

# Atco unveils new Heartland power plant project

BY DAVE COOPER, EDMONTON JOURNAL OCTOBER 4, 2013



Artist's rendering of Atco's proposed 400 MW Heartland generating station in Strathcona County.

**Photograph by:** Supplied , Atco Power

JOSEPHBURG — As power generation firms eye a huge potential market for new electricity, Atco Power has jumped to the head of the queue with plans for a 400 megawatt gas-fired plant for the Industrial Heartland area of Strathcona County that could be operating by 2017.

The Alberta Electric System Operator has estimated that 2,200 MW of coal-fired power plants will be retired prior to 2022. Add that to industrial and population growth, and the industry believes that Alberta will need 7,000 MW of new power over the next decade — most coming from natural-gas fired turbines, cogeneration units at industrial facilities and new wind farms.

Calgary's Enmax is completing an 800 MW power plant in Calgary that is a joint investment with Edmonton's Capital Power, and Capital itself has plans for an 800 MW gas-fired facility on the site of its Genesee coal-fired power plant south of Wabamun Lake.

Meanwhile, TransAlta Utilities, in combination with U.S.-based MidAmerican Energy, is working on an 800 MW gas-fired plant at its Sundance power plant site on the side shore of Wabamun Lake.

In May, Atco Power disclosed that it had similar plans, but the timing and size of its proposal were still under study.

On Thursday at a technical open house, the firm said it plans to apply to the provincial regulators within a couple of months, and expects the Alberta Utilities Commission and Alberta Environment and Sustainable Resource Development will reach a decision by mid 2014. A public hearing would be held if needed.

With a 33-month construction stage, Atco would see its Heartland Generating Station operating by late 2017, said David Carmichael, Atco's senior manager for business development.

"We have purchased a 140-acre site but will need just 30 acres of it, so the farmer will be able to continue using the land around the plant," he said, adding this will reduce the industrial footprint.

Water will be recycled throughout the site, and the latest technology used to reduce emissions and noise.

While Carmichael could not provide a cost estimate for the project, the new 800 MW Sheppard plant in Calgary is budgeted at \$1.4 billion.

He also could not comment on any possible future expansion at the site. Capital, for example, has said it might build its facility in two stages of 400 MW each to match market demand.

Carmichael said the new plant's technology will be a combined-cycle facility using a natural gas-fired turbine — much like a jet engine — to produce about two-thirds of the electricity. The hot exhaust will be captured and used as high-pressure steam to turn a steam turbine, which will provide about one-third of the electricity from the plant.

The site is adjacent to a natural gas supply line, and just three kilometres from an electrical transmission line.

Atco will provide a project update later this month to local residents and is currently consulting with landowners and other industries in the area.

The firm estimates the plant will need 35 full-time employees to operate the facility, and will create up to 400 jobs during construction.

The site is north of Highway 15, just east of the Shell complex and south of the B.A. Energy and Meg Energy projects.

It is adjacent to Atco's existing salt cavern storage operations, which are also set to be expanded. Atco Energy Solutions is proposing an additional four caverns, which are scoured from very deep salt formations and used to store natural gas and other hydrocarbons under very high pressure.