

# Preliminary Acceptance Criteria for M&V2.0 Results

# Proposed uncertainty and confidence targets

- Propose [80, 20 or 30] as starting point for M&V2.0 multi-building aggregate-level results to be taken as accurate enough
- Reasoning:
  - Criteria for deemed values, unknown, provide no guidance
  - Exceeds ASHRAE guidance, which is too low for EE program context
  - Provides more information than standard model error, fitness metrics
  - In same range as current BPA considerations

# Implications of proposed targets

- Aggregate, program [80, 20 or 30]: we are 80% certain that true amount of savings is within ~25% of the estimated savings – could have saved ~25% more, or ~25% less
- Could satisfy a *portfolio*-level 80-20 result
  - If a couple of programs dominate the savings (Btu), and they meet 80-20, the portfolio is *likely to meet* 80-20
  - If program savings are more evenly distributed and meet 80-20, the portfolio will *exceed* 80-20
- Allows for site level and program uncertainties to be higher or lower, as is realistic to expect
- Based on limited empirical analyses, this is achievable – pilots can provide more evidence

# Attributing the whole-building gross savings to the installed measures

- Implementer must define a process to monitor projects to identify occurrence of events
- Adjustments to savings must be transparently documented
- IPMVP and ISO 50015 addresses this at high level
- With a large enough program/pilot size, do these events ‘cancel out’?

# Proposed guidance for documenting non-routine adjustments

- Include a short description of potential non-routine adjustments, given program design and included measures
- Describe process used to monitor for non-routine events
  - Include measured or reported/surveyed data that was tracked, and frequency of data collection
- Describe how energy impacts of non-routine events were quantified
  - Include supporting calculations, and threshold for magnitude of events/impacts that were considered
- Enable third party replication of the need for, and size of the adjustment

# {Let's Discuss!}

What makes a great discussion?

- \* talking to each other
- \* use each other's names
- \* listen to each other
- \* look at the person
- \* respond to each other nicely
- \* share your ideas
- \* disagree in a polite way
- \* take turns
- \* connecting ideas