IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B;
AND IN THE MATTER OF a review of an application filed by Ontario Power Generation for an order or orders approving a revenue requirement and rates and other charges for prescribed generating facilities for 2011 and 2012.

Submissions of the Society of Energy Professionals

1. The following are the Society of Energy Professionals' ("the Society") submissions on selected issues reviewed in the matter of Ontario Power Generation's ("OPG" or the "Applicant") 2011-2012 Rate Application (EB-2010-000).
2. OPG filed an application, dated May 26, 2010, with the Ontario Energy Board under section 78.1 of the *Ontario Energy Board Act,1998,* S.O. 1998, c.15, Schedule B (the "Act") seeking approval for increases in payment amounts for the output of certain of its generating facilities, to be effective March 1, 2011.
3. The Society of Energy Professionals has represented professional engineers, scientists, supervisors and other professionals at OPG and other Ontario Hydro successor companies since the energy sector was restructured in 1999. Prior to 1999, the Society represented professional employees and supervisors at Ontario Hydro.
4. The Society and OPG have been party to a number of collective agreements since 1999. The current collective agreement between the Society and OPG expires December 31, 2010. The Society currently represents more than 3000 professional employees and supervisors who are employed at OPG.
5. OPG is seeking approval of a revenue requirement of $1,435.7M for the regulated hydroelectric facilities and a revenue requirement of $5,473.9M for the nuclear facilities for the test period January 1, 2011 to December 31, 2012.[1]
6. OPG indicated, in its published Notice of Application, that if the application was approved as filed, there would be an average 6.2% increase in payment amounts. This increase would mean an increase of $1.86 on the monthly total bill for a typical residential customer consuming 800 kWh per month.
7. The Society submits that the revenue requirement sought by OPG in this application is reasonable, and as such, should be granted by the Board.
8. The Society submission will address selected issues with respect to OPG's requested revenue requirements.

Pickering B Continued Operations

9. The Pickering B Continued Operations program is designed to add a four year operating life extension to the four Pickering B units. The proposed life extension would extend the shutdown of the Pickering B units from the currently planned 2014-2016 timeline out until

[1] Source: ExhI1/Tab1/Sch1, Table 1

2018-2020.[2] OPG proposes to achieve the goal of additional operating life through enhanced incremental maintenance, inspections and analyses.[3]

10. OPG proposes to support continued operations by undertaking the certain activities in the bridge year and test period, including:
    - additional maintenance to improve the plant's material condition and ensure the continued fitness-for-service of the plant's major components over the additional operating period,
    - increased inspections,
    - increased Spacer Location and Relocation work,
    - selective feeder replacement, and
    - Fuel Channel Life Cycle Management project, an OPG-initiated project undertaken as a CANDU Owners Group joint-funded program, to increase the certainty about the remaining service lives of CANDU units.[4]
11. The test period costs for continued operations are $92.9M and OPG estimates that Pickering B Continued Operations has a net present value of $1.1B (2010 dollars). The latter figure is derived by subtracting the estimated cost of Pickering B's output from the estimated cost of replacement generation. Given that life extension at Pickering B enables additional operating life at Pickering A, the benefit of Pickering B continued operations includes $420M in benefit derived additional production from Pickering A.[5] In addition to the Net Present Value benefits of continued operations, significant additional benefits are derived from the deferral of transmission upgrades that will be necessitated by the closure of Pickering A and B and the increased availability of nuclear base load generation from Pickering during the first part of the Darlington refurbishment.[6]
12. OPG forecasts that continued operations will increase the net output of Pickering B by 61.9 TWh over four years of life extension, and this nuclear baseload production will be further supplemented by 43.1 TWh of incremental production from Pickering A operations that will subsequently be enabled.[7]
13. The Society submits that the $1.1B benefit of the Pickering B Continued Operations project would, in and of itself, justify the test period revenue requirement of $92.9M. This benefit is coupled with the additional benefits of transmission upgrade deferral and the system benefit of ensuring nuclear baseload supply during Darlington refurbishment outages.
14. The Society submits that the OEB should approve OPG's proposed expenditures with respect to this project.

Darlington Refurbishment

15. OPG has submitted plans to refurbish Darlington units 1-4, thus enabling safe operation until approximately 2051.
16. Accordingly, OPG, it is seeking the following approvals associated with the project:

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[2] Ex. F2-T2-S3
[3] OPG Argument-in-Chief, pg 28
[4] Ex. F2-T2-S3, page 6
[5] Ex. F2-T2-S3
[6] Ex. F2-T2-S3, pg. 7
[7] Ex. F2-T2-S3, Attachment 1, page 17

- Approval of test period OM&A costs (which form part of the Nuclear revenue requirement) of $5.9M and $4.5M in 2011 and 2012, respectively, for definition phase work for the Darlington Refurbishment project,
- Changes in rate base, return on rate base, depreciation expense, tax expense and Bruce lease net revenues that result from the impacts of the service life extension, for purposes of calculating depreciation, and the change in the Nuclear liabilities associated with Darlington Refurbishment.
- An increase in rate base to reflect the inclusion of Construction Work In Progress ("CWIP") for the Darlington Refurbishment Project
- The recovery of the difference between forecast 2010 non-capital costs associated with the Darlington Refurbishment project and the costs underlying the payment amounts established in EB-2007-0905.

17. The revenue requirement impacts of the Darlington Refurbishment project produce an overall revenue requirement decrease of $197.1M during the test period. This negative adjustment to the revenue requirement is the result of a number of factors, but the key drivers are lower depreciation expense owing to the station's life extension and the resulting impact on the lower asset retirement obligation and asset retirement cost ("ARC"). The refurbishment also produces significant regulatory tax reductions, and there will be attendant reductions in Bruce ARC, depreciation and accretion expense due to a lower percentage of common waste disposal costs being allocated to the Bruce facilities.[8]
18. OPG has concluded with very high confidence that the project will have a Levelized Unit Energy Cost ("LUEC") of less than 8 cents per kilowatt hour in 2009$, based on Economic Feasibility Assessment of Darlington Refurbishment.[9] Sensitivity analyses and statistical analysis support a high degree of confidence in the estimated LUEC range. The assessment showed Darlington refurbishment to be a more economic option than other baseload generation alternatives such as new nuclear development or combined cycle gas turbine (CCGT) generation.
19. The OPA agreed with OPG's position that, based on OPG's projected LUEC of between 6 and 8 cents/kWh, Darlington refurbishment is an economic alternative in comparison to the cost of combined-cycle gas turbines, new nuclear or renewable sources.[10] Project approvals have been given by OPG's Board of Directors and endorsed by the Province via a communication from the Minister of Energy concurring with the decision of the Board of Directors.[11]
20. On November 23, 2010 the shareholder released its' new Long Term Energy Plan[12], in which it committed to full refurbishment of all 4 units at Darlington.
21. For all of the above reasons, the Society submits that OPG has satisfactorily demonstrated that the Darlington Refurbishment Project is the most economic means through which to ensure required nuclear baseload generation, and as such, the budget should be approved as submitted.

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[8] Ex. D2-T2-S1, page 3
[9] Ex. D2-T2-S1, Attachment 4
[10] Ex. F2-T2-S3, Attachment 2
[11] Ex. D2-T2-S1, Attachment 3
[12] Exh. K 16.2, pg. 23

CWIP In Rate Base

22. OPG is seeking Board approval to include CWIP in rate base for the Darlington Refurbishment project, which would result in an addition to rate base of $125.5M in 2011 and $306.0M in 2012 and has a test period impact of $37.9M on the nuclear revenue requirement.[13]
23. There are two well recognized benefits to including CWIP in rate base: 1) a smoothing effect on rates over time, mitigating the rate shock that might occur when large capital intensive projects; and, 2) a reduction in the cost of borrowing.
24. OPG contends that its proposal to include CWIP in baserate is: a)consistent with the OEB's recent report concerning the regulatory treatment of infrastructure[14]; and, b) will lessen the rate shock experienced by ratepayers when the refurbished reactors start to come into service in about 2020.
25. In support of the former, the Society submits that while the Report of the Board on The Regulatory Treatment of Infrastructure Investment ("the Report") is not entirely on point with respect to the current situation, either in terms of the type of infrastructure in question (generation vs. transmission), or with respect to the directly causal relationship between the imperative to construct and the Green Energy Act, OPG has made no direct claim that the current instance falls within the scope of the report. Rather OPG suggests, and the Society concurs, that the proposal to include Darlington CWIP in baserate is "consistent with"[15] the report, and that the end result would be "consistent with"[16] the OEB Chair's stated desire to, "…create conditions which could foster timely investment by utilities in required infrastructure"[17].
26. OPG outlines the similarities between the Darlington Refurbishment and the types of projects contemplated by the Report in its Argument-in-Chief:

    "OPG submits that inclusion of CWIP in rate base for the Darlington Refurbishment project meets the criteria for qualifying investments specified by the OEB in its Report. The project spans a number of years, has material costs (i.e., it is capital intensive) and it will form a significant portion of OPG's rate base once placed into service. Moreover, the risks of the project are similar to those noted by the OEB for green energy projects, which include risks related to project delays, public controversy, and the recovery of costs".[18]

27. The Society submits that OPG has made a reasonable case that, in an instance where a project meets criteria outlined by the OEB in it's Report on transmission and distribution investment, similar consideration should be given to CWIP in baserate for generation infrastructure projects.
28. The Society also supports OPG's contention that including CWIP in baserate will lessen the rate shock experienced by ratepayers when refurbished reactors begin coming on line in 2020. The projected cost of the Darlington Refurbishment project is between $6B and $10B in 2009 dollars. At midrange, these costs are roughly on par with OPG's combined regulated hydroelectric and nuclear rate base of approximately $7.8B[19], clearly demonstrating the significance of the Darlington project in relation to OPG's overall regulated ratebase.

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[13] Ex. B3-T1-S1 Table 1
[14] EB-2009-0152
[15] OPG Argument-in-Chief, pg 74

[16] OPG Argument-in-Chief, pg 75

[17] ibid
[18] OPG Argument-in-Chief, pg 75-76
[19] OPG Argument-in-Chief, pg 76

29. Although OPG has been unable to precisely quantify the impact of CWIP in baserate on borrowing costs, the Society submits that the Applicant has provided sufficient support that the impact will be directionally negative and significant:

> "In Ex. A2-T3-S1, both of the rating agencies that assess OPG (Standard & Poor's and DBRS) rated OPG's long-term credit rating in the low "A" range. Both agencies referenced OPG's nuclear program and Standard & Poor's specifically referenced weak cash flow metrics.
>
> Similarly, Fitch Ratings noted in a discussion of nuclear plant construction financing: "For regulated U.S. utilities, the availability of a cash return on construction work in progress (CWIP) would reduce the construction risk." Clearly, inclusion of CWIP in rate base will improve OPG's interest coverage ratios, would help OPG's ratings, and lower overall financing costs, although the precise impact is uncertain".[20]

Compensation

30. With respect to compensation, the Society recognizes that the Board is obligated to ensure the prudence and reasonableness of OPG's compensation costs. The Society also appreciates that this particular rate hearing is coincident with a great deal of public and political debate with respect to both electricity rates and public sector salaries. The Society submits that in order to fulfill its mandate under the Act, the Board faces the difficult, but necessary task of rising above this charged atmosphere to make decisions based solely on current facts and reasonable projections of future outcomes.
31. The Society submits that, based on both current facts and on realistic forecasting with respect to future obligations for collectively bargained compensation, OPG's requested revenue requirement for compensation is both reasonable and prudent, and should be granted.
32. OPG's current workforce demographic is aging rapidly and poses increasingly daunting retention and attraction challenges to the company. Fully half of the current workforce is 47 years of age or older,[21] and it is estimated that between 20-25% will need to be replaced due to retirement or termination between 2010 and 2014.[22] Indeed, at present, a significant proportion of the workforce is eligible to retire.[23]
33. The Society does have some concerns with projected reductions in staff over the business plan period, as we believe that the reductions in staffing levels are too large and may negatively impact unit performance. As the workforce decreases, there is the potential for less critical work to be deferred or delayed and this may result in lower production levels for the nuclear units in the future. The Society submits that a slower reduction in staffing levels will result in a better plan that ensures the continued reliable and safe operation of these units.
34. The Applicant faces a dual need, both to incent employees currently eligible to retire to remain in the OPG workforce, and to recruit the best available new talent in an increasingly competitive environment.
35. Even in the overall context of a rapidly expanding electricity sector and an aging workforce, OPG competes for talent in a particularly rarified segment of the sector. The

[20] OPG Argument-in-Chief, pg 77-78
[21] Exh. F4-T3-S1, pg. 3
[22] ibid
[23] ibid

Applicant contends, and the Society concurs, that given the complex nature of the company and the diverse mix of generation technologies supported, OPG staff must be highly skilled and posses a wider array of skills than employees in many other utilities.

36. Parties in this proceeding who make the assertion that OPG compensation costs are excessive rely heavily on the benchmarking of OPG salaries against respondents from the Power Services Industry survey conducted by Towers Perrin.[24] Board staff, in their final submission, make much of the fact that, based on 30 positions selected for comparison, OPG compensation is 6% above the 75th percentile of the Towers Perrin survey cohort. Further, Board staff challenge the use of the 75th percentile as the appropriate benchmarking target and suggest that the 50th percentile is the more appropriate target.[25]
37. Two questions are raised here, one explicitly and one implicitly. The explicit question which is raised by Board staff is whether use of the 75th percentile is appropriate. An implicit question, of fundamentally greater importance, and one which Board staff does not address, is whether the Towers Perrin Power Services Industry survey is even an appropriate dataset for comparisons of this nature.
38. For a company such as OPG, given its size, regulated nature, complexity and ownership structure, external benchmarking will always be problematic. The Society submits that benchmarking against a broad and generic comparator cohort, even within the power services industry, will most often be inappropriate and will most often result in misleading conclusions.
39. In cross examination[26], it was established that the Towers Perrin survey was an “off the shelf” report, and not a report customized for OPG which makes use of only the most relevant comparators. The inclusion of patently inappropriate comparators such as the City of Medicine Hat Hydro Division or Nexen Inc., and the fact that only four comparators are CNSC regulated[27], strongly suggests that if Towers Perrin is to be used at all, benchmarking at the 75th percentile is more than reasonable. In fact, OPG contends, and the Society concurs, that the companies surveyed for the Towers Perrin Power Services Industry report are “not the OPG comparators. These are the firms that Towers Perrin surveyed to get data for the report”.[28]
40. The Applicant has also provided some benchmarking against what the Society submits is a far more appropriate group: Bruce Power and other Ontario Hydro successor employers.
41. In relation to its most relevant comparator, Bruce Power, overall OPG salaries are generally lower; as much as 10% lower on a weighted average basis for PWU represented positions.[29]`
42. General wage increases for Society represented employees were lower than 4 of the 6 other Ontario Hydro successor companies between 2001-2009; general wage increases for PWU represented employees in the same period were lower for OPG than any other successor company.[30]

[24] Exh F4-T3-S1, pg. 30-31
[25] Board Staff Submission, Ontario Power Generation Inc., 2011-2012 Payment Amounts (EB-2010-0008)
[26] Trans. Vol. 9, pg 16-17
[27] Trans. Vol. 8, pg 164
[28] Trans. Vol. 8, pg. 152-153
[29] Exh. F4-T3-S1, pg. 32-33
[30] Exh. F4-T3-S1, pg. 9

43. OPG has also been able to achieve some significant cost reductions in recent rounds of collective bargaining, through restructuring pay bands for Society represented employees, skill broadening, adjustments to benefit programs and increased employee contributions toward pension costs.[31]
44. While it should be clear that OPG has attempted to contain and control costs through the collective bargaining process where possible, it must be noted that in the context of collective agreement renewal under the *Ontario Labour Relations Act*, there are real limitations, derived both from the *Act* and from *Section 2* of the *Canadian Charter of Rights and Freedoms*, on the ability of OPG to extract economic concessions from its represented employees.

Public Sector Wage Restraint and Collective Bargaining at OPG

45. In the spring of 2010, the Ontario Legislature passed into law the *Public Sector Compensation Restraint to Protect Public Services Act, 2010*. The Act covers "all public sector employers who have employees who do not collectively bargain"[32] and freezes the compensation for all non-bargaining employees in the broader public sector for two years. It is worthy of note that the *Act* explicitly allows compensation increases due to movement through an existing pay grid based on factors such as length of service or job performance.
46. OPG has implemented the *Act* with respect to all non-unionized employees resulting in a savings of $12M, although there was no reduction in revenue requirement due to an offsetting increase of $13M in CNSC regulatory fees.[33]
47. The *Act* makes no similar prohibitions with respect to employees who collectively bargain, but an attendant policy statement released by the government states: "Employees who are part of a union … would see their current agreements honoured. When these agreements expire and new contracts are negotiated, the government will work with transfer payment partners and bargaining agents to seek agreements of at least two years' duration that do not include net compensation increases….It doesn't matter whether contracts expire next month, next year or the year after that – all employers and employee groups will be expected to do their part."[34]
48. The policy statement with respect to unionized public sector employees has no force of law and is not binding on trade unions, arbitrators, or even, in a technical sense, public sector employers.[35] The policy statement, in effect, expresses the desire to achieve a particular end with respect to public sector collective bargaining, without providing any operable mechanism to achieve that end. In the end, it does nothing to abrogate the rights of unions, under the *Ontario Labour Relations Act* and *Section 2* of the *Canadian Charter of Rights and Freedoms*, to free and unfettered collective bargaining.
49. OPG is a heavily unionized employer. In fact, approximately 90% of OPG employees are represented, with 60% being represented by the PWU and 30% being represented by the Society. The PWU bargains with OPG in the context of a strike/lockout mechanism, while OPG's contract with the Society dictates a mandatory recourse to arbitration in the event that the parties cannot conclude a renewal through two party bargaining.

[31] Exh. F4-T3-S1, pg. 15-19
[32] Exh. K 8.3
[33] OPG Argument-in-Chief, pg. 49
[34] Exh. K 8.3
[35] Trans. Vol. 9, pg. 47

Regardless of the conflict resolution mechanisms, there are ultimately only two paths to concluding an agreement renewal: two party agreement or an arbitrated settlement.[36]

50. With respect to 90% of its workforce, OPG has no ability to unilaterally set compensation levels, they must be collectively bargained. While the outcome of a given round of bargaining cannot be predetermined, reasonable projections as to outcome can be made based on historical patterns of settlement between the parties, prevailing trends of settlement at a given point in time, arbitral jurisprudence and the like. The Society submits that OPG, taking the aforementioned and other factors into account, has made a reasonable and prudent projection about the likely or possible outcomes of future collective bargaining, and budgeted appropriately.
51. Historical patterns of contract settlement indicate that general wage increases for PWU and Society represented staff have fallen between 2% and 3% over the past decade.[37] In contrast to the approach suggested by Board staff[38], *these wage increases were not inclusive of progressions through and within bands.* This is a strong and consistent trend which the Society submits will weigh heavily on the decision making of arbitrators.
52. Recent arbitration awards at the Electrical Safety Authority and the University of Toronto were entered into evidence by the PWU. Both awards were made after the *Public Sector Compensation Restraint to Protect Public Services Act, 2010* came into force of law, and both decisions awarded general wage increases that did not conform to the government policy statement. In the case of the Electrical Safety Authority, the arbitrator awarded Society represented employees general wage increases of 3% annually, consistent with OPG's projection of the likely outcome of current bargaining.[39]
53. Reasons provided by arbitrator Teplitsky in the University of Toronto decision provide particularly relevant insight into the fiercely guarded nature of arbitral independence and the unwillingness of arbitrators to comply with policies around compensation that do not have the force of law:

> "Presumably the reach of the Act was limited because of a concern that including unions and associations would infringe on freedom of association in the Charter of Rights".[40]
>
> "In this [policy] release, the Government asserts that any negotiated increases will not be funded. Because public sector workers are dependant on Government funding, in whole or in part, this is a very serious threat, which would impact any employer's bargaining position".[41]
>
> "The parties know that ability to pay has been rejected by interest arbitrators for at least for decades".[42]
>
> "This is a clear case of either requiring or asking public sector employees to subsidize the public because public services benefit the public as a whole. A more

[36] Trans. Vol. 8, pg. 36
[37] Exh. F4-T3-S1, pg. 9
[38] Board Staff Submission, Ontario Power Generation Inc. 2011-2012 payment amounts EB-2010-0008, pg. 69
[39] Exh. K 9.1 and K 9.2
[40] Exh. K 9.2, pg. 3
[41] Exh. K 9.2, pg. 4
[42] Exh. K 9.2, pg. 5

equitable approach would be to spread the pain widely by measure which increase revenues (more taxes or user fees) although I recognize that such measures would be less popular than the one adopted by government. I agree with UTFA that recognizing the "Act" as relevant would be a recognition of ability to pay as relevant criterion and recognizing the policy statement would compromise my independence. I would appear to be a minion of government. Thus, in fashioning this award, I have not taken into account either the legislation or the policy".[43]

54. The Society submits that what certain parties are urging the Board to do in the current instance by not funding the likely normative outcomes of bargaining or arbitration[44], is to act as a proxy for government in a situation where the employer is not funded by transfer payments. Arbitrator Teplitsky's cautions about the jurisprudence on ability to pay, and the analogous role of taxes, user fees and electricity rates should not be lost on the Board, as the Society submits that they will not be lost on other arbitrators.
55. OPG is entitled to recover costs, including costs related to compensation, that are reasonable and prudently incurred. The Society submits that the only appropriate lens through which a judgment about the reasonableness and prudence of collectively bargained compensation costs can be made is the realm of bargaining outcomes which are actually, as opposed to theoretically, possible.
56. Intervenors for ratepayers groups, Board staff, the Board itself and even OPG's shareholder may have strongly held beliefs about the magnitude of economic concessions that OPG should extract from its represented employees. No doubt OPG will make best efforts to achieve further cost containment at the bargaining table; it is bound by the policy of its shareholder to seek, at a minimum, two years of net zero compensation increase.
57. The Society submits that OPG should not be punished should it conclude a collective agreement renewal, either through two party or arbitral mechanisms, that fails to deliver on the expectations and beliefs of those who are not a party to bargaining. It is neither unreasonable nor imprudent to fail to achieve a result which is not actually possible.
58. In conclusion, given the above argument, the Society submits that the Board should approve OPG's compensation costs as filed.
59. In the alternative, if the board believes that a 3% economic increase is unlikely to be granted by an arbitrator then it may consider the creation of a variance account or the allocation of this variance to an existing account where any amount less than 3% if negotiated or awarded by an arbitrator will be held for clearing at the end of the 2 year period.

Conclusion

60. For all of the above reasons, and considerations that call for the Board's appropriate judgment with respect to the individual components of the application, the Society respectfully submits that OPG's prposed 2011-2012 revenue requirement is reasonable and prudent, and therefore merits Board approval as proposed.

[43] Exh. K 9.2, pg. 5-6
[44] Board Staff Submission, Ontario Power Generation Inc. 2011-2012 payment Amounts EB-2010-0008, pg. 69

ALL OF WHICH IS RESPECTFULLY SUBMITTED