

EB-2015-0166/0175 NEXUS pipeline 15 year approval

Further to the Notice of Intent to provide further evidence that I had distributed on 17 September, 2015 the plan is to submit this evidence in electronic text form on Tuesday, September 29. The primary objective will be to provide the full text of the documents that have been relied on in the submissions that I had previously submitted or referred to in my interrogatory questions. These will be reports from the NEB, OEB, IESO and other government agencies, peer reviewed papers from established science journals, data from Statistics Canada, etc., that should not require the testimony of expert witnesses.

Over the past week or more the IESO web page reporting on current electricity statistics has shown that the power generation from the nuclear power fleet has been reduced to not much more than half of its normal capacity. The result has been a substantial increase in the dependence on power produced from natural gas. That raises the question of whether Ontario will need the NEXUS pipeline in order to meet Ontario's energy needs in the event that such nuclear reductions should occur during the peak power demand periods. It also raises the question of whether any of the nuclear power stations that are scheduled to be refurbished in the period of interest in the NEXUS review (i.e., until 2032) will really be needed at all, and might instead be permanently closed down, using either natural gas or exergy stores to fill the modest gap.

I would like to show how the use of exergy stores would be a more economical solution than building the NEXUS pipeline, either for the existing nuclear refurbishment plan or for an alternative plan under which no reactors would be refurbished during this period. Either objective is easier to accomplish with exergy storage than with natural gas, partly because exergy stores provide scalable thermal energy supply without limits and partly because they also boost the capacity of the existing electricity production facilities while simultaneously reducing the peak power demands.

Ron Tolmie
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