After six years of planning and preparations Ontario Power Generation (OPG) says it is "ready to execute" refurbishment of the Darlington nuclear power plant and remains within the CAD 12.8 billion ($9 billion) estimate for the project, which is to start next month.

The company's latest semi-annual performance report has just been published, outlining progress made through six years of detailed planning and preparations leading up to the official start of work. This will be marked by a milestone referred to as 'Breaker-Open': the official disconnection from Ontario's power grid ready to start work. The 40-month project to refurbish unit 2 will be the first of four such outages as all four of the plant's Candu units are refurbished over the next ten years.

The refurbishment comprises over 500 projects which OPG has subdivided into five work bundles: retube and feeder replacement, which involves removing and replacing the fuel channels, calandria tubes and feeders inside each reactor; turbine generators, consisting of inspections and repairs on the four turbine generator sets and replacement of analogue control systems with new digital control systems; steam generators, which includes mechanical cleaning, water lancing, inspection and maintenance work; and balance of plant, covering smaller projects to replace or repair components on both the nuclear and non-nuclear side, such as heavy water and cooling systems, electrical systems, piping and valve work.

All the necessary materials have been delivered to the site, training of workers has begun and a detailed execution plan has been drawn up ready for work to start on unit 2 in October. Preparations have included using a mock-up reactor, first to test tools and procedures and then to train staff.

"I'm pleased to report it's all systems go for Canada's largest clean energy project," OPG's senior vice president for nuclear projects Dietmar Reiner said yesterday. He said the refurbishment project will generate CAD14.9 billion in economic benefit for the province, and once complete will enable the plant to continue operating for a further 30 years.

The 3512 MWe plant supplies about 20% of Ontario's electricity and, to ensure a reliable supply of low-carbon power during the refurbishment program, OPG will seek regulatory approval to continue operating the Pickering nuclear power plant until 2024.
OPG ready to go with Darlington refurbishment

http://www.world-nuclear-news.org/C-OPG-ready-to-go-with-Darl...