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EM&V Impact, Process, Market Assessment Study Recommendations

Study Title: PY2013-2014 Emerging Technologies Program Targeted Effectiveness Study Report

Program: ETP

Author: ODC/ERS

Calmac ID: CPU0112.01

ED WO: ED_O_ETP_2

Link to Report: http://calmac.org/publications/PY2013-2014_ETP_Targeted_Effectiveness_Evaluation_Volume_I_FINAL.pdf

Item #	Page #	Findings	Best Practice / Recommendations	Recommendation Recipient	Disposition (Accepted, Rejected, or Other)	Disposition Notes (e.g. Description of specific program change or Reason for rejection or Under further review)
1	80	The analysis of project-barrier matches and a review of ETP’s tactic selection process both suggest that ETP is responsive to information gathered during the activity selection process. The evaluation team believes that by systematically gathering information geared towards market readiness at that phase, the ETP staff will be well positioned to respond to that information in a cost efficient and effective manner or will be able to share that information with other entities within the IOUs. The evaluators recommend articulating both technical and market barriers at the project or technology (not end-use) level in planning documentation such as the scanning and screening tools or the IOU technology roadmaps. The level of detail need not be excessive; in many cases, a single sentence or phrase can sufficiently describe the barrier.	Explicitly identify technical and market barriers as part of the tactic selection process and articulate them in planning documentation	All IOUs	Other	This recommendation is a duplicate of Item #7; see below. ETP already specifies the research objectives being considered in each project during the scoping phase, and "barriers" need to be appropriate to the context of the assessment: for example, customer adoption barriers are not appropriate for lab assessments. ETP will add a field on "barriers" to the existing project scoping template and populate that as is appropriate. However, approximately half of the barriers listed by evaluators are not within ETP’s scope. Market barriers within ETP’s scope were described in the 2010-2012 evaluation.
2	80	It is known that performance validation projects – including lab evaluations, field evaluations, and scaled field evaluations – sometimes organically reveal information that can accelerate market readiness. Program reporting sometimes captures that information. The evaluation team believes there are opportunities to extract more information in this regard. As a tangible and specific instance of this consideration, field evaluations and scaled field placements regularly put ETP staff in contact with customers and suppliers and sometimes their opinions on the technology are gathered and reported; ETP should take advantage of that captive audience by systematically having participants fill out surveys on their motivations regarding deployment, knowledge of the technology, experience with it, ability to deploy it, etc. This is one specific and obvious example of the opportunity that technical readiness projects provide for addressing market barriers.	Purposefully use performance validation projects to gather information on market barriers and include that information in all project reports.	All IOUs	Other	ETP currently already collects feedback from participants in field evaluations and scaled field placements. However, ETP’s field evaluations and scaled field placements are conducted on a small scale with a limited sample size; any data should be considered as anecdotal. ETP defers to the project manager any decision to include anecdotal data in a project report.

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3	82	<p>Broadly speaking, the project-barrier matching data shows that current tactic planning processes lead to projects that are generally responsive to the specific barriers faced by a given technology; the evaluation team regards this as a significant positive indicator for the tactic planning process. However, tactic planning is not perfect as evidenced by the shortcomings observed in Sections 5.2.2 and 5.2.3.</p> <p>The evaluation team attributes shortcomings to three key aspects of tactic planning: 1) the planning is generally done at the project level, not the technology level, which limits strategic planning across projects; 2) planning is IOU-by-IOU with coordination occurring only secondarily when interests overlap; and 3) the emphasis on technical readiness noted above.</p>	<p>The evaluation team recommends that the IOUs pilot a new tactic planning approach (e.g., "strategic technology plan") with the following features:</p> <ul style="list-style-type: none"> • Technology-level barrier identification – barrier identification should occur at the technology level (e.g., smart thermostats) to ensure that selected projects are able to address the full range of barriers. • Statewide coordination – all 4 IOUs should participate in the methodical determination of barriers and collaborate to address all barriers which can be addressed feasibly and cost effectively. Each IOU should participate in the barrier identification process, but each will retain full control over the use of its own funds when it comes to actual project execution. • A plan to address market and technical barriers comprehensively – for each barrier identified above, ETP should assign an ETP project (or projects) which either investigates or addresses the barrier or identify an entity within the IOUs that is better positioned to address the barrier (e.g., Workforce Education and Training) and provide reasonable efforts to support that entity in gathering data on and/or addressing that barrier. This aspect of the pilot could provide context and data for the further research proposed in the above section on the costs, benefits, and best practices associated with addressing market versus technical barriers. <p>The IOUs and the CPUC should work together to define goals and success criteria for the pilot.</p>	All IOUs	Other	<p>This recommendation is a duplicate of Item #6; see below.</p> <p>ETP already does this. The evaluators did not actually evaluate ETP coordination. This recommendation seems to be driven by the project-barrier matching task. However, the evaluators did not recognize that not all "barriers" are appropriate for ETP's scope. Furthermore, evaluators only reviewed a limited sample of ETP projects before arriving at their conclusion.</p>
4	106	<p>Some of the current PPM are misaligned with current program design do not provide metrics against which to determine if the program is performing as expected or not. For example, the IOUs and CPUC should consider removing project technical potential as a PPM and focusing on claimed savings achievements due to measure transfer into the IOU EE portfolio. Additionally, revised metrics may better support CPUC guidance if they are focused on technology-specific achievements for measure transfer as well as for market readiness. For example, current end-use alignment with CEESP is tracked at a project level, rather than technology level. Due to this, the same technology could be accounted for in multiple projects.</p>	<p>Recommendation #1: Adjust PPM and PIP Objectives to measure program effectiveness.</p> <p>Revising metrics to align objectives with past achievements and incorporate more useful assessments of achievement will support program assessment. We suggest that the IOUs and CPUC work collaboratively to:</p> <ul style="list-style-type: none"> n Agree on objectives of the program and how to document and track outcomes, n Shift objectives and metrics to reflect technology, rather than project, activities, n Identify and implement adjustments to track achievements. 	All IOUs	Accepted	<p>The IOUs agree to revise PPMs to align with program objectives, including removing the PPM on project technical potential. However, the IOUs disagree that tracking is not needed at the project level, as there is frequently a need to conduct multiple projects on one technology. ETP considers completion of projects to be valid program achievements.</p>

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5	106	<p>The ETP data tracking and reporting quality continues to limit the CPUC's ability to provide oversight on ETP activities, or evaluation of program effectiveness. In support of improving tracking, we recommend four efforts to support program oversight:</p> <ul style="list-style-type: none"> • Improve ETP data tracking and reporting quality for status variables • Clarify time frames for adoption to enable annual and cumulative tracking of adoption to EE portfolio • Assure measure codes are in place within the ETP database and accurately match measure codes in the savings database • Investigate the benefits of capture information of custom projects needed to support claimed savings assessments. 	<p>Recommendation #2: Improve tracking of three program parameters of interest– project status, project adoption, and measure transfer</p>	All IOUs	Accepted	<p>The IOUs agree to revise and improve tracking of project status and measure transfer. ETP already tracks dates of adoption. ETP measure codes are already in place in the savings database; we are unsure why the evaluators had difficulty. ETP will consider the feasibility of creating a special tag within the savings database to mark those measures transferred from ETP.</p>
6	107	See Sections 5.2.2 and 5.2.3.	<p>Recommendation #3: Launch a moderate-length pilot initiative (perhaps 2 years) within ETP to create and execute a statewide “strategic technology plan”</p> <p>For a specific technology, we recommend:</p> <ul style="list-style-type: none"> • Methodically determining all barriers for that one technology by explicitly identifying technical and market barriers as part of a coordinated tactic selection process • Collaborating across the four IOUs to address barriers that can be cost-effectively and feasibly addressed • Collectively identifying appropriate technical- and market-readiness projects and distributing them to one or more IOUs for execution, as interest, budget, climate, and other IOU-specific characteristics allow. Additionally, for those barriers that ETP is unable to address, identifying other entities within the IOUs that are better positioned to address them. 	All IOUs	Rejected	<p>The IOUs decline this recommendation, because ETP has an extensive history of strategic coordination of technology projects from the beginning of the program. We are currently putting together a white paper to describe these successes and will be happy to share this with ED and other stakeholders when it is ready.</p> <p>The IOUs agree that strategic coordination is critical. However, the logic behind this recommendation does not follow: evaluators looked at "barriers" addressed by only 8 technologies, found that there were some "barriers" (including social, regulatory, and political barriers) not being addressed by ETP, and concluded that ETP lacks strategic coordination. This conclusion is flawed due to the limited sample size and to the incorrect premise that all "barriers" are within ETP's scope.</p>

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7	107	The analysis of project-barrier matches and a review of ETP's tactic selection process both suggest that ETP is responsive to information gathered during the activity selection process. The evaluation team believes that by systematically gathering information geared towards market readiness at that phase, the ETP staff will be well positioned to respond to that information in a cost efficient and effective manner or will be able to share that information with other entities within the IOUs. The evaluators recommend articulating both technical and market barriers at the project or technology (not end-use) level in planning documentation such as the scanning and screening tools or the IOU technology roadmaps. The level of detail need not be excessive; in many cases, a single sentence or phrase can sufficiently describe the barrier.	Recommendation #4: Increase attention paid to market barriers.	All IOUs	Accepted	ETP will add a field in the project scoping template on barriers and populate that whenever it is appropriate. ETP already systematically addresses market barriers, as documented in the 2010-2012 evaluations, but not all market barriers are within ETP's scope due to the unique nature of ETP activities. ETP has and continues to coordinate their activities with those of multiple departments within the IOUs. The Study of the California Utility Internal Measure Development Process (available on Calmac.org) identifies numerous other departments within each utility that contribute to understanding deeper understanding of market barriers and all aspects of developing a new measure. It would be incorrect to assume that just because ETP itself does not address a particular barrier, that the barrier will remain unaddressed.
8	108		Recommendation #5: Make improvements to ETCC website navigability and content to support ETP dissemination efforts.	All IOUs	Accepted	This recommendation has already been implemented through ETP's existing process: ETP regularly assesses website usability and feedback, and will continue to do so.