Proprietary and Confidential

Report on the Accounting Cost for Post Employment Benefit Plans for Fiscal Years 2018 and 2019

Ontario Power Generation Inc.
January 1, 2018 to December 31, 2019

AON
Empower Results®

Table of Contents

Introduction **3**

Actuarial Report **5**

Schedule 1—Summary of 2018 US GAAP Results **9**

Schedule 2—Summary of 2019 US GAAP Results **10**

Introduction

This report summarizes the accounting costs for fiscal years 2018 and 2019 for the post employment benefit plans sponsored by Ontario Power Generation Inc. (“OPG”). In addition, Aon prepared this report to provide an independent actuary’s confirmation of information for the post employment benefit plans sponsored by OPG in relation to the December 31, 2019 balances in OPG’s Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account established by the Ontario Energy Board (“OEB”). We understand that this report is expected to be filed with the OEB.

This report covers the following plans sponsored by OPG:

- Ontario Power Generation Inc. Pension Plan (“RPP”);
- Ontario Power Generation Inc. Supplementary Pension Plan (“SPP”);
- Non-Pension Post Retirement Plan which provides other post retirement benefits (“OPRB”) including retiree medical, retiree dental, retiree life insurance, and retirement bonus benefits, and
- Post Employment Plan which provides long-term disability benefits (“LTD”) including sick leave benefits before LTD begins and the continuation of medical, dental and life insurance while on LTD.

Collectively SPP, OPRB and LTD are known as Other Post Employment Benefits (“OPEB”).

The results cover the fiscal years from January 1, 2018 to December 31, 2018 and from January 1, 2019 to December 31, 2019. The results have been developed in accordance with US generally accepted accounting principles (“US GAAP”) under ASC 710, 712 and 715.

The results in this report do not include amounts related to the benefit plans of the Nuclear Waste Management Organization or operating subsidiaries which are included in OPG’s consolidated financial statements.

Unless otherwise stated, all assumptions, data elements, methodologies, plan provisions, and information about assets reflected in this report are the same as those underlying and/or contained in the December 31, 2018 or the December 31, 2019 disclosure reports ("the Reports") prepared by Aon in accordance with US GAAP for the post employment benefit plans sponsored by OPG. These disclosure reports were dated March 2019 and March 2020, respectively, and are titled as follows:

- US GAAP Accounting Information Non-pension Post-retirement and Post-employment Benefits Plans; and
- US GAAP Accounting Information – Pension Plans.

Sincerely,

Aon

[Original signed by]

Linda M. Byron
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

Aon

[Original signed by]

Gregory W. Durant
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

December 2020

Actuarial Report

Results for 2018 and 2019

This report confirms OPG's total actual pension and OPEB costs for the period from January 1, 2018 to December 31, 2019, as determined in accordance with US GAAP, are as follows:

(in Canadian $ 000's)	January 1 to December 31, 2018	January 1 to December 31, 2019
RPP	$ 272,514	$ 249,801
SPP	25,875	25,681
OPRB	175,290	150,011
LTD	14,410	31,095
Total	**$ 488,089**	**$ 456,588**

Further details of the OPG-wide costs provided above, by plan, as well as OPG's actual contributions to the RPP fund and benefit payments for OPEB for the periods from January 1, 2018 to December 31, 2019 are provided in Schedules 1 and 2 to this report.

In its November 2014 decision under case number EB-2013-0321, the OEB established the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account for OPG's nuclear and regulated hydroelectric businesses, effective November 1, 2014. The OEB authorized the continuation of these accounts in its December 2017 decision under case number EB-2016-0152, effective June 1, 2017.

As shown in materials being filed by OPG under OEB case number EB-2020-0290, additions to the Pension & OPEB Cash Versus Accrual Differential Deferral Account for the period from January 1, 2018 to December 31, 2019 were calculated by OPG by comparing the portion of the January 1, 2018 to December 31, 2019 OPG-wide US GAAP pension and OPEB costs attributed to OPG's nuclear and regulated hydroelectric businesses to the regulated businesses' portion of OPG's total actual contribution to the RPP fund and actual benefit payments under OPEB plans for the corresponding periods. As also shown in those materials, additions to the Pension & OPEB Cash Payment Variance Account for the period from January 1, 2018 to December 31, 2019 were calculated by OPG by comparing the regulated businesses' portion of the total actual contribution to the RPP fund and actual benefit payments under OPEB plans to such forecast amounts included in the regulated prices established by the OEB under case number EB-2016-0152.

The resulting unamortized balances of the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account calculated and recorded by OPG as at December 31, 2019 were $885 million to be recovered from ratepayers and $348 million to be paid to ratepayers, respectively, as reported in the audited schedule of regulatory balances as at December 31, 2019, prepared by OPG for filing with the OEB and dated December 22, 2020.

Actuarial Methods and Assumptions

Aon confirms that the OPG-wide costs for the years ended December 31, 2018 and December 31, 2019 as disclosed in this report were determined using the actuarial methodology and accounting standards described below. We furthermore confirm that the methodology under US GAAP is consistent with the methodology outlined in OPG's application to the OEB under case number EB-2016-0152 and used to determine the forecast of OPG-wide pension and OPEB costs for 2018 and 2019, which were presented by OPG in that proceeding through the filing of our report on these costs, "Report on the Estimated Accounting Cost for Post Employment Benefit Plans for Fiscal Years 2017 to 2021" dated December 2016. Finally, we confirm that the methodology under US GAAP is consistent with the methodology outlined in OPG's application to the OEB under case number EB-2018-0243 and used to determine the forecast of OPG-wide pension and OPEB costs for 2018 and 2019, which were presented by OPG in that proceeding through the filing of our report on these costs, "Report on the Estimated Accounting Cost for Post Employment Benefit Plans for Fiscal Years 2018 to 2024" dated December 2018.

- Benefit obligations for RPP, SPP and OPRB are determined using the projected benefit method prorated on service;
- Benefit obligations for LTD are determined using the projected benefit method on a terminal basis such that the total estimated future benefit is attributed to the year of service in which a disability occurs;
- The discount rates have been determined in accordance with US GAAP, with reference to those representative of AA corporate bond yields in Canada having duration similar to the liabilities of the plans. For the estimated RPP, SPP and OPRB costs for 2018, the discount rates were set using the applicable bond yields used to determine the corresponding benefit obligations as of December 31, 2017;

  The following effective discount rates for determining the 2018 pension and OPEB costs under the full yield curve approach[1] were as follows:

	RPP and SPP	OPRB	LTD
Current Service Cost	3.69% per annum	3.73% per annum	3.09% per annum
Interest Cost[2]	3.25% per annum	3.38% per annum	2.70% per annum

The discount rate used to determine the projected benefit obligation at December 31, 2018 was 3.43% per annum for LTD;

[1] A series of individual spot rates applied to projected cash flows under the full yield curve approach is expressed as a single effective discount rate for disclosure purposes.
[2] The rates shown apply to interest cost on the projected benefit obligations at the beginning of the year. Under the full yield curve approach, a separate rate is used to calculate the interest cost on the current service cost recognized during the year. For 2018, this rate was 3.54% for RPP and SPP costs, 3.69% for OPRB costs and 2.70% for LTD costs.

The effective discount rates for determining the 2019 pension and OPEB costs under the full yield curve approach[1] were as follows:

	RPP and SPP	OPRB	LTD
Current Service Cost	3.93% per annum	3.96% per annum	3.43% per annum
Interest Cost[2]	3.56% per annum	3.64% per annum	3.11% per annum

The discount rate used to determine the projected benefit obligation at December 31, 2019 was 2.83% per annum for LTD;

Under the full yield curve approach, individual spot discount rates along the yield curve are applied to the projected cash flows at the relevant maturity, resulting in a more precise measurement of interest cost. The service cost is also more precisely determined under the full yield curve approach, based on duration specific spot rates applied to discount the service cost projected cash flows.

- A building block approach is used in determining the expected long-term rate of return on plan assets. Historical markets are studied and long-term historical relationships between equities and fixed-income are preserved consistent with the widely accepted capital market principle that assets with higher volatility generate a greater return over the long run. Current market factors such as inflation and interest rates are evaluated before long-term capital market assumptions are determined. The long-term portfolio return is established using the fund's asset allocations, via a building block approach with proper consideration of diversification and rebalancing. Aon calculated the expected return based on this methodology. An expected rate of return on assets of 6.00% per annum determined using the above approach was used for determining the 2018 and 2019 RPP costs;
- Other actuarial assumptions are management's best estimate of future events, as determined in consultation with us and as set out in the Reports. For 2018 and 2019 costs, the inflation rate was set at 2.00% per annum. The salary scale increase rate set for 2019 costs was established at 2.00% per annum to the end of 2024 for all employee representations, with the exception of 1.00% per annum to end of 2018 for employees represented by the Society of United Professionals consistent with the provision of the existing collective agreement, and 2.50% per annum for all employee representations thereafter, (plus Promotion, Progression, Merit for all years). For the 2018 costs, the same assumed salary scale increase rates were used, with the exception of 2.50% per annum used for the 2022-2024 period for all employee representations;
- Actuarial gains or losses for RPP, SPP and OPRB have been amortized using the 10% corridor method, except where immediate recognition is required under US GAAP for non-routine events during the year (none during 2018 and 2019);
- Past service costs for RPP, SPP and OPRB have been amortized on a straight-line basis over the expected average remaining service lifetime at the amendment date, except where immediate recognition is required under US GAAP for non-routine events during the year (none during 2018 and 2019);

[1] A series of individual spot rates applied to projected cash flows under the full yield curve approach is expressed as a single effective discount rate for disclosure purposes.
[2] The rates shown apply to interest cost on the projected benefit obligations at the beginning of the year. Under the full yield curve approach, a separate rate is used to calculate the interest cost on the current service cost recognized during the year. For 2019, this rate was 3.80% for RPP and SPP costs, 3.92% for OPRB costs and 3.11% for LTD costs.

- For LTD, all actuarial gains and losses and past service costs are required to be recognized immediately in the cost. Therefore, under US GAAP, the cost is equal to the change in the benefit obligation plus benefit payments; and
- Expected return on assets and amortization of actuarial gains/losses are based on a market-related value of assets where investment gains and losses on equity assets in excess of an expected return of 6.00% per annum plus the increase in Consumer Price Index are smoothed over five years.

For 2018, OPG's contributions to the RPP fund were made pursuant to the filed actuarial valuation report for funding purposes as of January 1, 2018 of the RPP. For 2019, OPG's contributions to the RPP fund were made pursuant to the filed actuarial valuation report for funding purposes as of January 1, 2019 of the RPP.

Schedule 1—Summary of 2018 US GAAP Results

The following table provides a summary of US GAAP results for 2018 for the post employment benefit plans sponsored by OPG. The net periodic pension/benefit cost for this period was determined based on the balance sheet items at January 1, 2018.

(in Canadian $ 000s)	RPP	SPP	OPRB	LTD
Net Asset (Liability) Recognized as at January 1, 2018				
Projected Benefit Obligation	$ (17,249,198)	$ (350,412)	$ (2,969,382)	$ (202,310)
Fair Value of Plan Assets	14,157,418	-	-	-
Net Asset (Liability) Recognized	**$ (3,091,780)**	**$ (350,412)**	**$ (2,969,382)**	**$ (202,310)**
Amounts Recognized in Accumulated Other Comprehensive Income as at January 1, 2018				
Unrecognized Past Service Costs (Credits)	$ -	$ -	$ 4,685	$ -
Unrecognized Net Actuarial Loss (Gain)	3,637,508	115,589	371,901	-
Total Accumulated Other Comprehensive Loss (Income)	**$ 3,637,508**	**$ 115,589**	**$ 376,586**	**$ -**
Components of Net Periodic Pension/Benefit Cost, January 1, 2018 to December 31, 2018				
Employer Current Service Cost	$ 325,127	$ 7,628	$ 67,271	$ 11,127
Interest Cost	563,169	11,421	101,670	5,388
Expected Return on Plan Assets	(813,266)	-	-	-
Recognition of LTD Past Service Cost (Credit)	-	-	-	(23)
Recognition of LTD Actuarial (Gain) Loss	-	-	-	(2,082)
Amortization of Past Service Cost (Credit)	-	-	583	-
Amortization of Net Actuarial Loss (Gain)	197,484	6,826	5,766	-
Total Cost	**$ 272,514**	**$ 25,875**	**$ 175,290**	**$ 14,410**
2018 Estimated Employer Pension Contributions / Benefit Payments				
Amounts used for developing net periodic pension/benefit costs	$ 214,730	$ 14,619	$ 69,654	$ 27,762
2018 Actual Employer Pension Contributions / Benefit Payments	**$ 194,782**	**$ 15,152**	**$ 70,356**	**$ 25,521**

Schedule 2—Summary of 2019 US GAAP Results

The following table provides a summary of US GAAP results for 2019 for the post employment benefit plans sponsored by OPG. The net periodic pension/benefit cost for this period was determined based on the balance sheet items at January 1, 2019.

(in Canadian $ 000s)	**RPP**	**SPP**	**OPRB**	**LTD**
Net Asset (Liability) Recognized as at January 1, 2019				
Projected Benefit Obligation	$ (16,977,799)	$ (347,414)	$ (2,590,232)	$ (191,199)
Fair Value of Plan Assets	13,661,843	-	-	-
Net Asset (Liability) Recognized	**$ (3,315,956)**	**$ (347,414)**	**$ (2,590,232)**	**$ (191,199)**
Amounts Recognized in Accumulated Other Comprehensive Income as at January 1, 2019				
Unrecognized Past Service Costs (Credits)	$ -	$ -	$ (2,085)	$ -
Unrecognized Net Actuarial Loss (Gain)	3,783,952	101,868	(105,413)	-
Total Accumulated Other Comprehensive Loss (Income)	**$ 3,783,952**	**$ 101,868**	**$ (107,498)**	**$ -**
Components of Net Periodic Pension/Benefit Cost, January 1, 2019 to December 31, 2019				
Employer Current Service Cost	$ 307,058	$ 7,778	$ 55,082	$ 14,531
Interest Cost	605,071	12,401	95,092	5,980
Expected Return on Plan Assets	(818,582)	-	-	-
Recognition of LTD Past Service Cost (Credit)	-	-	-	(561)
Recognition of LTD Actuarial (Gain) Loss	-	-	-	11,145
Amortization of Past Service Cost (Credit)	-	-	(163)	-
Amortization of Net Actuarial Loss (Gain)	156,254	5,502	-	-
Total Cost	**$ 249,801**	**$ 25,681**	**$ 150,011**	**$ 31,095**
2019 Estimated Employer Pension Contributions / Benefit Payments				
Amounts used for developing net periodic pension/benefit cost	$ 198,679	$ 14,721	$ 74,243	$ 26,881
2019 Actual Employer Pension Contributions / Benefit Payments	**$ 178,104**	**$ 17,951**	**$ 70,404**	**$ 25,682**

About Aon

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

The information contained herein and the statements expressed are of a general nature and are not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information and use sources we consider reliable, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2020 Aon Hewitt Inc. All Rights Reserved.