

## Introducing the Deerland Peaking Station

MAXIM Power Corp. proposes to construct and operate a clean and efficient natural gas-fired power generation facility to help address Alberta's growing power needs. MAXIM plans to seek approvals for a 4-unit configuration to produce 190 MW of incremental generation. This represents less than 5 percent of the Alberta Electric System Operator (AESO)'s projected supply deficit and will provide Alberta with a source of cost-effective, peaking capacity.

### WHAT IS A PEAKING STATION?

As its name suggests, a peaking station generates electricity to meet peak electricity demand, which typically occurs between 8 am and 8 pm on weekdays. Because electricity cannot be stored cost effectively or efficiently, the market requires peaking generation capacity to quickly meet demand. The proposed Deerland Peaking Station will be a technologically-advanced facility, using equipment and design specifications that are among the cleanest and most fuel-efficient in the world. MAXIM expects the station will have an estimated capital cost of \$140 million and will operate approximately 1200 to 2500 hours per year to meet growing demand.

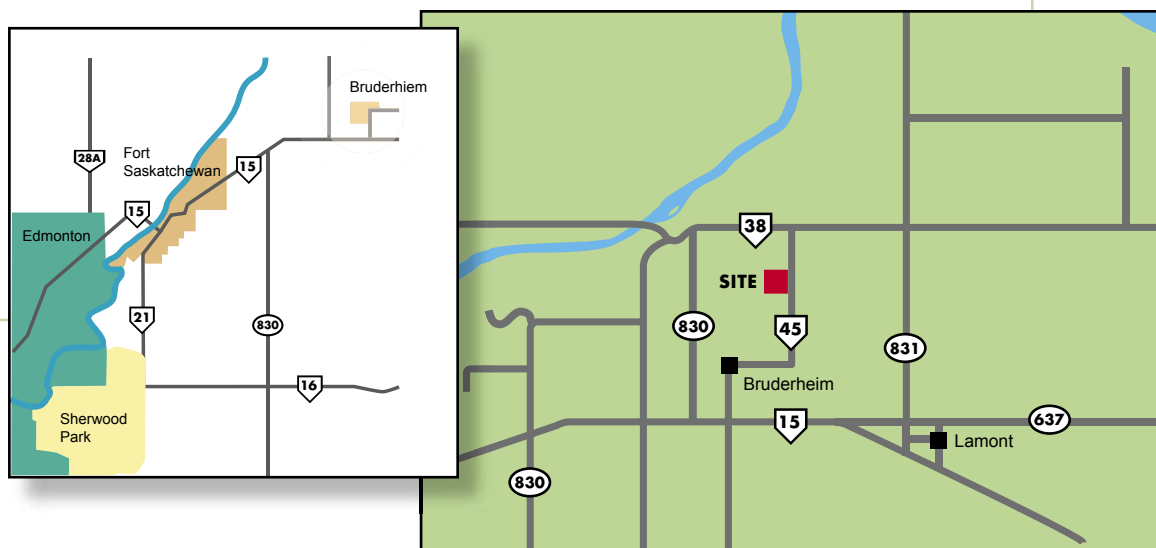
MAXIM proposes to stage construction to supply growing market demand. The first two generating units will be brought on line in 2009 and produce 95 MW. The third and fourth units will be built and commissioned at a later date in response to market conditions. The proposed peaking station will utilize combustion turbines in "simple-cycle" mode which use a gas turbine to drive an electric generator – ideally suited for peak demand response. The site will also house a gas metering station, gas compressors, a water treatment facility, water storage tanks and a warehouse building in addition to the generating turbines.

The Deerland station will be remotely operated, with a small number of local operations staff initially working on a part-time or on-call basis. In addition, the project will create short-term employment opportunities during the construction phase.



## LOCATION

MAXIM has secured an option to lease a 10-acre site immediately adjacent to the existing Deerland high-voltage substation, 6 kilometers northeast of Bruderheim, Alberta. MAXIM believes the proposed site is an excellent location due to its close proximity to the Alberta Industrial Heartland, a major centre of electrical consumption which is projected to grow significantly in the coming years. The site is remote from high-density residential areas and is consistent with local land uses, with access to water and existing transmission infrastructure. Natural gas can be supplied by a proposed 15-kilometre dedicated pipeline owned and operated by the ATCO Pipelines system. Due to its proximity to the substation and the site's topography and heavily-treed vegetation, the proposed facility will have little aesthetic impact on the surrounding area. MAXIM will work closely with nearby residents to refine the design to best serve community interests.



## ALBERTA'S ELECTRICITY INDUSTRY

Alberta's electricity industry has been evolving since the provincial government began deregulating electrical power generation in the mid 1990s. Independent Power Producers now compete to develop cost-effective and environmentally sound facilities to serve consumers.

Alberta's installed generating capacity is approximately 11,000 megawatts (MW)<sup>1</sup> and neighbouring provinces can provide an additional 950 MW. Alberta's peak demand is expected to approach 10,000 MW in 2007 and to grow 3 to 4 percent per year on average. The Alberta Electric System Operator (AESO) estimates that Alberta will require approximately 4,000 MW of new generation capacity by 2017 to serve growing demand while retiring older, less efficient facilities and maintaining extra capacity to meet demand during planned and unplanned facility outages.

<sup>1</sup> Wind resources are not included in this estimate as wind can't be "turned on" to meet demand.

## HEALTH, SAFETY & ENVIRONMENT

MAXIM takes pride in conducting its business in a healthy, safe and environmentally responsible manner. MAXIM recognizes and accepts its responsibility as an energy company to develop resources with an awareness of the environmental, economic and social needs and expectations of all stakeholders, and applies its standards of business conduct equally to employees and contractors.

## ACOUSTICS

The technology proposed for the Deerland Peaking Station utilizes leading acoustic enclosures for the generating equipment and silencers for the exhaust stack. MAXIM has completed baseline studies of ambient noise in the immediate area of the proposed site and has modeled the expected noise contribution from the facility and concluded that there will be no noticeable contribution to the ambient noise levels for nearby residents.

## AIR QUALITY

The proposed facility will be fueled by the same natural gas used by residents to heat their homes. Air emissions will be primarily Nitrogen (75%), Oxygen (14%), water vapour (8%) and Carbon Dioxide (3%). The technology proposed for the facility will be among the cleanest and most efficient in the world and will achieve Alberta's stringent new guidelines for Oxides of Nitrogen (NOx). Sulfur dioxide (SO<sub>2</sub>) is not a consideration with natural gas fuel.

## WATER

When the station operates on days when the temperature is greater than 10 °C, water will be injected into the turbines to increase output. Actual water use will depend upon weather conditions and hours of operation; the estimated annual average consumption of 2 to 4 cubic meters (440-880 gallons) per day will have negligible impact on area water consumption.

## PROPOSED PROJECT SCHEDULE

MAXIM expects to file for approvals from the Alberta Energy & Utilities Board (EUB) and Alberta Environment (AENV) in October 2007. Once these applications have been submitted, the regulatory review process could last up to six months and possibly longer. MAXIM will also seek appropriate approvals from Lamont County. If successful in obtaining the required approvals, MAXIM expects commercial operation to begin in the middle of 2009.

## About MAXIM Power Corp.

Based in Calgary, Alberta, MAXIM is an Independent Power Producer that owns and operates innovative and environmentally responsible power projects, including 30 power plants in Western Canada, western and northeast USA and France, with 482 MW of electric and 121 MW of thermal net generating capacity. In Alberta, MAXIM owns and operates the 150 MW HR Milner Generating Station near Grande Cache and four separate natural gas-fueled generating facilities in Taber, Burdett, Coaldale and Fort Macleod (The Alberta Power Project) that produce a total of 26.5 MW. MAXIM also owns and operates the Gold Creek waste heat recovery generation facility near Grande Prairie and an 800 kilowatt distributed power generation project at Gift Lake that provides an environmentally sound alternative to flaring by using waste gas as fuel, reducing flare emissions.

MAXIM's business strategy is to grow through the development and acquisition of power projects which utilize hydrocarbon-based fuels and renewable resources. MAXIM trades on the Toronto Stock Exchange (TSX) under the symbol "MXG". More information is available on MAXIM's website at [www.maximpowercorp.com](http://www.maximpowercorp.com)

