

2019 Interim Framework (IF) Energy Performance Program EM&V Key Findings and Recommendations

| No. | PROGRAM | KEY FINDINGS | 2019 EM&V RECOMMENDATIONS | IMPACT | IESO RESPONSE |
|-----|----------------------------------|--|--|--------|---|
| 1. | Energy Performance Program (EPP) | All programs reviewed in the Pay for Performance (P4P) jurisdictional scan require climate normalized data (typical meteorological year) for savings estimates. While we have yet to review Interim Framework (IF) savings calculations, the evaluation team found that actual weather data was used for savings calculations in the Conservation First Framework (CFF). | Require climate normalized data for performance period savings estimates. Savings normalized for climate will ensure customer incentive payments are not rewarded or penalized for short term shifts in weather. Climate normalized savings estimates will also facilitate incorporating EPP savings more accurately in integrated resource plans. | High | The recommendation is under consideration for future versions of pay for performance programs. |
| 2. | Energy Performance Program (EPP) | Many programs reviewed in the P4P jurisdictional scan require an intensive application and screening processes that include detailed project implementation plans, project cost estimations, baseline models and modeling explanations, and even site visits to verify existing building conditions. | Create an incentive mechanism that provides funding in the planning or implementation phase beyond the modeling incentive. Providing an opportunity for participants to offset costs early on in the project timeline is especially important during the current pandemic when capital budgets are impacted. | High | This pay for performance program was designed to reduce up front administration required to participate. The recommendation to offset costs early on the project timeline is under consideration for future versions of pay for performance programs. |

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| 3. | Energy Performance Program (EPP) | Participants see communication as an issue. A common theme that affected satisfaction scores was a lack of communication surrounding progress in the program and how the COVID-19 shutdowns in Ontario would affect savings calculations. Participants also expressed confusion surrounding their progress and performance status in the program. | Hold regular update meetings with both the participant and their Energy Service Providers (ESPs) to encourage communication, provide progress updates, gather feedback on the experience, and plan for future projects. The participants and ESPs may not have fully recognized the COVID-19 messaging efforts of the IESO communications team. Streamline and centralize communications through the EPP business advisors, specifically about difficulties participants are facing during the COVID-19 crisis. As the uncertainty surrounding the impacts of COVID-19 wanes and program participation increases in the long term, update meetings can be scaled back in frequency. | Medium | The COVID-19 health emergency was a unique situation that was not anticipated through the program design. The IESO has since contacted each participant and consultant to engage them on options to address the impact of COVID-19 on their participation in the program. |
| 4. | Energy Performance Program (EPP) | Participants and energy service providers expressed frustration with the process of making baseline adjustments and the Rolling 28-day Variance Analysis Report. Most programs reviewed in the P4P jurisdictional scan limit baseline model metrics to accuracy (Coefficient of Variation of the Root Mean Square Error or CVRMSE, bias (Normalized Mean Bias Error or NMBE), and model fit (R2). | Remove the Cumulative Sum (CUSUM) and 28-day rolling variance baseline requirements for EPP. CV(RMSE), NMBE, and R2 metrics set sufficient standards on model performance for a P4P program and meet the International Performance for Measurement and Verification Protocol (IPMVP). | Medium | The recommendation is under consideration. Affected applications have been identified to determine the impacts of implementing the recommendation. |
| 5. | Energy Performance Program (EPP) | Most programs reviewed in the P4P jurisdictional scan require a model accuracy of threshold CV(RMSE) value of less than 25%. | Increase the EPP CV(RMSE) threshold to 25%. | Medium | This recommendation is under consideration for future pay for performance programs. |

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| 6. | Energy Performance Program (EPP) | Two of the participants and energy service providers stated that their preference would be to implement capital measures through the Retrofit program instead of EPP. | Build a business case or case study to show the benefits of coordinating both capital and operating and maintenance (O&M) measures through EPP to reduce the risk of uncertainty surrounding the performance payment and encourage participants to pursue both types of actions through the program. | Medium | The recommendation is under consideration. |
| 7. | Energy Performance Program (EPP) | Both participants interviewed indicated that an energy manager would boost their performance in EPP, allowing them to identify more measures and facilities to participate in the program. | Develop cross-program marketing and training to leverage the potential of Energy Managers (EMs) in driving EPP participation. The energy manager is an enabling resource that provides opportunities to develop energy efficiency projects incentivized through other IESO programs such as Retrofit and Process & Systems Upgrades (PSU) programs. The non-incented target of the EM also ensures that facilities also generate natural spillover without program assistance. | Low | The IESO agrees that strong energy management principles are a benefit to participant success through the program. |
| 8. | Energy Performance Program (EPP) | All other P4P programs reviewed in the jurisdictional scan collect project cost data from participants, and most require reporting of measure-level incremental costs. This data is used to set incentive thresholds and calculate the cost-effectiveness of the program. | Require EPP participants to provide invoices for capital projects and cost estimates for O&M measures. | Low | Requesting invoices for capital projects and cost estimates for operational and maintenance measures unnecessarily increases the administrative burden on program participants. |

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| 9. | Energy Performance Program (EPP) | <p>Most commercial P4P programs rely on a group of approved contractors and energy services companies to recruit and provide support to participants throughout the application and performance periods.</p> <p>EPP is unique that it encourages using a modeling consultant but does not require or provide access to pre-approved modeling consultants.</p> | Consider developing a list of preferred contractors and ESPs for which EPP participants can partner. | Low | The recommendation is under consideration. |