- 1 Q. Re: IC-NLH-093. For each measure noted, please provide the date of
- 2 implementation (or planned implementation) of the fuel saving initiative.

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- 5 A. The following table provides the date of implementation (or planned
- 6 implementation) of the fuel saving initiatives outlined in Hydro's response to IC-
- 7 NLH-093.

| Year | Initiative | Date (or Planned Date) of Implementation |
|------|---|--|
| 2008 | Installation of a variable speed drive air compressor to reduce auxiliary power consumption. | December 2008 |
| 2009 | A study of the feasibility of installing an intelligent soot-blowing system to only use steam to clean boiler components when fouling reaches inefficient levels. | Study presented February 2009 |
| 2010 | A study of the feasibility of installing variable speed drives on boiler feed pumps and forced draft fans. | Installation of forced draft fan variable speed drives planned to commence in August 2014. Due to utilization and potential energy savings, boiler feed pump variable speed drives offered a longer return on investment, decreasing the viability of the project. As such, the project was not pursued. |
| | Submission of a capital budget proposal to upgrade forced draft fan ductwork to reduce air flow restriction, hence reducing electrical load on the fans. | August 2011 |
| 2011 | A review of turbine condenser operation and maintenance activities with a view to increasing unit efficiency for all three units. | May 2012 |
| | The installation of a new forced draft fan ductwork. | August 2011 |
| 2012 | Performance of a gap analysis on condenser operation and maintenance. | May 2012 |
| | Submission of a capital budget proposal to install variable speed drives on the six 1500 hp forced draft fan motors. | Installation planned to commence in August 2014. |

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|----------|---|---|
| Year | Initiative | Date (or Planned Date) of Implementation |
| | Implementation of an improved and more timely | May 2012 |
| 2012 | method for conversion of Unit 3 to and from | |
| (cont'd) | synchronous condenser operation thus reducing the | |
| | time that Units 1 and 2 have to be generating at low | |
| | inefficient load levels for voltage support. | |
| | Installation of new energy efficient heat tracing on | September 2012 |
| | fuel oil lines. | |
| | Performance of a lighting study to establish the cost | October 2012 |
| | of upgrading to energy efficient lighting throughout | |
| | the facility, including the use of photo cells and | |
| | motion sensors. | |
| 2013 | Completed design work to install variable speed | Installation planned to |
| | drives on the six forced draft fans. | commence in August 2014. |
| | Implementing recommendations of the 2012 | June 2013 |
| | condenser gap analysis. | |
| | Completed installation of new energy efficient heat | September 2013 |
| | tracing on fuel oil lines. | |
| 2014 | Installation and commissioning of the variable speed | August 2015 |
| | drives on the forced draft fans. | |
| | Collected and reviewing electrical consumption data | December 2014 |
| | of the new fuel oil lines heat tracing, comparing to | |
| | previous years. | |
| | Implemented recommendations of the 2012 | November 2014 |
| | condenser gap analysis. | |

- The forced draft fan variable speed drives, identified for 2014, are currently being
- 2 commissioned on two units.