CASCADE POWER PROJECT

JULY 2018 / Newsletter

PROPOSED PROJECT LOCATION



PROJECT DESCRIPTION

Cascade Power is proposing to develop a 900-megawatt (MW) combined cycle power facility, located in Yellowhead County approximately 12 kilometres southwest of Edson, Alberta. Cascade Power is an Alberta based power producer passionate about creating a clean energy future for Canada.

It is anticipated that the Project will be developed in two phases, with the first 450 MW of generation in service by 2022, and the second 450 MW phase being brought into service in the following year. The Project will be located on crown lands on a 52-hectare site and will have the capacity to serve the electrical needs of approximately 900,000 homes and businesses in Alberta. The facility will utilize modern, highly efficient industrial turbines, fueled by natural gas.

You're Invited

Please join us at our community open house to learn more about the proposed Cascade Combined Cycle Power Project and to meet the Project team.

Wednesday, July 25, 2018 4:30p.m. — 8:00p.m. Best Western High Road Inn 300 — 52nd St, Edson, Alberta T7E 1X8

Cascade Power Project representatives will be available to share Project specific information, including studies being conducted to assess impacts to noise and air emissions and to gather feedback from the community. Light refreshments will be served; we look forward to seeing you.

THE NEED

Alberta has set a renewable energy target in which 30% of future electricity requirements will come from renewable sources. Across Alberta, numerous wind and solar projects are currently being developed to help meet this target. However, the province will still need additional sources of reliable and cost effective sources of electricity that can support its future energy requirements.

Natural gas is one of the most affordable, reliable and abundant energy sources in Alberta. Combined cycle power facilities have been identified as a viable option to help reduce emissions and provide low carbon, reliable on-demand power.



For more information on Alberta's Climate Leadership Plan, please visit: https://www.alberta.ca/climate-coal-electricity.aspx

Alberta's abundant supply of natural gas is one of the cleanest, cheapest and most efficient sources of energy.

COMBINED CYCLE POWER GENERATION FACILITIES

Natural gas combined cycle power generation facilities are a high efficiency, environmentally attractive form of power generation necessary to meet the growing demand for electricity in Alberta.

Combined cycle power facilities are comprised of a combination of both gas and steam power production technologies. A combined cycle power facility uses natural gas as a fuel to produce power in a gas-turbo generator and then utilizes the waste energy from the exhaust to produce steam, which then drives the steam-turbo generator. This process produces up to 50 per cent more electricity from the same amount of fuel than a traditional simple cycle power facility, which utilizes only a gas-turbo generator.

In order to fuel the combined cycle power facility, natural gas will be supplied to the plant via a small pipeline tied into the existing natural gas distribution network located near the Project.



Benefits:

- Optimal power outputs
- Higher efficiency
- Lower emissions

Associated Components

The Project will require electricity, natural gas, and a water source. The site location is considered favourable because of its close proximity to existing substations and transmission lines



• Electricity will be supplied by interconnecting with the AltaLink 39S Substation adjacent to the Project site via a short power line.



 Gas will be supplied through a new supply pipeline tied into an existing natural gas transportation network, which is located in the vicinity of the site.



• Limited water is required for the Project as Air-cooled Condensers will be utilized, however the steam cycle requires make-up water which will be sourced locally.

Today, more than ever, the way we create and utilize energy matters.

ENVIRONMENT

As a leading innovator in the development of efficient methods of generating power and heat, Cascade Power delivers smart generation solutions to energy consumers.

The Project is being designed and will be operated in a way that minimizes potential adverse environmental effects and supports the provincial government's effort to continue to diversify its overall power production mix. As part of the regulatory application, the following environmental studies and assessments have either been completed or in progress:

Air — A dispersion modelling assessment compliant with the Alberta Air Quality Model Guideline (AQMG) will be completed to assess Project effects on air quality. The Project will meet the National Base Level Industrial Emissions Requirements (BLIERS).

Noise — A detailed noise impact assessment is being undertaken to assess the noise that will be generated by the Cascade Power facility during both the construction and operation phases. The Project would comply with applicable regulatory noise limits, including the Alberta Utilities Commission (AUC) Rule 012: Noise Control.

Field Surveys — Various surveys and desktop reviews, specific to soils, vegetation and incidental wildlife have been conducted and are ongoing.



ADDING VALUE IN ALBERTA

Creating power for a sustainable future. The development of combined cycle power generation facilities will provide reliable on-demand power, which will help keep electricity costs competitive and will help Alberta transition to a diverse energy future.

Efficiency and optimization of resources is critical. Combined cycle power plants will help maintain a reliable supply of electricity as more renewable energy like solar and wind comes online.

Creating opportunity for Edson and region. The total capital investment associated with the Cascade Power Project is anticipated to be approximately \$1.5 Billion. Should the Project receive regulatory approval, Cascade Power anticipates that it will take three years of construction, employing at peak some 700 workers. Almost 2,000,000 man-hours will be required to undertake construction. During operations, Cascade anticipates a full-time workforce of approximately 20 people supported by local services and contractors, where required.

ANTICIPATED PROJECT SCHEDULE

In fall 2018, following completion of environmental studies and assessments and public and Indigenous engagement, Cascade Power will submit regulatory applications to the Alberta Utilities Commission (AUC) and Alberta Environment and Parks (AEP). Following regulatory approval, construction is anticipated to commence in spring 2019, with a planned in-service date of October 2022.

COMMUNITY INVOLVEMENT + BENEFITS

The development and operations of the Project will play an important role in the local economy by providing jobs during construction that will benefit the local and Indigenous communities, businesses and suppliers, as well as provide a base of additional tax revenue to Yellowhead County.

Cascade Power will work collaboratively and responsively with all interested parties, to answer questions and to better appreciate and understand potential issues or concerns regarding the Project.

Cascade Power believes strong Indigenous and stakeholder relationships strengthen the business decisions we make. We strive to build long-term relationships by collaborating with and listening to our neighbours in the area. We hope to maintain an open and respectful dialogue over the years to come.

SAFETY

Cascade Power supports policies that protect and enhance the safety of our workers and the communities within which we operate. If there are community concerns related to the Project, please contact us using the Project's toll free number: **1-855-955-3056**

2018							2019	2020/21	2022
January to April Front-end Engineering and Design	April (ongoing) Environmental Assessments	July Project Announcement	July Round 1 Project Notification and Personal Consultation	July (ongoing) Indigenous and Stakeholder Engagement	August Round 2 Project Update and Personal Consultation	October Submit Regulatory Applications	March Anticipated Regulatory Approvals	> CO20 to 2022 Anticipated Project Construction	Ctober Anticipated In-Service Date

FREQUENTLY ASKED QUESTIONS

Why Yellowhead County?

Access to gas supply, proximity to power lines, and land access all played a role in the site selection process. The proximity to Edson will allow for staging during construction as well as access and investments into local goods and services.

How long will construction take and what can I expect?

Should regulatory approvals be received, Cascade Power anticipates that it will require three — four years of construction to complete the new facility. We estimate that the workforce requirements will peak at some 700 people. Once operational, Cascade Power would employ more than 20 direct, long-term skilled jobs in the community.

Will there be increased traffic due to construction?

The precise sequencing and traffic management plan for construction of the Project has yet to be determined. It is anticipated that construction of the facility may impact traffic at various times during large equipment delivery. Where possible, the Project will maintain safety and enforce an approved traffic management plan.

What visual impacts can I expect to see?

The proposed Project site is located on a cleared site and would be visible from Highway 47. To reduce the visual impact of the facility, Cascade will continue to assess options to modify the overall site plan, through such measures as berms and other related options.

Will this Project affect water in the area?

The Project anticipates that water could be trucked in to the Project site, to meet the needs of construction and operations.

NEXT STEPS

As we move through the regulatory and permitting process, we will continue the dialogue with landowners and stakeholder in the area. We will consider your feedback for this Project. We encourage you to reach out to us as we provide Project updates.

CONTACT US

We welcome your feedback about the Project at any time. If you have any questions or concerns regarding the Cascade Power combined cycle power project, do not hesitate to contact us at:

Email: info@cascadepower.ca Toll-free: 1-855-955-3056 For more information about the Project, please visit: www.cascadepower.ca

Cascade Power is committed to protecting your privacy. Collected personal information will be protected under the Freedom of Information and Protection of Privacy Act. As part of the regulatory permitting process, Cascade Power may provide your personal information to provincial regulators and public responses may be reported in our regulatory application, which becomes part of the public record. Personal information we collect may be used to contact you in the future.