PY2021 EM&V Key Findings and Recommendations IF Energy Manager (EM) Program

No.	KEY FINDINGS	2021 EM&V RECOMMENDATIONS	IMPACT	IESO RESPONSE
1.	Supporting documentation provided by the energy managers for many of the smaller projects (< 100 MWh) was inadequate to determine how savings were calculated and reviewed. Of the 149 non-incented measures from PY2021, 128 were less than 100 MWh. Savings for the smaller projects accounted for 22% of the program's total in PY2021. These smaller projects include optimization, O&M, behavioural, and equipment upgrades. While savings for behavioural and O&M measures can be more difficult to substantiate with supporting documentation, half of the smaller projects were equipment upgrades such as HVAC and lighting. Basic information on the equipment and its operations is sufficient to substantiate savings estimates, but many of these projects had inadequate supporting documentation. For larger projects, the level of documentation provided by the energy managers and technical reviewers was sufficient to verify savings accurately and thoroughly. The exception was one large optimization, and BAS controls project that lacked reported savings for one major measure in the larger project, resulting in EcoMetric's inability to determine the driver of the energy realization rate.	Require that the technical reviewer only accept non-incented measures that have sufficient documentation for savings verification. The technical reviewer is not required to conduct an engineering review of every measure, but they must accept every measure for inclusion in the energy manager's progress towards their non-incented savings target. Provide a list of required information for common projects that achieve less than 100 MWh. For example, a lighting project would require baseline wattages, efficient wattages, number and type of fixtures or bulbs retrofitted, and the annual hours of use.	High	The IESO has enhanced the savings reporting template for the 21-24 CDMF EM program to include additional guidance on the type of information to report.

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2.	Following a trend EcoMetric saw between PY2019 and PY2020, non-incented projects in PY2021 generally showed improved attention to detail in the peak demand savings calculations. In prior years, EcoMetric often found peak demand savings values set to missing or zero in the program tracking data. This was not an issue in the PY2021 sample frame. However, several EMs would claim the change in connected load as summer peak demand savings without consideration of coincidence.	The IESO should develop guidelines for calculating peak demand savings aimed at energy managers. These guidelines would be beneficial for the program in the 2021-2024 CDM Framework, which focuses on achieving peak demand savings. As the program shifts toward a Strategic Energy Management design, guidance and training for participants should focus on the difference between peak demand savings and changes in connected load.	High	The IESO is providing information to EMs on how to calculate demand savings via Energy Manager Support Services.

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3.	In PY2021, IESO-funded energy managers were responsible for 55,350 MWh of reported energy savings and 7.98 MW of reported summer peak demand savings across the programs they enabled savings in. This represents 12% and 11% of the total savings in the EM, Retrofit, PSUP, and EPP programs, respectively. IESO-funded energy managers are major enablers of energy and summer peak demand savings across the IESO's portfolio of programs. IESO-funded energy managers implement larger projects and achieve more energy savings at their facilities, on average, than the general population. In the PY2021 Retrofit program, projects led by IESO-funded energy managers averaged 66,355 kWh reported energy savings while the rest of the population averaged 37,735 kWh. Average Retrofit energy savings for facilities with an IESO-funded energy manager were 124,338 kWh compared to 97,467 kWh for facilities without an energy manager. In PSUP, an organization with an IESO-funded energy manager implemented the project with the highest level of reported energy and summer peak demand savings in PY2021—accounting for one-third of the total reported energy savings and nearly two-thirds of the total reported summer peak demand savings. These findings further support the results from the PY2020 holistic evaluation of IESO-funded energy managers, where they achieved 11% of the savings in the programs they participated in.	As the EM program transitions towards a Strategic Energy Management (SEM) design in the 2021-24 CDM Framework, include training and resources on how to achieve savings and receive incentives through the other programs in the IESO portfolio. Structure the program to reward participating organizations that achieve savings through the SEM program and in other programs by offering an incentive booster for reaching portfolio-wide savings goals.	Medium	The IESO is actively developing the SEM program and will take this recommendation into consideration.