

BRUCE LEASE NET REVENUES VARIANCE ACCOUNT

1.0 PURPOSE

This evidence presents the revenues earned by OPG under the Bruce Lease Agreement and associated agreements (“Bruce Lease”) and the related costs incurred by OPG with respect to the Bruce Nuclear Generating Stations that underpin the entries into the Bruce Lease Net Revenues Variance Account for 2011 and 2012 as shown in Ex. H1-1-1, Table 14.

2.0 OVERVIEW

Section 3 of this exhibit discusses the Bruce Lease and associated agreements. Section 4 considers Bruce Lease revenues and explains the 2011 and 2012 variances associated with each major revenue item.¹ Section 5 considers the costs associated with the Bruce facilities and explains the 2011 and 2012 variances associated with each major item. Section 6 summarizes the impact of the current approved Ontario Nuclear Funds Agreement (“ONFA”) Reference Plan (discussed in Ex. H2-1-1) on the 2012 additions to the Bruce Lease Net Revenues Variance Account. Section 7 describes the calculation of entries into the account and the projected year-end 2012 balance.

Actual (2011) or projected (2012) additions to the Bruce Lease Net Revenues Variance Account are a credit to customers of (\$13.6M) for January and February 2011, and amounts to be recovered by OPG of \$70.4M and \$305.2M for March to December 2011 and 2012, respectively, as shown in Ex. H1-1-1, Table 14. The projected account balance at December 31, 2012 is \$368.2M.

3.0 THE BRUCE LEASE AND ASSOCIATED AGREEMENTS

OPG has leased its Bruce A and Bruce B Nuclear Generating Stations and associated lands and facilities to Bruce Power L.P. (“Bruce Power”). The Bruce Lease sets out the main terms and conditions of the lease arrangement between OPG and Bruce Power, including lease payments. The initial term of the lease expires on December 31, 2018 with Bruce Power having the option to extend the lease for up to 25 years. As explained in EB-2010-0008,

¹ The impact of the adoption of USGAAP on Bruce Lease net revenues is discussed in Ex. A3-1-2.

1 however, OPG and Bruce Power reached an agreement that effectively binds Bruce Power
2 to the renewal of the Bruce Lease beyond the initial expiry date.² In addition, OPG and Bruce
3 Power have entered into a number of associated agreements for the provision of services by
4 OPG to Bruce Power or by Bruce Power to OPG.

5
6 As in EB 2010-0008, the treatment of revenues and costs associated with the Bruce Lease
7 and associated agreements are based on the OEB's Decision in EB-2007-0905. The
8 methodology for allocating revenues and costs to the Bruce facilities and under the Bruce
9 Lease is unchanged from that presented in EB-2010-0008. In 2010 Black & Veatch
10 Corporation Inc. ("Black & Veatch") reviewed this allocation methodology and found it
11 appropriate and it was accepted by the OEB in EB-2010-0008.

12 13 **4.0 REVENUES FROM BRUCE LEASE AND ASSOCIATED AGREEMENTS**

14 Sections 6(2)9 and 6(2)10 of O. Reg. 53/05 provide that the OEB shall ensure that OPG
15 recovers all the costs it incurs with respect to the Bruce Nuclear Generating Stations, and
16 that any revenues earned from the Bruce Lease in excess of costs be used to offset the
17 nuclear payment amounts.

18
19 As discussed in EB-2010-0008, revenues are derived from the Bruce Lease and associated
20 agreements. The latter include the Used Fuel Waste and Cobalt-60 Agreement, the Low and
21 Intermediate Level Waste Agreement, and the Bruce Site Services Agreement. Sections 4.1
22 through 4.4 describe these four sources of revenue.

23 24 **4.1 Bruce Lease Revenues**

25 Bruce Lease revenues consist of: base rent, including the amortization of initial deferred rent,
26 discussed in Section 4.1.1, and supplemental rent discussed in Section 4.1.2. These
27 revenues are presented in Ex. H1-1-1, Table 14(a).

28 29 **4.1.1 Base Rent Revenue**

30 The Bruce Lease contains a base rent amount that is set out in the lease and is fixed for

² EB-2010-2008, Ex. G2-2-1, page 3.

1 each year of the lease. As per the OEB's direction in EB-2007-0905, OPG determines lease
2 revenue on a straight-line, rather than a cash, basis as this is in accordance with generally
3 accepted accounting principles for non-regulated businesses.

4
5 The straight-line basis requires recognition of an equal amount of lease revenue over the
6 expected term of the lease. This amount is determined by dividing the total expected fixed
7 component of lease revenues over the expected lease term by the number of years in the
8 lease term. Based on the accounting reassessment of the lease following the agreement
9 noted in Section 3.0 above, effective late-2008 the expected lease term for accounting
10 purposes was extended to December 2036.

11
12 Because there have been no changes in the term of the lease, and hence no changes in the
13 period over which base lease payments are recognized, there are no variances between
14 budgeted and actual amounts of base rent revenues in 2011 and 2012.

15
16 4.1.2 Supplemental Rent Revenue

17 In addition to the predetermined amount of base rent, Bruce Power also pays a variable
18 amount of supplemental rent. The supplemental rate is currently in the order of \$31M per unit
19 per year (in 2012 dollars) and is applied on the basis of the number of generating units
20 operational in a given calendar year. In accordance with the Bruce Lease, when certain
21 Bruce A units, including Units 1 and 2, are refurbished and declared in service, the
22 supplemental rent for each refurbished unit is reduced to approximately \$6.9M per year (in
23 2012 dollars). The full amount of supplemental rent is due to OPG regardless of how much a
24 unit operates during a given year except in a year, such as is projected for 2012, in which a
25 refurbished Bruce A unit is returned to service. In a return-to-service year, the supplemental
26 rent for a refurbished unit is pro-rated. The supplemental rent payments are escalated
27 annually by the Consumer Price Index (Ontario) ("CPI").

28
29 Supplemental rent revenue is generally recognized on a cash basis for financial accounting
30 purposes because it is not a fixed amount and is contingent on the number and operational
31 state of Bruce units. Supplemental rent is also dependent on the Hourly Ontario Energy Price
32 ("HOEP"). A provision in the Bruce Lease requires a partial rebate by OPG to Bruce Power of

1 the supplemental rent payments for the Bruce B units in a calendar year where the annual
2 arithmetic average of the HOEP (“Average HOEP”) falls below \$30/MWh, and certain other
3 conditions are met.

4
5 As discussed in the EB-2010-0008 evidence, this conditional reduction to revenue in the
6 future, embedded in the terms of the Bruce Lease, must be accounted for as a derivative.³
7 The derivative is measured at fair value for financial accounting purposes and changes in its
8 fair value are recognized as adjustments to revenue.⁴ The fair value is derived based on the
9 present value of the probability-weighted expectations of reductions in supplemental rent
10 payments in the future as a result of Average HOEP falling below \$30/MWh calculated over
11 the remaining accounting service life of the applicable Bruce units.

12
13 In a year where Average HOEP falls below \$30/MWh, the reduction in the supplemental rent
14 payments to OPG determined at the end of that year typically would be offset by a reduction
15 in the derivative liability. The resulting net effect is that the amount of supplemental rent
16 revenue recognized for accounting purposes in that year would be unchanged. However, any
17 change to the present value of the expected reductions in payments over the derivative’s
18 remaining life (i.e., in subsequent years) must be recognized as an adjustment to the fair
19 value of the derivative liability and revenue in the current year.

20
21 OPG calculates the fair value of the derivative using a valuation model. Ernst & Young
22 (“E&Y”), OPG’s external auditor, independently reviewed the significant inputs used in the
23 model, the model itself and the resulting valuation as part of the audit of OPG’s financial
24 statements for 2011.⁵ The E&Y review involved specialized valuation experts.

25
26 The 2011 supplemental rent revenue is \$25.7M less than the EB-2010-0008 approved
27 forecast amount as shown in Ex. H1-1-1, Table 14a. The majority of this amount, \$23M, is
28 attributable to the increase in the fair value of the liability for the embedded derivative

³ EB-2010-2008, Ex. G2-2-1, page 4

⁴ This accounting treatment is the same under CGAAP and USGAAP.

⁵ Similar reviews were conducted as part of the 2009 and 2010 audits.

1 calculated using the valuation model described above and recognized in OPG's 2011 audited
2 consolidated financial statements. The increased fair value of the liability is based on the
3 expectation of rent payment reductions in the years beyond 2011. Since the Average HOEP
4 was above \$30/MWh in 2011, there was no reduction in the supplemental rent payments
5 received by OPG for that year.⁶ The remainder of the variance is attributable to the fact that
6 the forecast return to service in 2011 of one of the Bruce A units being refurbished did not
7 occur, partially offset by higher than forecast CPI.

8
9 The service lives used to estimate the fair value of the derivative liability are consistent with
10 the accounting assumptions used for depreciation purposes. The value of the derivative
11 liability up to the end of 2011 does not include any change in the expected service lives of
12 the Bruce units from those provided in EB-2010-0008.

13
14 Effective December 31, 2012, OPG expects to extend the estimated average service life of
15 the Bruce B station from 2014 to 2019 for accounting purposes.⁷ This extension would result
16 from OPG having achieved a high level of confidence that the fuel channel assemblies are fit
17 to serve over a longer period (as discussed in Ex. H2-2-1). The assemblies are considered to
18 be the life-limiting component of the Bruce units.

19
20 In total, the 2012 supplemental rent revenue forecast is \$354.2M less than the EB-2010-
21 0008 approved forecast, as shown in Ex. H1-1-1, Table 14a. The extended average service
22 life is projected to increase the fair value of the derivative liability at December 31, 2012 by
23 approximately \$306M based on current probability-weighted expectations of future Average
24 HOEP over the additional life of the applicable Bruce units. Therefore, the supplemental rent
25 revenue forecast for 2012 includes a reduction of approximately \$306M that must be
26 recognized in accordance with generally accepted accounting principles in 2012 due to the
27 life extension. The same audited valuation model as that used to determine the actual fair
28 value in 2011 and prior years has been used to determine the above projections for 2012.

29

⁶ In contrast, the Average HOEP for the first six months of 2012 was \$19.62/MWh.

⁷ Effective December 31, 2012, OPG also expects to extend the estimated average service life of the Bruce A station to 2048 for the same reasons. This has no impact on the value of the derivative, as the conditional reduction in supplemental rent currently applies to Bruce B units only.

1 An additional \$43M of the variance is attributable to changes to the fair value of the
2 derivative liability during the first six months of 2012 due to increasing expectations of rent
3 payment reductions in the future that are independent of the estimated impact of the average
4 service life extension. The remainder of the 2012 variance, approximately \$5.2M, is
5 attributable to the fact that the EB-2010-0008 forecast assumed earlier return-to-service
6 dates for the Bruce A Units 1 and 2 than are currently expected, partially offset by current
7 CPI projections being above forecast.

8 9 **4.2 Used Fuel Waste and Cobalt-60 Agreement Revenues**

10 Under the Used Fuel Waste and Cobalt-60 Agreement, OPG provides used fuel interim
11 storage and long-term disposal services to Bruce Power for the used nuclear fuel generated
12 in the Bruce A and Bruce B reactors. OPG has also accepted liability for the interim storage
13 and future disposal of Bruce Power's spent cobalt-60, and, in return, OPG receives
14 payments from Bruce Power as set out in Ex. H-1-1, Table 14(a). Revenues for cobalt-60
15 storage and disposal services under this agreement are recorded as the services are
16 provided.

17
18 There was no variance associated with this revenue source in 2011 and none is projected for
19 2012.

20 21 **4.3 Low and Intermediate Level Waste Agreement Revenues**

22 Under the Low and Intermediate Level Waste Agreement, OPG is obligated to manage (i.e.,
23 collect, store, and dispose of) low and intermediate level radioactive waste generated by
24 Bruce Power. In return, Bruce Power pays OPG a fee for the provision of low and
25 intermediate level radioactive waste management services. The fee is volume-based,
26 escalated annually by the CPI, and determined on the basis of OPG's estimated future costs
27 of managing the low and intermediate level waste generated by Bruce Power. Revenues
28 under this agreement are recorded as the services are provided.

29 The impact of the Low and Intermediate Level Waste Agreement on revenues from Bruce
30 Power is set out in Ex. H1-1-1, Table 14(a). Actual waste services revenue in 2011 was \$1M
31 higher than the EB-2010-0008 approved forecast. For 2012, waste service revenues are
32 expected to be \$2.4M higher than the approved EB-2010-0008 forecast amount. These

1 variances are primarily a result of variances in the actual (2011) or expected (2012) volumes
2 of waste received from Bruce Power under this agreement. OPG projects revenues based on
3 waste volume information received from Bruce Power. Based on this information, volumes
4 received were (2011) or are currently projected to be (2012) higher than originally estimated.

6 **4.4 Bruce Site Services Agreement Revenues**

7 This agreement provides for various support and maintenance services that are provided by
8 OPG to Bruce Power, and by Bruce Power to OPG, on a cost recovery basis. The services
9 contemplated by this Agreement are necessary to accommodate the joint occupancy and
10 use of the Bruce site by OPG and Bruce Power.

11
12 OPG's site service revenues are set out in Ex. H1-1-1, Table 14(a). Revenues in 2011 were
13 \$0.5M higher than the EB-2010-0008 forecast and are currently projected to be \$0.2M higher
14 for 2012.

16 **5.0 COSTS FROM BRUCE LEASE AND ASSOCIATED AGREEMENTS**

17 Section 6(2)9 of O. Reg. 53/05 provides that the OEB shall ensure that OPG recovers all the
18 costs that it incurs with respect to the Bruce Nuclear Generating Stations. In order to record
19 entries into the Bruce Lease Net Revenues Variance Account, OPG tracks variances in the
20 cost components ("Bruce Costs") discussed in this exhibit.

21 As noted above, Black & Veatch reviewed OPG's methodology for assigning and allocating
22 costs to the Bruce facilities and under the Bruce Lease in 2010. Black & Veatch concluded
23 that the methodology is appropriate, properly reflects the costs OPG incurs and complies
24 with the OEB's Decision in EB-2007-0905. This methodology was accepted by the OEB in
25 EB-2010-0008. This same methodology is used in this Application.

26
27 The following categories of Bruce Costs are presented in Ex. H1-1-1, Table 14(a):

- 28
29 • Depreciation: Depreciation is calculated on the fixed assets owned by OPG at the Bruce
30 site and leased to Bruce Power. These fixed assets include the associated asset
31 retirement costs ("ARC") as discussed in Ex. H2-1-1. OPG applied the same depreciation
32 methodology as in EB-2010-0008 to derive the depreciation expense for 2011 and 2012.

1 For 2011, actual depreciation expense was \$1.3M lower than the EB-2010-0008
2 approved forecast amount, mainly as a result of an extension to the estimated average
3 service life of the Bruce A station for accounting purposes, which was not assumed in the
4 EB-2010-0008 forecast. For 2012, depreciation is projected to be \$43.2M higher than the
5 EB-2010-0008 approved forecast amount (Ex. H1-1-1, Table 14a). The 2012 variance
6 reflects an increase of approximately \$50M (also shown in Section 6.0 below) as a result
7 of the December 31, 2011 increase to the asset retirement obligation (“ARO”) and ARC
8 attributed to Bruce of \$495.1M arising from the current approved ONFA Reference Plan
9 as shown in Ex. H2-1-1, Tables 2 and 3. This increase is offset by a \$6.9M decrease in
10 2012 mainly attributable to extensions of the estimated average service life of the Bruce
11 A station for accounting purposes, which was not assumed in the approved forecast. The
12 change in the nuclear ARO on December 31, 2011 and the expected change on
13 December 31, 2012 are discussed in Ex. H2-1-1.

14
15 • Property Tax: Pursuant to the provisions of the Bruce Lease, OPG pays the property
16 taxes for the Bruce site as a whole. OPG manages the annual tax assessment process
17 and payments of municipal property taxes to the Municipality of Kincardine and
18 payments-in-lieu of property tax to the Ontario Electricity Financial Corporation (“OEF”).
19 Compared to the EB-2010-0008 approved forecast amounts, property tax expense was
20 \$1.4M lower in 2011 and is projected to be \$1.7M lower in 2012 as shown Ex. H1-1-1,
21 Table 14a. These decreases are due to lower than forecast municipal tax rates.

22
23 • Accretion: The accretion expense represents the growth in the ARO due to the passage
24 of time. The actual (2011) and projected (2012) expense has been derived using the
25 same methodology as described in EB-2010-0008, Ex. G2-2-1, Section 5.0. The 2012
26 forecast expense is derived by reference to the actual ARO balance as at December 31,
27 2011, and additional used fuel storage and disposal and waste management variable
28 expenses (discussed below) and expenditures on activities expected to draw down the
29 ARO during 2012. The actual ARO balance includes the December 31, 2011 increase of
30 \$495.1M in the Bruce ARO referred to in the depreciation expense explanation above.

31
32 As at December 31, 2011, the total portion of OPG’s ARO related to the Bruce assets

1 was \$6,107.7M, which consists of four different tranches representing the initial ARO and
2 each of the subsequent increases with the fourth tranche being the previously discussed
3 December 31, 2011 increase of \$495.1M (See Ex. H2-1-1, Table 2). A different
4 discount/accretion rate is used to calculate each tranche.

5
6 The forecast accretion expense for 2012 is derived based on the application of the
7 appropriate accretion rates to the prior year ARO ending balances for each tranche. An
8 accretion rate of 3.43 per cent is applied to the fourth tranche, as discussed in Ex. H2-1-1.

9
10 Accretion expense for 2011 was \$2.1M higher than the forecast amount approved in EB-
11 2010-0008, a variance of less than one per cent. Projected 2012 accretion expense is
12 \$21.3M above the approved EB-2010-0008 forecast amount, which is primarily
13 attributable to the Bruce portion of the ARO increase at December 31, 2011 arising from
14 the current approved ONFA Reference Plan, as presented in Section 6.0 below and
15 explained further in Ex. H2-1-1. Continuity schedules for the Bruce ARO for the 2009 to
16 2012 period are provided in Ex. H2-1-1, Table 2.

- 17
18 • (Earnings)/Losses on Nuclear Segregated Funds: OPG includes (earnings)/losses
19 resulting from the investments in the nuclear segregated funds pertaining to Bruce
20 stations as (negative)/positive cost associated with Bruce assets. The attribution of the
21 segregated funds to the Bruce stations is as described in EB-2010-0008, Ex. G2-2-1,
22 Section 5.0. The forecast amount for 2012 is based on actual experience for the first six
23 months of the year and a projection for the remainder of the year using a rate of 5.15 per
24 cent (the long-term target rate of return as per the ONFA). This methodology was also
25 applied in EB-2010-0008.

26
27 As at December 31, 2011, the actual balance of the nuclear segregated funds attributable
28 to Bruce was \$6,002.5M, as shown Ex. H2-1-1, Table 2, line 17. As in EB-2010-0008, the
29 actual and forecast year-end balances of the funds take into account the contributions to
30 and disbursements from the segregated funds during the year based on the approved
31 ONFA Reference Plan.

1 Earnings in 2011 related to the Bruce portion of the funds were below the approved
2 forecast amount in EB-2010-0008 by \$46.1M, as shown in Ex. H1-1-1, Table 14a, line 14.
3 This variance primarily resulted from the decline in global financial markets impacting the
4 value of the Decommissioning Fund. This impact was partially offset by changes in the
5 CPI, which affected the provincially-guaranteed rate of return applicable to the majority of
6 the Used Fuel Fund value. The Provincial guarantee assures a return of 3.25 per cent
7 plus the change in the CPI on the portion of the Used Fuel Fund attributable to the first
8 2.23 million used fuel bundles, as described in EB-2010-0008 Ex. C2-1-1, Section 3.2.

9
10 Currently, 2012 earnings are projected to be \$17.7M above the EB-2010-0008 approved
11 forecast amount reflecting better than expected returns from both the Decommissioning
12 and Used Fuel Funds during the first six months of the year. This amount may change as
13 market conditions for the remainder of the year continue to impact earnings and
14 therefore, the amount recorded in the Bruce Lease Net Revenues Variance Account.
15 Continuity schedules for the Bruce portion of the segregated funds for the 2009 to 2012
16 period are provided in Ex. H2-1-1, Table 2.

- 17
18 • Used Fuel Storage and Disposal Costs: OPG incurs variable costs associated with
19 storing and disposing of used nuclear fuel produced by Bruce Power. These costs are
20 included in the period incurred as an expense related to the Bruce assets, and are
21 presented as part of the nuclear fuel expense in OPG's consolidated financial
22 statements.

23
24 Used fuel storage and disposal costs in 2011 were \$10.1M higher than the EB-2010-
25 0008 approved forecast amount mainly because of a higher volume of fuel bundles
26 associated with the Bruce units. This increase resulted from Bruce Power's installation in
27 2011 of the initial load of the bundles into the reactors of Bruce A Units 1 and 2 as part of
28 the return to service of those units. The costs for this initial load were not included in the
29 forecasts in EB-2010-0008.

30
31 For 2012, costs are projected to be \$19.5M higher than the corresponding EB-2010-0008

1 approved forecast amount, as shown in Ex. H1-1-1, Table 14a, line 14. This increase
2 relates to the increase in variable costs primarily due to higher dollar per bundle variable
3 cost rates for 2012, which reflect the accounting impact of the current approved ONFA
4 Reference Plan, as shown in Section 6.0. The impact of the current approved ONFA
5 Reference Plan on variable rates is discussed in Ex. H2-1-1.

- 6
- 7 • Waste Management Variable Expenses: The variable costs associated with managing
8 the quantities of low and intermediate level radioactive nuclear waste produced by Bruce
9 Power are included as a period expense related to Bruce assets.

10

11 These expenses were largely in line with EB-2010-0008 approved forecast amount in
12 2011. For 2012, OPG is projecting a \$1.1M increase over the EB-2010-0008 approved
13 forecast amounts. The increase is mainly attributable to higher low and intermediate level
14 waste variable cost rates in 2012 reflecting the accounting impact of the current approved
15 ONFA Reference Plan, as shown in Section 6.0. The impact of the current approved
16 ONFA Reference Plan on variable rates is discussed in Ex. H2-1-1.

- 17
- 18 • Interest: As in EB-2010-0008, interest related to Bruce assets represents an allocation of
19 OPG's actual/forecast corporate-wide accounting interest cost after attributing project-
20 specific interest to appropriate business units. The allocation is based on the historical
21 proportion that the average net book value of the assets leased to Bruce Power
22 represents of the total average net book value of OPG's in-service fixed assets
23 (excluding in-service fixed assets financed by project-specific debt). This approach is
24 unchanged from that described in EB-2010-0008.

25 For 2011, interest expense associated with Bruce assets was slightly lower than the EB-
26 2010-0008 approved forecast amount. For 2012, OPG projects interest expense to be
27 similar to the 2011 actual amount (\$11.7M for 2012 versus \$11.6M in 2011). The EB-
28 2010-0008 approved forecast amount for 2012 of \$6.9M included a reduction in the
29 amount of interest attributed to Bruce assets.

- 30
- 31 • Current Income Taxes: OPG follows the same methodology reflected in the payment
32 amounts approved by the OEB in EB-2010-0008. Current income taxes for Bruce assets

1 continue to be calculated in accordance with the *Income Tax Act* (Canada) and the
2 *Taxation Act, 2007* (Ontario), as modified by the *Electricity Act, 1998* and related
3 regulations. The amount of taxes is determined by applying the substantively enacted
4 statutory tax rate to taxable income. Taxable income is computed by making
5 adjustments, in accordance with applicable legislation, to the Bruce stand-alone
6 accounting earnings before tax determined in accordance with generally accepted
7 accounting standards, as applicable, for items with different accounting and tax
8 treatment. With the exception of the deduction related to the supplemental rent reduction
9 described below, the main adjustments were previously described in EB-2010-0008 Ex.
10 G2-2-1, Section 5.1. The derivation of taxable income and current tax expense for 2011
11 (actual) and 2012 (projected) is shown in Ex. H1-1-1, Table 14(b).

12 As forecast in EB-2010-0008, the actual current income tax expense for the Bruce assets
13 in 2011 was nil because the unutilized tax losses carried forward from prior years were
14 sufficient to fully offset the taxable income in 2011.

15
16 A small tax loss is currently projected for 2012, while the EB-2010-0008 forecast for 2012
17 was based on a taxable income. The difference is mainly due to a higher current
18 projection of cash expenditures for used fuel, waste management and decommissioning
19 and the forecast reduction in the supplemental rent payment to OPG during 2012 under
20 the Bruce Lease as discussed above. The reduction in the supplemental rent payment
21 results in a deduction from earnings before tax in computing taxable income/tax loss.
22 While the reduction in the supplemental rent payment does not impact 2012 revenues
23 (and therefore earnings before tax) as discussed above, the lower payment is recognized
24 as a reduction in income under the *Income Tax Act* (Canada).

- 25 • Future Income Taxes: OPG follows the same methodology reflected in the payment
26 amounts approved by the OEB in EB-2010-0008. The future income tax expense related
27 to the Bruce assets is determined in accordance with financial accounting requirements
28 for unregulated entities. The future income taxes related to Bruce assets for 2011 (actual)
29 and 2012 (projected) are calculated on a stand-alone basis using the actual or forecast
30 Bruce Lease revenues and Bruce Costs, and are shown in Ex. H1-1-1, Table 14(b).

31
32 Generally, future income taxes represent the amount of tax that will be

1 payable/recoverable in the future upon reversal of temporary differences between the tax
2 basis and the accounting carrying value of items recorded in the current year. For
3 example, the current income tax benefit of the difference between accelerated
4 depreciation for income tax purposes (Capital Cost Allowance, or “CCA”), and a lower
5 accounting depreciation expense is recorded as a future income tax liability and expense
6 to match the higher earnings before tax. When this difference reverses (i.e., when the
7 accounting depreciation expense becomes higher than CCA) and, consequently, the
8 earnings before tax become lower than taxable income, the future income tax liability is
9 reversed through a reduction to the future income tax expense in order to recognize the
10 actual taxes payable for that year. The future income tax benefits of tax losses incurred in
11 a given year are treated in a corresponding manner.

12
13 The actual future tax expense for 2011 was \$19.9M lower than the EB-2010-0008
14 forecast amount mainly due to lower than forecast segregated fund earnings during the
15 year and the increase in the fair value of the liability for the embedded derivative
16 recognized in 2011, which is not deductible under the *Income Tax Act* (Canada).

17
18 The current projection of the future tax expense for 2012 is \$96.9M lower than the EB-
19 2010-0008 amount for two main reasons. First, the current forecast includes the impact of
20 the projected increase in the fair value of the liability for the embedded derivative,
21 partially offset by the net impact of differences in depreciation and accretion expenses
22 and segregated fund earnings. Second, the current 2012 forecast is based on a tax loss
23 position whereas the EB-2010-0008 forecast was based on taxable income partially
24 offset by the utilization of carried forward losses. The tax benefit of the currently projected
25 tax loss will be carried forward to subsequent periods and, therefore, is recognized as a
26 reduction of future taxes in 2012.

27
28 **6.0 IMPACT OF THE CURRENT APPROVED ONFA REFERENCE PLAN ON THE**
29 **BRUCE LEASE NET REVENUES VARIANCE ACCOUNT**

30 Section 6(8) of O. Reg. 53/05 provides that the OEB “ensure that OPG recovers the revenue
31 requirement impact of its nuclear decommissioning liability arising from the current approved

1 reference plan.”⁸ The OEB determined in EB-2007-0905 that the cost impact of any changes
2 in nuclear liabilities related to the Bruce stations should be recorded in the Bruce Lease Net
3 Revenues Variance Account rather than in the Nuclear Liability Deferral Account, as
4 discussed in Ex. H2-1-1.

5
6 The revenue requirement impacts of the current approved ONFA Reference Plan on costs
7 related to the Bruce facilities in 2012 are determined using the methodology referenced in Ex
8 H2-1-1. The current approved reference plan was effective as of January 1, 2012, thus there
9 are no impacts for 2011. Impacts for 2012 are forecast in the areas of depreciation, accretion
10 expense, variable expenses and income taxes, and are projected to total approximately
11 \$70M, as shown below.

Chart 1: Forecast Impacts of Current Approved ONFA Reference Plan

Cost Item	2012 Amount (\$M)
Depreciation	50
Accretion	18
Used Fuel and Waste Management Variable Expenses	26
Income Taxes*	(24)
Total	70

13 * The income tax impact relates to the higher taxable temporary differences due to higher depreciation, accretion
14 and variable expenses, which are not deductible for income tax purposes. The impact is computed by applying
15 the 2012 tax rate of 25 per cent to the increase in these expenses.

17 **7.0 CALCULATION OF ADDITIONS TO THE BRUCE LEASE NET REVENUES**
18 **VARIANCE ACCOUNT**

19 The Bruce Lease Net Revenues Variance Account captures differences between the OEB-
20 approved forecasts of revenues and costs related to the Bruce Lease (discussed above) and
21 OPG’s actual revenues and costs in respect of the Bruce facilities.

22
23 OPG compares actual Bruce Lease revenues net of costs credited to customers in each

⁸ The “nuclear decommissioning liability” is defined in O. Reg. 53/05 (section 0.1) as “the liability of Ontario Power Generation Inc. for decommissioning its nuclear generation facilities and the management of its nuclear waste and nuclear fuel.”

1 month through current payment amounts to the actual net revenues realized by OPG for that
2 month. The differences are recorded in the Bruce Lease Net Revenues Variance Account.

3
4 As shown in Ex. H1-1-1, Table 14, the Bruce Lease net revenues included in the 24-month
5 2011/2012 revenue requirement approved in the EB-2010-0008 Payment Amounts Order
6 were divided by the approved 24-month forecast nuclear production to determine a rate that
7 reflects the customer credit contained in the current nuclear payment amount. Starting in
8 March 2011, this rate is multiplied by the actual (2011) or projected (2012) monthly
9 production to derive the amount of net revenues credited to customers. This amount is
10 compared to the actual net revenues realized by OPG in each month, with the difference
11 recorded in the Bruce Lease Net Revenues Variance Account.

12
13 For January and February 2011, in accordance with the EB-2009-0174 Decision and Order,
14 the same approach was applied using the EB-2007-0905 approved forecast amounts to
15 calculate the equivalent rate. This was the same rate that was reflected in the December 31,
16 2010 balance of the variance account approved for recovery in EB-2010-0008.

17
18 As shown in Ex. H1-1-1, Table 14, the resulting actual (2011) or projected (2012) additions to
19 the Bruce Lease Net Revenues Variance Account are a credit to customers of (\$13.6M) for
20 January and February 2011, and amounts to be recovered by OPG of \$70.4M and \$305.2M
21 for March to December 2011 and 2012, respectively. The projected 2012 amount includes
22 the estimated additions of \$70M arising from the current approved ONFA Reference Plan as
23 discussed in Section 6.0 above. The resulting projected year-end 2012 balance in the
24 account, inclusive of interest and net of amortization for 2011 and 2012 as shown in Ex. H1-
25 1-1, Tables 1a through 1c, is \$368.2M.