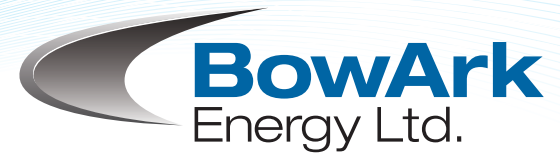


# QUEENSTOWN

## Natural Gas Fired Power Plant



### About the Project

March 2018

BowArk Energy Ltd. is proposing to build the Queenstown Power Plant, a simple cycle natural gas-fired peaking power plant, and the McGregor substation to connect the Queenstown Power Plant to the Alberta Interconnected Electric System. BowArk Energy plans to construct and operate the Project on a site adjacent to the existing Altalink 504s Queenstown Substation at the intersection of Range Rd 225 and Township Rd 192 in the County of Vulcan. The project's generation capacity shall be 94 megawatts (MW). The Queenstown Power Plant and McGregor substation have received Alberta Utility Commission approval for in-service of 2018. This project newsletter is being provided to update stakeholders that BowArk will be delaying the in-service date to early 2021.

### 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 been working with local residents and landowners to develop relationships in the community since 2013. BowArk will continue to 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 our request for in-service date extension 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](mailto:consumer-relations@auc.ab.ca).

### Project Need

The Queenstown 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, dispatchable, 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 the Southwest quarter of Section 17, Township 19, Range 22, West of the 4<sup>th</sup> Meridian in the County of Vulcan, approximately 60 km East of High River and 7 km Southwest of the Hamlet of Queenstown.

**Engines and Engine Hall:** The plant will be comprised of five Wartsila W18V50SG 18.7 MW natural gas fueled reciprocating spark ignition generator sets. The generator sets will be located within a new, acoustically isolated steel building, specifically designed for station reciprocating generation.

**Gas Supply:** Natural gas will be supplied to the plant via a new 7.5 km high pressure buried line which is connected to TransCanada's existing Queenstown lateral pipeline. Separate regulatory approval will be required for this new gas line.

**Interconnection:** The Queenstown Power Plant will be connected to the Alberta Integrated Electricity System at the existing Queenstown 504S Substation, operated by Altalink and located adjacent to the project site. A newly build 138 kV substation, McGregor 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 currently updating its public consultation to inform stakeholders of the in-service date delay. BowArk has completed all environmental assessments, noise and emission modelling. In progress activities include project design, engineering, and optimizing the plant layout. BowArk intends to submit a permit extension request to the Alberta Utilities Commission and has already received extension approvals from Alberta Environment and Parks and the Alberta Electric System Operator for interconnection in-service.

## 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 Queenstown Project will incorporate advanced emission controls systems providing clean, reliable, flexible and responsive generation.

The Wartsila W18V50SG generator set incorporates the most advanced emission control technology that outperforms Federal nitrous oxide requirements.

## What is a Rule 007 Power Plant Application?

BowArk has submitted a Power Plant application under the Alberta Utility Commission rule 007: Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments, and has received a permit and licence to construct, own and operated the Queenstown Facility. Rule 007 outlines the requirements needed for BowArk to seek a Permit and License for the Queenstown natural gas fired power plant facility.

The application requires stakeholder consultation. BowArk has completed several rounds of consultation and will continue to 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](http://www.auc.ab.ca).

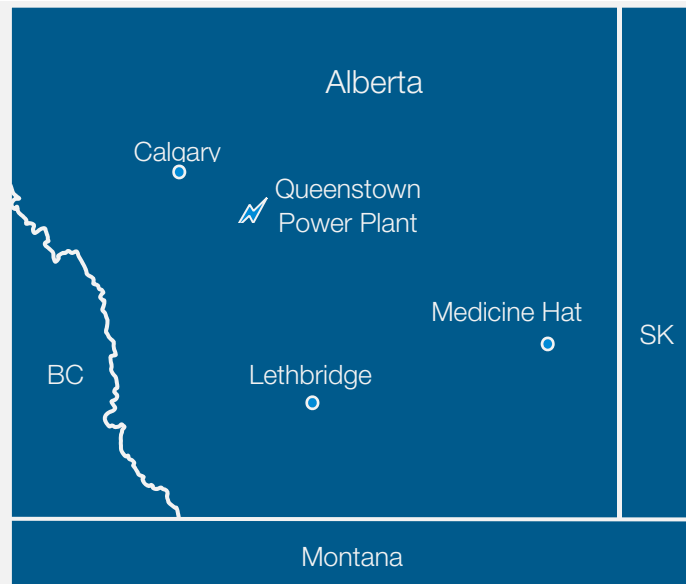
Attached to this newsletter is an information brochure from the AUC detailing how you may participate in this project.

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

## Expected Project Schedule

\*Project Schedule Subject to Change

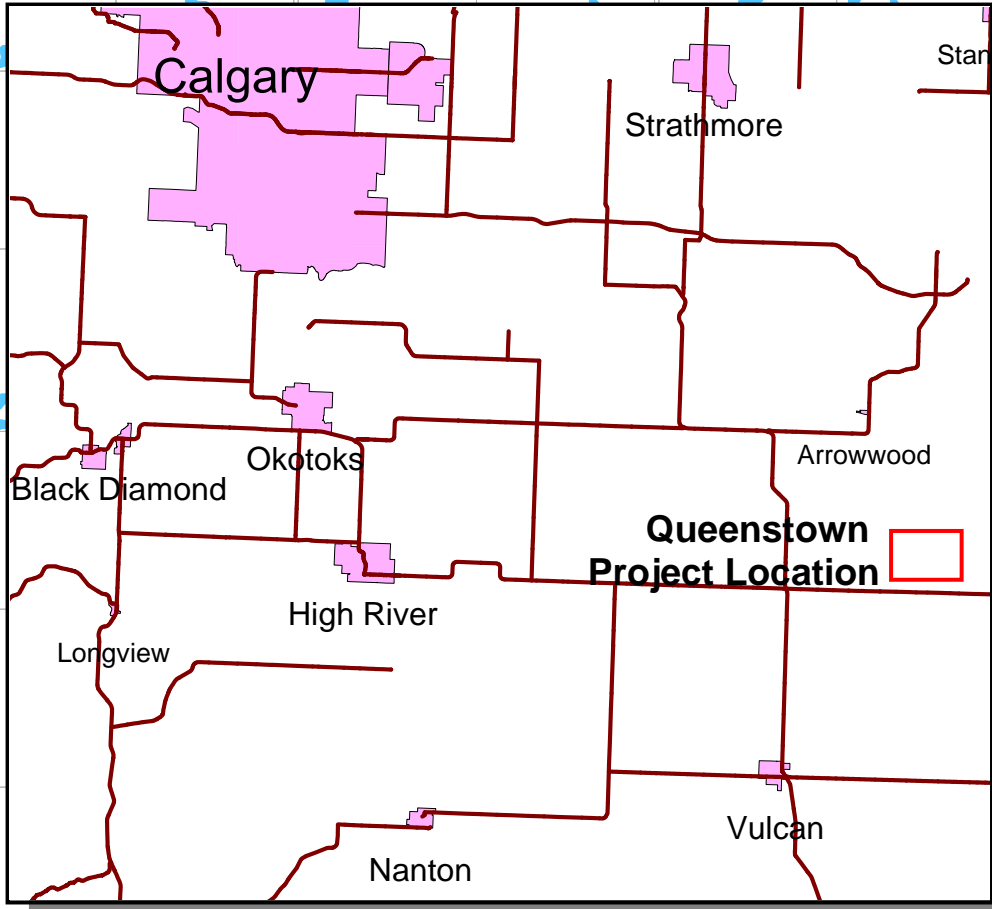
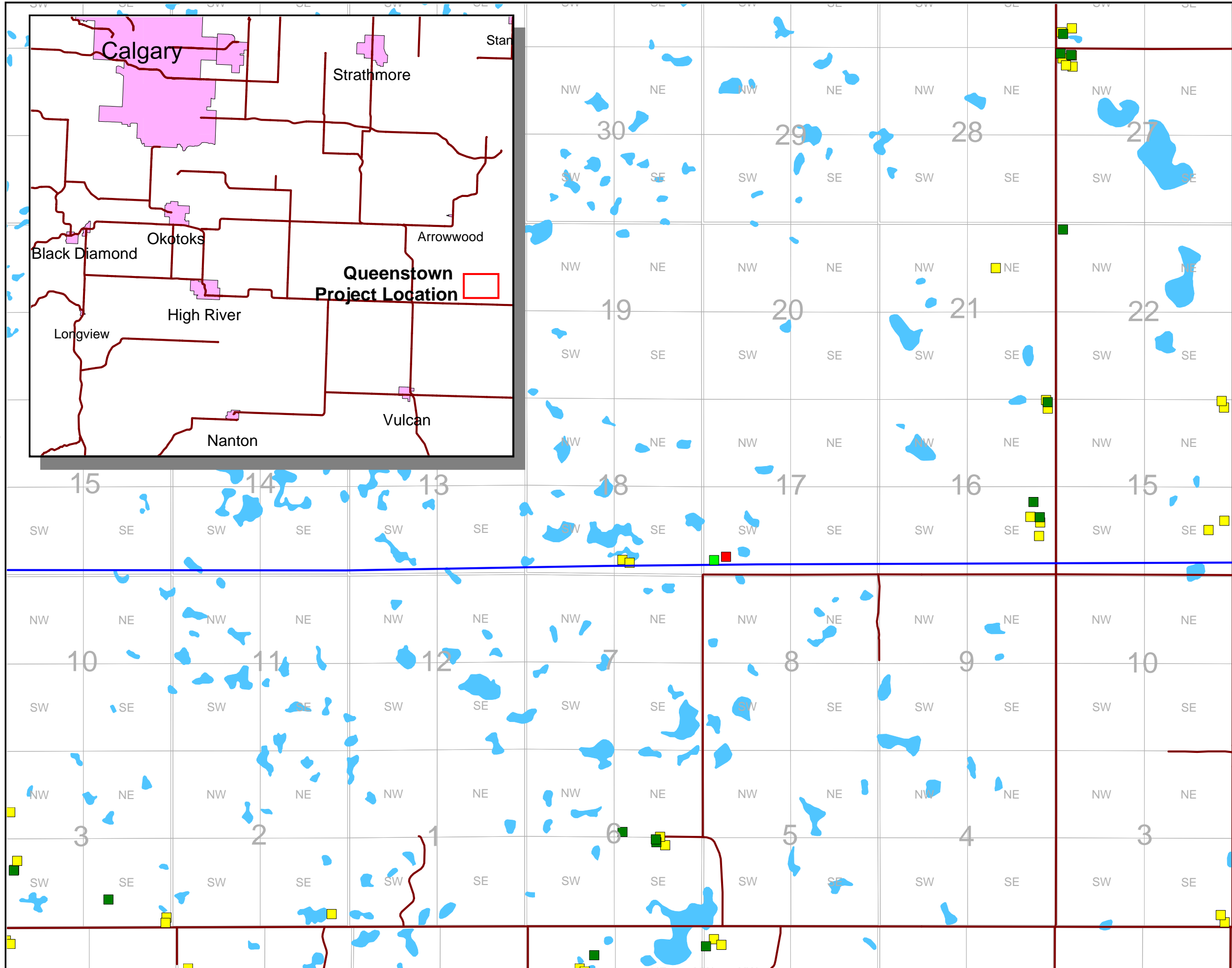
<b>Q1 2018</b>	Notification and approval to Alberta Environment and Parks and the Alberta Electric System Operator of in-service delay. Public Involvement Process for notification of delay.
<b>Q2 2018</b>	Submission to the Alberta Utilities Commission for Rule 007 Power Plant Application delay of in-service date.
<b>Q2 2018</b>	Alberta Utilities Commission approval anticipated
<b>Q2 2019</b>	Final project engineering complete
<b>Q3 2019</b>	Mobilize to Site
<b>Q4 2020</b>	Electrical facilities in-service
<b>Q1 2021</b>	Commercial Operation



## Meet the Team

For additional information about the Project, please contact:

**Keith Knudsen** | BowArk Project Manager  
T 403.585.6761 E [kknudsen@bowark.com](mailto:kknudsen@bowark.com)  
**Shelley Sammartino** | BowArk Land Administrator  
T 403.237.0211 E [ssammartino@bowark.com](mailto:ssammartino@bowark.com)



### Legend

**Queenstown Facilities**

- Proposed McGregor Substation
- Proposed Queenstown Engine Hall
- Railway
- Transmission Line
- Residences
- Accessory Buildings
- Road
- Waterbody
- Built Up Area
- Quarter Section Line

## Queenstown Power Plant Project Area

March 19, 2018

0 2,000

meters

Coordinate System: NAD 1983 UTM Zone 12N

RGE 23 | RGE 22

TWP 19