



March 23, 2004

Mr. Gord Haines

Section Manager  
Technical Compliance  
Ontario Power Generation  
700 University Avenue  
Toronto, Ontario, M5G 1X6

Dear Mr. Haines:

***Replacement of Blue and White Single Phase Transformers on Beck GS#2 T17  
Notification of Approval of Connection Proposal  
CAA ID Number: 2004-Ex190***

Thank you for the detailed information that you provided on OPGI's proposal to replace the blue and white phases of the three single phase transformer T17 at Beck GS#2, as part your plan to replace all the step-up transformers at the station.

We have reviewed the data and concluded that this project will not have any adverse impact on the reliability of the IMO-controlled grid since the new facilities represent a "like-for-like" replacement of the existing facilities. The data supplied by OPG for the replacement unit is attached to this notification.

The IMO is therefore pleased to grant **conditional approval** of the proposed transformer replacement. Any material changes to your proposal may require a re-assessment by the IMO in accordance with Market Manual 2.10, and may nullify your conditional approval.

**Final approval** will be granted upon successful completion of the IMO Facility Registration process. During facility registration you will be expected to demonstrate that the project you have installed is materially unchanged from the proposal assessed by the IMO. Contact [facility\\_registration@theIMO.com](mailto:facility_registration@theIMO.com) if you have not received a Facility Registration Summary package within the next 10 days.

For further information, please contact the undersigned.

Yours truly,

Bob Gibbons  
Manager - Long Term Forecasts & Assessments  
Telephone: (905) 855-6482  
Fax: (905) 855-6129  
E-mail: bob.gibbons@theimo.com

cc: IMO Records

---

All information submitted in this process will be used by the IMO solely in support of its obligations under the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998*, the *Market Rules* and associated policies, standards and procedures and in accordance with its licence. All information submitted will be assigned the appropriate confidentiality level upon receipt.

655 Bay Street, Suite 410, P.O. Box 1, Toronto ON M5G 2K4 Canada tel 905.403.6900 toll.free 1.888.448.7777 fax 905.403.6921  
[www.theIMO.com](http://www.theIMO.com) – [helpcentre@theIMO.com](mailto:helpcentre@theIMO.com)

***Sir Adam Beck GS#2***

***Replacement of Blue and White Phase step-up transformers on T17***

Data for the single phase transformer:

Rated Voltage for each Winding(LL):	HV:250 kV	LV:13.8 kV
Rating:	70 MVA	
Impedance:	X=10.2% on 70 MVA	
Off-load Taps	262 kV 256 kV 250 kV 244 kV 238 kV	
In service off-load tap position	244 kV	
Connection Arrangement	HV: Wye (solidly grounded)	LV: Delta

Proposed in-service data (Outage April 19<sup>th</sup> to 23<sup>th</sup> 2004)

***Assessment***

The information provided by OPG shows that T17 is rated for continuous summer and 10-day LTR operation of 210 MVA. Extensive testing performed by OPG indicates that the transformer unit could be capable to operate at 225 MVA for four hours. However, limitations associated with the phases buses and LV bushings restrain the continuous power flow over the station equipment to 210 MVA.