📙 SaskPower

PROJECT PROFILE



Shand Power Station

Facility: Coal-fired station located near Estevan. One unit with a generating capacity of 279 net MW commissioned in 1992. Shand's advanced environmental design includes: the LIFAC (Limestone Injection into the Furnace and re-Activation of Calcium) system. A closed-loop, zero-discharge water management system ensures that the water used in the



plant will not be discharged into the environment. Shand is equipped with a highefficiency electro-static



precipitator (ESP), which acts as a giant dust collector to trap over 99 per cent of the flyash before it leaves the power station's stack. Stateof-the-art computer controls ensure the plant is run as efficiently as possible

Scope: Phase 1: Engineering and design of materials and installation specifications for coal handling, desulphurization, ventilation, fly-ash handling, cooling towers, demineralization, and



lifac system. Prepared approval, construction, and as-built ACAD drawings.*^(see note)

2001/2: As-built engineering, supply and manufacture for modernization of fly ash handling and collection system, and coal



analyzer remote monitoring of CSA-approved control panels.

Technology: Bailey Infi-90 DCS, A-B Pyramid Integrator PLC's, PLC-5 PLC's, microLogix PLC's and A-B 1791 remote block i/o.

Boundary Dam Power Station



Facility: Coal fired station located near Estevan. Six units with a combined generating capacity of 813 net MW. Recent upgrades include installation of electrostatic precipitators to reduce air particulate emissions.

Scope: As-built engineering, supply and manufacture for modernization of fly ash handling and collection

system, and service water instrument racks.



Technology: A-B microLogix PLC's and A-B 1791 remote block i/o.



PROJECT PROFILE



E.B. Campbell Hydro Station*



Facility: Located on the Saskatchewan River near Nipawin. Eight units with a combined generating capacity of 288 net MW.

Scope: Designed and commissioned PLC controls for blackout sequence logic for LV/MV

breakers and a 5KV diesel generator. Commissioned to minimize downtime during peak demand.



Technology: A-B 5/25 PLC

Coteau Creek Hydroelectic Station*



Facility: Located on the South Saskatchewan River near Elbow. Three 62 net MW units with a total capacity of 186 net MW

Scope: Engineering and manufacture of CSA-approved

600V/1600A breaker distribution panel including custom copper bus bar fabrication.



SaskPower

PROJECT PROFILE

Queen Elizabeth Power Station*

Facility: Natural gas-fired station located in Saskatoon. Three units with a combined generating

capacity of 221 net MW. Six 25 MW combustion gas turbines, along with systems to produce additional electricity from waste heat. The combined-cycle technology added 150 MW of supply and reduced SaskPower's greenhouse gas emissions by an amount equal to emissions from 30,000 cars.

Scope: As-built engineering, supply and manufacture of Units 1 & 2 generator Protection Upgrade control panels.

Technology: ABB MRK Protection relays, and Alstom PK2 test blocks.

Cory Cogeneration Project

Facility: 260-megawatt natural gas-fired, cogeneration power plant at the Potash Corporation of Saskatchewan Inc.'s (PCS) Cory Mine outside Saskatoon. The cogeneration plant, co-owned by ATCO and SaskPower International, features leading-edge technology.

Scope: Commissioning assistance with Zenon's boiler feedwater purification system, and plant's Delta-V DCS to PLC communications interfaces.

Technology: 1st Stage Reverse Osmosis – SLC 5/04 and A-B PV-900. 2nd Stage Glegg Ultra Pure Water System– PLC5 and RS-View. Delta-V DCS/PLC communication interface.

Note: Projects denoted with a "*" were completed by current Delco Automation employees at previous firms.





