DRYWOOD EXPANSION

Natural Gas Fired Power Plant



About the Project March 2018

BowArk Energy Ltd. is proposing the development of the Drywood Expansion Natural Gas Fired Power Plant in your area. The project is located at the existing Drywood Generator site approximately 25 km to the South and East of Pincher Creek, Alberta. BowArk intends to construct and operate three new natural gas fueled reciprocating electrical generators located within a new, on-site building adjacent to the existing Drywood Generating Plant. Each unit is rated at 11.3 megawatts (MW) with a total proposed installed capacity of 33.9 MW. The proposed in-service date is currently December 2019 with an expected life of approximately 35 years. BowArk will seek approvals from the Municipal District of Pincher Creek, Alberta Environment and Parks, and the Alberta Utilities Commission for this Project.

Public Consultation

BowArk is committed to working with stakeholders to identify concerns and design our project so that we respect the environment and the local community.

BowArk has initiated discussions with local residents and landowners to develop relationships in the community. BowArk will meet with community stakeholders, government officials, and local businesses throughout the development process. We are interested in hearing from all stakeholders on their ideas and concerns regarding the project.

BowArk will include a summary of stakeholder comments in the power plant application we submit to the Alberta Utilities Commission. To learn more about the application and review process, please contact the Alberta Utilities Commission (AUC) at 780.427.4903 (toll-free by dialing 310.0000 before the number) or by email at consumer-relations@auc.ab.ca.

Project Need

The Drywood Expansion Power Project is being developed to meet Alberta's unique future power needs and the increasing concentration of renewable power generation in the province.

Requirements for new generation are being supported by economic growth and the retirement of Alberta's coal fired fleet by 2030. Compounding the need for new, dispatch-able, fast acting generation within the province is the expected increase in wind generation under the Provincial Government's Climate Change Initiative.

Project Details

Location: The project is to be located on Legal Subdivision 6 and 7 of Section 23, Township 4, Range 29, West of the 4th Meridian in the Municipal District of Pincher Creek approximately 25 km South and East of Pincher Creek and 27 km west of the town of Glenwood.

Engines and Engine Hall: The plant will be comprised of three Wartsila 20V31SG 11.3 MW natural gas fueled reciprocating spark ignition generator sets. The generator sets will be located within a new, acoustically isolated steal building, specifically designed for station reciprocating generation.

Gas Supply: Natural gas will be supplied to the plant via an existing high pressure buried line which is connected to TransCanada's existing Pincher Creek station and will be shared with the existing Drywood Power Facility.

Interconnection: The Drywood Expansion Power Plant will be connected to the Alberta Integrated Electricity System at the existing Drywood 415s Substation, operated by Altalink and located adjacent to the project site. A newly build 138 kV substation, Harland 573S will be situated adjacent to the Engine Hall to accommodate the connection to the grid.

Engine Cooling: Engine and auxiliary cooling will be facilitated by closed circuit aerial coolers, to be located just south of the Engine Hall. The plant requires no water for cooling nor discharges any waste cooling water.

Ongoing Development Work

BowArk is completing public consultation, environmental assessments, noise and emission modelling. BowArk is also completing the project design, engineering, and optimizing the plant layout. We are also completing permitting activities, including the Alberta Utilities Commission application, the Alberta Electric System Operator interconnection process, and the other required signoffs from regulatory bodies.

Environmental Studies and Assessments

BowArk has consulted with Alberta Environment and Parks on our environmental study program. BowArk has conducted desktop and field studies and assessments to identify potential issues and to develop a plan to mitigate impacts. These studies include:

Soil – baseline soil assessment

Emission Modelling – baseline and impact assessment

Historical Resources – archaeological and cultural features

Wetlands – mapping, classification and field verification

Wildlife – baseline and impact assessment

The Drywood Expansion will incorporate advanced emission controls systems providing clean, reliable, flexible and responsive generation. The Wartsila W20V31SG generator set incorporates the most advanced emission control technology that outperforms Federal nitrous oxide requirements.

What is a Rule 007 Power Plant Application?

BowArk intends to submit a Power Plant application under the Alberta Utility Commission rule 007: Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments. This rule outlines the requirements needed for BowArk to seek a Permit and License from the AUC to construct and operate the Drywood Facility.

The application requires stakeholder consultation. BowArk will meet the Participant Involvement Program requirements of rule 007 so that stakeholders have an opportunity to give us their feedback. For more information on the AUC process, please contact us or visit www.auc.ab.ca.

Attached to this newsletter is an information brochure from the AUC detailing how you may participate in this project. We look forward to discussing the proposed Drywood Expansion Power Plant Project with you and gathering any input you may have to help refine the project.

The schedule below outlines the proposed timeline for the permitting process.

Expected Project Schedule

*Project Schedule Subject to Change

Q1 2018	Desktop noise and air emission studies, Public
	Involvement Process, desktop wildlife and wetland
	studies
Q2 2018	Submission to Alberta Environment for review and
	approval of environmental baseline and impact
	assessment
Q2 2018	Submission to the Alberta Utilities Commission for
	Rule 007 Power Plant Application
2018	Alberta Utilities Commission approval anticipated
Fall 2018	Final project engineering complete
Q4 2018	Mobilize to Site
2019	Commercial Operation

Meet the Team

For additional information about the Project, please contact:



