Ex Ante Development Guidelines – What's Missing?

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Sources of Ex Ante Development Guidelines

- IOU workpaper development guidelines
- Ex ante measure development subcommittee discussions to date

Question for the TF: What is missing?

IOU Workpaper Template and Guidelines Content

- **Definitions**
  - Terms (NTG, EUL, etc.)
  - Delivery channels (Downstream, Upstream, etc.)
  - Installation type (RET, ROB, REA, NEW)
- **Common workpaper data sources**
  - ET studies
  - EM&V studies
  - Other jurisdictions
  - Manufacturer information
- **Instructions**
  - Key workpaper sections
  - Documentation of information
  - Guidance on significant figures for numeric values

Cal TF Staff Suggestions for Additional Guidelines Content

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- **Pre-Work:** Literature Review/Other TRM Review/Due diligence
  - Consideration/discussion of all sources of "available information"
    - Disclose all, indicate which prior research will be used
- **Evaluating Available Information**
  - Validity of Research Approach: Sample size, statistical significance, research methodology (e.g. Quasi-experimental; RCT)
  - Applicability of Data to Planned Implementation: Date and location of study, technologies considered, sample size vs. expected customer population.
- **Evaluating whether more information is needed** – Interim approval
  - Data collection during Implementation/early EM&V
  - Modeled results validated through data collection
- **Assess Appropriate Level of Complexity for Measure**
  - Number of building combinations, vintages, locations
  - Merits of algorithms vs. modeling
  - What information really drives outcome? (savings; TRC calculation)
    - Spend more time/money evaluating parameters that impact outcome

Ex Ante Measure Development Subcommittee

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- **Create different standards for statistical rigor, complexity, and accuracy depending on portfolio impact of measure**
  - Higher impact measures warrant greater complexity in pursuit of greater accuracy
    - Calibrated building models (higher cost)
    - Calibrated engineering equations with statistically rigorous inputs
  - Lower impact measures require less complexity
    - Engineering equations with documented inputs
  - Measure impact may change over time, so assess regularly (annually) portfolio impact.

- **Establish duration of measure approval based on quality of information and measure impact: Sunset date for all measures**
  - Low quality of information, low statistical rigor warrants 1-year short-term approval
  - Low impact measures may not warrant investing in better information
  - High impact measures warrant better information for longer-term approval

Ex Ante Measure Development Subcommittee

- **Implementation considerations**
  - Cost of workpaper development, both initial development and maintenance
  - Cost of processing measure data internally for reporting purposes
  - Risk of human error due to number of measure combinations, frequency of updates, etc.
- **Other issues to address**
  - Appropriate application of interactive effects
  - Definition/consideration of bias
  - Best practices for measure documentation
  - Clear model validation guidelines – consider EnergyPlus criteria for new modules?
  - Role of stakeholder input/"best professional judgment"
  - Baseline justification
  - Simplifying "Rules of Thumb"

Question for the TF

What is missing?