

1 Q. Please provide the critical path schedule for blanket replacement for the  
2 Stephenville CT from the time Hydro learned that insulating blankets were  
3 necessary.  
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6 A. From 2008 to 2013, the Stephenville Combustion Turbine (CT) was used primarily as  
7 a synchronous condenser and rarely as a peaking unit. PUB-NLH-148 provides the  
8 operating hours from 2008 to 2013, which demonstrates the requirements for this  
9 unit. The unit was available and operated as a synchronous condenser following its  
10 refurbishment in June 2013. It was also available as a peaking generating unit up to  
11 30 MW, a reduction of 20 MW from its full capacity. To recover the 20 MW of  
12 capacity, new insulating blankets were required. The insulating blankets are  
13 required to ensure that the ambient temperature inside the engine module is  
14 maintained at an acceptable operating level. Engineering support for the  
15 procurement of the insulating blankets to restore the 20 MW of capacity was  
16 identified early after the problem with the blankets was identified. However, it was  
17 determined that since the insulating blankets are only necessary when the plant is  
18 required for peaking service the Engineering support could be scheduled to be  
19 completed in the early fall of 2013. This was anticipated to provide sufficient time  
20 so that the blankets could be procured and installed for the unit to be available at  
21 full capacity for peaking service in December 2013. For specific details relating to  
22 the procurement and receipt of the insulating blankets, please see Hydro's  
23 response to PUB-NLH-072.  
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25 It is noteworthy that as the ambient temperatures cooled in late December/early  
26 January, it was realized that the Stephenville CT was available for full peak  
27 operation at 50 MW without the insulating blankets installed due to the colder

temperatures outside and the ability to remove excess heat from the turbine module. However, plans were still in place to install the insulating blankets in early January, but due to the failure of engine B, the installation was put on hold. An interim engine from Alba Power was installed on End B at Stephenville Gas Turbine in February after engine B failed in early January, but because there was still no heat restrictions on the gas turbine due to the outdoor ambient temperatures, the insulating blankets installation was again put on hold. The installation of the insulating blankets is planned to occur during the same time that the rebuilt engine B is returned from Alba Power and reinstalled at the Stephenville CT. This will be prior to the 2014/2015 winter peak season.

The following table lays out the timeline for obtaining the insulating blankets for the Stephenville CT from the time it was identified that the insulating blankets required replacement.

<b>TIMELINE - Stephenville Gas Turbine Insulating Blankets</b>		
1	Determined by inspection condition of Insulating Blankets – Poor; causing heat build in the turbine module	June 2013
2	Gas Turbine returned to service – De-rated due to poor condition of insulating blankets	June 2013
3	Engineering (PETS) – Provided technical support to provide cost estimate and ensure proper specification of the insulating blanket	July 2013
4	Engineering (PETS) – Coordinated and planned installation work with Operations, including site visit	September 2013
5	Hydro performed review of the quotation, which included the budgetary quote, lead times and proposed blanket specifications	October 2013
6	Hydro received updated/revised quote from vendor - To narrow scope of original bid and include installation	November 2013
7	Hydro engaged another vendor to provide quote to supply and install insulating blankets – Due to unfavorable pricing and delivery time of first quote	December 2013
8	Hydro created PO to supply and install insulating blankets on Stephenville Gas Turbine	December 2013
9	Hydro received insulating blankets from vendor	January 2014