

Portlands Energy Centre

The Works Committee recommends that:

- (1) the City of Toronto request an individual environmental assessment for the Portlands Energy Centre; and**
- (2) the City of Toronto determine from the Toronto Waterfront Revitalization Corporation if a 550 megawatt plant is part of the vision of the waterfront development for the Portlands.**

Action taken by the Committee:

The Works Committee requested that the Acting Commissioner of Works and Emergency Services submit a report to the Works Committee on the status of Enwave District Energy Ltd. as a partner in the Portlands Energy Centre.

The Works Committee submits the Briefing Note (July 2, 2004) from the Acting Commissioner of Works and Emergency Services:

Issue/Background:

At its meeting of June 29, 2004, the Works Committee was provided with a presentation from Lake Ontario Waterkeeper, regarding their water quality monitoring and research on urban infrastructure in Ontario in the past two years, and their findings on the Toronto Region. The Works Committee adopted, amongst others, a motion that the Commissioner of Works and Emergency Services also provide a briefing note on water quality associated with the Portlands Energy Centre for the special meeting on July 5, 2004.

Portlands Energy Centre (PEC) is a partnership between TransCanada Energy Corporation and Ontario Power Generation. The project is to construct a natural gas-fired, combined-cycle, cogeneration plant that will produce 550 megawatts of electricity and will have the capacity to supply steam and/or hot water for district heating. This type of approach could be a key component of the integrated energy strategy proposed by the Toronto Waterfront Revitalization Corporation as part of Waterfront renewal, and could also provide a more efficient source of heat for the existing downtown Enwave district heating system. The project is completing an environmental assessment in accordance with Ontario Ministry of Environment (MOE) Environmental Assessment Act and the "Guide to Environmental Assessment Requirements for Electricity Projects."

The City has been involved in significant consultation with the PEC partners and has provided comments as the project evolved since 2003. PEC in an update on its web site indicates that its Environmental Review Report was sent to the MOE in November 2003, and PEC is awaiting a decision from the Province with respect to requests received by the MOE for elevation of the project to an individual environmental assessment. The Director of Environmental Assessment and Approvals Branch has indicated that a decision is forthcoming on July 2, 2004.

Key Points:

Water Quality

The proposed PEC facility would be located on the eastern section of Unwin Avenue, immediately east of the former Hearn Generating Station. The facility would draw cooling water from the Ship Channel and discharge it into the Outer Harbour, raising the concern that these discharges could cause increased postings of Cherry Beach due to potential elevated levels of E. coli. PEC has confirmed its proposed chlorination/dechlorination system for the cooling water would be capable of reducing E. coli concentrations to levels that would prevent adverse effects at Cherry Beach. It has committed to operate the system to ensure that outcome, and has committed to work with the Commissioner of Works and Emergency Services and the Medical Officer of Health to develop a satisfactory operating protocol and annual reporting. City staff have also requested that PEC monitor the discharge plume of cooling water from PEC on a daily basis for E. coli during the months of June, July and August to coincide with City monitoring of Cherry Beach, to provide prompt communication of results to the City, and to develop mitigation measures where applicable. City staff have requested that the MOE include these provisions as a condition in the Certificate of Approval for the PEC facility for at least two years after it begins operation. The cooling water discharge has also been identified as having thermal impacts on the Outer Harbour. A May 2003 Public Open House indicated as follows:

- that chlorination of cooling water would be undertaken to control build up of slime and zebra mussels;
- that the water will then be dechlorinated to applicable criteria prior to discharge;
- that the cooling water system will be designed to limit the temperature difference between intake and discharge to 10 degrees Centigrade or less;
- that during the summer, cooling water discharge will have a minimal effect on overall temperatures in the Outer Harbour; and
- that during the spring, fall and winter, surface water temperatures would increase by up to 4 to 5 degrees Centigrade.

City staff have confirmed that PEC is currently working with Toronto and Region Conservation Authority staff to determine the collection of more up-to-date water temperature baseline data for use in monitoring the thermal impact on the lake and anticipating any ecological implications.