PY2021 EM&V Key Findings and Recommendations IF Process and System Upgrades Program (PSUP)

No.	KEY FINDINGS	2021 EM&V RECOMMENDATIONS	IMPACT	IESO RESPONSE
1.	Peak demand reductions were not calculated by the technical reviewers in the Q1 Measurement and Verification (M&V) Reports for projects that did not have data from the summer. This affected eight out of 14 PSUP projects in the PY2021 sample frame. With no attempts at estimating ex-ante summer peak demand savings, the technical reviews underestimate the total reported peak demand savings for the program, resulting in the realization rate of 149%. As part of PSUP, projects are technically reviewed after one-quarter of performance and then reviewed again after one year. In the Q1 M&V reports, the technical reviewers annualized energy savings for reporting. As designed in the evaluation, EcoMetric can begin to evaluate a PSUP project after its Q1 M&V Report. This is a common issue that EcoMetric has seen throughout the evaluation of PSUP in the IF. EcoMetric included a similar finding and recommendation in the PY2020 report, but the issue remains.	The technical reviewer should always strive to calculate demand savings for the summer peak period defined by the IESO, regardless of the time of year from which the performance data comes. If there is no data from the peak summer period, various methods could be employed to estimate peak summer demand savings, including: • Weather variable-based (i.e., outside air temperature) or production-based regression • If the measure is not weather-dependent, assume the peak summer demand savings are the same as the peak demand savings from the period that the performance data comes from. The IESO should develop a peak demand calculation tool that leverages the hourly measurement and verification data required by the PSUP program. This tool would be used by both technical reviewers and applicants when calculating peak demand to ensure accurate and consistent estimates. The IESO's custom and formatted load profile macros in its Cost Effectiveness Tool could be leveraged to develop this tool. The macro leverages 8,760 annual hourly data to build custom load shapes for a facility or project that can be used to calculate savings in the summer and winter peak periods. Such a tool would be beneficial for industrial programs in the 2021-2024 CDM Framework, which focuses on achieving peak demand savings.	High	The IESO will work with the Technical Reviewer to ensure demand savings are calculated using the methods described/recommended.