2019 HYDROELECTIC PAYMENT AMOUNT

1.0 PURPOSE

This evidence supports the approval and implementation of the 2019 Hydroelectric Payment Amount ("HPA") effective January 1, 2019, pursuant to the price-cap index approved for OPG's regulated hydroelectric facilities in the EB-2016-0152 Decision and Order issued on December 28, 2017 (the "EB-2016-0152 Decision").

2.0 OVERVIEW

OPG requests the OEB to approve an HPA effective January 1, 2019, based on the requirements of the EB-2016-0152 Payment Amounts Order (the "EB-2016-0152 PAO"), the EB-2016-0152 Decision, and the relevant index values published by the OEB in the fall of 2018. Section 3.0 summarizes the annual HPA adjustment framework. Section 4.0 summarizes OPG's proposal to implement the 2019 HPA.

3.0 HYDROELECTRIC PAYMENT AMOUNT

The EB-2016-0152 PAO established a 2017 HPA of $41.67/MWh and a 2018 HPA of $42.05/MWh[1], and required that:

> "For the periods January 1, 2019 to December 31, 2019, January 1, 2020 to December 31, 2020 and January 1, 2021 to December 31, 2021, the HPA amounts will be determined through an annual hydroelectric payment amount adjustment application. The HPA for each year shall be determined using the price-cap index proposed by OPG in Ex. A1-3-2 of this proceeding, under which the HPA for the prior year is adjusted by the generation industry-weighted inflation factor (using the most current Statistics Canada values for GDP-IPI (FDD) and Ontario AWE), less a productivity factor of 0% less a stretch factor of 0.3%."[2]

The EB-2016-0152 Decision requires that the HPA for each year be determined using the price-cap index proposed by OPG in EB-2016-0152 Ex. A1-3-2 (the "approved methodology"). The EB-2016-0152 Decision established the formula to be applied to adjust rates annually, the base

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[1] EB-2016-0152 PAO, p. 9, paragraph 3.
[2] *Ibid*.

payment amount to which the annual adjustment formula is to be applied, and the basis upon which inputs to the annual adjustment formula are determined. The methodology approved by the OEB is as follows[3]:

$$\text{Payment Amount}(t) = \text{Payment Amount}(t-1) \times \left(1 + \text{Inflation Factor} - \left(\text{Productivity Factor} + \text{Stretch Factor}\right)\right)$$

OPG has calculated the proposed 2019 HPA pursuant to the approved methodology. Specifically:

1) **Prior Year's Payment Amount**: The approved 2018 HPA is $42.05/MWh as established in the EB-2016-0152 PAO.[4]

2) **Inflation Factor**
The composite inflation index approved by the OEB in EB-2016-0152 is determined using the annual change in the following sub-indices (and respective weightings):[5]

    i. GDP-IPI FDD from Statistics Canada applied to generation industry capital costs (81%) and non-labour O&M costs (7%); and
    ii. Ontario AWE from Statistics Canada applied to generation industry labour costs (12%).

The resulting approved formula for determining the annual inflation factor is:

[(81% + 7%) x GDP-IPI FDD] + [12% x Ontario AWE]

The OEB published the 2017 GDP-IPI FDD and Ontario AWE sub-indices on November 23, 2018. An inflation factor of 1.4% is determined using the OEB published sub-indices for 2016 and 2017 and the OEB approved weighting of these indices, as illustrated in Chart 1, below.

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[3] EB-2016-0152 Decision, p. 121.
[4] EB-2016-0152 PAO, p. 9, paragraph 3.
[5] EB-2016-0152 Decision, p. 122.

Chart 1

Year	Inputs and Assumptions										
	Non-Labour GDP-IPI (FDD) - National							Labour AWE - All Employees - Ontario			Composite Index
	Q1	Q2	Q3	Q4	Annual	Annual % Change	Weight	Annual	Annual % Change	Weight	Annual % Change
2016	116.5	116.4	116.9	117.5	116.83			973.55			
2017	118	118.5	118.2	119	118.43	**1.4%**	**88%**	992.55	**1.9%**	**12%**	**1.4%**

3) **X Factor (Productivity and Stretch Factors)**

The OEB has approved a productivity factor of 0%[6] and a stretch factor of 0.3%[7] for the regulated hydroelectric facilities for the IR Term (2017-2021).

Based on the approved 2018 HPA, and using the inflation and X-factors summarized above, the 2019 HPA is to be $42.51/MWh.

4.0 IMPLEMENTATION

OPG requests OEB approval of an effective date, and implementation date, of January 1, 2019 for the 2019 HPA.

[6] EB-2016-0152 Decision, p. 128.
[7] EB-2016-0152 Decision, p. 129.