# FW: MEDIA EVENT: FAO NUCLEAR REFURBISHMENT REPORT

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Am sure you saw this…highlighted points below…

**From:** Doose, Ann (CAB)
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**To:** @CAB-Media Event 1; @ENERGY-COMM-Issues_and_MediaRelations; @FIN-L-O-CSB-ISSUES; @TBS-L-Issues and Media
**Subject:** MEDIA EVENT: FAO NUCLEAR REFURBISHMENT REPORT

## MEDIA EVENT: FAO NUCLEAR REFURBISHMENT REPORT

November 21, 2017

## Time / Location:

10:00 a.m./ Media Studio

## Speakers:

J. David Wake, Ontario's Temporary Financial Accountability Officer; Jeffrey Novak, FAO's Chief Financial Analyst.

## Summary:

- The Financial Accountability Officer released a report entitled An Assessment of the Financial Risks of the Nuclear Refurbishment Plan.
- Wake said the report examines the government's plan to refurbish 10 nuclear reactors at the Bruce and Darlington Nuclear Generating Stations, and extend the life of six reactors at the Pickering Nuclear Generating Station.
- Wake said overall the plan is expected to provide ratepayers a long-term supply of relatively low-cost, low-emissions electricity.
- Wake said the risks identified include: refurbishment cost overruns, higher—than-anticipated station operating costs, lower-than-expected electricity demand, potential for a lower-cost, lower-emissions alternative generation option to emerge.
- Novak said that if refurbishment moves forward as planned, the FAO estimates it would supply a significant proportion of Ontario electricity demand from 2016 to 2064. It would also cost an average price of $81/megawatt hour in 2017 dollars. This is higher than current cost ($69/megawatt hour) but lower than residential price of electricity generation ($115/megawatt hour).
- Novak said prices will be higher than average in the near term, peaking by 2027 but prices will gradually fall.

## Media Attendance:

Print – 3 TV - 4 Radio – 1

**Media Outlets:**
Jeffords – CP; Artuso – Sun; Hains – QP Briefing; Smith – QP Today; Brule - Radio Canada/CJBC

Q. Brule: (inaudible) question. You talk about the possible risk, but have you looked into how likely though we're going to be facing those risks, if there's one risk that we're going to be facing more likely than others?

Novak: Now so the report identifies what we think are the four key financial risks and how the risk is allocated among ratepayers, the province, OPG, and Bruce Power. But we don't review the likelihood of the risk materializing or whether appropriate mitigation strategies are in place.

Q. Brule: Because we've seen in the past – and I think it was mentioned this morning too – that cost overruns were almost always an outcome for refurbishment in New Brunswick, elsewhere in Canada. So how likely is it that it's going to happen here? Can you explain – did you look into what happened in other cases?

Novak: So no, we didn't review the likelihood of the risk materializing. We did develop, you know, two illustrative examples of a 30-per-cent or a 50-per-cent cost overrun materializing and what that – that mean for rates that ratepayers pay. Also point out that once the (inaudible) from the Bruce nuclear generating station, once the refurbishment price is locked in 12 months before refurbishments begin, then the risk of any cost overruns are transferred to Bruce Power.

Q. Smith: Can you explain why the off-ramps that you call them for terminating refurbishment before or at any point why those do not – are not reliable for taxpayers?

Novak: So when looking at refurbishment cost overruns and assuming that demand for the nuclear electricity generation is still there, then the refurbishment cost overrun would have to be quite significant for the off-ramps to provide any value, and generally the reason for that is once the first refurbishment is done at each of the plants, then a lot of that capital cost is already built in, and then there is, you know, you lose economies of scale and also the final point is you still need an alternative generation option, and we assumed you would need to find a low-emission option and the current prices of those alternatives are quite high. And so if demand doesn't change or the cost of alternative generation options doesn't change, then the off-ramp for simply a refurbishment cost increase is, you know, not as valuable as you might think.

Q: Smith: So basically it gets so expensive that you can't back out.

Novak: That could be. That could happen yes.

Q: Jeffords: Does the fact that there are no other alternative sources simply say the province has no choice but to do this?
Novak: So we didn't investigate whether it was. We took it as given that the province was going to do this, refurbish the nuclear reactors. So we review the nuclear refurbishment plan. One of the risks identified as opportunity cost risk. The risk that they could be doing something else. We concluded that at this point that there are no alternative generation options that could provide the same amount of electricity at the same price with low emissions.

Q: Jeffords: So that sort of precludes going back to coal for instance or something like that?

Novak: That's a policy decision. So if you're not going to use fossil fuels then, you know, we couldn't find an alternative generation option at the same price. If you were to include fossil fuels, then that changes the options.

Q: Artuso: Could you talk a little bit about why fossil fuels are not an option or not a reasonable replacement for nuclear?

Novak: It's just it's not it's reasonable. It's just, it's not comparable cost based on the analysis that we performed. You know appendix C see the report kind of lists all the, all the options that we considered and what we think that the current prices for those for those options. And it was just you know simple financial calculation.

Q: Brule: You mentioned the decrease in the electricity supply. So are you basing your estimations on what has happened in the past? Do you believe it could go even faster now?

Novak: So we don't estimate whether there will be no decrease in demand or supply. You know looking at, you know, the last 10 years there's been an 11-12 percent decrease in grid demand. But going forward we're not estimating, you know, where supply or demand will be. It's just identifying that as potential risk.

OK. Thank you thank you.

N.B.: Comments captured are not verbatim quotes

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