



EB-2016-0152

Ontario Power Generation Inc.

**Application for payment amounts for the period from
January 1, 2017 to December 31, 2021.**

**DECISION ON ISSUES LIST
September 23, 2016**

Ontario Power Generation Inc. (OPG) filed an application with the Ontario Energy Board (OEB) on May 27, 2016 under section 78.1 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, (Schedule B), seeking approval for changes in payment amounts for the output of its nuclear generating facilities and most of its hydroelectric generating facilities. The request seeks approval for nuclear payment amounts to be effective January 1, 2017 and for each following year through to December 31, 2021. The request seeks approval for hydroelectric payment amounts to be effective January 1, 2017 to December 31, 2017 and approval of the hydroelectric payment amount setting formula for the period January 1, 2017 to December 31, 2021.

In Procedural Order No. 1, issued on August 12, 2016, the OEB made provision for submissions on the draft issues list at Exh A1-10-1 of the application, reproduced as Schedule B of the Procedural Order. Initial submissions were filed on August 31, 2016 and reply submissions on September 9, 2016.

Submissions on the draft issues list were received from the following parties: OEB staff, Association of Major Power Consumers in Ontario (AMPCO), Consumers Council of Canada (CCC), Energy Probe Research Foundation (Energy Probe), Environmental Defence Canada Inc. (Environmental Defence), Independent Electricity System Operator (IESO), School Energy Coalition and Sustainability-Journal. Reply submissions were received from OEB Staff and OPG. While no provision was made for further submissions, Sustainability-Journal filed additional submissions on September 14, 2016 on OPG's reply submission.

The OEB has considered all submissions on the draft issues list in establishing a final non-prioritized issues list. The submissions are referred to where required below.

1. GENERAL

Submissions were filed on issues 1.2 and 1.3 of OPG's draft issues list.

- 1.2 Are OPG's economic and business planning assumptions appropriate for the nuclear assets?
- 1.3 Is the overall increase in nuclear payment amounts reasonable given the overall bill impact on customers?

AMPCO proposed that issue 1.2 of OPG's draft issues list be revised to exclude specific reference to nuclear assets to cover the business planning assumptions that support all aspects of the application. Both OEB staff and OPG replied that the revision should not be approved as the hydroelectric application is based on the incentive regulation mechanism (IRM) methodology. OPG stated that as the IRM methodology decouples ratemaking from costs, the focus of issue 1.2 should only be nuclear.

Appropriate economic and business planning assumptions should underpin the operations of all utilities. However, as the hydroelectric application is based on IRM, only the economic and business planning assumptions impacting the nuclear facilities will be examined in the proceeding. Issue 1.2 has been revised to incorporate assumptions that impact the nuclear facilities.

- 1.2 Are OPG's economic and business planning assumptions that impact the nuclear facilities appropriate?

Energy Probe proposed revising issue 1.3 to: *Is the overall increase in nuclear payment amounts, including any rate riders and excluding rate smoothing, reasonable given the bill impact on customers?* Energy Probe submitted that the bill impact should include any rate riders that OPG may request over the life of the application. OEB staff replied that consideration of rate riders was subsumed under deferral and variance account issue 9.4 (*Is the disposition methodology appropriate?*), while OPG replied that Energy Probe's submission regarding rate riders was confusing as OPG has only proposed riders for 2017 and 2018. Both OEB staff and OPG replied that rate smoothing is consistent with the requirements of O. Reg. 53/05. OPG further noted that the rate smoothing proposal is considered under issue 11.3 of OPG's draft issues list.

The OEB notes that the issue refers to “overall increase” and the OEB finds that consideration of rate riders, if only for 2017 and 2018, should be included in the review of the overall increase. The issue will be revised to make this expectation clear. As submitted by OEB staff and OPG, rate smoothing is a requirement of O. Reg. 53/05. Unsmoothed rates will be considered in determining the approved smoothed rates.

1.3 Is the overall increase in nuclear payment amounts including rate riders reasonable given the overall bill impact on customers?

2. RATE BASE

Submissions were filed on issue 2.1 of OPG’s draft issues list and an additional issue was proposed.

2.1 Are the amounts proposed for nuclear rate base appropriate?

OEB staff proposed that issue 2.1 of OPG’s draft issues list be revised to: *Are the amounts proposed for nuclear rate base (excluding those for the Darlington Refurbishment Program) appropriate?* OEB staff further proposed a second issue specific to DRP, namely: *Are the amounts proposed for nuclear rate base for the Darlington Refurbishment Program appropriate?* OPG did not oppose the proposal.

Energy Probe submitted that the OEB should consider the timing for increases in rate base given the history of nuclear projects. OEB staff replied that the timing is considered in the issue as currently worded and that concerns with respect to project delays are addressed to some extent by the capacity refurbishment variance account. The OEB agrees with the reply submission of OEB staff and finds that no reference to timing is required as timing is already considered in the issue as written.

2.1 Are the amounts proposed for nuclear rate base (excluding those for the Darlington Refurbishment Program) appropriate?

2.2 Are the amounts proposed for nuclear rate base for the Darlington Refurbishment Program appropriate?

3. CAPITAL STRUCTURE AND COST OF CAPITAL

A submission was filed on issue 3.1 of OPG’s draft issues list.

3.1 Are OPG’s proposed capital structure and rate of return on equity appropriate?

Energy Probe proposed adding “*given the heightened financial and economic risks associated with nuclear refurbishment*” to issue 3.1. Both OEB staff and OPG replied that the addition did not change the scope of the issue. OPG further replied that the addition was inappropriate as it would require the OEB to make a determination on risk.

The OEB finds that the issue as written is sufficiently broad to address Energy Probe’s proposed revision.

4. CAPITAL PROJECTS

Submissions were filed on issues 4.1, 4.2 and 4.4 of OPG’s draft issues list and additional issues were proposed.

- 4.1 Do the costs associated with the nuclear projects that are subject to section 6(2)4 of O. Reg. 53/05 and proposed for recovery meet the requirements of that section?
- 4.2 Are the proposed nuclear capital expenditures and/or financial commitments reasonable?
- 4.3 Are the proposed test period in-service additions for nuclear projects (excluding those for the Darlington Refurbishment Program) appropriate?
- 4.4 Are the proposed test period in-service additions for the Darlington Refurbishment Program appropriate?

Environmental Defence sought confirmation that issue 4.1 allowed parties to examine whether there was alignment of nuclear expenditures with the Government of Ontario’s Long-Term Energy Plan (LTEP). AMPCO proposed the additional issue: *Does OPG’s DRP strategy align appropriately with the Government of Ontario’s Long Term Energy Plan?* OPG replied that O. Reg. 53/05 establishes that the OEB shall accept the need for DRP in light of the LTEP. OEB staff replied that external requirements, e.g. LTEP and Canadian Nuclear Safety Commission determinations, are considered in payment amount proceedings. OEB staff noted that the decision of the previous decision, EB-2013-0321, stated that a review and determination of whether the Darlington refurbishment aligned with the LTEP was outside the OEB mandate.

As noted in OPG’s reply submission, O. Reg. 53/05 establishes that the OEB shall accept the need for DRP in light of the LTEP. In OPG’s evidence at Exhibit D2 Tab 2 Schedule 1 page 11, OPG notes that the LTEP also directed OPG to minimize and mitigate risk, entrench off ramps, incorporate lessons learned, etc. To the extent that these directions have been addressed by OPG, and have impact on payment amounts, it is relevant for the OEB to examine the alignment with the LTEP.

4.1 Do the costs associated with the nuclear projects that are subject to section 6(2)4 of O. Reg. 53/05 and proposed for recovery meet the requirements of that section?

OEB staff proposed that issue 4.2 of OPG's draft issues list be revised to: *Are the proposed nuclear capital expenditures and/or financial commitments (excluding those for the Darlington Refurbishment Program) reasonable?* OEB staff further proposed an additional issue specific to DRP, namely: *Are the proposed nuclear capital expenditures and/or financial commitments for the Darlington Refurbishment Program reasonable?* OPG disagreed with the additional issue as OPG has not sought approval for DRP capital expenditures and the annual costs of different components of DRP will vary over the test period. OPG stated that what is relevant is in-service additions and that issue 4.4 captures this matter. OPG believes that the approach taken by the OEB in the previous proceeding, EB-2013-0321, wherein the OEB did not approve DRP capital but focused on in-service additions, should continue.

While OPG has not requested specific approval of DRP capital expenditures in the test period, the issue on DRP capital expenditures proposed by OEB staff will allow for an examination of the entire program including the contracts. The examination will provide context for this major nuclear capital project.

4.2 Are the proposed nuclear capital expenditures and/or financial commitments (excluding those for the Darlington Refurbishment Program) reasonable?

4.3 Are the proposed nuclear capital expenditures and/or financial commitments for the Darlington Refurbishment Program reasonable?

Energy Probe stated that the \$12.8 billion DRP cost should be examined in this proceeding and that any evidence could be used in prudency reviews conducted at a future date. The issue: *Is OPG's cost estimate of \$12.8 billion for the Darlington Refurbishment [Program] reasonable and appropriate?* was proposed. OPG replied that the proposal should not be accepted as the OEB would be required to consider costs outside the test period that are not addressed in evidence. OPG referred to the decision of the previous proceeding, EB-2013-0321, which states, "The [OEB] notes that the majority of the capital expenditures proposed will not be added to rate base within the test period. The [OEB] will not determine whether the amounts are reasonable or not, deferring that decision until OPG seeks to add these capital expenditures to rate base." In reply, OEB staff noted that the OEB has no mandate to

consider whether DRP should go forward, and that test period costs will be reviewed in the current proceeding.

The OEB will not add the issue proposed by Energy Probe. Consistent with its previous practice, the OEB will only be making approvals (or disallowances) for costs that will be reflected in payment amounts for the test period. However, the OEB recognizes that the DRP is multi-year mega project, and that the amounts that are projected to close to rate base in the test period are an integral part of the total cost of the project. The \$12.8 billion total projected cost for the DRP is certainly a contextual factor that will be considered by the OEB in its assessment of the current application.

5. PRODUCTION FORECAST

A submission was filed on issue 5.1 of OPG's draft issues list.

5.1 Is the proposed nuclear production forecast appropriate?

Energy Probe proposed adding "*given the heightened financial and technical risks associated with nuclear refurbishment*" to issue 5.1. Both OEB staff and OPG replied that the addition did not change the scope of the issue. OPG further replied that the addition was inappropriate as it would require the OEB to make a determination on risk.

The OEB finds that the issue as written is sufficiently broad to address Energy Probe's proposed revision.

6. OPERATING COSTS

Submissions were filed on issues 6.1, 6.2, 6.5, 6.6, 6.7 and 6.8 of OPG's draft issues list.

- 6.1 Is the test period Operations, Maintenance and Administration budget for the nuclear facilities appropriate?
- 6.2 Are the benchmarking results and targets flowing from OPG's nuclear benchmarking reasonable?
- 6.4 Is the test period Operations, Maintenance and Administration budget for the Darlington Refurbishment Program appropriate?
- 6.5 Are the test period expenditures related to extended operations for Pickering appropriate?
- 6.6 Are the test period human resource related costs for the nuclear facilities (wages, salaries, benefits, incentive payments, FTEs and pension costs) appropriate?
- 6.7 Are the corporate costs allocated to the nuclear businesses appropriate?

6.8 Are the centrally held costs allocated to the nuclear business appropriate?

The OPG draft issues list proposed issue 6.4, i.e. a separate OM&A issue for DRP. OEB staff submitted that, for consistency, issue 6.1 should be revised to exclude DRP. OEB staff also submitted that issue 6.2 should include reference to benchmarking methodology. The addition would be consistent with previously approved issues lists for OPG proceedings, and is relevant in the current proceeding as the nuclear payment amounts are filed under a five year Custom IR framework. OPG did not object in reply to these proposed revisions, and the OEB approves the revisions.

6.1 Is the test period Operations, Maintenance and Administration budget for the nuclear facilities (excluding that for the Darlington Refurbishment Program) appropriate?

6.2 Is the nuclear benchmarking methodology reasonable? Are the benchmarking results and targets flowing from OPG's nuclear benchmarking reasonable?

CCC submitted revision to issue 6.5 to make the issue broader so that all of OPG's proposals regarding Pickering are considered by the OEB. CCC proposed: *Are OPG's proposals related to the extended operations for Pickering and the impacts on the payment amounts appropriate?* In reply, OEB staff observed that the issue structure proposed by OPG is the same as that approved by the OEB in the 2011-2012 proceeding when Pickering continued operations was considered. OEB staff submitted that issue 6.5 as proposed by OPG is sufficient to permit the evaluation of cost effectiveness of Pickering extended operations. OPG replied that CCC's proposal should be rejected referring to Ministry of Energy endorsement of Pickering extended operations. OPG also referred to the issues list decision of the previous proceeding, EB-2013-0321, which stated that "Parties are reminded that the Board's jurisdiction is the setting of payment amounts and not the management of OPG's activities or the selection of generation options."

The OEB finds that the consideration of the test period expenditures for Pickering Extended Operations are addressed by the issue as written and that consideration of the impacts on payment amounts is subsumed in the issue. No revisions are required.

AMPCO noted the Auditor General of Ontario's 2013 recommendations regarding overtime and staff schedules. AMPCO proposed adding "resource optimization strategies" to OPG's issue 6.6 relating to human resource related costs. OEB staff replied that the addition was unnecessary. OPG replied that the addition should not be

accepted as it is OPG who is responsible for creation and implementation of resource optimization strategies and that the OEB's role is to consider whether resulting costs are appropriate.

Overtime and contractual work arrangements are well within the scope of review of human resources related costs. For clarity, the issue will be revised to:

6.6 Are the test period human resource related costs for the nuclear facilities (including wages, salaries, payments under contractual work arrangements, benefits, incentive payments, overtime, FTEs and pension costs, etc.) appropriate?

The IESO submitted that issues 6.7 and 6.8 should not be limited to the nuclear facilities. Both OEB staff and OPG replied that the revision should not be approved as the hydroelectric application is based on the IRM methodology. OPG stated that as the hydroelectric payment amounts will be determined mechanistically, issues 6.7 and 6.8 should only relate to allocated costs for the nuclear facilities.

As the hydroelectric application is based on IRM, the OEB agrees with the OEB staff and OPG reply submissions that the focus of issues 6.7 and 6.8 should be the nuclear business.

7. OTHER REVENUES

No submissions were filed on the other revenues issues.

8. NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING LIABILITIES

No submissions were filed on issue 8.1 of OPG's draft issues list but an additional issue was proposed.

8.1 Is the revenue requirement impact of the nuclear liabilities appropriately determined?

AMPCO proposed the addition of: *Is the revenue requirement methodology for recovering nuclear liabilities in relation to nuclear waste management and decommissioning costs appropriate? If not, what alternative methodology should be considered?* AMPCO stated that including this issue would be consistent with the previously approved issues list in proceeding EB-2013-0321. In reply, OEB staff stated that it had no concerns. OPG replied that the issue should not be accepted. OPG noted that the methodology for recovering nuclear liabilities was established in the first OPG

payment amounts proceeding, and that this methodology has continued unchanged in subsequent proceedings. OPG submitted issue 8.1 is sufficient given the review regulatory treatment of nuclear liabilities in previous proceedings and the nuclear liability requirements set out in O. Reg. 53/05.

The OEB accepts the addition to the issues list as proposed by AMPCO. The addition is consistent with previous issues lists.

8.1 Is the revenue requirement methodology for recovering nuclear liabilities in relation to nuclear waste management and decommissioning costs appropriate? If not, what alternative methodology should be considered?

8.2 Is the revenue requirement impact of the nuclear liabilities appropriately determined?

9. DEFERRAL AND VARIANCE ACCOUNTS

Submissions were filed on issues 9.1 and 9.6 of OPG's draft issues list.

9.1 Is the nature or type of costs recorded in the deferral and variance accounts appropriate?

9.6 Are the deferral and variance accounts that OPG proposes to establish appropriate?

OEB staff submitted that clarity on the reference values for determining additions to hydroelectric deferral and variance accounts is required during the 2017-2021 period when IRM is based on EB-2013-0321 payment amounts. OEB staff proposed that issue 9.1 be revised to: *Are the nature or type of costs, as well as the methodologies for recording costs in the deferral and variance accounts appropriate?* In reply, OPG did not oppose the proposal.

The OEB finds that the reference to methodologies for recording costs in deferral and variance accounts should be included in the issues list, but finds that the issue should be stand-alone. The first issue on the original list will continue.

9.2 Are the methodologies for recording costs in the deferral and variance accounts appropriate?

OEB staff submitted that that issue 9.6 regarding the establishment of new deferral and variance accounts be separated into those which relate to DRP and those which relate to other elements of OPG's business. OEB staff proposed the following:

- 9.6 Is the rate smoothing deferral account related to the Darlington Refurbishment Program that OPG proposes to establish appropriate?
- 9.7 Are any other new deferral and variance accounts that OPG proposes to establish appropriate?

OPG did not oppose a separate issue relating to the rate smoothing deferral account, but replied that the reference to DRP is not consistent with O. Reg. 53/05 which refers to the account "in respect of the nuclear facilities". Should the OEB decide to include a specific issue on this matter, OPG proposed: *Does the rate smoothing deferral account meet the requirements of O. Reg. 53/05?*

The OEB has considered OPG's reply submission and approves the following issue:

- 9.7 Is the rate smoothing deferral account in respect of the nuclear facilities that OPG proposes to establish consistent with O. Reg. 53/05 and appropriate?

Regarding other new deferral and variance accounts, AMPCO proposed the addition of accounts that "*other parties propose*", while CCC proposed "*Should any newly proposed deferral and variance accounts be approved by the OEB?*" OEB staff had no concerns and replied that the proposals were consistent with the issues list approved in the previous proceeding. OPG replied that parties who wish to propose new accounts should file evidence so that the proposed accounts can be tested. OPG proposed: *Are any other new deferral and variance accounts proposed in evidence, appropriate?*

The OEB notes that all parties may propose deferral and variance accounts in this proceeding and that the filing of evidence is not necessarily required to propose an account. Argument in favour of a new account can be based on the evidence of OPG or other parties, though of course parties are not precluded from filing their own evidence in favour of a new account. The OEB approves the revised issue as proposed by CCC.

- 9.8 Should any newly proposed deferral and variance accounts be approved by the OEB?

10. REPORTING AND RECORD KEEPING REQUIREMENTS

No submissions were filed on issue 10.1 of OPG's draft issues list but additional issues were proposed.

10.1 Are the proposed reporting and record keeping requirements appropriate?

OEB staff submitted that the performance measures proposed by OPG are subsumed in the broad "reporting and record keeping" requirement. However, as this is the first hydroelectric IRM and nuclear Custom IR application, OEB staff submitted that additional issues specifically related to performance reporting for the hydroelectric facilities and the nuclear facilities were required. OEB staff proposed the following additional issues:

Is the monitoring and reporting of performance proposed by OPG for the regulated hydroelectric facilities adequate?

Is the monitoring and reporting of performance proposed by OPG for the nuclear facilities adequate to determine whether the planned productivity and efficiency gains are achieved?

OPG replied that the additional issues proposed by OEB staff are subsumed in issue 10.1 and should not be added. OPG stated that the reference to planned productivity and efficiency gains is inconsistent with OPG's stretch factor proposal, which provides customers with the benefits of savings in advance of OPG's identification of the productivity and efficiency gains that will produce the savings.

As parties may wish to propose reporting requirements specific to DRP, CCC proposed: *What are the appropriate reporting requirements specific to the Darlington Nuclear Refurbishment Project?* OPG stated that its proposed reporting requirements for DRP are in the evidence and submitted that CCC's proposed issue should not be established as it is a sub-issue of issue 10.1. OEB staff had no concerns with CCC's issue, but also replied that the OEB may find the proposed issue is subsumed in issue 10.1

This proceeding is the first IRM and Custom IR for OPG. The OEB finds that it would be informative to consider all aspects of reporting. The OEB approves the addition of hydroelectric and nuclear reporting issues and a DRP reporting issue.

10.1 Are the proposed reporting and record keeping requirements appropriate?

10.2 Is the monitoring and reporting of performance proposed by OPG for the regulated hydroelectric facilities appropriate?

10.3 Is the monitoring and reporting of performance proposed by OPG for the nuclear facilities appropriate?

10.4 Is the proposed reporting for the Darlington Refurbishment Program appropriate?

11. METHODOLOGIES FOR SETTING PAYMENT AMOUNTS

OEB staff submitted that the issues under section 11 of the issues list should be grouped by hydroelectric and nuclear as the rate setting processes for 2017-2021 differ. OEB staff proposed the following revisions and additions:

Hydroelectric

11.1 Has OPG responded appropriately to OEB direction on establishing incentive regulation *for the regulated hydroelectric facilities*?

11.2 *Are OPG's hydroelectric payment amounts arising from EB-2013-0321, as adjusted, appropriate as base rates for applying the hydroelectric incentive regulation mechanism over the 2017-2021 period?*

Nuclear

11.3 Has OPG responded appropriately to OEB direction on establishing incentive regulation *for the nuclear facilities*?

11.4 *Does the nuclear Custom IR application adequately account for productivity and efficiency gains in its forecasts? Does the Custom IR application adequately include expectations for productivity and efficiency gains relative to benchmarks and establish an appropriately structured incentive-based rate framework?*

11.5 *Are OPG's proposed nuclear off-ramps and mid-term review appropriate?*

11.6 Is OPG's proposal for smoothing nuclear payment amounts consistent with O. Reg. 53/05?

CCC proposed that the first issue should be phrased more generally: *Is OPG's approach to IR for establishing the hydroelectric payment amounts appropriate?* Energy Probe has submitted that reference to hydroelectric total factor productivity (TFP), either as a stand-alone issue or as part of another issue was appropriate. OPG did not oppose the creation of separate issues for hydroelectric and nuclear facilities and did not oppose CCC's proposal for the first issue, however, OPG replied that TFP is a sub-issue of issue 11.1. The OEB accepts the revision proposed by CCC for issue 11.1 and agrees that specific reference to TFP is not required as it is subsumed in issue 11.1.

11.1 Is OPG's approach to incentive rate-setting for establishing the regulated hydroelectric payment amounts appropriate?

In the prior proceeding, payment amounts were set for previously regulated hydroelectric facilities and for newly regulated hydroelectric facilities while all of the regulated hydroelectric facilities have been grouped together in the current proceeding. OEB staff proposed issue 11.2, submitting that a specific finding on the base rate for applying IRM over the 2017-2021 period is required. OPG replied that issue 11.2 as proposed by OEB staff should not be accepted as the wording could open the question of rebasing hydroelectric payment amounts and a re-evaluation of the costs underpinning the hydroelectric payment amounts approved in EB-2013-0321. OPG noted that OEB staff referred to the tax loss adjustment that OPG applied to establish the starting point for hydroelectric IRM. OPG proposed that issue 11.2 be revised to: *Are the adjustments OPG has made to regulated hydroelectric payment amounts arising from EB-2013-0321 appropriate for establishing base rates for applying the hydroelectric incentive regulation mechanism?*

For all five years covered by the application, OPG proposes hydroelectric payment amounts determined under IRM. The OEB accepts OPG's proposed revision to issue 11.2.

11.2 Are the adjustments OPG has made to regulated hydroelectric payment amounts arising from EB-2013-0321 appropriate for establishing base rates for applying the hydroelectric incentive regulation mechanism?

The IESO indicated an interest in examining OPG's operations for the purposes of earning other revenue. The IESO proposed an issue related to the design of payment amounts issue in OPG's draft issues list: *Are OPG's payment amounts appropriately designed to incent OPG to operate its regulated generation facilities to earn Other Revenues so as to fairly benefit both OPG and ratepayers?* OEB staff replied that the IESO's proposal is not required as it relates to a hydroelectric payment amount application under cost of service or Custom IR, while the current application is IRM. OPG's reply also noted that incentives for ancillary services affect OPG as well as other market participants. OPG submitted that this matter is not appropriate for an OPG payment amounts proceeding. In correspondence filed on September 12, 2016, the IESO informed the OEB that, after discussions with OPG, the IESO and OPG have committed to working together outside the formal regulatory process to address the IESO's concerns. Accordingly, the OEB will not add the issue originally proposed by the IESO.

CCC proposed that issue 11.3 should be phrased more generally.: *Is OPG's approach to IR for establishing the nuclear payment amounts appropriate?* OPG did not oppose CCC's proposal. As above, the OEB accepts CCC's revision to issue 11.3.

11.3 Is OPG's approach to incentive rate-setting for establishing the nuclear payment amounts appropriate?

OPG replied that issue 11.4 relating to productivity and efficiency gains submitted by OEB staff should not be established as the matter is subsumed by issue 11.3.

The OEB considers that it is important to use benchmarks in assessing productivity and efficiency gains and will therefore keep the second part of OEB staff proposed issue.

11.4 Does the Custom IR application adequately include expectations for productivity and efficiency gains relative to benchmarks and establish an appropriately structured incentive-based rate framework?

OPG did not oppose the reference to the mid-term review in issue 11.5 submitted by OEB staff, but stated that the issue is not appropriately framed with respect to off-ramps. The application proposes an off-ramp based on OPG's regulated ROE which is not determined separately for hydroelectric and nuclear facilities. OPG replied that off-ramps are appropriately considered under issues 11.1 and 11.3.

The OEB has revised issue 11.5 as proposed by OEB staff to:

11.5 Is OPG's proposed mid-term review appropriate?

While OPG has replied that the off-ramp proposed in the application is considered under issues 11.1 and 11.3, the OEB has included a general issue in section 11:

11.7 Is OPG's proposed off-ramp appropriate?

CCC proposed that issue 11.6 be revised to replace reference to O. Reg. 53/05 with reference to the public interest and Energy Probe proposed reference to whether the rate smoothing proposal is in the best interests of rate payers. OEB staff replied that reference to O. Reg. 53/05 should be retained and proposed: *Is OPG's proposal for smoothing nuclear payment amounts consistent with O. Reg. 53/05, and reasonable given the bill impact on customers?* OPG replied that the CCC and Energy Probe proposals should be rejected as the requirement for rate smoothing is established in O.

Reg. 53/05 and the issue must refer to the regulation. OPG proposed the following in reply: *Is OPG's proposal for smoothing nuclear payment amounts appropriate and consistent with O. Reg. 53/05?*

The OEB has considered OPG's reply submission and approves the following issue:

11.6 Is OPG's proposal for smoothing nuclear payment amounts consistent with O. Reg. 53/05 and appropriate?

12. IMPLEMENTATION

No submissions were filed on the implementation issue.

The final unprioritized issues list is attached as Schedule A.

DATED at Toronto, September 23, 2016

ONTARIO ENERGY BOARD

Original signed by

Kirsten Walli
Board Secretary

Schedule A

Ontario Power Generation Inc. 2017-2021 Payment Amounts for Prescribed Generating Facilities EB-2016-0152

FINAL ISSUES LIST (NON-PRIORITIZED)

1. GENERAL

- 1.1 Has OPG responded appropriately to all relevant OEB directions from previous proceedings?
- 1.2 Are OPG's economic and business planning assumptions that impact the nuclear facilities appropriate?
- 1.3 Is the overall increase in nuclear payment amounts including rate riders reasonable given the overall bill impact on customers?

2. RATE BASE

- 2.1 Are the amounts proposed for nuclear rate base (excluding those for the Darlington Refurbishment Program) appropriate?
- 2.2 Are the amounts proposed for nuclear rate base for the Darlington Refurbishment Program appropriate?

3. CAPITAL STRUCTURE AND COST OF CAPITAL

- 3.1 Are OPG's proposed capital structure and rate of return on equity appropriate?
- 3.2 Are OPG's proposed costs for the long-term and short-term debt components of its capital structure appropriate?

4. CAPITAL PROJECTS

- 4.1 Do the costs associated with the nuclear projects that are subject to section 6(2)4 of O. Reg. 53/05 and proposed for recovery meet the requirements of that section?
- 4.2 Are the proposed nuclear capital expenditures and/or financial commitments (excluding those for the Darlington Refurbishment Program) reasonable?
- 4.3 Are the proposed nuclear capital expenditures and/or financial commitments for the Darlington Refurbishment Program reasonable?

- 4.4 Are the proposed test period in-service additions for nuclear projects (excluding those for the Darlington Refurbishment Program) appropriate?
- 4.5 Are the proposed test period in-service additions for the Darlington Refurbishment Program appropriate?

5. PRODUCTION FORECASTS

- 5.1 Is the proposed nuclear production forecast appropriate?

6. OPERATING COSTS

- 6.1 Is the test period Operations, Maintenance and Administration budget for the nuclear facilities (excluding that for the Darlington Refurbishment Program) appropriate?
- 6.2 Is the nuclear benchmarking methodology reasonable? Are the benchmarking results and targets flowing from OPG's nuclear benchmarking reasonable?
- 6.3 Is the forecast of nuclear fuel costs appropriate?
- 6.4 Is the test period Operations, Maintenance and Administration budget for the Darlington Refurbishment Program appropriate?
- 6.5 Are the test period expenditures related to extended operations for Pickering appropriate?

Corporate Costs

- 6.6 Are the test period human resource related costs for the nuclear facilities (including wages, salaries, payments under contractual work arrangements, benefits, incentive payments, overtime, FTEs and pension costs, etc.) appropriate?
- 6.7 Are the corporate costs allocated to the nuclear businesses appropriate?
- 6.8 Are the centrally held costs allocated to the nuclear business appropriate?

Depreciation

- 6.9 Is the proposed test period nuclear depreciation expense appropriate?

Income and Property Taxes

- 6.10 Are the amounts proposed to be included in the test period nuclear revenue requirement for income and property taxes appropriate?

Other Costs

- 6.11 Are the asset service fee amounts charged to the nuclear businesses appropriate?

7. OTHER REVENUES

Nuclear

- 7.1 Are the forecasts of nuclear business non-energy revenues appropriate?

Bruce Nuclear Generating Station

- 7.2 Are the test period costs related to the Bruce Nuclear Generating Station, and costs and revenues related to the Bruce lease appropriate?

8. NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING LIABILITIES

- 8.1 Is the revenue requirement methodology for recovering nuclear liabilities in relation to nuclear waste management and decommissioning costs appropriate? If not, what alternative methodology should be considered?
- 8.2 Is the revenue requirement impact of the nuclear liabilities appropriately determined?

9. DEFERRAL AND VARIANCE ACCOUNTS

- 9.1 Is the nature or type of costs recorded in the deferral and variance accounts appropriate?
- 9.2 Are the methodologies for recording costs in the deferral and variance accounts appropriate?
- 9.3 Are the balances for recovery in each of the deferral and variance accounts appropriate?
- 9.4 Are the proposed disposition amounts appropriate?
- 9.5 Is the disposition methodology appropriate?
- 9.6 Is the proposed continuation of deferral and variance accounts appropriate?
- 9.7 Is the rate smoothing deferral account in respect of the nuclear facilities that OPG proposes to establish consistent with O. Reg. 53/05 and appropriate?
- 9.8 Should any newly proposed deferral and variance accounts be approved by the OEB?

10. REPORTING AND RECORD KEEPING REQUIREMENTS

- 10.1 Are the proposed reporting and record keeping requirements appropriate?
- 10.2 Is the monitoring and reporting of performance proposed by OPG for the regulated hydroelectric facilities appropriate?
- 10.3 Is the monitoring and reporting of performance proposed by OPG for the nuclear facilities appropriate?
- 10.4 Is the proposed reporting for the Darlington Refurbishment Program appropriate?

11. METHODOLOGIES FOR SETTING PAYMENT AMOUNTS

Hydroelectric

- 11.1 Is OPG's approach to incentive rate-setting for establishing the regulated hydroelectric payment amounts appropriate?
- 11.2 Are the adjustments OPG has made to the regulated hydroelectric payment amounts arising from EB-2013-0321 appropriate for establishing base rates for applying the hydroelectric incentive regulation mechanism?

Nuclear

- 11.3 Is OPG's approach to incentive rate-setting for establishing the nuclear payment amounts appropriate?
- 11.4 Does the Custom IR application adequately include expectations for productivity and efficiency gains relative to benchmarks and establish an appropriately structured incentive-based rate framework?
- 11.5 Is OPG's proposed mid-term review appropriate?
- 11.6 Is OPG's proposal for smoothing nuclear payment amounts consistent with O. Reg. 53/05 and appropriate?

General

- 11.7 Is OPG's proposed off-ramp appropriate?

12. IMPLEMENTATION

- 12.1 Are the effective dates for new payment amounts and riders appropriate?