



Memorandum

TO: Committee of the Whole
FROM: Erin Mahoney, Commissioner of Environmental Services
DATE: October 8, 2015
RE: **Durham York Energy Centre Update**

This memo provides an update on the Durham York Energy Centre project and the schedule for completing the acceptance test.

Acceptance test will demonstrate compliance with contractual and regulatory performance requirements

The Durham York Energy Centre is designed, built, operated and maintained by a private contractor, Covanta Durham York Renewable Energy Limited Partnership (Covanta). Under the contract, Covanta is required to complete a formal acceptance test to demonstrate that the facility meets all contractual and regulatory performance requirements. The acceptance test lasts a minimum of 30 days, followed by a period of approximately six weeks to compile, review, and approve the test results.

Acceptance test delayed to allow Covanta to complete modifications and repairs

Staff reported to Council in May 2015 that the acceptance test was expected to begin in June. This estimate was based on project schedules provided by Covanta and was consistent with the best information available at the time.

Covanta later advised the Regions that modifications and repairs were required prior to the acceptance test. The modifications and repairs included the following:

- Boiler modifications to increase steam temperatures
- Repairs to the air-cooled condenser to address ice damage that occurred during start-up in February
- Reconstruction of the pressure control valve in the steam bypass line.

Boiler modifications and repairs to the air-cooled condenser were completed during a total plant shutdown from July 25 through August 16, followed by a separate, one-day shutdown on September 3 to reconstruct the pressure control valve. Timing of the

shutdowns was determined by the lead time required to manufacture and deliver replacement parts. York Region's full weekly tonnage allocation was redirected to the Emerald Energy from Waste facility for the duration of the shutdown. Since York Region's unit cost for transportation and processing at the two facilities is approximately equivalent, there was no significant impact on the annual operating budget.

Covanta to complete acceptance test in Q4 2015

Since completing the final repair work on September 3, Covanta has achieved the design steam temperature of 499 °C and started generating electricity. Covanta also certified the continuous emissions monitoring system and started posting emissions data to the project website during the week of September 28.

Covanta started the acceptance test during the same week of September 28. The acceptance test will require at least 30 days to complete, followed by approximately six weeks to compile, review and approve test results. On this basis, it is anticipated that the contract will formally enter the operations phase by year end 2015.

Next steps

The Regions' engineering consultants will remain on-site throughout the acceptance test period to ensure that performance tests are performed in accordance with all regulatory and contractual requirements. As required by the Environmental Assessment Notice of Approval, there will also be an independent third-party engineering review of the acceptance test results after the tests are completed. Staff will provide updates to Council should any material changes to these scheduled dates occur.

The Durham York Energy Centre is a key piece of York Region's strategy for sustainable waste management. We look forward to achieving this significant milestone and moving into the operations phase of the contract in partnership with Durham Region and Covanta.

Erin Mahoney, M.Eng.

SD/sd

Copy to: Cliff Curtis, Commissioner of Works, Regional Municipality of Durham
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