T2WG Task 5 ISP Guide Update

Statement of Problems and Recommendations

A Presentation to T2WG Task 5 Subgroup, May 22, 2017

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T2WG Task 5 Data Review

Outline

- Statement of Problems in the existing ISP Guide
  - What works
    - Technical elements
    - Policy elements
  - What needs improvement

- Recommendations for the Guide Update
  - Agree upon Overarching Goals
  - Define Purposes of ISP Study Guide
  - Improve definitions around ISP (concept, applicability, type, etc.)
  - Select applicable approach of ISP studies
  - Decide upon editorial fix-up vs. major revision

Problem Statement (1)

What works

- Technical elements
  - Clear definition for triggers
  - Clear definitions for ISP-by-default and ISP-by-code
  - Workable general process for ISP studies, esp. geared toward measures having broad market implementation
    - Good for market-based ISP study
    - Good for ISP investigation for deem measure's sunset
    - Part of process can be used in ISP investigation for custom specific measures

- Policy elements
  - Some references to prior CPUC Decisions
  - …

Existing Guide: ISP Study Scope

Perform literature reviews

- **Technology and application**
- **Code/Regulation**

Develop questionnaire & reviews

Conduct Interviews

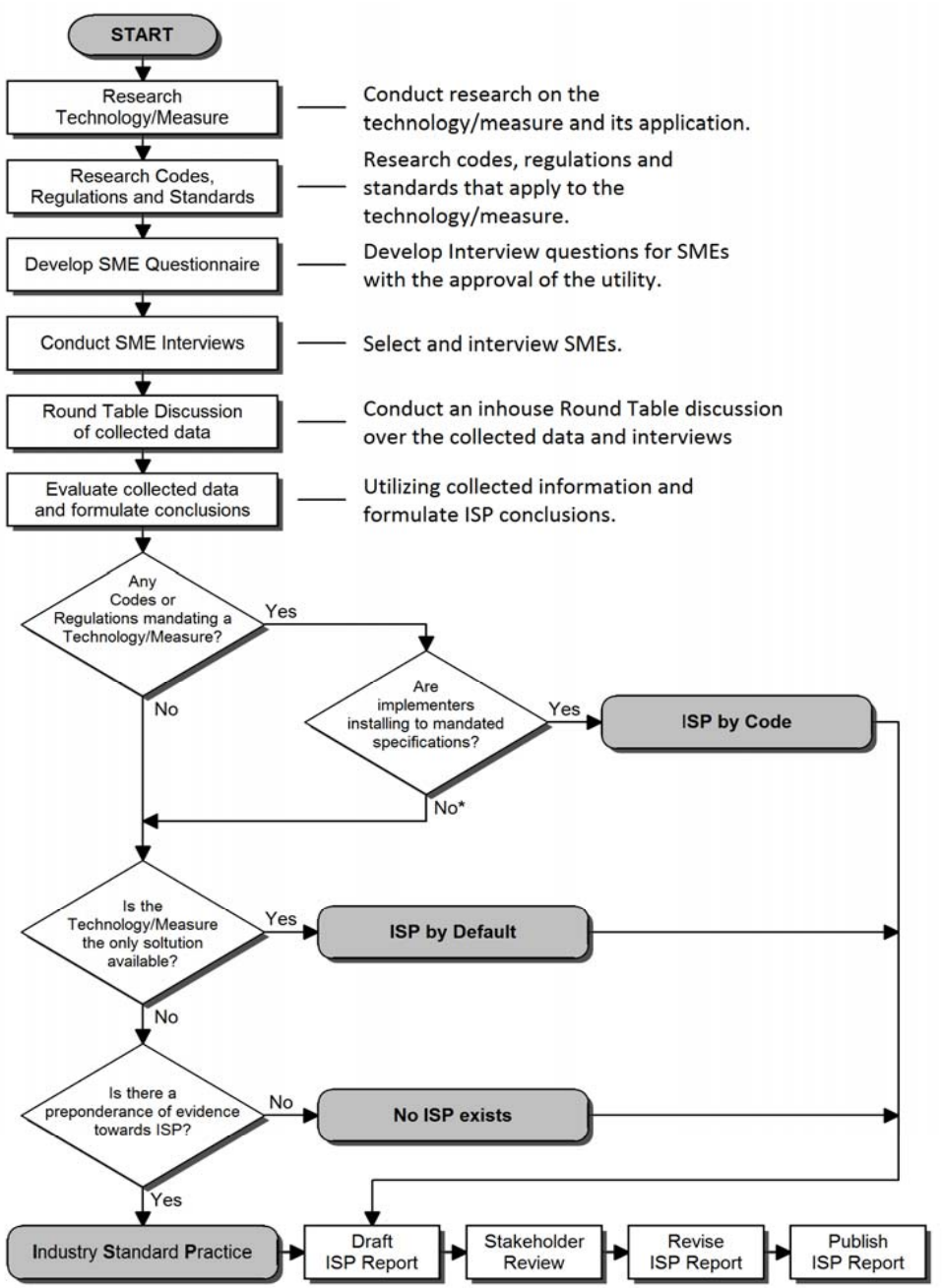
In-house discussion

Data collection

- **Code/Regulation**
- **Alternative**

ISP report (draft/revision) and reviews

ISP report publication

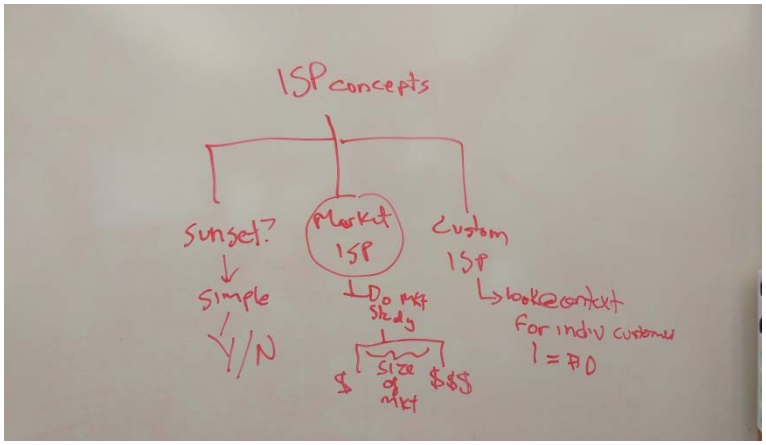


* A No decision typically indicates that implementors are installing technology above and beyond code/regulation or disregarding the code/regulation entirely.

Market-based ISP Study Process

Steps	• Stakeholders	Est.Time (wks)
Complete ISP Study Request From	• Requester (PI/PM/Engr.)	
Review and finalize Request Form	• Lead & Requester	
Upload Request Form to CMPA & notify CPUC; Recommend the type of ISP study	• Lead	
Develop draft survey instrument	• Team with support from requester & SMEs	
Review and revise survey instrument	• CPUC, SMEs, and Team	
Upload final survey instrument to CMPA	• Lead	
Identify and recruit participants	• Requester, reps, SMEs, and team	
Perform ISP study	• Team	
Complete ISP study and draft report	• Team	
Upload draft report to CMPA & notify CPUC	• Lead	
Review draft report	• CPUC and all stakeholders	
Revise and finalize the report for upload to CMPA	• Team	

Problem Statement (2)

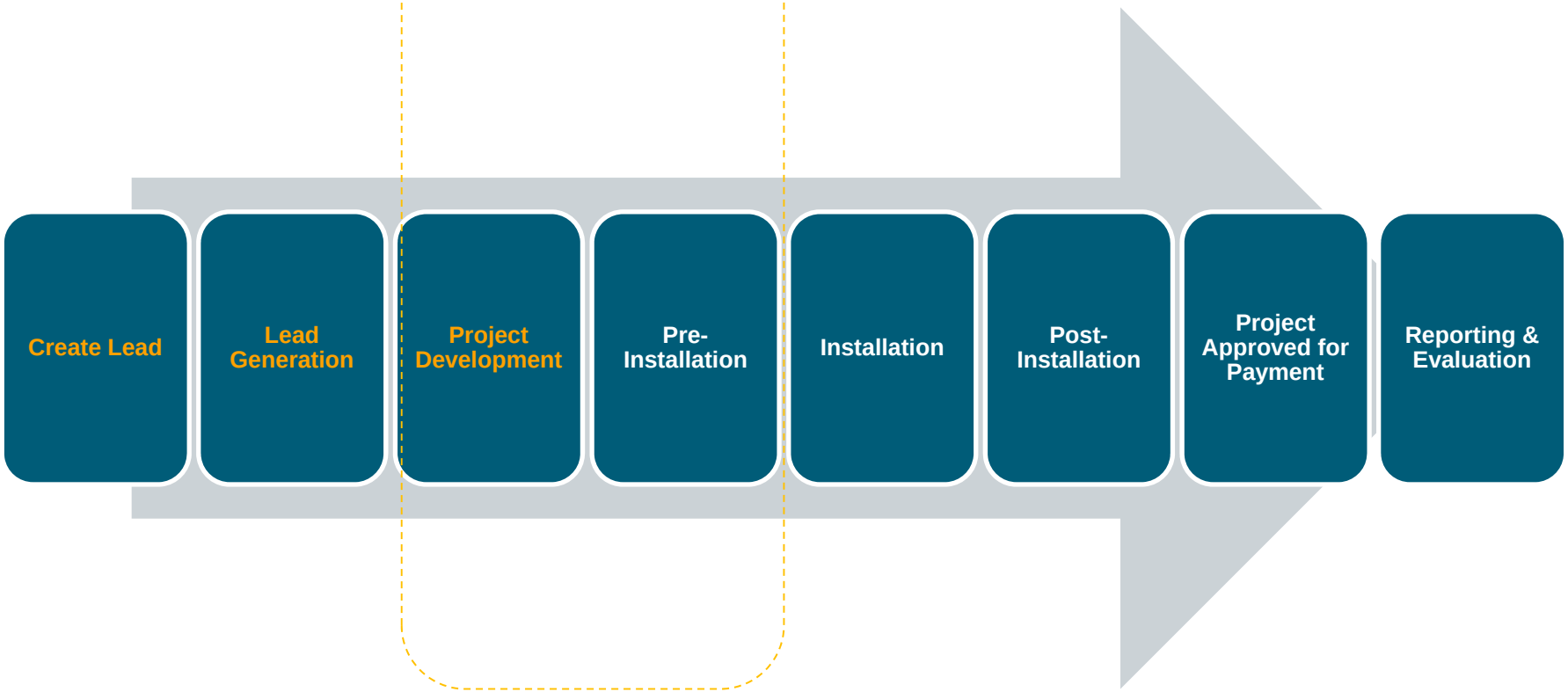


What needs improvement

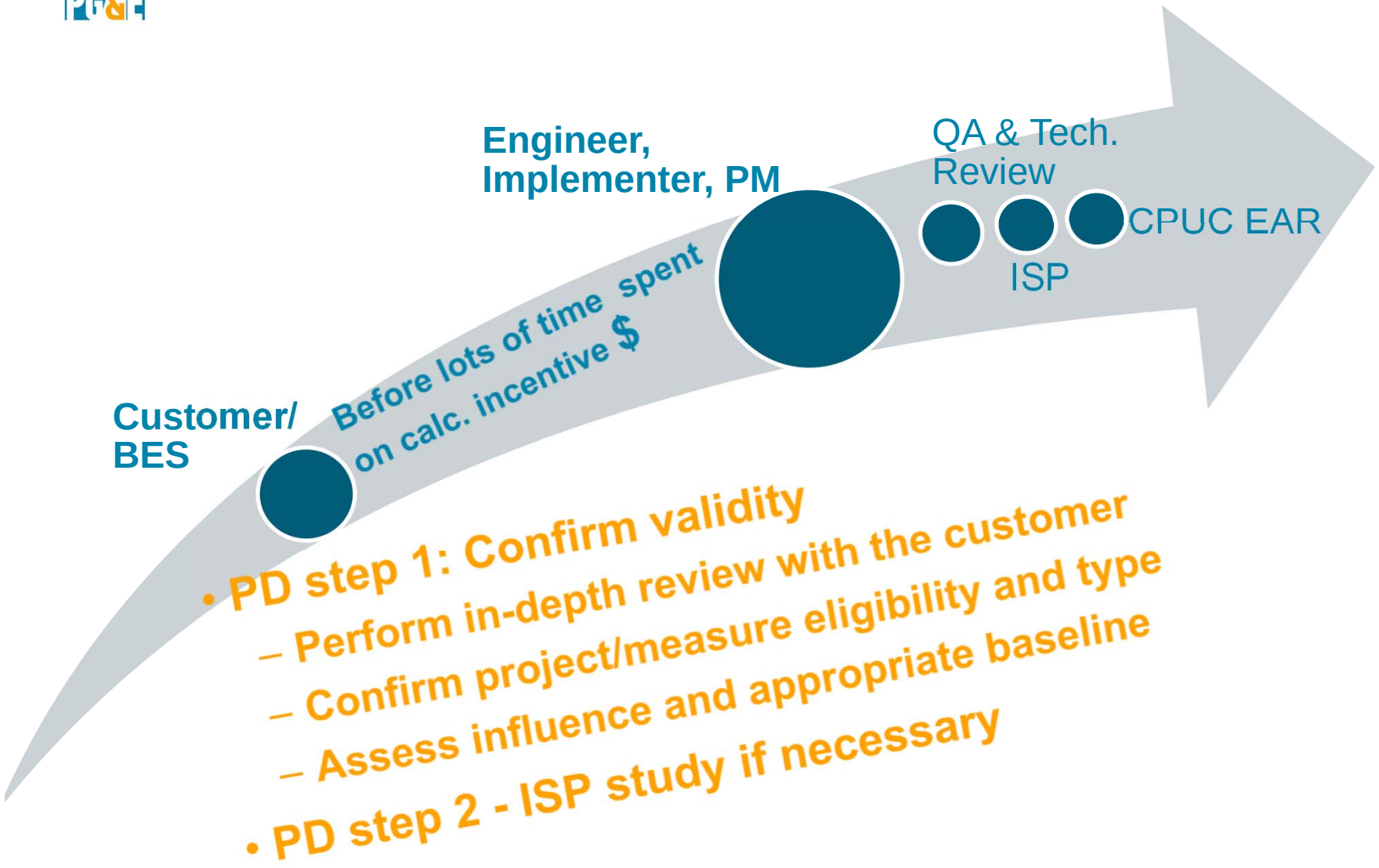
- Technical elements
  - Define ISP, ISP study & ISP baseline
  - Specify ISP study types for three distinct cases
    - market-based, sunset, custom-specific
  - Specify the process for each ISP study type
    - Request form and justification
    - Timelines
- Policy elements
  - Overarching goals and purposes
  - Applicability of ISP study results
  - “Net” accounting
- Other – to simplify convoluted issues
  - Project development (PD)
  - Custom review process

Project Development (PD)

A majority of time is spent in PD and pre-installation



Past Lessons of Custom Projects



Recommendations… more to come…

- Key technical element for today's discussion:
  - ISP research addresses one of three distinct situations listed in the following table. For each situation, we define roles and responsibilities (who does what), and the investigation approach (including samples)

ISP Study Type & Approach	Research Sample Population	Sample size	Rigor
Measure sunset ISP	Customer (participant & non-participant) Vendors/suppliers/manufactures Designers	Small	Low
Market-based ISP	Customers (participant & non-participant) Vendors/suppliers/manufactures Designers	Moderate to large	High
Custom- or site-specific ISP investigation	Step 1: Review with the customer to understand key PD elements (eligibility, type, influence, options) Step 2: Interview vendors, suppliers, manufacturers and/or designers	Small	High