

Comments on Ontario Energy Board, “Staff Discussion Paper on the Review of The Ontario Power Authority’s Integrated Power System Plan and Procurement Processes”

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General comments:

1. The discussion paper is meant to provide guidance for the Ontario Power Authority (OPA) in preparing, presenting and defending its proposed Integrated Power System Plan. In doing so the paper relies on statutory and regulatory guidance, some of which is subject to the authors’ particular interpretations. The document appears also to reflect established evaluation emphases and preferences, perhaps institutionalized in the Board.
2. No integrated framework for planning and evaluation is provided even though an integrated plan is required (p.10). Instead the document’s authors have adopted an approach that separates consideration of the near-term plan and the beyond the near-term plan; further separates conservation, generation and transmission; and provides somewhat different guidance for each of the various generation options. Moreover, after presenting lengthy guidance focused on economic considerations, the authors recognize a general obligation to address other environmental considerations.
At some points, the need for a comprehensive and coherent overall evaluation is recognized, but this seems not to have affected the structure of the report, or led to an effort to describe how the various requirements might or ought to be addressed together, even in the expected comparative evaluation of overall plan alternatives.
The absence of integrated guidance reflects the lack of such guidance from the province and the different concerns and foci in the various statutes and regulations that provide the existing base for the planning and review. Nonetheless, in the absence of clarification from the province, the Board might be expected to set out its expectations in a more integrated and coherent manner. In the absence of clarification from the Board, the task will fall to the OPA and other participants in the review.
3. Perhaps there are two basic options for the Board (and/or the OPA):
 - The first would be to deal with all the plan components separately, following the particular requirements for each, and attempt to defend the overall plan without a consistent approach to the parts.

- The second would be to take all the various requirements as the minimum standards for the separate components, and to design a comprehensive and coherent overall framework that would incorporate and meet all of these while permitting a consistent and more broadly acceptable approach to all the parts and the whole plan.

The latter could take the form of a sustainability assessment with a consistent overall set of criteria and trade-off rules.

4. For construction of a usefully integrated framework for planning and evaluation, the document provides a wide range of pieces. Some of these are phrased (and perhaps conceived) in unfortunate and conflicting ways. Nevertheless, the full set is, as a rough package, probably open to interpretation and consolidation into a coherent and comprehensive set of evaluation and decision criteria. Items of particular interest include the following:

(i) Consideration of “the adequacy and reliability of electricity supply” is defined to include attention to demand management (p.1).

(ii) Economic prudence and cost effectiveness are defined to consider only “costs and tangible benefits” (p.6), with no indication of what might be included as tangible benefits except for a reference to \$/kW or \$/kWh that implies a need for monetization. If rough monetization can be done for air quality improvements, health cost reductions, system resilience gains, cuts in life-cycle wastes, etc., presumably these could be included. Moreover, the economic focus on a “least cost” option is tempered by recognition that higher economic cost options could be defended on the grounds of net advantages due to (undefined) “incremental benefits” (p.7, also pp.22-23). Overall, while the document’s discussion of economic prudence and cost effectiveness suggests a narrow emphasis, the discussion also leaves open a variety of possibilities, including openings for a broad interpretation that would accommodate most serious concerns about the long term desirability of a particular proposed integrated electricity system plan.

(iii) Elsewhere, the near-term options are generally to be compared considering “factors such as costs, financial risks to be assumed by electricity consumers, benefits, reliability and quality of service” (p.13); nuclear refurbishment studies are to consider “economic, technological and environmental aspects” (p.18); transmission proposals must meet a “system reliability standard” and “the OPA must demonstrate that the proposed solution offers the greatest net benefit of all alternatives considered (p.20). Again there is inconsistency but openness to reasonably comprehensive evaluation.

(iv) The narrowest set of explicit criteria are proposed for the “beyond the near-term plan” (p.21). The portfolio components are apparently to be selected on the basis of direct costs, timing, fit-in-system, and risk/uncertainties factors only.

(v) Perhaps trumping the narrow requirements for the beyond the near-term component, are the expectations for the overall plan. Here the emphasis is heavily on economic matters. The OPA is expected to provide a rationale for any departure from a “least cost” option and if the least cost option is proposed as the preferred plan, it appears that no

more advanced evaluation is required (pp.22-23) except as required elsewhere in the document (e.g. see point (vi) below). However, where the least cost option is not preferred, the least cost option and the preferred alternative must be compared in light of their “economic, environmental, reliability, safety, security, locational, congestion, system loss, land use and land acquisition, and other technical and non-technical attributes” (p.23). There is also reference to explicit evaluation of trade-offs (p.23). The inconsistency here is significant, though it would not hamper construction of a viable overall framework if all the particulars were considered as minimum requirements and the more comprehensive and demanding standards are applied consistently throughout.

(vi) At the end of their discussion of how the OPA should present its proposed plan, the authors of the document note that “in developing the IPSP” the OPA is required by regulation to consider “safety, environmental protection and environmental sustainability”. Accordingly the OPA is told that it “will be required to indicate how it has considered these matters in developing the IPSP” (p.24). This appears to fall short of the Board accepting that these are appropriate criteria for its review, though arguably they are at least implicitly included as criteria for other reasons at other places in the document.

The document authors do, however, offer definitions for each of the three considerations, in each case taking a remarkably narrow, if not illogical, position:

- Safety is defined to suggest that compliance with existing laws and regulations will ensure it (p.24), despite the implausibility of a fully comprehensive legal regime.
- Environmental protection is defined to suggest that mitigation of adverse effects in compliance with federal and provincial laws and regulations will ensure it (p.24), even though mitigation promises only to reduce damage, not to protect.
- “Environmental sustainability” is defined using a corruption of the standard, if vague, definition set by the World Commission on Environment and Development. The WCED referred to “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. The document authors replace “without compromising” with “in a manner that seeks to minimize impacts on” (p.25).

(vii) The proposed procurement criteria include consideration of the financial worthiness of the proponent, the status of land use rights, indirect as well as direct costs, and risks (p.31).

5. The document notes an expectation that the plan will provide a basis for facilitating implementation by streamlining project-level approval processes. Two openings are identified. The first deals with matters within the Board’s jurisdiction and suggests that a successful system plan will establish grounds for the Board to approve particular consequent undertakings without re-examining need and costs matters already addressed at the plan level (pp.7-8).

The second deals with projects that will require approval under the *Environmental Assessment Act* (p.26). Here too the expectation is that the plan level approval by the Board will streamline project level approvals, presumably by giving the province grounds to narrow the term of reference of assessments under the *EA Act*. This, however is beyond the Board’s authority and would be legitimate only if the plan-level work were as broadly

conceived (covering social, economic and cultural as well as biophysical considerations and their interrelations) and demanding (aiming for “betterment” rather than mere mitigation) as would have been required under the *EA Act*.

The implication is that the Board’s process, including its evaluation and decision criteria, must be at least equivalent to those under the *EA Act*, at least where the plan proposes projects. This is addressed in a listing of requirements for general assessment of projects, which represent a somewhat confused version of the *EA Act* requirements, but is probably intended to be equivalent (p.27). The OPA would be better advised to refer directly to the *EA Act*, especially because of that *Act*’s clearer presentation of a broad definition of “environment” and its commitment to “betterment”.

Miscellaneous other comments:

1. The presentation of the “supply mix” requirements appears to recognize that the conservation and renewables targets are minima, while a maximum is set for nuclear component capacity.
2. Only forecasting of demand and supply is expected. There is no reference to backcasting (p.11). While there is no explicit assumption that economic growth and demand growth are automatically coupled, load growth is assumed to be tied to economic growth and end use changes (p.12). There is no reference to seeking energy efficiencies though matching energy quality with end-use requirements.