**T2WG Task 5 – ISP Guidance**

**List of issues, Action items, and Recommendations for Meeting #6 (7/10)**

*This document is a working document with draft content provided by working group participants or collected through various working group discussions. The draft material in this document has not been vetted by participants and does not reflect the final input of the working group – until the final report is produced, the material should be used only as a basis for working group discussions.*

This document summarizes the context, relevant documents, identified issues, and proposals to date for Task 5 – ISP Guidance.

Please review the list of issues and proposals and be prepared to:

* Indicate whether you agree with an issue (if not, why not?)
* Indicate whether you agree with the proposal (if not, why not?)
* Share other issues/proposals to would like to add to this list
* Discuss issues/proposals that require input

If you have thoughts or material to share ahead of the next T2WG meeting (including previously-compiled findings, comments, or recommendations) email: [t2wg@cadmusgroup.com](mailto:t2wg@cadmusgroup.com). You may send notes directly in this document or as separate documents.

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**Reference Documents**

All materials are available in the “Task 5” folder on <http://t2wg.cadmusweb.com/>

* ISP Guide (the “Document”), version 1.2A, final living document, April 2014: [ISP Guide Book](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISPGuideBook-v1.2A_20170705.docx)
  + This is the existing ISP Guidance Document that is under review for T2WG Task 5
* PG&E Redline version of ISP Guide: [PGE Comments on ISP Guide](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISPGuidance-PGEComments_20170106.pdf)
  + This marked up version of the guidance document includes detailed comments and redlines describing issues and suggested revisions to the existing guidance document
* PG&E problem statement and recommendations: [PG&E problem statement](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP-Issues-PGESummary-v2_20161222.pdf)
  + PG&E’s summary of ISP issues and recommendations
* PG&E kick-off meeting presentation: [Kick-off meeting presentation](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP_PG&E_Kickoff%20meeting%20presentation_20170522.pdf)
* PG&E Project Development Protocol: [PG&E PD Protocol](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP_ProjectDevelopementProtocol_PG&E_20170518.pdf)
  + Proposals for Issues 1, 2, 3 and 4 reference the PG&E PD protocol
* PG&E ISP study request form: [ISP Study Request From](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP%20Study%20Request%20From_PG&E_20170706T2WG.docx)
  + Proposals for Issue 5 reference the PG&E request form

# T2WG Task 5 Context

**R.13-11-005, Page 38:**

Another issue to be addressed in a collaborative setting is the development and application of Industry Standard Practice (ISP) determinations, as suggested by SCE in its comments on EM&V.

We decline to stop reliance on ISP determinations entirely at this time, as suggested by CEEIC in their comments. Informal ISP studies were initiated by the utilities as a method of risk assessment for individual projects. Those studies can still be helpful in determining whether an implementer has achieved incremental energy savings by convincing the customer to go beyond the usual type of equipment purchased in that customer’s sub-segment, and for identifying larger ISP market studies that should be carried out by the program administrators.

* We agree with SCE that the **current ISP Guidance Document should be revised**.
* This should be a topic to be addressed in the collaborative working group convened by Commission staff and/or utilizing an existing collaborative forum.
* We also agree with the CEEIC’s contention in its EM&V comments that **broader ISP studies should be used as an approach to market assessment**.
* **How these studies should be designed and carried out should be clarified** in the revision to the existing ISP Guidance Document (i.e., “Industry Standard Practice Guide, Version 1.2A,” Final Living Document, April 2014

# Issue 1: Definitions

The Document needs clear and consistent definitions of the following terms/concepts:

* Industry Standard Practice (ISP)
* ISP study
* ISP baseline

The Document needs to be cleaned up to be clear and consistent. The term ISP is often perceived as market penetration in the document. Market saturation graphs in the existing document imply ISP determination is based upon penetration rate; however, the ISP Guide does not indicate any penetration or market saturation metric or threshold that would define a measure as ISP.

## Action Item:

Review Section 1 and 2 of [ISP GuideBook-v1.2A](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISPGuideBook-v1.2A_20170705.docx) and consider whether the current definitions need revision. ***Are the existing definitions accurate, clear, and consistent?***

If the existing definitions require or would benefit from revision, indicate what needs to be changed and suggest a new definition.

Following (in italics) are excerpts from the current Document with PG&E comments on issues with existing definitions.

Section 1. Introduction

*Briefly, an* ***Industry Standard Practice, or ISP****, is a term used to describe a technology or measure that is the typical equipment or commonly-used practice.*

Section 2.1 Definition

*A basic definition for Industry Standard Practice:*

***Industry Standard Practice (ISP)*** *represents the typical equipment or commonly used current practice absent the program.*

*This* ***ISP*** *is used as the baseline to establish the minimum efficiency requirement that must be exceeded to qualify for program incentives. An* ***ISP baseline*** *is used in cost-benefit analysis, comparing the incremental benefits of one technology over the ISP baseline, and to calculate the incremental cost of a technology that exceeds the ISP baseline energy performance.*

Section 2.1 Footnote

*Per the CPUC, D.12-05-015. Page 351: For purposes of establishing a baseline for energy savings, we interpret the* ***standard practice case*** *as a choice that represents the typical equipment or commonly-used practice, not necessarily predominantly used practice.” It also said, “****Industry standard practice baselines*** *are established to reflect typical actions absent the program.”*

Section 2.3:

*Adoption curves – justifying* ***ISP***

Section 2.5

*Market Penetration - A technology that is commonly purchased is considered to be* ***ISP****. A distinction must be made from what is already installed in the field and what is currently being purchased. Surveying the percentage of units in the field that already employ a technology does not effectively indicate* ***Industry Standard Practice****. This installation base is more of a representation of the past or a history of what was* ***ISP****. Surveying what is currently being purchased is a more accurate representation of* ***ISP****. … Estimating the percentage of new purchases or retrofits that employ a technology is an accurate indicator of current* ***ISP****.*

*Standards - Industries will often adopt standards that are established by a research and development entity for the industry. Although these standards are not legally binding, they can effectively mandate a technology to be used in an industry. Standards like ASHRAE or recommendations from the Green Grid can strongly influence what is Industry Standard Practice. Other sources of standards the California's Public Interest Energy Research (PIER), American Gas Association, etc.*

*Program Administrator/Implementor Design - Incentive or Rebate programs are designed to influence standard practices, accelerating the adoption of technologies. Routine* ***ISP studies*** *inform program management of how a particular standard practice impacts eligibility. Good program design takes all the previous factors into account to achieve faster adoption into ISPs.”*

Glossary Section:

***Industry Standard Practice (ISP)*** *- is a practice that refers to a technology or measure that is the typical equipment purchased for a specific application.*

## Proposal

Table summarizes issues and presents proposed new definitions for key terms.

|  |  |  |
| --- | --- | --- |
| **Term** | **Issues** | **Proposed New Definition** |
| Industry Standard Practice (ISP) | confusing, conflicting, no quantitative metric to measure | TBD |
| ISP study (to include types/applications) | Confusion among different types of ISP investigations; Confusion between ISP study and Project Development steps | An investigation or study through surveys to understand whether a specific measure is a common practice that meet the needs of the like process/ application.  Need to differentiate among three types/applications, and how to perform [Issue #2] |
| ISP baseline | needs clear and accurate definitions; confusion leads to undesirable consequences. | Task 1 language ([Standard Practice Baseline\_V9](http://t2wg.cadmusweb.com/Documents/Task%201%20-%20Code%20Baseline/T2WG_Task1_Proposal-StandardPracticeBaseline_DRAFTv9_20170621.docx)) |

Notes:

Rafi and Kay: the original ISP document was designed to be a risk-mitigation tool to support and validate a decision to sunset an existing energy efficiency measure that has already been in the program. The risk-mitigation study concept was proposed by SCE and approved by Kay Hardy to help identify EE measures that needed to be sunset. Staff later extended the use of this concept to include baselines for custom projects.

Kay agreed that the existing document is not well written and can benefit from revisions.

The group agreed to making specific changes to improve the Document rather than re-writing.

**INPUT NEEDED:**

1. If you agree that the current document would benefit from revision, indicate what needs to be changed and suggest a new definition.
   1. PG&E team [Tim and Rafi] have volunteered to revise the document to improve the definitions.
2. If you don’t agree that the current definitions can benefit from revision, describe your disagreement.

# Issue 2: Multiple Types/Applications of ISP Studies

The ISP Guidance Document does not distinguish between different applications of ISP studies.

## Action Item

Review Section 3.1 of the ISP Guidance Document ([ISP GuideBook-v1.2A](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISPGuideBook-v1.2A_20170705.docx)) to decide whether existing division (low rigor ISP study vs. high rigor ISP study) make sense. Provide recommendation on what different types of ISP studies should exist.

## Proposal

Define three types of ISP studies:

* Measure sunset
* Market-based
* Customer or site-specific

The table below suggests a sample population, sample size, and rigor level for each ISP study type.

|  |  |  |  |
| --- | --- | --- | --- |
| **ISP Study Type** | **Research Sample Population** | **Sample size** | **Rigor** |
| Measure sunset | Customer (participant & non-participant) Vendors/suppliers/manufactures Designers | Small | Low |
| Market-based | Customers (participant & non-participant) Vendors/suppliers/manufactures Designers | Moderate to large | High |
| Custom or site-specific | *Phase 1***:** Review with the customer to understand and analyze key project development elements (eligibility, type, influence, baseline/options\*)  \*Follow SP baseline definition from Task 1 ([Standard Practice Baseline\_V9](http://t2wg.cadmusweb.com/Documents/Task%201%20-%20Code%20Baseline/T2WG_Task1_Proposal-StandardPracticeBaseline_DRAFTv9_20170621.docx))  [related to ISP] *Phase 2:* (where there is no existing market-based ISP study applicable, but it’s still needed to justify the baseline assumption when there are no fewer than 2 options): Interview vendors, suppliers, manufacturers and/or designers. | *Phase 1:* One  *Phase 2*: Small | *Phase 1*: High (in-depth)  *Phase 2*: Low |

Notes:

Tim: The existing ISP study guide is geared toward market-based ISP with couple of sentences about measure sunset, and custom or site-specific ISP is missing

Shawn: PAs don’t need a guideline on how to sunset a measure. Rafi clarified that the guideline can be used if PAs are not sure that a measure needs to be sunset or not.

Stakeholders generally found the above table proposed by PG&E to be helpful, and suggested to add more columns to include applicability, study approach, and definition of terminologies [Anuj].

Kay disagreed with removing the current division of low rigor and high rigor studies.

The current funding source for the high rigor studies are IOU EM&V and/or CPUC staff funding. The current funding source for low rigor studies are IOUs Direct Implementation (DI) and/or EM&V funds. Kay: The current gap is on the studies conducted on the program side. Also, all IOU EM&V studies should be publicly announced, but they are not always announced.

**INPUT NEEDED:**

1. Indicate whether you agree that the Document needs to be revised to include all three types of studies (i.e., measure sunset, market-based, and custom).
   1. PG&E team has volunteered to revise the Document to include three types of ISP studies for different applications (see the above table). The division of low- and high-rigor will be dictated by types of ISP study.
2. If you don’t agree, explain your disagreement and submit other proposals to address this issue.
3. Send us a list of all published ISP studies conducted/funded by your organization using this spreadsheet: [List of Published ISP Studies](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task%205_%20ISP-Published%20Studies_20170717.xlsx).
   1. Email the list to [t2wg@cadmusgroup.com](mailto:t2wg@cadmusgroup.com).

# Issue 3: Custom/Site-Specific Baseline

The Document does not provide guidance on how to determine the appropriate counterfactual baseline for custom- or site-specific projects.

## Action item

Discuss proper project development (PD) process including the following:

1. what level of rigor? What are questions to ask the customers?
2. When it’s necessary to contact vendors/designer/manufacturers?
3. What questions for the vendors/designer/manufacturers?
4. Who collects the data and who does the documentation?
5. Who does analysis, who does review of the data gathered
6. What ‘s range of literature and regulation to be collected and reviewed?
7. \*\*\*\*how does this process fit into PD process (drivers & responsible parties)?
8. when?

Proposal

This should be part of custom project development (PD) process that includes data collection for justifying eligibility, measure type, influence, and appropriate SP baseline. In fact, the SP baseline has been fully addressed in Task 1 SP baseline definition and should be followed as part of the PD process.

A clear guideline about custom and site-specific ISP needs to be included in this update in contrast with the need for market-based ISP study, in sync with the custom review process, to avoid review process delays or wasted efforts.

We recommend the T2WG to work out a synchronized process between Project development, the applicable ISP study, and custom review process to minimize project delays due to absence of a market-based ISP study when it’s applicable and necessary. For additional info, refer to PG&E’s PD Protocol ([PG&E Project Development Protocol](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP_ProjectDevelopementProtocol_PG&E_20170518.pdf)).

Notes:

Rafi: purpose of custom or site-specific ISP is to capture correct counterfactual baseline, not to capture the customer view. SP determination are related to market not customer perspectives.

Rich: We need to look at the options in customer perspective.

Jeff: For the custom project, after the project passes influence, you can conduct low rigor ISP study and publish it. For future project, on a project by project basis, it can be decided if the published low rigor ISP study is applicable or not.

# Issue 4: Application of ISP Findings

The Document does not provide information on when to integrate the ISP study and outcomes into the custom project review process. ISP guidance must specify scenarios for project hold-up and contingency plans.

## Action Item

Provide your recommendation on appropriate effective date or transition period for custom or site-specific ISP studies. Also, Review PG&E’s project development protocol ([Project Development Protocol](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP_ProjectDevelopementProtocol_PG&E_20170518.docx)) and Task 1 baseline definition ([Standard Practice Baseline\_V9](http://t2wg.cadmusweb.com/Documents/Task%201%20-%20Code%20Baseline/T2WG_Task1_Proposal-StandardPracticeBaseline_DRAFTv9_20170621.docx)) to address project hold-up and resolutions for different scenarios.

## Proposal

There is no project hold up for custom or site-specific PD (or ISP approach) by following the PD protocol. CPUC has the ultimate authority to hold up projects only if:

1. the measure would trigger market-based ISP study per trigger threshold; and
2. market-based ISP study is non-existent or outdated; and
3. the market-based ISP, if feasibly performed with statistical significance, would be applicable to the specific measure at question.

Notes:

Rich: the current Task 1 document is not clear, transparent, and ready to use.

Ryan: who decides weather an existing ISP study applies to a project or not? There should be a mechanism for cases when parties disagree on what applies.

**INPUT NEEDED:**

* Indicate whether you agree with the PG&E proposal on how to address project hold-up? (if not, why not?)
* Provide alternative proposals on how to address project hold-ups.

# Issue 5: ISP Study Process

The Document does not provide clear guidance on process, reviews, and stakeholder roles throughout the process of an ISP study; not does it provide guidance to justify what type of ISP study is warranted and applicable.

## Action item:

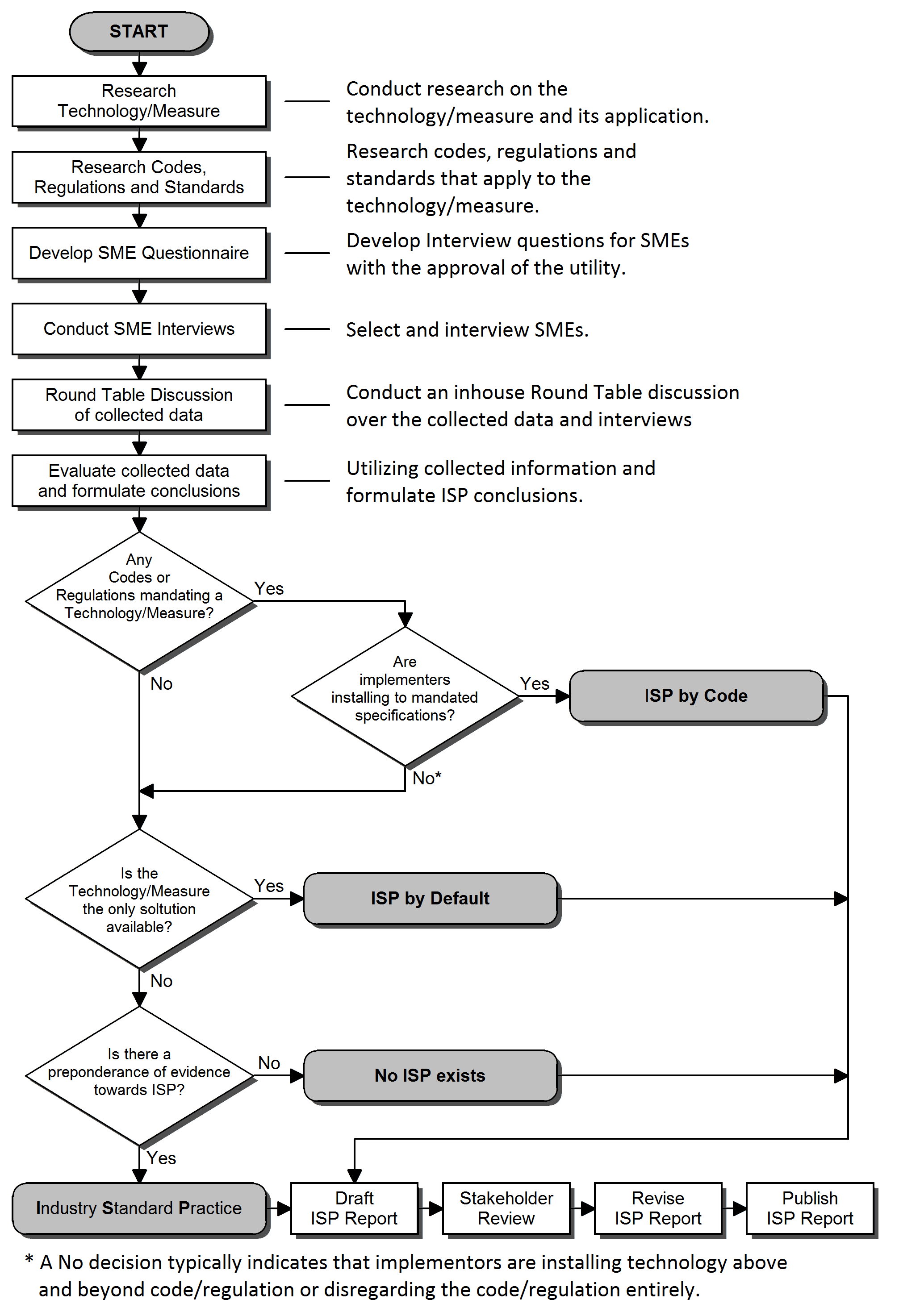
Review Section 5 and 6 of ISP Guidance Document ([ISP GuideBook-v1.2A](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISPGuideBook-v1.2A_20170705.docx)) and discuss the following:

1. Request form: for scope of work and justification for the types of study to apply
2. Survey instrument and review
3. Sample selection and recruitment
4. Survey administration
5. Data compilation and analysis
6. Literature reviews
7. Draft report
8. Stakeholder/ED review
9. Final publication (venue) current: <http://www.cpuc.ca.gov/General.aspx?id=4133>
10. Turn-around time for each step

For Market-based ISP which is expected to take months to complete, discuss its rigor levels, applicability, and project hold-up related to reviews. Also, discuss the metrics/ quantitative threshold from survey data for use of deciding ISP vs. non-ISP:

1. What questions PAs need to design and collect?
   1. Do broad market studies suffice?
   2. What secondary research suffices?
   3. What primary research suffices?
   4. Develop specific core questions to ask if interviews/surveys involved?
2. Who collects the data and does the analysis?
3. Who is involved in the development of the research plan?
4. How is the data analyzed and interpreted?
5. Review of the market-based ISP report?
6. What is the dispute resolution process?
7. What is the timelines for each step?
8. Publication

The flowchart shows the current process for ISP studies [pg. 15 of [ISP GuideBook-v1.2A](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISPGuideBook-v1.2A_20170705.docx)]:



## Proposal

PG&E has adopted an ISP study request form ([ISP Study Request From](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP%20Study%20Request%20From_PG&E_20170706T2WG.docx)) that is used to justify the need for an ISP study, the types of ISP study (market-based, sunset, or custom-/site-specific), and the applicability of the study outcomes.

Notes:

[proposal] Kay: take market-based ISPs out of the scope and only discuss custom ISP – custom impacts more people and is the most significant to this group. Stakeholders disagreed and expressed that they deal with all three types of ISPs - *proposal was withdrawn*.

Rich: A clear effective date should be added to all Market-based ISP studies. Anuj and Ryan have put together a sample ISP Cover Page to be included with each approved ISP. The Cover Page has standard fields/check points to include market applicability, start date, shelf life, scope, etc.

ACTION ITEM: Anuj will revise the Cover Page ([Notice of Standard Practice Applicability](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP%20Study%20Cover%20Page_DRAFT_20170711.docx)) to include all three study types proposed by PG&E.

Jeff: Questions are the key for Market-based ISP studies. Current equipment saturation doesn’t matter, what matters is what currently being purchased.

Rafi: the ISP Guide does not indicate any penetration or market saturation metric or threshold that would define a measure as ISP

Tim: The existing ISP study process works for market-based ISPs.

**INPUTS NEEDED**:

1. ISP Study Request form is the first step to be taken by requestors (CPUC, PAs, or Implementers) for a new ISP study. Review the existing Request From (Appendix C of the Document) and PG&E’s revised Request Form ([ISP Study Request From](http://t2wg.cadmusweb.com/Documents/Task%205%20-%20ISP%20Guidance%20Document/T2WG_Task5_ISP%20Study%20Request%20From_PG&E_20170706T2WG.docx)). Provide your feedback on weather PG&E’s revised form can be used as the new/revised template.
2. Review the existing ISP study process and indicate if you agree weather the existing process needs to be revised and/or simplified for each of the three study types proposed by PG&E.
   1. If you agree, provide proposals on how to revise the existing process for custom ISP studies.
   2. If you don’t agree, explain your disagreement?

# Issue 6: Leaders vs. Laggards

The Document does not provide guidance on how to address ISP for laggards (late adopter in the market of high-penetration) vs. ISP for leaders (early adopter in market of low-penetration)

## Action Item

Provide recommendation on how to address ISP for leaders (early adopters) vs. laggards (late adopters)

## Proposal

TBD – Needs a proposal

* Differentiate by market sub-segmentation? e.g., by size of business, financial status, location, …

Notes:

We did not agree how to address ISP for laggards vs. leaders, but the group agreed that this issue can be (will be) resolved if we clearly define the process of technology adoption and factors that likely indicate technologies becoming ISP.