GEC-Pembina-OSEA interrogatory to Dr. Booth

Mr. Chernick in his evidence states: There are at least two benefits of separate costs of capital for OPG's two lines of business. First, if the OEB establishes separate costs of capital and the mix of OPG's investment changes, due to nuclear retrofits or refurbishment or new nuclear or hydro capacity, OPG's average allowed return would automatically shift in the direction of the investment mix. The return would only need to be updated for changes in market rates or the underlying risk in either OPG business segment. Second, when OPG is reviewing options for capital investments—capital to reduce operating cost, capital to increase output, capital to extend operating lives—it's analysis should reflect the different costs of capital for nuclear and hydro investments. Please comment on this suggestion of distinct costs of capital for the nuclear and hydraulic businesses on the rationale above and on the compatibility of that approach with the cost of capital proposal you have made. Assuming that the combined cost of capital would equal the value you have recommended for the initial rate period, what spread between the two divisions would you suggest (for both ratio and ROE as appropriate) if such a spread were to be utilized by the Board?

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Answer

As Dr. Booth indicated in his executive summary

> **Although in an absolute sense, nuclear generation is inherently more risky than Hydro, I would use the same common equity ratio for both. The reasons for this are that the major risks are not borne by OPG, but by ratepayers through the extensive use of deferral accounts. Further it would be my expectation that should a significant risk materialise, the Province would intervene to allocate the costs either to ratepayers or taxpayers. In this respect it is important to "pierce the corporate veil" and recognise that OPG is still owned by the people of this province and it is *they* who will bear the risks attached to nuclear whether as taxpayers, shareholders or ratepayers. It is then *double counting* the risks of nuclear to charge ratepayers higher financial costs, through ROE and the common equity ratio, while also having them bear substantially all the risks**.

It is clear from this that Dr. Booth believes that while nuclear is inherently more risky than Hydro, these risks are borne by ratepayers and not the company. It is therefore contradictory for OPG to get a higher cost of capital for risks that it is not bearing and to double charge ratepayers for the same risks; the first part of the questions is therefore moot. If the Board decides to "double charge" ratepayers for the risks of nuclear then separate costs of capital by definition would be appropriate.

For the second part of the question, Dr. Booth also said

> **However, this risk assessment is based on existing assets with OPG's risk mitigated by deferral accounts; OPG is then making a fundamental mistake in using the same discount rate (hurdle rate) for evaluating *new* investments (L-3-1-2c) in all its generating assets. For new project appraisal OPG should be taking into account the total risks imposed on ratepayers, taxpayers and investors. It is disturbing that OPG has not analysed the social cost of capital (L-3-1-3h) or taken into account the total risks that new nuclear investments impose over and above the risks of hydro and peaking assets. In making the same mistakes as the old Ontario Hydro, rate payers are implicitly being asked to bear the same risks that lead to the $20 billion stranded nuclear debt charge. Such a practise is contrary to any and all financial principles that I am aware of.**

From this it is clear that Dr. Booth believes that OPG should use separate costs of capital for analysing nuclear versus hydro investments. Otherwise there is an incentive to invest in the riskier nuclear assets. This would apply to both "Greenfield" nuclear plants and substantial refurbishments. Although in the latter case it is not clear that refurbishing existing assets is as risky as a "Greenfield" plant.