioxide or particulate matter.

24. Imperial Oil states it assessed four possible routing options, in consultation with Alberta Sustainable Resources Development (ASRD), to determine the preferred route for the 144-kV transmission line based on the following environmental and socio-economic factors:

- presence and use of existing disturbed areas to minimize new clearing;
- consideration of access to sensitive areas including watercourse crossings;
- total vegetation control easement required in addition to a rights-of-way;
- line-of-sight characteristics; and
- presence of productive vegetation sites.

25. Imperial Oil states that the selected route is, therefore, the least-impacting route of the four routes assessed.

Other Approvals

26. Imperial Oil states that Alberta Culture and Community Spirit has granted *Historical Resources Act* clearance for the Nabiye Project.

27. Imperial Oil states that it has confirmed with the Director of Planning Development for the Municipal District of Bonnyville that, with the exception of building and land development permits, municipal approval is not required for the Nabiye Project.

28. Alberta Environment has advised that approval pursuant to the *Environmental Protection and Enhancement Act* for industrial releases is forthcoming.

Notice of Application

29. The Commission reviewed the Application and requested additional information from Imperial Oil on April 7, 2010. After completing a review of all of the information provided by Imperial Oil, the Commission deemed the Application complete and issued a Notice of Application (Notice) on June 10, 2010.

30. The Notice was mailed directly to all potentially affected parties as identified by the Applicant. The Notice was also sent electronically to a list of other potential stakeholders. In addition, the Notice was published in the Fort McMurray Connect on June 18, 2010. The Commission received the following objections, interventions, or statements of intent to participate (SIP) in response to the Notice of Application.

31. Chris and Lorie Penner (the Penners) submitted a request for intervenor status (standing) on the basis that they will be directly and adversely affected by the Commission's decision in this proceeding.

32. The Commission dealt with the Penners' request as a preliminary matter. The Commission received evidence from the Penners and from Imperial Oil and made a ruling as to the merit of the Penners' request for standing.

33. AE submitted a SIP indicating that the Nabiye Project, including related electrical facilities, will be constructed and operated in AE's service territory and, therefore, AE will be directly affected by the matters raised in Imperial Oil's filing and the disposition of this Application by the Commission. AE also stated that it reserved its right to make submissions regarding the Nabiye Project until after further information was received.

34. On August 27, 2010, AE sent a letter indicating it had filed the SIP for monitoring purposes only. AE clarified that it did not object to the granting of this Application and withdrew its SIP.

3 COMMISSION FINDINGS

Request for Standing and Interventions

35. With respect to the Penners' request for standing, the Commission, in its ruling issued on August 26, 2010, and marked as Exhibit 16, denied them standing for the reasons stated in that ruling.

36. With respect to AE, the Commission notes AE's letter dated August 27, 2010, that indicated it did not object to this Application and was withdrawing its SIP.

Industrial System Designation (ISD)

37. The Commission considered the ISD Application pursuant to the principles and criteria set out in section 4 of the *Hydro and Electric Energy Act*. Section 4(2) sets out the principles the Commission shall have regard to when considering an ISD application and section 4(3) sets out the criteria that must be met prior to the Commission making a designation. These principles and criteria, as well as the Commission's findings, are addressed below.

Principle 4(2)(a) - Most Economic Source of Generation

38. This principle requires proponents to demonstrate that the internal supply through on-site generation is the most economic source of power for the industrial complex. To this end, the Commission observes that Imperial Oil provided a 30-year cash-flow comparison of the following two scenarios:

- A "Purchased Power" scenario, i.e. a scenario with no on-site generation and power purchased from the Alberta grid to supply the Nabiye electrical demand; and
- A "Cogeneration" scenario, i.e. the proposed scenario with on-site generation to supply the Nabiye electrical demand and excess generation sold to the Alberta grid.

39. Furthermore, the Commission notes that the 30-year cash-flow comparison of the two scenarios shows that the proposed Nabiye "Cogeneration" scenario provides a present value after tax benefit of \$252 million when compared with the "Purchased Power" scenario. In addition, the Commission reviewed the economic comparison provided by Imperial Oil, including all of the costs, benefits, and identified assumptions. As a result, the Commission finds that the proposed ISD, with the cogeneration option, satisfies the most economic source of generation principle.

Principle 4(2)(b) - Efficient exchange, with the interconnected electric system, of electric energy that is in excess of the Industrial System's own requirements, improved voltage stability, reduction of losses and congestion of transmission lines

40. This principle requires proponents to demonstrate that the designation supports the development of the economical supply of generation to meet the requirements of integrated industrial processes, the efficient exchange, with the interconnected electric system, of electric energy that is in excess of the industrial system's own requirements, and the making of decisions respecting the location of generation and consumption facilities so that the efficiency of the interconnected electric system is improved, including improved voltage stability and reduction of losses and congestion on transmission lines.

41. In this case, the Commission notes that the Nabiye Project will be equipped with a cogeneration plant that will generate, on average, approximately 155 MW at the site, while the Nabiye demand will be approximately 40 MW. This means that there will be an average electric capacity surplus of 115 MW that will be sold to the Alberta Power Pool. Therefore, the Commission finds that the proposed ISD supports the continued exchange with the interconnected electric system of electric energy that is in excess of the industrial system's own requirements.

42. The Commission considered the location of the proposed cogeneration plant at the end of a 13-kilometre long radial transmission line that would connect the proposed Nabiye substation with the existing MahNo Substation 909S. Furthermore, the Commission notes that the existing MahNo Substation 909S is predominantly supplied via another 10-kilometer long radial transmission line (7L105) from the existing AE's Mahihkan Substation 837S, which is connected to the AIES. In light of this system configuration, the Commission is satisfied that the addition of internal generation at the end of a long radial system at the Nabiye Project site will improve voltage stability.

43. The Commission accepts Imperial Oil's submissions that the transmission system losses within the Cold Lake ISD, in light of the potential increase in surplus capacity delivered to the AIES via 13 additional kilometres of new transmission line, are expected to increase by approximately 1 MW. The Commission considers this increase to be negligible.

44. The Commission notes that there is significant forecast electric load growth and generation expected on the electric system in the Central East region of Alberta, which includes the Cold Lake area where the Nabiye Project is being developed, that may result in thermal overloads starting in 2012. However, the AESO has already filed with the Commission a proposal for transmission reinforcement in this area to address the entire thermal protection schemes currently in place and to mitigate thermal overloading of various transmission lines, including the Cold Lake area. The Commission is satisfied that, once the AESO's proposal for the Central East region is implemented, there would be no congestion of transmission lines.

45. The Commission considers that the proposed ISD also meets the principles in subsection 4(2)(b) of the *Hydro and Electric Energy Act*.

Principle 4(2)(c) and (d) - Cost Avoidance, Uneconomic Bypass and Duplication

46. This principle requires proponents to demonstrate that the designation does not facilitate the development of independent electric systems that attempt to avoid costs associated with the interconnected electric system and uneconomical by-pass of the interconnected electric system.

47. The Commission notes that the Nabiye Project, as well as the exiting Leming, Maskwa, Mahihkan, and Mahkeses sites, will continue to be connected to the grid via AE's transmission system. This connection will allow Imperial Oil to sell surplus electric energy to the Alberta Power Pool and to consume electric energy from the Alberta Power Pool during planned and unplanned outages of its cogeneration plants. Imperial Oil will be paying tariffs for the supply of electric energy to the Alberta Power Pool and for receiving stand-by energy from the Alberta Power Pool; hence, the Commission is satisfied that there will be no avoidance of costs associated with the interconnected electric system.

48. The Commission also notes that, in this case, Imperial Oil will construct, own, and operate the substation and transmission line needed to connect the Nabiye Project to the existing MahNo substation, which is also owned by Imperial Oil, and located within its lease area. AE has not objected to this arrangement. Therefore, there would be no duplication or by-pass of the interconnected electric system.

49. For the reasons stated in the preceding paragraphs, the Commission considers that the proposed ISD also meets the principles set out in the section 4(2)(c) and (d) of the *Hydro and Electric Energy Act*.

Criterion 4(3)(a)

50. This criterion requires proponents to demonstrate that the electric system includes a generating unit located on the property of the one or more industrial operations it is intended to serve, that 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 a high degree of integration of the components of the industrial operations.

51. In this case, the Commission considered that the Nabiye Project will be equipped with a generating unit, specifically a cogeneration plant capable of producing power and steam for the bitumen-producing facilities, located at the Nabiye Project site.

52. The Commission notes that the Cold Lake operations, including the proposed Nabiye Project, are owned by Imperial Oil and are industrial processes that produce bitumen by way of cyclic steam stimulation process, which is further described below. Furthermore, the Cold Lake operations, of which the Nabiye Project will become part of, incorporates significant integration amongst the different sites, such as:

- generation, transmission, and distribution of electric energy;
- transfer of surplus (produced, fresh, and brackish) water, diluents, diluted bitumen, and natural gas between the operating sites; and
- access roads and operational management.

53. The Commission considers that criterion 4(3)(a) is met, because there is internal generation and there is a high degree of integration of the components of the industrial operations.

Criterion 4(3)(b)

54. This criterion states that the industrial operations process a feedstock, produce a primary product, or manufacture a product.

55. The Commission considered that Imperial Oil's cyclic steam stimulation process used to recover bitumen from reservoirs, which involves the drilling of wells, the injection of steam into wells to warm the bitumen and allow it to be pumped, the separation of water and gas from the bitumen, the addition of diluents to reduce viscosity, and the marketing of diluted bitumen, meets the definition set out in criterion 4(3)(b).

Criterion 4(3)(c)

56. This criterion states that there is a common ownership of all of the components of the industrial operations. In this case, the Commission notes that all equipment and facilities are owned by Imperial Oil and considers that criterion 4(3)(c) is met.

Criterion 4(3)(d)

57. This criterion states that 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. In this Application, the Commission considered that the whole of the output of each component within the industrial operation (reservoir fluid from production wells) is used by that operation (the processing plants) and is necessary to constitute its final products (diluted bitumen). Therefore, the Commission finds that criterion 4(3)(d) has been met.

Criterion 4(3)(e)

58. This criterion states that there is a high degree of integration of the management of the components and processes of the industrial operations. In this case, the Commission notes that the Cold Lake operations, including the proposed Nabiye Project, are owned by Imperial Oil and will be managed as a single integrated operation. Therefore, the Commission considers that criterion 4(3)(e) has been met.

Criterion 4(3)(f)

59. This criterion states that an application to the Commission for a designation demonstrates significant investment in both the expansion and extension of the industrial operations processes and the development of the electricity supply. The Commission took note that the Nabiye Project, through the addition of new bitumen processing plant, field, and infrastructure components, represents approximately a 20 per cent increase in bitumen production capacity for Imperial Oil's Cold Lake operations. Also, the Nabiye electrical facilities, including cogeneration plant, substation, and transmission line, will double the electric power generation capacity for Imperial Oil's Cold Lake operations. Therefore, the Commission considers that criterion 4(3)(f) has been met.

Criterion 4(3)(g)

60. This criterion applies where an industrial operation extends beyond contiguous property. In this case, the Commission observes that the industrial operations will take place within the single contiguous area of crown land within the Applicant's lease boundary (as shown in Figure 1) and will not extend beyond contiguous property. Therefore, the Commission finds that criterion 4(3)(g) does not apply.

61. As a result of the above stated findings, the Commission is satisfied that all of the principles set out in section 4(2) and all of the applicable criteria set out in section 4(3) of the *Hydro and Electric Energy Act* have been met.

62. The Commission notes that AE, the Transmission and Distribution Facility Owner in whose service area the proposed ISD is located, has not objected to the formation of the ISD within its service area.

Electric Facilities

63. With respect to the applied-for cogeneration, substation, and transmission line, the Commission has reviewed the Application and has determined that they meet the requirements as stipulated in *AUC Rule 007*.

64. The Commission notes that a noise impact assessment demonstrating compliance with the noise standards has been provided. Furthermore, the cogeneration plant will have minimal impact on the environment as it meets the source emission standards. Additionally, all other necessary approvals have been obtained by the Applicant.

65. The Commission notes that Imperial Oil assessed four possible routing options in consultation with ASRD to determine the preferred route for the 144-kV transmission line and it based the selection of the route on several relevant environmental and socio-economic factors. The Commission accepts that the selected route is the least-impacting route.

66. Furthermore, the Commission reviewed the potential impact of the proposed transmission line on local trapping lines and notes that Imperial Oil has already compensated local trappers for any potential decrease of trapping income that its facilities might cause for the next 50 years.

67. With respect to the Penners' concerns, the Commission reviewed the map provided by the Applicant in Exhibit 8. This map, included as Figure No. 2 in this decision, shows the boundaries of the Penners' RFMA #0054 trapping area. It also shows the locations of the Nabiye bitumen processing plant, the network of well pads forming the Nabiye field, and the access corridor to the Nabiye plant. From this map the Commission notes that the Nabiye bitumen processing plant and the Nabiye field, i.e. the network of well pads, as well as a segment of the access corridor (which contains a road and a pipeline), are located within the Penners' RFMA #0054 trapping area. The Commission further notes that these facilities, which were approved by the Energy Resources Conservation Board (ERCB) in 2004, are not the subject of this Application.

68. The facilities that are the subject of this Application are a cogeneration plant and substation, to be located within the previously approved Nabiye bitumen processing plant, and a transmission line to be located within the access corridor, adjacent to the road and pipeline. An Equipment Location Plan drawing included in Imperial Oil's Application also shows that the cogeneration plant and substation will occupy a very small area within the previously approved Nabiye bitumen processing plant. Furthermore, the proposed transmission line will be located within the Nabiye access corridor, adjacent to a road and a pipeline, and would run for approximately 6 kilometers within the Penners' RFMA #0054 trapping area. Therefore, the Commission finds that the facilities proposed in this Application will have minimal, if any, negative impact on the Penners' trapping activities.

Connection to the AIES

69. The Commission has reviewed the Application for connection to the AIES and has determined that it also meets the requirements as stipulated in *AUC Rule 007*.

70. The Commission is satisfied that, based on the steady-state and transient analysis carried out by the AESO, the Nabiye cogenerating plant can be connected with no adverse effects on the AIES provided that the Cold Lake area system reinforcements are in place. In this respect, the Commission notes that the AESO has already filed the Central East Transmission Development proposal that includes transmission reinforcements in the Cold Lake area scheduled to be in place on or before the fourth quarter of 2012. The Commission further notes that, should Imperial Oil decide to connect before the implementation of the Cold Lake area system reinforcements, the Nabiye cogenerating plant would have to be placed under a Remedial Action Scheme to allow connection to the AIES. Hence, the Commission approves the connection on this basis.

71. The Commission notes that Connection Order U2007-198, which was issued to AE in August 2007, ordered the connection of Imperial Oil's MahNo Substation 909S with AE's Mahihkan Substation 837S via Imperial Oil's transmission line 7L105. Furthermore, the proposed Nabiye cogenerating plant will supply electric energy to Imperial Oil's MahNo Substation 909S via the proposed 13-kilometer transmission line also owned by Imperial Oil. Surplus electric energy from the Nabiye cogenerating plant to the AIES will, therefore, be routed via transmission facilities for which a connection order already exists. For this reason, the Commission finds that Connection Order U2007-198 need not be rescinded and consequently remains active.

72. Finally, the Commission notes the Applicant's submission that a participant involvement program has been conducted by the Applicant with respect to the proposed cogeneration plant, transmission facilities, and the proposed ISD and has considered the concerns expressed by the Penners. The Commission notes that the facilities will have minimal, if any, negative impact on their trapping activities.

73. For all of the foregoing reasons the Commission finds that Imperial Oil's proposal should be approved.

4 DECISION

74. Pursuant to sections 4, 11, 14, 15, and 18 of the *Hydro and Electric Energy Act*, the Commission approves the Application subject to the terms and conditions as set out in the following appendices, which are being released concurrently with this Decision:

- Appendix 1 – Nabiye Power Plant Approval U2010-319;
- Appendix 2 – Nabiye Substation 942S Permit and Licence U2010-320;
- Appendix 3 – Transmission Line 7L161 Permit and Licence U2010-321;
- Appendix 4 – MahNo Substation 909S Permit and Licence U2010-322; and
- Appendix 5 – Industrial System Designation Order U2010-323.

75. The Commission further grants the subject industrial system an exemption for the electric energy produced from, and consumed by, the industrial system from the operation of the *Electric Utilities Act*, in accordance with section 117 of the *Electric Utilities Act*.

Dated on September 2, 2010.

ALBERTA UTILITIES COMMISSION

(original signed by)

Thomas McGee
Panel Chair

(original signed by)

Anne Michaud
Commissioner

FIGURE 1

NABIYE PROJECT AREA MAP PROVIDED BY IMPERIAL OIL

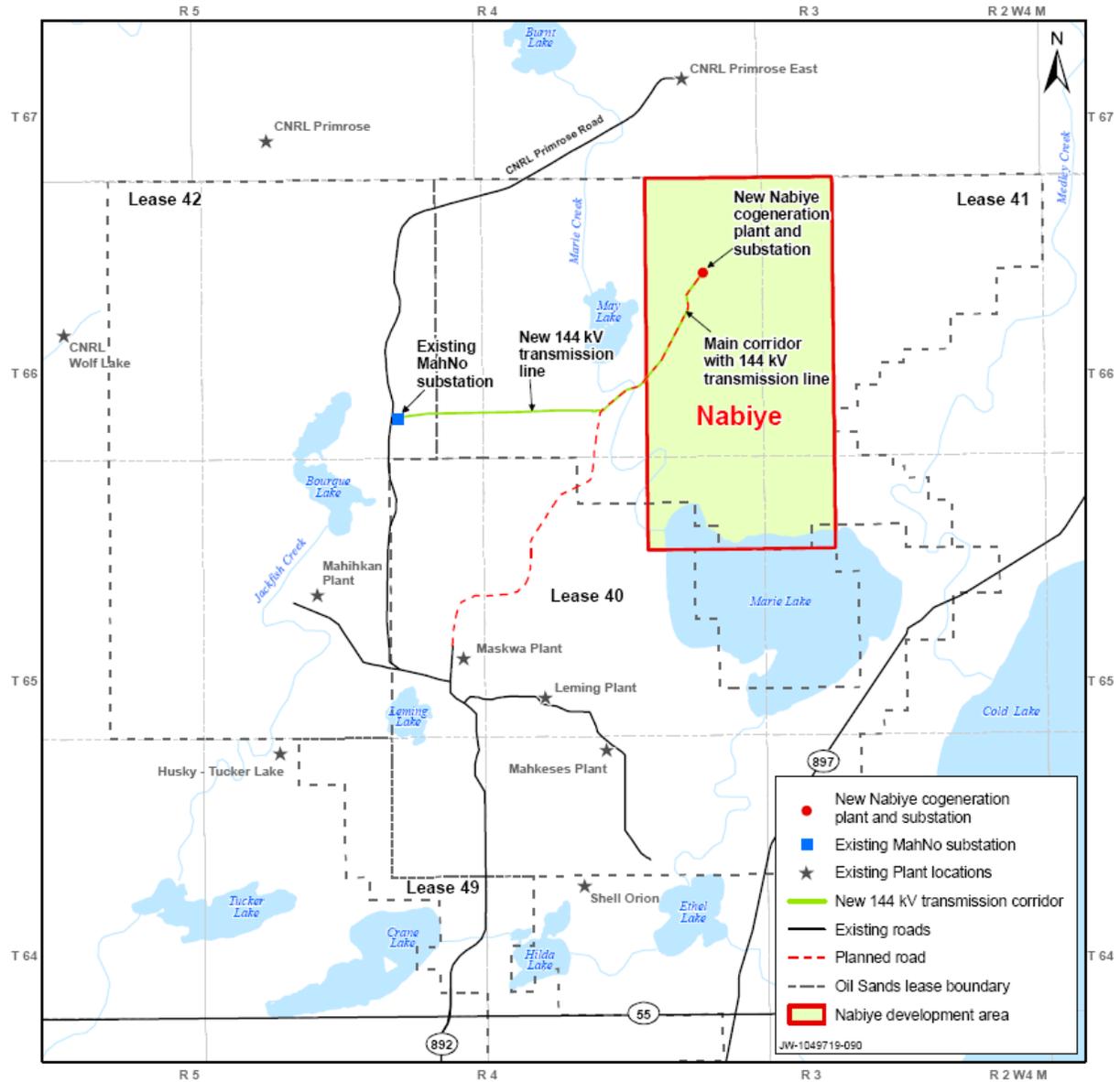


FIGURE 2

NABIYE PROJECT AREA MAP SHOWING RMFA 54 BOUNDARIES

