

Good Afternoon:

After a summer of analysis and modelling, the Ministry of Energy has returned with the results which will form the economic basis of the next Long Term Energy Plan.

Ministers' will recall that at our meeting in late July, we approved the policy initiatives and main supply mix objectives associated with the next LTEP.

Today's presentation will focus on three key remaining items : the price projections for electricity; the assessment of fuels use in our overall energy & electricity sectors; and finally the associated greenhouse gas emissions projections.

My presentation will last about 12 minutes and will focus on some core slides included in the deck and I'm sure that following that, we will have a robust conversation.

First – Electricity Sector.

SLIDE 9 shows the combined supply and demand that we are projecting for the Ontario electricity grid. For the next few years, Ontario will remain in a position of adequate supply – meaning that we have no need to procure any new electricity generating resources until the early part of the next decade.

One thought to keep in mind in reviewing this slide, you will see the impact of energy supply resource retirements. First, in 2024, the Pickering Nuclear Generating Station will come to the end of its useful life. Second, and it is displayed on this chart as the dashed bars, over the planning horizon, there will be a multiplicity of contracts that begin to expire. While those resources – both renewable as well as natural gas stations – will continue to be available, should we need them, we don't yet have sufficient information to confirm that we would necessarily re-contract. Should electricity demand not materialize in the way that we are currently projecting, then it would be foolish for us to begin extending contracts now, since we have more time to see demand develop. What's more, the competitive tension that will come about as a result of the IESO's "Market Renewal" activity that we discussed at the July Cabinet meeting will mean that Ontario ratepayers will benefit from competitive tension, aimed at driving down prices, through a capacity auction for new electricity supply, if we need it. Finally, as we all know, the impact of disruptive technologies and major innovations advancements are impossible to predict or model. A cost-competitive energy storage solution may yet emerge before the intended retirement of Pickering, potentially changing our economic considerations. In sum, Ontario's ratepayers are finally in the enviable position of being in a "buyers market". We don't need to acquire any new resources at present, and when we will need to – there will be a range of potential options for us to choose from. Maintaining flexibility at this time will certainly lead to better economic outcomes for Ontario electricity ratepayers in the future.

SLIDE 10 is perhaps the most vital slide in our presentation, and certainly the one which will generate the most amount of media interest : the projected residential electricity price line.

As you can see, we are now projecting that we are going to remain below the 2013 LTEP for the entire life of this plan. That was not the case when the Fair Hydro Plan was initially conceived. Members will recall that in order to spread the cost of Ontario's low-carbon assets across a longer payment schedule, future ratepayers would need to be charged an additional amount to recover the the cost of funding the 25% reduction that took effect earlier this year. After significant research and economic modelling, we

have concluded that we are able to remain under the 2013 LTEP projection, even with these associated charges.

I do want to point out some important risks. The chart below the graph shows the projected annual increase to electricity rates as we anticipate them today. The Fair Hydro Plan maintains an inflationary cap for the next four years, but then after 2021, the rates need to rise. Pressure builds within the system as a result of this four year period, meaning that the increases in 2021-2027 will average at 5% before levelling out at more modest rates beyond 2028. Unfortunately, it will not be possible to further “smooth” this curve beyond what has already been done. Meaning, the rate of increase during 2021-2027 will need to occur as projected here because of the constitutional law risk that we faced when first considering the Ontario Fair Hydro Plan. Any further rate mitigation to ease this “rebound” after the four year freeze would need to come from outside the electricity sector (the fiscal plan, or greenhouse gas reduction account, for example). However we are not recommending any additional action today.

The rate of increase in those years is in keeping with historical rate increases during the 2004-2010 period – pre-dating the major price spikes that occurred after 2011. While this will always be a difficult slide to communicate to the media and general public, it is also the most responsible approach.

The Government’s Fair Hydro Plan is working and future cost pressures are contained and moderate. Devoting any additional resources from the fiscal plan towards even further smoothing wouldn’t be appropriate.

I’d now like to move on to our outlook for Fuels and ask you to turn to SLIDE 14.

I like to remind stakeholders that we are the Ministry of Energy – not just Electricity – and that means that this edition of the LTEP will have a much more significant focus on the fuels sector than previous iterations.

At the same time, our team is keenly aware of the Government’s overall carbon reduction agenda, legislated targets for emission reductions and has been involved with MOECC with respect to Green Ontario Fund programming.

On this slide, you can see the multiplicity of fuel types and consider their entry point into Ontario’s economy.

Turning to SLIDE 18, you will see how we are projecting to evolve this fuel supply to include a greater share of lower-carbon renewable natural gas (RNG) and bio-fuels, in an effort to reduce our reliance on traditional fuel sources.

SLIDE 19 provides an early assessment of how the Government’s Cap and Trade program will impact the typical household natural gas bill. Over the life of the plan, homes served by natural gas will see their bills increase. These cost increases are largely a result of the compliance obligation imposed on natural gas utilities via the Cap & Trade legislation. How each residential consumer responds to these price pressures will be unique, but we know that the GOF will be making programs available for families and businesses to access technologies that can lower their use of natural gas, and thereby lowering costs and emissions. Unlike the electricity sector, the Ministry of Energy has very few supply mix options or levers to help alleviate rate pressure for natural gas customers, but, as mentioned, the Greenhouse Gas

Reduction Account (GGRA) and GOF – supervised by the Ministry of Environment & Climate Change – will be coming forward soon with programs designed to target these concerns.

This is a convenient segway to the overall GHG picture, as will be described in the 2017 LTEP and I'd ask you to now turn to SLIDE 22.

Emissions from the Energy sector are projected to decline from nearly 130 MegaTonnes to about 90 MT over the life of this plan. That is a reduction consistent with our government's CCAP targets.

SLIDE 23 breaks this out specifically for the electricity sector. Once the Pickering Nuclear Generating Station comes to the end of its' life in the early part of the next decade; electricity demand might be high enough to require additional natural gas burn from within the existing fleet of Ontario's installed gas plants. However, as discussed earlier: demand might not materialize as anticipated, or disruptive technologies may provide economic alternatives. To that end, we are forecasting a range of potential GHG emissions that will remain within the narrow band on the bottom right of this chart. Significantly, we note that Ontario's electricity sector remains among the cleanest and greenest in North America – especially as compared to historic data.

While this concludes the main policy content of our presentation, I would like to highlight the significant communications and issues management section of this submission. As discussed at the July Cabinet Meeting – we know that energy and electricity issues are going to serve as a lightning rod for media, the opposition and general public. We know that prices are going to be a core focus, despite the significant policy initiatives and exciting technological evolutions described in our earlier submission. The Communication section of this presentation presents our early and initial thinking around public messaging. Given significant lead-time required to produce the final plan, we have some time this next month to further refine our communications approach and I would certainly welcome thoughts and advice from colleagues.

Finally, I would ask that you turn to SLIDE 43 for a quick snapshot of next steps. We are currently in the final drafting stages of the formal LTEP document text. By the time the Legislative Assembly returns for the autumn session on September 11th, we will have locked the text and begun the production. Layout, design, translation and government's accessibility requirements