

# Genesee Generating Station

Units 4 & 5

Project Summary

Canadian Environmental Assessment Agency

November 2013



# Project Description Summary for Capital Power's Proposed Genesee Generating Station (GGS) Units 4 and Unit 5

## GENERAL INFORMATION

Capital Power Generation Service Inc. (Capital Power) is pleased to provide this Project Description Summary for the proposed Genesee Generating Station (GGS) Units 4 & 5 Project (the Project). This Project Description Summary to assist in the Canadian Environmental Assessment Agency's determination on the need for a federal environmental impact assessment.

Capital Power is proposing to expand its existing Genesee Generating Station (GGS) by constructing and operating a natural gas-fired power plant to meet expected increases in Alberta's power requirements, arising both from continued economic growth in the Province and from the expected retirements of existing coal generating units in the 2020 timeframe. The Project will be situated adjacent to the existing GGS (Units 1 to 3) approximately 17 kilometres north of the Town of Warburg in Leduc County (Figure 1). The Project is located within Sections 25, Township 50, Range 3, west of the 5<sup>th</sup> Meridian and is expected to occupy about 5 hectares of previously disturbed land (i.e., a brownfield site) owned by Capital Power (Figure 2). GGS has been operating at this site since 1989. The existing three units burn coal from the nearby Genesee Coal Mine to produce electricity. Units 1 and 2 of the GGS each have a nameplate capacity of 410 MW gross, and Unit 3 has nameplate capacity of 495 MW gross. The proposed Project would increase the electrical output of the GGS to by approximately 80% (up to an additional 1050 MW gross) for a combined total gross nameplate capacity of up to 2365 MW at the Genesee site.

The Project is being developed to meet expected increases in Alberta's power requirements, arising both from continued economic growth in the Province and from the expected retirements of existing coal generating units in the 2020 timeframe. The Project's design and configuration will also address requirements for flexible and dispatchable generation in Alberta that are expected to accompany increased levels of wind and intermittent types of generation.

| Proponent                                                                                                                                                                     | Project Contact                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mr. Brian Vaasjo<br>President and Chief Executive Officer<br>Capital Power Corporation<br>12 <sup>th</sup> Floor EPCOR Tower<br>10423-101 Street<br>Edmonton, Alberta T5H 0E9 | Jennifer Lowry<br>Senior Advisor, Public Consultation<br>Toll Free: (Alberta) 1-866-348-3946<br>Local: 780-848-8474<br>Fax: 780-392-5124<br>Email: <a href="mailto:publicconsultation@capitalpower.com">publicconsultation@capitalpower.com</a> |

Consultation with Aboriginal groups (i.e., First Nations and Métis) and the public will be formally initiated in Q4 2013. Capital Power has mentioned the Project in its bi-monthly community newsletter for regional stakeholders. The newsletter was also posted on the corporate website. In addition, the Project has also been referenced in several news reports in the Edmonton Journal.

The Project will be subject to obtaining approvals to construct and operate the power plant from the Alberta Utilities Commission (AUC) and from Alberta Environment and Sustainable Resource Development (ESRD). Recently, Capital Power submitted a letter and Project Summary Table to ESRD seeking confirmation that an Environmental Impact Assessment (EIA) report is not required. Based on the submission, ESRD determined that an EIA process is not required for the Project.

Capital Power will provide detailed environmental information in support of its amendment Application. The information will provide ESRD and other interested regulatory agencies with sufficient information to review the potential environmental effects of the Project and determine whether the Project should be approved.

Capital Power will likely need to amend its current Alberta *Water Act* Approvals and Licence to Divert Water for the Project to reflect the integration of the Project with the existing GGS. The Project will make effective use of the existing GGS infrastructure, specifically, utilization of the existing river water intake, pumphouse, cooling pond, and point of discharge to the North Saskatchewan River (NSR) of the GGS. Utilizing the existing GGS infrastructure will help further reduce any potential environmental effects of the Project.

Capital Power will need to obtain a Development Permit from the County of Leduc.

Since two new generator stacks will be installed (each approximately 80 m in height), aeronautical clearance from Transport Canada and land use clearance from NavCanada may be required.

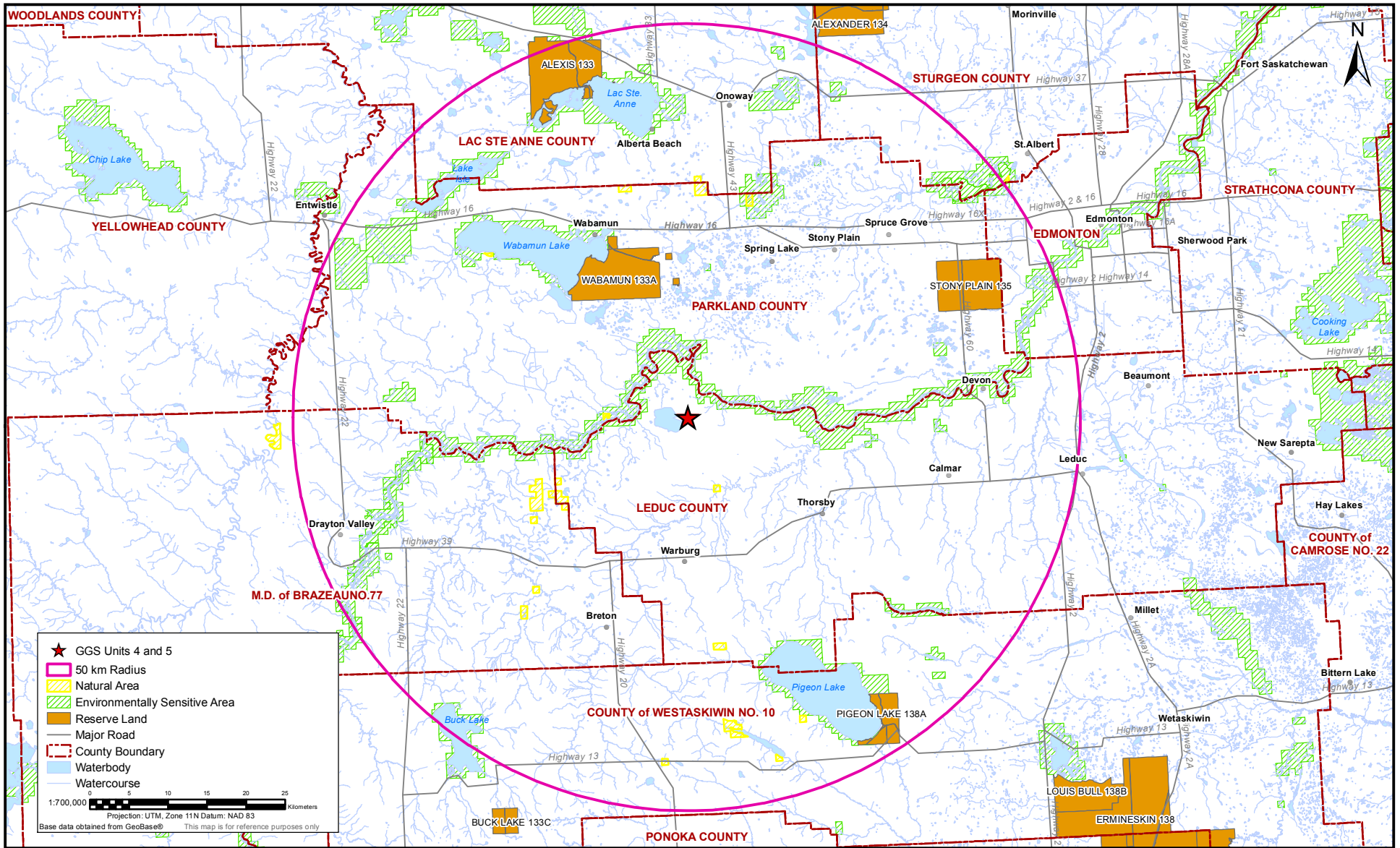
No current or historic regional studies, within the context of *Canadian Environmental Assessment Act 2012* have been conducted in the region. However, Capital Power has historically undertaken many environmental studies in association with its existing GGS and associated Genesee Mine operating in the area. Recent and ongoing environmental studies include:

- Environmental assessments in 2001, 2005, 2011 in support of operating the existing GGS and Genesee Mine (i.e., approval to operate the Genesee 3 Project (2001), renewal to operate the existing GGS (2005), approval to extend the Genesee Mine (2011),
- Ongoing biomonitoring program that measures environmental effects of existing GGS (2004 to Present)
- Ongoing annual compliance reporting to ESRD and AUC (e.g., air, noise, surface and cooling pond water quality)

## PROJECT INFORMATION

In December 2012, Capital Power announced the development of the Project (formerly the Capital Power Energy Centre). Capital Power, together with potential partner(s), plans to construct and operate the Project. The earliest in-service date is currently expected to be in 2017. The gross capacity of the Project will be approximately 1050 MW, and construction could be in two phases with each phase's capacity being approximately equal. The expected life for the facility is approximately 35 years.

The Project will use natural gas combined-cycle (NGCC) technology. Specifically, the Project consists of two "1-on-1" units, each consisting of a single natural gas turbine paired with a heat recovery steam generator (HRSG), and a single steam turbine. The Plant will be located on a brownfield site adjacent to the existing GGS. The Project will make effective use of the existing



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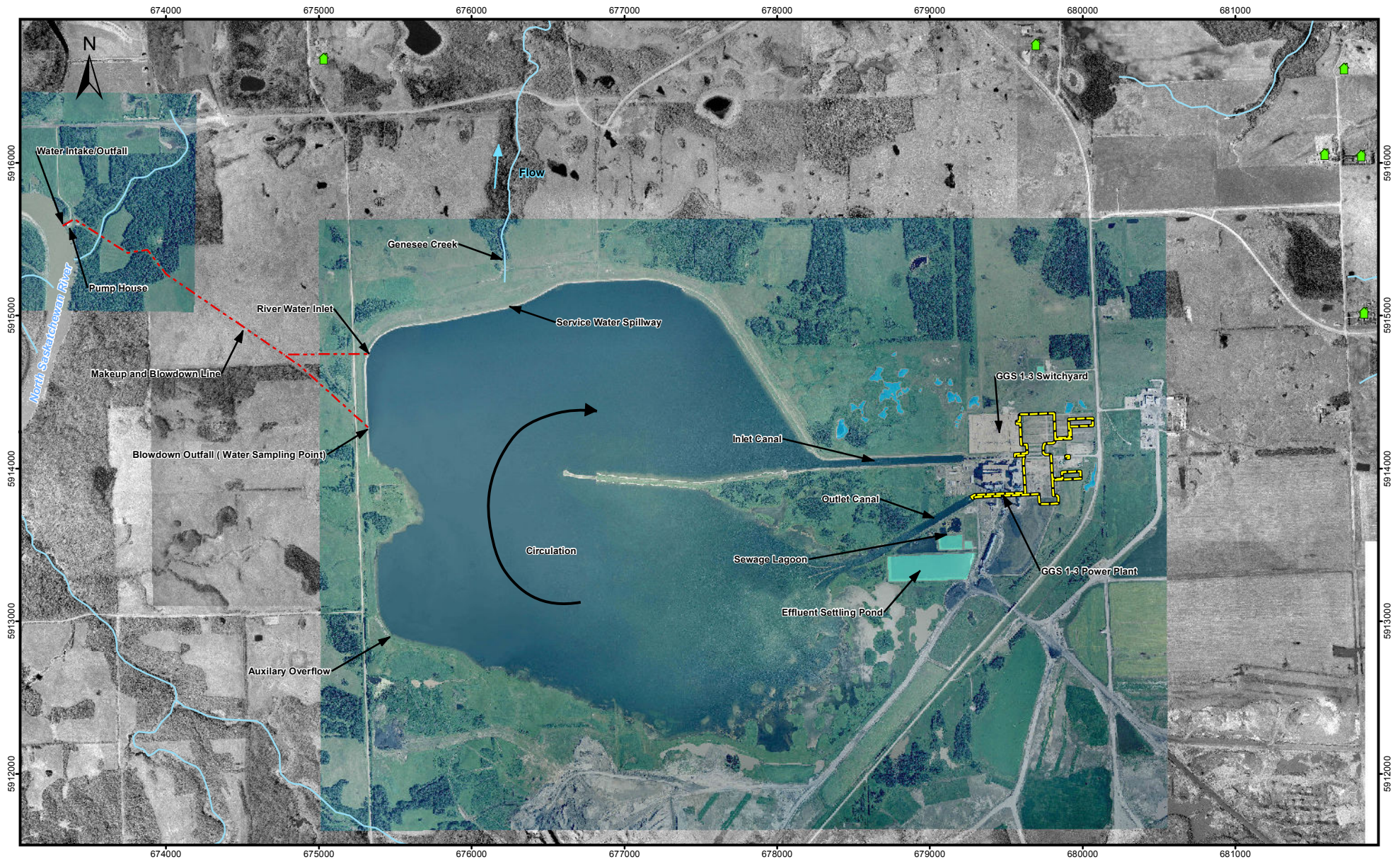
October 2013  
 1102-19025



Client/Project  
 CAPITAL POWER CORPORATION  
 GENESEE GENERATING  
 STATION EXPANSION

Figure No.  
 1

Title  
 REGIONAL SETTING OF THE PROJECT



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 1102-19025



Projection: UTM Zone 11 Datum: NAD 83  
 Imagery obtained from Alberta Sustainable Resource  
 Development, 2011 and CPC, 2011.

- Limit of Construction
- Makeup and Blowdown Line
- Residence
- Constructed Waterbody
- Wetland
- Watercourse

Client/Project  
 CAPITAL POWER CORPORATION  
 GENESSEE GENERATING  
 STATION EXPANSION

Figure No.  
 2

Title  
 SITE PLAN OF GENESSEE  
 GENERATING STATION UNIT 4 & 5



GGs infrastructure, specifically, utilization of the existing river water intake, pumphouse, Genesee cooling pond, and point of discharge to the NSR.

Cooling water for the Project will continue to be obtained from the inlet channel of the Genesee cooling pond (the cooling pond), pass once through the steam turbines and then be released through the outlet channel back into the cooling pond.

Other minor on-site infrastructure that will be constructed includes:

- Minor additional roads;
- A natural gas pipeline tie-in to supply fuel for the gas turbines;
- Opened circulating / cooling and fire protection water pump house and associated pipelines;
- Ammonia tankage and storage for selective catalytic reduction (SCR) system; and
- Tankage and storage for process treated demineralized water.

Electricity generated by the Project will be transmitted to the Genesee substation owned by EPCOR via an approximately 200 m overhead 500 kV power line. The Project is anticipated to supply 1020 MW net of electricity to the Alberta power grid.

The Project is an expansion of a fossil fuel-fired electrical generating station that would result in an increase in production capacity of 50% or more and 200 MW or more, and is therefore subject to the provision set out in Schedule 1, Section 3a of the *Regulations Designating Physical Activities*.

The Project consists of two phases with a combined generating capacity of up to 1050 MW gross output. The combined cycle configurations are based on a design, so that an initial phase of approximately 525 MW gross can be built, followed by integration of a second phase of approximately the same output at a later date. The earliest in-service date is currently expected to be in 2017.

Phase I involves construction and operation of a combined cycle natural gas-fired power plant of approximately 525 MW gross capacity. Phase I will be located within a brownfield site (*i.e.*, previously disturbed lands) adjacent to the existing GGS. The footprint of Phase I will be approximately 2.5 hectares (Figure 2). Phase II is identical to Phase I and also involves construction and operation of another modular combine cycle natural gas-fired power plant of 525 MW gross capacity. The Phase II footprint will also be located within a brownfield area adjacent to Phase 1 (Figure 2). The disturbance footprint of Phase II is also approximately 2.5 hectares.

Each power plant is comprised of three main components: a gas turbine generator, an HRSG, and a steam turbine generator in a “1-on-1” configuration.

Overall, the Project will encompass an area of approximately 200 m by 400 m, on land already prepared as part of construction of the Genesee Phase 3 Project (2001-2005). The turbines will be housed within two large buildings. The turbine building will be approximately 30 m high, and the two gas turbine generator stacks will be approximately 80 m high.

The Project will require electricity, natural gas, and a cooling water source, Electricity will be supplied by interconnecting with the existing Genesee substation located on-site. Additional

electric equipment (e.g., transformers) will be installed at the substation and a short (200 m) aerial power line will provide connection.

Gas will be supplied by a new supply line tied into the existing natural gas distribution network located in the vicinity of the Project.

Cooling water for the steam turbines will be sourced from the cooling pond's existing inlet canal. All other water requirements for equipment cooling and cycle make-up will also be met from the cooling pond. Furthermore, all cooling water requirements for the Project will be met by making effective use of the existing GGS infrastructure, specifically, utilization of the existing river water intake, pumphouse, cooling pond, and point of discharge to the NSR. These synergies will reduce any potential environmental effects of the Project. Water held in the cooling pond is sourced from diverting water from the NSR.

The plot plan (Figure 3) and the conceptual rendering (Figure 4) present a visual representation of the Project.

The Project will produce source and fugitive air emissions. Source air emissions will occur during operation of the Project and include nitrogen oxides, carbon dioxide, carbon monoxide, and minor amounts of volatile organic compounds and unburned hydrocarbons. Fugitive air emissions will occur during construction and operation from engines, buildings, and equipment exhausts and vents.

The Project will use advanced gas and steam turbine technology commercially available and be designed to meet the Clean Air Strategic Alliance's (CASA) standards and performance expectations for air emissions for the Alberta electricity sector.

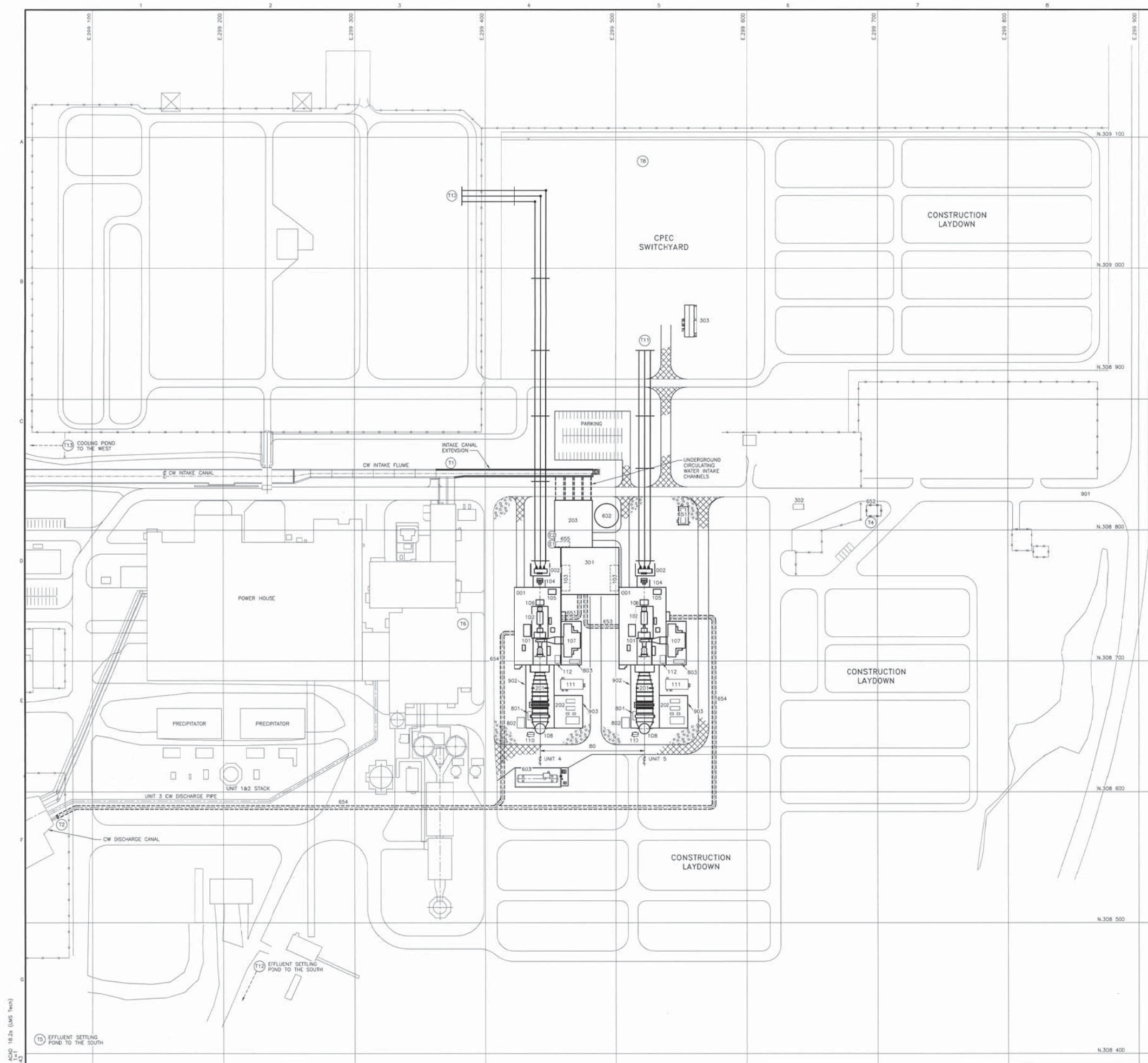
For instance, dry low NO<sub>x</sub> burners on the gas turbines, effective emission control technology, adequate stack heights, and use of properly functioning equipment will be implemented to reduce air emissions.

The NSR will continue to be the source of all cooling water and make-up water for the Project. Cooling water will be obtained by diverting river water from the NSR via the existing pumphouse into the existing cooling pond. As previously described, the Project will utilize existing GGS infrastructure, specifically, the existing river water intake, pumphouse, cooling pond, and point of discharge to the NSR. These synergies will reduce any potential environmental effects due to the Project.

No additional diversion of water from the NSR is required for the Project beyond the volumes already permitted under the current Licences to Divert Water issued by ESRD for the existing GGS. Capital Power does anticipate the need to amend the current Licence to Divert Water to extend the expiration date and for some adjustments to operational blowdown conditions due to marginal changes in the cooling pond water temperature (slightly higher), which may result in a reduction of discharge back to the NSR due to increased evaporative losses from the cooling pond.

Liquid discharges of the Project include industrial process wastewater, stormwater, and domestic sewage.

Industrial process wastewater and stormwater from the power plant will be directed to the existing cooling pond (Figure 2). Process industrial wastewater blowdown from the HRSGs is also directed to the existing cooling pond. Blowdown from the cooling pond will be occasionally released into the NSR to meet operational water quality requirements of the GSS.



| FACILITIES LEGEND |                                                               |                             |
|-------------------|---------------------------------------------------------------|-----------------------------|
| ID                | FACILITY                                                      | HEIGHT ABOVE GRADE (METERS) |
| 001               | GENERATOR BUILDING                                            | 39.0                        |
| 002               | GENERATOR STEP-UP TRANSFORMER (DSU)                           |                             |
| 101               | GAS TURBINE / STEAM TURBINE                                   |                             |
| 102               | GENERATOR                                                     |                             |
| 103               | MAIN SWITCHYARD ROOMS (LOWER LEVEL)                           |                             |
| 104               | UNIT AUXILIARY TRANSFORMER                                    |                             |
| 105               | SFC TRANSFORMER                                               |                             |
| 106               | GENERATOR CIRCUIT BREAKER (ON LOWER LEVEL)                    |                             |
| 107               | GAS TURBINE AIR INLET                                         |                             |
| 108               | STACK                                                         | 51.0                        |
| 110               | CONTINUOUS EMISSIONS MONITORING EQUIPMENT (CEMS)              | 4.0                         |
| 111               | SAMPLING BUILDING                                             | 4.0                         |
| 112               | COMPRESSOR WASH WATER DRAINS PIT                              |                             |
| 201               | HEAT RECOVERY STEAM GENERATOR (HRSG)                          |                             |
| 202               | BOILER FEED PUMPS                                             |                             |
| 203               | PUMP HOUSE - CIRC WTR, COOLING WTR AND FIRE WTR               | 15.0                        |
| 301               | ADMIN/CONTROL (UPPER LEVEL) AND WATER TREATMENT (LOWER LEVEL) | 15.0                        |
| 302               | GUARD HOUSE (EXISTING)                                        |                             |
| 303               | SWITCHYARD CONTROL BUILDING                                   | 4.0                         |
| 602               | DEMINERALIZED WATER STORAGE TANK                              | 11.0                        |
| 603               | AMMONIA UNLOADING/STORAGE TANK AND PUMPS                      |                             |
| 651               | FUEL GAS COMPRESSORS                                          | 4.0                         |
| 652               | FUEL GAS METERING STATION                                     |                             |
| 653               | CIRCULATING WATER SUPPLY PIPE                                 |                             |
| 654               | CIRCULATING WATER RETURN PIPE                                 |                             |
| 655               | EMERGENCY DIESEL GENERATOR (INDOOR)                           |                             |
| 801               | AMMONIA VAPORIZER SKID                                        |                             |
| 802               | NITROGEN STORAGE                                              |                             |
| 803               | HYDROGEN/CO2 STORAGE                                          |                             |
| 901               | MAIN ENTRANCE ROAD                                            |                             |
| 902               | HRSG ENCLOSURE                                                | 44.0                        |
| 903               | BOILER FEED PUMP ENCLOSURE                                    | 6.0                         |

| EMISSION LOCATIONS         |          |          |          |           |
|----------------------------|----------|----------|----------|-----------|
| ID                         | FACILITY | NORTHING | EASTING  | ELEVATION |
| UNIT 4 STACK               |          | 308648.0 | 299442.0 | 783.3     |
| UNIT 5 STACK               |          | 308648.0 | 299522.0 | 783.3     |
| EMERGENCY DIESEL GENERATOR |          | 308789.0 | 299452.0 | 736.3     |
| DIESEL DRIVEN FIRE PUMP    |          | 308796.0 | 299452.0 | 736.3     |

| TERMINAL POINTS |                                      |     |                                     |
|-----------------|--------------------------------------|-----|-------------------------------------|
| T1              | CIRCULATING WATER SUPPLY             | T10 | UNIT 4 500KV TO EXISTING SWITCHYARD |
| T2              | CIRCULATING WATER RETURN             | T11 | UNIT 5 500KV TO NEW SWITCHYARD      |
| T3              | NOT USED                             | T12 | POWER BLOCK STORM WATER DISCHARGE   |
| T4              | FUEL GAS                             | T13 | SWITCHYARD STORM WATER DISCHARGE    |
| T5              | PROCESS WASTEWATER DISCHARGE         |     |                                     |
| T6              | AUXILIARY STEAM SUPPLY               |     |                                     |
| T7              | COMMUNICATION - PHONE & DATA (LATER) |     |                                     |
| T8              | ELECTRICAL TRANSMISSION 500KV        |     |                                     |
| T9              | SANITARY WASTEWATER (LATER)          |     |                                     |

| GENERAL LEGEND |                                   |   |                                    |
|----------------|-----------------------------------|---|------------------------------------|
| ●              | NEW TRANSMISSION POLE (BY OTHERS) | ○ | EXISTING TRANSMISSION POLE         |
| —              | FENCE                             | ⊙ | INDICATES TERMINAL POINT           |
| ▨              | NEW ASPHALT SURFACING             | ⊘ | GRASS                              |
| ▩              | NEW AGGREGATE SURFACING           | ⊚ | NEW HEAVY HAUL AGGREGATE SURFACING |
| ■              | CONCRETE                          |   |                                    |

**NOT TO BE USED FOR CONSTRUCTION**

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| NO | DATE      | ISSUED FOR PERMIT APPLICATION | REVISIONS AND RECORD OF ISSUE |
|----|-----------|-------------------------------|-------------------------------|
| 0  | 19/SEP/13 | ISSUED FOR PERMIT APPLICATION |                               |



I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALIFIED REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE PROVINCE OF ALBERTA.

SIGNED: STEPHEN L. HEYBORNE  
 DATE: 19/SEP/13 REG. NO. 56305

|  |                                                                                                   |                                                                                       |                                                           |
|--|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------|
|  | <b>BLACK &amp; VEATCH CORPORATION</b><br>ENGINEER    S.A.B.    DRAWN    R.M.G.<br>CHECKED    DATE | <b>CAPITAL POWER</b><br>GENESSEE GENERATING STATION UNITS 4 AND 5<br>SITE ARRANGEMENT | PROJECT: 180144-CGAU-G1000<br>DRAWING NUMBER: 0<br>REV: 0 |
|  | <b>Figure 3</b>                                                                                   |                                                                                       |                                                           |



**Figure 4** Conceptual rendering of the Genesee Generating Station (GGS) Units 4 & 5 Project



All cooling pond blowdown discharged back to the NSR will be undertaken in accordance with the conditions outlined in the current GGS *EPEA* Approval and/or meet any discharge criteria established by ESRD in its amended approval for the Project.

Domestic sewage (toilets, showers) from the facility will be connected to the on-site septic treatment system.

There are three main phases of the project: construction, operation, and decommissioning. Each phase has main activities associated with them, as described below. A project schedule is provided below.

|                                       |                   |
|---------------------------------------|-------------------|
| Applications and associated approvals | Q4 2013 – Q1 2015 |
| Site Preparation                      | Q1 2015           |
| <b>Phase 1</b>                        |                   |
| Construction                          | Q1 2015 – Q2 2017 |
| COD                                   | Q2 2017           |
| Commercial operations                 | 2017 – 2052       |
| Decommissioning / Reclamation         | 2054 – 2058       |
| <b>Phase 2</b>                        |                   |
| Construction                          | Q1 2016 – Q2 2018 |
| COD                                   | Q2 2018           |
| Commercial operations                 | 2018 – 2053       |
| Decommissioning / Reclamation         | 2054 – 2058       |

Since the Project will be located on a brownfield site, site preparation activities will be minimized. Specifically, no vegetation clearing of previously undisturbed areas including forests will be required. Minimal topsoil salvage, site grading, and site preparation activities will be necessary. The site is already prepared for the construction phase of the Project. Moreover, since the Project will be located on a brownfield location, potential environmental effects of the Project will be reduced. De-watering of the site is not required. Construction involves site preparation, civil works, installation of major equipment, connection of process and ancillary equipment, and finishing works. Commissioning of the power plant concludes construction and transition of it into the operational phase.

The Project is expected to operate for 35 years. During operations, the power plant will be shut down for scheduled maintenance activities.

Near the end of project life, decommissioning options will be assessed and will be dependent on future conditions of Alberta's electricity market.

#### PROJECT LOCATION INFORMATION

The Project is located within the SW and SE quarters of Section 25, Township 50, Range 3, W5M, on lands owned by Capital Power. The centre of the GGS 4 & 5 is located at the following geographic coordinates:

|   |      |     |          |        |
|---|------|-----|----------|--------|
| N | 53°  | 20' | 38.8356" | WGS 84 |
| W | 114° | 17' | 50.568"  |        |

Figures 1 and 2 depict the Project in relation to natural and man-made features in the area. The town of Warburg, located 16 km south, is the closest community to the Project site. The nearest aboriginal community to the Project area is the Paul First Nation. It is located approximately 16 km north of the Project on the east shore of Lake Wabamun. The land use in the immediate vicinity of the Project area includes; power generation, coal mining and agriculture. The Project will be sited directly adjacent to the existing GGS (Units 1-3).

The Project lies within the 'Genesee Power Project Overlay' of Leduc County's Land Use Bylaw (Bylaw 07-08) and south of the Genesee Area Structure Plan (Bylaw 18-13). Leduc County's Land Use Bylaw (Bylaw 07-08) provides planning guidance for industrial development at the project site. The Project is located within the Genesee Power Project Overlay zone. Power plants are a permitted use within this zone, with road and property setbacks, landscape plan, as well as height restrictions in some portions of the zone, being the sole constraints to power plant development. General conditions related to such things as signage also apply.

The Genesee Area Structure Plan, applicable to lands north of the power plant, provides planning guidance to assist in accommodating rural and commercial/industrial development while maintaining the natural, agricultural, and small community features that characterise this area.

The location for the Project is a brownfield site that was disturbed as part of construction (2001-2005) of the Genesee Phase 3 Project. The location is well within the existing plant fence line of the existing GGS. The site remains disturbed and is currently being used as a location for siting portable office trailers, as well as a laydown area for equipment as part of the ongoing operation of the existing GGS. The site is a level area built up with gravel fill.

The cooling pond hosts waterfowl, fish species, and likely supports amphibians and aquatic mammals. The NSR, near the intake/outfall, hosts various fish species, wildlife, and amphibians. There are a number of wetlands to the north and south of the Project and white-tailed and mule deer concentration areas and movement corridors occur in the area of the Project.

The nearest residence is located in SW 32-50-2-W5M. It is 1.9 km from the Project. Residences in the vicinity of the project are indicated on Figure 2.

The Project is located within the area covered by Treaty 6. The Project is approximately 15 km south of Paul Nations Wabamun 133A and 133B Indian Reserve. The First Nations identified for consultation in the First Nations Consultation Plan submitted to ESRD are all Treaty 6 signatories. In addition, Capital Power will also engage the Métis Nation of Alberta, Region 4.

Capital Power, previously Edmonton Power and EPCOR, have occupied the site since the early 1980s. The lands proposed for the Project are not currently used for traditional purposes by Aboriginal peoples.

## FEDERAL INVOLVEMENT

The Project will neither use any federal financial support nor use any federal lands, and will not be subject to any federal legislative or regulatory requirements. The Project will not lead to changes in the environment that would affect federal lands in a province other than Alberta, or outside Canada.

This Project Description has been submitted to CEAA to assist their determination on the need for a federal environmental impact assessment process.

## ENVIRONMENTAL EFFECTS

The potential environmental effects of the Project include changes to air quality and changes to surface water quality and quantity.

The Project will produce source and fugitive air emissions. Source air emissions will occur during operation of the Project and include nitrogen oxides, carbon dioxide, carbon monoxide, and minor amounts of volatile organic compounds and unburned hydrocarbons. Fugitive air emissions will occur during construction and operation from engines, buildings, and equipment exhausts and vents.

The Project will use advanced gas and steam turbine technology commercially available and be designed to meet the Clean Air Strategic Alliance's (CASA) standards and performance expectations for air emissions for the Alberta electricity sector.

The NSR, near the intake/outfall, hosts various fish species, wildlife, and amphibians. Marginal changes in the cooling pond water temperature (slightly higher) are anticipated, which will likely result in a reduction of discharge back to the NSR due to increased evaporative losses from the cooling pond. Given the comparatively small net reduction in volume of discharge anticipated to be released back to the NSR, changes to fish and fish habitat are not expected.

Construction and operation of the Project are not expected to lead to changes to aquatic species, including species at risk since no physical changes are expected to the existing intake/outfall at the NSR.

There is a limited amount of vegetated cover on the site. Given the high level of existing disturbance in the Project area, the land in the immediate vicinity of the Project, an active industrial facility, is considered to have low habitat value for wildlife. There are a number of wetlands to the north and south of the Project and white-tail and mule deer concentration areas and movement corridors occur in the area of the Project.

Carrying out the Project is not expected to lead to changes to migratory birds since the Project is situated on an existing brownfield site and the existing cooling pond will remain unchanged.

The Project is located on disturbed land adjacent to the existing GGS. Carrying out the Project is not expected to change the environment such that it would affect Aboriginal peoples, including impacts to Treaty Rights, socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes, or any structure, site, or things that are of historical, archaeological, paleontological, or architectural significance.

## PROPOSER ENGAGEMENT AND CONSULTATION WITH ABORIGINAL GROUPS

Capital Power has had past dialogue and information exchanges with Aboriginal<sup>1</sup> groups concerning Capital Power operations at the Genesee site, in addition to formal consultation programs in relation to projects that Capital Power has developed in the area. Based on this experience, Capital Power will seek to consult the communities listed in Table 1.

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<sup>1</sup> Reference to "Aboriginal groups" is inclusive of both First Nations and Métis groups.

Table 1 Aboriginal groups with potential interest in the Project

| Aboriginal Groups                 | Band Office                                                                                         |
|-----------------------------------|-----------------------------------------------------------------------------------------------------|
| Paul First Nation                 | P.O. Box 89, Duffield, AB, T0E 0N0<br>Contact: Keith Rain<br>Phone: 780-892-2691                    |
| Enoch Cree Nation                 | P.O. Box 29, Enoch, AB, T7X 3Y3<br>Contact: Cordell Makokis<br>Phone: 780-470-4505                  |
| Alexis Nakota Sioux Nation        | P.O. Box 7, Glenevis, AB, T0E 0X0<br>Contact: Orlando Alexis<br>Phone: 780-967-2225                 |
| Alexander First Nation            | P.O. Box 3840, Morinville, AB, T8R 1S3<br>Contact: Edwin Paul<br>Phone: 780-939-5887                |
| Métis Nation of Alberta, Region 4 | 11724 95 Street<br>Edmonton, AB T5G 1L9<br>Contact: Métis Industry Relations<br>Phone: 780-944-9288 |

Figure 1 indicates the location of First Nation communities in relation to the Project. There are no Métis communities in the regional area of the Project.

Capital Power is engaging Aboriginal groups in accordance with ESRD's consultation guidelines. Capital Power has developed a First Nations Consultation Plan (FNCP) to ensure meaningful engagement and consultation with First Nations with respect to the Project and its potential effects on treaty rights and Aboriginal interests. The FNCP was submitted to ESRD on October 7, 2013 to verify that it is consistent with the requirements of the Government of Alberta's *First Nations Consultation Guidelines on Land Management and Resource Development* (the Consultation Guidelines). Specific consultation or engagement activities with Aboriginal groups regarding the Project will begin in Q4 2013.

**CONSULTATION WITH THE PUBLIC AND OTHER PARTIES (OTHER THAN ABORIGINAL CONSULTATION INCLUDED ABOVE)**

Capital Power has had past dialogue and information exchanges with various stakeholders concerning Capital Power operations at the Genesee site, in addition to formal consultation programs in relation to projects that Capital Power has developed in the area. Based on this experience, Capital Power will seek to engage the following stakeholders in its Consultation Program:

- General area residents with a focus on residents who live within 5 km of the Project site
- Local government (County of Leduc, Villages of Warburg and Thorsby)
- Community Groups (Genesee Agricultural Society, Genesee Synergy Group, Leduc-Nisku Economic Development Authority, and others)

- Environmental groups / associations
- Local and regional businesses
- Special interest/advocacy groups
- RCMP

Capital Power uses a number of ongoing consultation tools to communicate operations updates to the community. The following communication means are currently in use, and will be used to communicate ongoing updates for the duration of the Project:

- newsletters (4-6 annually);
- quarterly Community Advisory Task Group (CATG) meetings;
- bi-annual meetings with Leduc County Council;
- bi-annual meetings with Village of Warburg Council;

Newsletters are delivered via postal code drop, email and direct mail to residents within a 20 km radius of the Genesee Generating Station. The main objective of the newsletters is to provide area residents with current information about operations at the Genesee Station and the Genesee Mine. Newsletter distribution began when EPCOR (Capital Power) began Genesee operations in the early 1980s, and will continue throughout the life of the Project.

The Community Advisory Task Group (CATG) is a volunteer group of 7 local residents that meet three times annually to discuss topics relating to the GGS and Genesee Mine operations.

Capital Power also hosts special events at the Plant and Mine. This includes a field research tour, which has been held for the last four years. In 2012, this event attracted 230 individuals who received a tour of both the Genesee Generating Station and the Mine.

Informal breakfast meetings are conducted quarterly with the Leduc County Council and Village of Warburg to share updates regarding existing GGS and Genesee Mine operations, as well as, learn of upcoming projects in the County and Village. Synergies and partnerships are developed when possible and accommodations made where necessary to ensure operations do not interfere with local activities.

The following consultation events have taken place with parties identified in Table 3:

- An article on the Project appeared in the Genesee Community Newsletter in October 2013.
- Members of the CATG were briefed on the Project at the June 19, 2013 meeting and additional information was provided at a meeting on October 16, 2013.
- The Project was confirmed via email to the Councilor for Leduc County Division 7 on April 30, 2013.
- The Project was discussed at the bi-annual Good Neighbour Breakfast on March 11 and September 12, 2013. Attendees at this breakfast were Leduc County Council members and Village of Warburg Council members.

In addition, the general public has been informed of the Project:

- On April 27, 2013, an article about the Capital Power Energy Centre appeared in the Edmonton Journal.
- Capital Power announced its intent to build the Project in a news release in December 2012.

Key issues raised during the discussions noted above include:

- Questions about what form of regulatory approval would be required for the Project.
- The specific location and footprint size of the facility.
- The generation capacity of the Project.
- How gas would be transported to the Project site.
- The timing of project development activities.
- When more information would be available to area residents.

No issues have been raised by the general public.

Through the consistent connection to the Genesee community, Capital Power is aware of historical concerns that some area landowners have with existing operations. To date, concerns and comments expressed by stakeholders include:

- the potential effects on the local environment specific to air and water,
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- noise and dust from ongoing plant and mine operations, and
- loss of community and potential socio-economic effects due to additional land acquisition and road closures for the recent Genesee Mine Extension.

Consultation for the Project will occur in a manner that meets or exceeds the scope of the Participant Involvement Program described in AUC Rule 007, including notification and personal consultation activities.

Consultation for the Project will focus on residents who live in the Genesee area and identify themselves as having an interest in or concerns with the Project. Identification of these residents will be achieved through public notice of the Project, information provided in Capital Power's Genesee Newsletter and on Capital Power's website, as well as, planned public open houses. An open house in the local area is planned for late November 2013.

Personal consultation with residents who have indicated an interest in the Project will consist of face to face meetings, mail, and telephone conversations, as necessary.