

2018 Annual Report on Costs Incurred as a Result of Mitigating Transmission Constraints

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1. Background

The following report has been prepared pursuant to subsection 4(2) of Section 302.1 of the ISO rules, Real Time Transmission Constraint Management ("Section 302.1"), which requires the Alberta Electric System Operator ("AESO") to: "monitor and publicly report on the costs incurred as a result of mitigating transmission constraints on an annual basis."

AESO System Controllers mitigate transmission constraints in accordance with the sequence set out in subsection 2(1) of Section 302.1. This report sets out the costs that were directly incurred in 2017 "as a result of mitigating transmission constraints on an annual basis", including transmission must-run costs and the costs of transmission constraint rebalancing ("TCR").

2. Costs of mitigating transmission constraints

2.1 Constrained Down Generation

For information on annual CDG volume and cost estimates for the years 2011-2015, please refer to Table 1 in the 2016 AESO Annual TCM Report.

Table 1: Annual TCR Costs

Year	Number of Days with TCR Payments	Actual TCR Cost (\$)
2016	5	\$7,499
2017	10	\$15,019

2.2 Transmission Must Run

For information on annual TMR costs for years 2011-2015, please refer to Table 2 in the <u>2016 AESO</u> Annual TCM Report.

Table 2: Annual TMR Costs

Year	Contracted TMR Costs (\$) ¹	Conscripted TMR (\$)	Total TMR Costs (\$)
2016 ²	\$303,208	\$1,209,497	\$1,512,704
2017	\$352,901	\$500,374	\$853,275

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¹ The 2018 TCM Report has been updated to include dispatch costs for the Poplar Hill contract under contracted TMR costs. The Poplar Hill contract is classified separately from other TMR contracts; however, the Poplar Hill generator is dispatched under the contract to provide MW to mitigate transmission constraints. Dispatch costs for Poplar Hill have been included under contracted TMR costs to capture this cost of mitigating transmission constraints, as required under Section 302.1. In addition, consistent with prior annual TCM reports, dispatch costs for Location Based Credit Standing Offer (LBC SO) contracts have also been included, as they also represent the costs of dispatching generation to provide MW to mitigate transmission constraints.

² The cost of TMR for the year 2016 has been adjusted since the June 2017 TCM report. Contracted TMR costs were updated to reflect the addition of the Poplar Hill contract dispatch costs, which increased contracted TMR costs by \$276,383 from \$26,825 to \$303,208. Conscripted TMR Costs were updated to reflect actual settlement values, which resulted in a decrease in conscripted TMR costs from \$1,230,734 to \$1,209,497.



2.3 Total Cost of Using the TCM Rule

For information on annual cost of using the TCM rule for years 2011-2015, please refer to Table 3 in the 2016 AESO Annual TCM Report.

Table 3: Total Annual TCM Costs

Year	Total Cost (\$)
2016	\$1,520,203
2017	\$868,294