## Relation to Task 3:

The Standard Practice Baseline definition is written such that tests for the Repair Eligible and Repair Indefinitely use cases may be handled through the Standard Practice Baseline definition. In Step 2, the project developer must identify the customer’s feasible options. While the options considered in this process must be real options, they may represent solutions that do not involve the replacement of equipment.

*Example 1: A customer has a failed piece of equipment. The customer may choose to repair it, or the customer may choose to replace it with a higher efficiency system. This is the Repair Eligible use case, where the project developer must demonstrate that it is “more likely than not” that a repair of the failed equipment could and would occur. Evidence must be submitted to demonstrate that a) the existing equipment could be repaired to meet the need, and that b) the existing equipment would have been repaired if the program had not induced the replacement.*

*Example 2: A customer has a working piece of equipment, with no need to replace it or increase its level of service. The customer can maintain the existing equipment, or they can replace it with a higher efficiency system. This is the Repair Indefinitely use case, where the project developer must demonstrate that it is “more likely than not” that continued maintenance of the existing system could and would occur. Evidence must be submitted to demonstrate that a) the existing equipment could be continually repaired to meet the need, and that b) the existing equipment would continually be repaired if the program had not induced the replacement.*

In both of these cases, it is a POE test to determine if it is more likely than not that the customer could and would repair the equipment. If the measure passes that test, then the project developer may use a repaired state as the baseline. It should be within the scope of Task 3 to define that POE test, as the questions and evidence will likely differ from Early Retirement applications claiming operation through the RUL. We envision a questionnaire and affidavit for smaller incentive amounts, with higher rigor applied for larger incentive amounts, as is in line with Task 2.

The following table describes the underlying questions explored in the various viability and influence tests:

|  |  |  |
| --- | --- | --- |
|  | **Viability** | **Influence** |
| Normal Replacement, New Load, Add-on Equipment | N/A | Is it more likely than not that the exact new equipment would not be installed without program intervention? |
| Early Retirement | Is it more likely than not that the existing equipment has remaining useful life? | Is it more likely than not that the existing equipment would not be replaced without program intervention? |
| Repair Eligible | Is it more likely than not that the existing equipment could be repaired? | Is it more likely than not that the existing equipment would be repaired without program intervention? |
| Repair Indefinitely | Is it more likely than not that the existing equipment could be continually maintained and repaired? | Is it more likely than not that the existing equipment would be continually maintained and repaired without program intervention? |

Note that Step 1 can preempt any eligibility of repairable measures. For example, an ISP document may be posted determining that it is ISP to replace a certain failed piece of equipment with a brand new one. In those cases, a repaired state for that equipment would not be an allowable option in Step 2 of the Standard Practice Baseline selection process.

## Notes on Step 1:

Website

In Step 1, the project developer reviews a designated website to see if any ISP guidance is available that might guide the project. If guidance is found, the developer follows the guidance and stops. The developer does not proceed to Steps 2 or 3 and does not identify any options associated with the customer’s decision making process.

We expect guidance on this site to take the following forms:

1. Market-based ISP study reports where a standard practice is determined
2. CPUC dispositions determining a technology in a certain application to be standard practice
3. CPUC memos notifying parties that a market-based ISP study is underway, and that related projects may not be approved until completion of said ISP study
4. CPUC memos notifying parties that a market-based ISP study is underway, and that related projects may continue until completion of said ISP study

The CPUC has full authority to author and post any document to this site.

PAs and implementers recommend that each document appearing on this site have the following information associated with it:

* A definitive effective date (for example: June 30, 2017; not “60 days upon completion”)
* The date the document was uploaded
* The date a document is no longer effective (if applicable)

As an example of how we recommend implementing this (note that dates are illustrative only):

* Uploaded April 1: CPUC memo A is posted, notifying parties that a market-based ISP study for X measure in both Y and Z types of buildings is underway. Projects involving X measure may not be approved after June 1 until completion of this study.
	+ Projects involving this measure may be approved up until June 1, but are on hold indefinitely after June 1.
* Uploaded September 1: Completed market-based ISP study is complete, determining that X measure is ISP in Y buildings, but is not ISP in Z buildings. Projects involving X measure in Y buildings may not be approved after November 1.
* Also updated September 1: Memo A is amended to no longer be effective as of September 1.

Having these dates will facilitate accurate and repeatable implementation of ISP guidance. We will need to design a process that ensures timely upload of these files.

Projects which highlight a need for an ISP study

If no ISP guidance exists, the project developer must pause and adhere to the ISP Guidance Document. *The Standard Process Baseline selection process does not circumvent the need for a market-based ISP study when applicable and necessary*, as will be defined in the ISP Guidance Document, scheduled to be updated under Task 5. When Task 5 is complete, the ISP Guidance Document must advise the project developer on the following:

* Whether a market-based ISP study must be initiated
* Whether the current measure that flagged the potential ISP must be put on hold

The second bullet has been a matter of much contention in T2WG. We feel it is duplicative to discuss this in the context of both Task 1 and Task 5. Instead, our proposal requires that the ISP Guidance Document be followed before proceeding to Step 2 of the selection process, and that both of the above bullets be addressed within the scope of Task 5.

## Notes on Steps 2 and 3:

Use case where Step 2 yields exactly one feasible option:

The measure is ineligible for Normal Replacement (NR). Recall that the NR measure type presumes that some replacement is necessary, whether it be because the equipment has failed (the Replace on Burnout use case), the customer’s needs have changed (the New Load use case), or the equipment is naturally due to be replaced (the Normal Replacement use case). If replacement is necessary, and there is only one option that meets the need, then there is no decision point for the customer and therefore no reason to provide an incentive or claim any savings. The measure is ineligible.

However, if the project developer can successfully demonstrate that it is “more likely than not” that the existing equipment could AND would remain in service, then a preponderance of evidence has been provided and the measure can be eligible for Early Retirement (ER). ER claims assume that the existing equipment would remain in operation through its RUL, and after that, the customer is compelled to conduct a replacement. At the RUL point, if only one option meets the need, there is again no decision point for the customer. No savings should be claimed for anything after the RUL point. Therefore, if POE has been provided, savings can only be claimed up to the RUL point.

This is stated in footnote 7 – for cases where Step 2 yields only one viable option, NR claims are ineligible and ER claims shall have no second baseline savings.

Use case where Step 2 yields exactly two feasible options:

One of these options will be the baseline, and the other option will be the measure. Any options considered in this process need to be real options.

*Example 3: A customer has to replace a mechanical unit, whose installation is governed by Title 24. However, physical constraints prevent the installation from satisfying Title 24 requirements; the customer has a letter from the authority having jurisdiction that such is true and has been exempted from those Title 24 requirements. In this case, the Title 24 minimally-compliant installation is NOT an eligible standard practice baseline. The baseline MUST be a real option that is reasonable to install for the customer, and it is impossible for this customer to exactly meet Title 24.*

*Example 4: A customer needs 75,000 MBTU of output. Suppose that a high efficiency 75,000 MBTU model exists, but the standard efficiency models are only manufactured with 50,000 and 100,000 MBTU sizes. The baseline should be a 100,000 MBTU model operating at 75% load, not a hypothetical 75,000 MBTU model with an efficiency rating interpolated between the two models. The baseline must be a real option that exists.*

Use case where Step 2 yields more than two feasible options:

One of these options will be the baseline, and another option will be the measure. The measure is clear; it is the end state that the customer desires.

Which remaining option to use as the baseline is less clear. We propose using the option with the lowest first cost, since normal replacement measures already do not allow the baseline to be more expensive than the measure.

One commenter recommends using the most common choice (i.e. market based) as the standard practice baseline, rather than the lowest first cost. We agree that this is ideal; however, we find that there is rarely an agreed upon “most common choice.” One party may survey some vendors and come to one conclusion; another party may survey some other vendors and come to a different conclusion. This also assumes that the installation is homogeneous enough that a relevant question can be posed to a valid sample of vendors, and that a relevant and conclusive study can be completed. Such studies are only cost-effective to carry out for measures that have multiple applications across many markets.

In cases where a large enough sample size of vendors can be surveyed and a conclusion on the most common choice can be determined, we recommend that the process and results be documented and posted publically for use in Step 1 of this process. Such research typically requires a decent amount of time to assemble and should be applied broadly. That way, the project developer finds and applies this baseline upfront and never gets to Steps 2 and 3 of exploring different customer options.

In our experience, parties rarely agree on a conclusion after vendors are surveyed. The purpose of the selection process is to provide an answer of how to select the baseline, regardless of whether the measure is eligible or not. PG&E’s proposal always provides the project developer with an answer; this commenter’s proposal does not. We prefer our method as it produces a counterfactual baseline that reviewers can more easily evaluate. This is especially preferred when the process in Step 1 provides a forum to specifically address situations where Step 3 would yield a non-ideal answer.

Recall that in Step 1 of this proposed baseline definition, the CPUC still has ultimate authority over the ISP documents posted in the publically available website. The CPUC may declare any technology as ISP or on hold until further notice, so long as it is posted on this website. As noted above, such documents will govern Step 1 of the process and prevent any projects from moving through to Steps 2 or 3. We think this provides the necessary CPUC oversight; if it suspects that a lowest cost option is not the standard practice, it may post a memo to the website as described above. CPUC ISP declarations are not required to be rooted in research, although stakeholders would hope that supporting documentation is provided.

For those reasons, we disagree with the suggestion to amend Step 3 to use the most common choice as the standard practice baseline and stand by our preference to use lowest first cost.

On use of the word “economic”:

The phrase “economic needs” does not necessarily mean “the most economical option.” The Standard Practice Baseline must be an option that the customer considers economically reasonable. The baseline is supposed to represent what would happen in absence of the program.

Energy costs must be taken into consideration when assessing the customer’s feasible options. If a particular option is functionally and technically feasible, but the energy costs are so high that the customer would never consider it, then that option shall not be used as the Standard Practice Baseline. If an option has higher energy costs than an alternative but is still considered reasonable by the customer (e.g. due to familiarity with incumbent technologies), that option may be considered for the Standard Practice Baseline.

On determining whether a proposed baseline is viable or reasonable:

The determination of a selected baseline’s viability is very similar to the POE test used for Accelerated Replacement. POE tests seek to determine if existing equipment could AND would remain in operation. Baseline viability tests seek to determine if a particular option could AND would meet the customer’s needs. The selected baseline must pass the “sniff test” as an option that a customer might realistically implement. That is extremely subjective – and while we don’t have a formal recommendation on how reviewers and implementers might agree on the reasonableness of the selected baseline, we hope that similar methods can be used as have been previously discussed in T2WG, such as a questionnaire and affidavit signed by the customer with submittal of corroborating evidence.