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APPrO
ASSOCIATION OF
POWER PRODUCERS
OF ONTARIO

May 31, 2019

Barbara Ellard
Director, Markets and Procurement
Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1

Dear Barbara,

**RE: APPrO Comments on IESO's Market Renewal Business Case:
Approach, Alternative Case and Assumptions**

APPrO is pleased to provide further remarks with respect to the Market Renewal Project (MRP) Business Case Session held on May 16, 2019.

APPrO is encouraged by the IESO's recognition that a new business case is needed and is a pre-requisite for further work investment in MRP as a whole. Stakeholder input into the process is integral to the success of the overall initiative. APPrO supports this stakeholder engagement initiative and looks forward to continued discussions with the IESO on this important undertaking. The current proposed approach is a significant improvement toward a more robust business case.

In past submissions, and most recently in its Incremental Capacity Auction High Level design (ICA HLD), APPrO not only emphasized the importance of developing an updated benefits case for the MRP, but also stressed the importance of engaging stakeholders in the scoping exercise to review the approach and input assumptions, including the development of alternative scenarios. Absent a compelling business case based on a properly undertaken cost-benefit analysis (CBA), APPrO concludes the ICA may not be the most economically efficient means to procure capacity – especially for new investment.

Such an analysis must consider a number of assumptions and criteria including the following:

- Clearly describe the status quo (i.e. the base case), in order for the CBA to plainly differentiate alternate scenarios, and to avoid false comparisons. More specifically APPrO would recommend the IESO provide an economic benefit threshold that it will use to measure alternatives against the status quo. We would encourage the IESO to seek stakeholder input on such a threshold in light of the material changes being

considered in its market reform initiatives. IESO noted on Slide 14¹, development of the but-for or “Alternative Case” is critical in order to perform a meaningful analysis. APPrO believes the Alternative Case as described on Slide 38 is more representative of the status quo or base-case.

- Don’t assume the procurement status quo will remain static prospectively. The status quo does not necessarily mean that nothing will change going forward. For example, renewed contracts for assets with expiring contracts in the mid to late 2020s would not be identical to what they are today. Existing capacity coming off contract will be closer to the end of its economically useful life and will likely be significantly depreciated. It should therefore be able to be re-contracted using competitive tension that would also result in reduced costs as compared to the current contract prices – although APPrO continues to believe that a contract should represent the value of the capacity and energy at that time. Further consultation with stakeholders is required to ensure that the input assumptions to the modeling exercise are reasonable and prudent.
- Use market specific (i.e. Ontario) data for modeling before making the policy equivalent of a “final investment decision”. The analysis must reflect current conditions, and reasonable future requirements and it must incorporate Ontario specific data to the maximum extent possible.
- Provide calculation transparency, replicable by stakeholders.
- Include applicable transitional costs for all participants. The IESO’s decision to examine and incorporate Market Participant costs is welcome, and should enable more realistic comparisons.
- Distinguish between scenarios and sensitivities. At least three alternative scenarios should be explored including the status quo. Explanations should be provided for plausible scenarios that were rejected.
- Stress test the various scenarios. Sensitivities for the various scenarios should be evaluated to ‘stress test’ the resilience to shocks or disruptions that may occur in the future.
 - For example, market designs may have very different outcomes if decentralized generation driven partially by delivered prices begins to become a significant supply source, and should be explored in detail in at least one of the scenarios.
 - Responsiveness and performance of both the status quo and the alternate scenarios with regards to various types of government intervention should be explored. For example, if short term price spikes are the most likely cause of intervention, then the market design that is most likely to produce volatility may also result in such intervention, meaning the design may not be durable.

¹Market Renewal Program Update Meetings: MRP Business Case; May 16, 2019

- The potential failure of the ICA mechanism to procure adequate capacity should be explored.
- Be clear on the limitations of the analysis and the reality that the outcomes on a relative basis can provide reasonable guidance on direction but the absolute values have a certain degree of uncertainty on a stand-alone basis. The reality is there can be fallacies of misplaced precision in such studies, and it is better to identify these up front.
- Avoid skewing Requests for Proposal (“RFP”) assumptions in such a way as to unrealistically add to potential costs of the Alternative Case as noted on Slide 21. Incorporating RFPs for system adequacy and energy needs is sensible.
- Do not assume energy reforms and capacity are integrated in all scenarios. They are not mutually dependent. The intention to view the MRP initiatives as a combined “package” (Slide 20) may fail to capture the possibility that other potential bundles, such as making all the MRP proposed changes except for the ICA, could produce similar or better outcomes. Furthermore, the description of “integration benefits” on Slide 22 is troubling in that it may assume an exaggerated degree of optimization. The slide notes that “benefits are expected to include right-sizing the market, better investment and consumption decisions, reduced system costs and out of market actions.” A concern is that if benefits are “expected”, objective analysis that does not find them, or finds that the benefits are small, will be rejected.
 - While energy stream reforms (SSM, DAM and ERUC²) address well-known and understood market inefficiencies and have been commented on at length by the Market Surveillance Panel, the Auditor General and others, the base case should be the status quo which is the existing energy market with modifications to extend existing contracts. The greatest capital costs associated with this project are the procurement and integration of the new DSO³. If these costs are not justifiable through either quantitative or qualitative means, then the energy workstream perhaps should not move forward. In the original Brattle business case, the net benefits were not built from a bottom up approach nor were they Ontario specific. Stakeholders should be able to see these benefits through a proper analysis. The identification of energy workstream benefits becomes even more important when calculating integration benefits. By understanding the contribution of the energy workstream, Market Participants and others would be able to comment more effectively on the validity of the integrated analysis.
- Don’t overshoot reserve margins. Capacity mechanisms with high target reserve margins could also lead to “buying too much steel in the ground” or having excess energy (Slide 23); none of the slides address the symmetrical theoretical result and cost of a capacity mechanism potentially producing too little investment too late at too high a cost when a supply crisis occurs.

² Single Schedule Market (SSM), Day Ahead Market (DAM), Enhanced Real-time Unit Commitment (ERUC)

³ Dispatch Scheduling and Optimization, the software program that determines the most efficient dispatch of resources subject to constraints for secure operation of the grid.

- Acknowledge policy drives market design. The contention on Slide 24 that previous poor outcomes were a function of inadequate market design is questionable. It is likely that deficiencies arose because of the OPA and IESO's inability to counter government policy decisions and direction, and a failure to rely exclusively on competitive RFPs consistent with load forecasts in the Long Term Energy Plan (LTEP), using a mixture of short, medium, and long duration contracts. Future RFPs need not be for contracts of the same duration (as we noted in our recent ICA HLD submission). The discussion on Slide 40 regarding the cost to extend the life of existing facilities can be incorporated into tailored RFPs designed to achieve this outcome but using shorter duration contracts; the exploration of contract structure on Slide 41 appears to envision some differentiation.
- A rigorous evaluation is merited. IESO and stakeholders should not underestimate the cost and time required to perform a proper CBA. As APPrO has noted, the pursuit of sound analysis should be viewed as an investment given the consequentiality of the resulting outcomes to resource adequacy and cost for the Ontario power sector and broader economy.
- Recognize ICA may not deliver the same asset at a lower cost. IESO is correct to observe (Slide 25) the ICA may not deliver the same asset at a lower installed cost than in an RFP; the longer term nature of the RFP process may enable lower costs of capital or a longer amortization period, as examples, and it is not clear an RFP process need exclude "non-traditional" sources.
- Be realistic on cost of capital. Accurately forecasting the appropriate cost of capital is an important factor. The assumed cost of capital must use accurate assumptions that are reflective of Ontario's unique market characteristics, location and Market Rules. It is reasonable to expect that in Ontario, a new merchant facility participating in the ICA subject to the applicable Market Rules will require a significantly higher weighted-average cost of capital than a plant procured through an RFP with a 20-year contract that has recourse through arbitration or other legal recourse. The current sector governance model which falls short compared to other jurisdictions where there is greater reliance on market mechanisms to secure capacity, exacerbates this risk.

Alternative Procurement Options

Although an ICA is one potential mechanism for procuring capacity, there are other options that have yet to be considered and evaluated by the IESO. In its 2017 benefits case, the IESO did not consider other procurement options to an ICA for 2017 Benefits Case as evidenced by the IESO's response in a recent OEB proceeding: ("The alternative case of maintaining status quo (i.e. the cost of administering and supporting large centralized supply procurements) was considered, however costs were not included in the analysis. Other alternatives to obtain capacity were not considered in this analysis [emphasis added]."⁴)

⁴ EB-2019-0002 - IESO Response to APPRO INTERROGATORY 10; Reference: Exhibit C-2-1 p 3 and Exhibit C-2-1 p 14

APPo recommends that the CBA compare the following scenarios⁵:

- 1) Baseline or “Status Quo” scenario
 - a) Energy stream reforms are not implemented.
 - b) Centralized procurement continues for new assets and existing assets but recognizes economically useful life/depreciated value of assets at end of contracts.
 - i) Recontracting of existing assets through bilateral negotiation. Terms should be shorter than original term (i.e., 5-10 years; based on updated planning needs).
 - ii) New build contracts supported by long term tenor of minimum 20 years or longer based on asset class.
- 2) Status Quo “Plus”
 - a) As above but with energy stream reforms and the proposed Transitional Capacity Auction (TCA) for DR, imports, uncontracted generation.
- 3) IESO’s current proposed ICA as per the HLD, with proposed energy workstream reforms, and,
- 4) Hybrid portfolio alternative.
 - a) Common in most jurisdictions and will necessarily be the case in Ontario since the majority of Ontario capacity will remain rate regulated or under long term contracts for some time.
 - b) Longer Term
 - i) Competitive procurement through RFP
 - ii) Term 20 to 40 years
 - iii) Bilateral negotiation or rate regulated for Hydro and Nuclear
 - iv) Target capacity is function of long term gaps less reasonable reliance on short term markets for supply
 - c) Medium Term
 - i) RFP process for existing assets which are eligible for this category
 - ii) 5-10 years
 - iii) Potentially options to extend, and off-ramps to meet planning needs
 - iv) Option for supplier to participate in RFP process or the TCA / ICA
 - v) Target capacity for this group is the same as “Existing contracts” coming off of contract

⁵ Obviously, given time constraints, these alternate scenarios are sketched out at a very high level, compared to the IESO’s current proposed ICA which already has a well-developed HLD. It is assumed that they would be fleshed out in more detail during stakeholder discussions.

- d) Shorter Term
 - i) Year by year
 - ii) TCA/ICA for shorter term needs, rebalancing:
 - DR
 - Imports
 - Uprates
 - Uncontracted capacity (assets between contracts and competitive procurement)
 - iii) Target capacity is incremental to secure reliable supply based on best estimate of real time needs.


Common Assumptions across Scenarios

- System demand and reserve requirements are identical across alternatives.
- Underlying build costs for new entrants to meet system requirements are the same.
- All resources are evaluated on an unforced capacity metric as opposed to an installed capacity metric.
- Robust planning and forecasting program is in place. APPrO is confident on the IESOs approach to modelling and transparency to date on this aspect of the market design.
- Integration benefits calculated are clearly identified with the opportunity for stakeholder review; all data is available for review.

Finally, APPrO and other stakeholders have consistently characterized the current timeline as a “hurry-up” approach. APPrO is concerned that the current work schedule (i.e. a completed business case presented to and approval by the IESO Board in August) seems extremely optimistic. Reconsideration of the schedule should be undertaken.

If you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Butters', is written over a horizontal line.

David Butters
President and CEO