**eTRM Custom Measure Wireframe v1.2**

Notes from 2/2/23 Custom Subcommittee meeting

Materials:

* [Custom eTRM Design 1.2 (Phase 1 Wireframes)](http://www.caltf.org/s/eTRM-Custom-Measure-Wireframe-v12_wAnnotations.pdf)
* Link to Custom eTRM [Phase 1 Functional Specifications (nee](https://futeeenergy.sharepoint.com/:x:/r/sites/CalTFCustomSubcommittee/Resource%20Library/eTRM%20for%20Custom/eTRM%202.6%20-%20Functional%20specification%20-%20Custom%20measures%20-%202023-01-26.xlsx?csf=1&d=w54c0995776624a999b636d560049998f&e=Zmf3dh&web=1)d SharePoint access)
  + Email [arlis.reynolds@futee.biz](mailto:arlis.reynolds@futee.biz) if you need access to the SharePoint site

Key:

* INPUT indicates a request for additional input from stakeholders
* Q = question from stakeholders; A = answer to question
* FE = marked for potential future enhancement (please let us know if you think an item marked FE is critical for the initial buildout)

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**Custom Library**

* INPUT: What resources, other than tools, would be useful in the Custom Library? Items in the Custom Library are version controlled (using the eTRM Versioning functions) and can be linked to Custom Measures.
* Q: Is there a mechanism to know that there is a new tool available?
  + A: This notification is not in the functional specs. We could create a subscription system for the Custom Library. FE

**Calculation Tools**

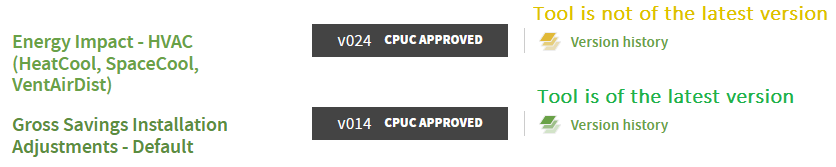
* Q: We need to be able to access multiple/past versions of a given calculation tool.
  + A: Similar to deemed measure packages, users will be able to see and access past versions of a given tool using the “Version History” button at the top of the Tool page. The Version History shows all past versions and the text information describing updates between versions.
* Q: We should show the eligibility information for different versions; it’s very important that users know which version of the tool to use.
  + A: We can use the Tool Description text to include this pertinent information. The Tool Description text shows up in the Calculations Tools List in the Custom Library (Wireframe PDF pg 4), in the Tool detail page (Wireframe PDF pg 6).
  + A: User should also be looking at the measure itself to verify if their custom project is within the scope to use the tool. A custom measure should document the specific eligibilities, requirements, and other detail aspects of the tool within the scope of the measure (ex. Process chiller measure v HVAC chiller measure, even if they may link to the same tool). The custom library serves as a database for different custom measures to link common custom tools. It is generally expected that users would download tools from the measure and not from the custom library.
  + INPUT: What “version” information do we need to capture with the tool? What should show on the screen?
  + INPUT: What content should be included in the rich text descriptions for Calculation Tools?
  + Note: Potential future enhancement: incorporate Measure Property Data to custom measures/tools. Need to understand this need better FE
* Q: How do we connect to externally-managed tools? Can we provide multiple links for a similar tool – e.g., for the DOE MEASUR resources, can we include a link to both the main MEASR site as well as the GitHub site for downloading the tool, and can we also provide a link to the direct downloads? (Users might need different tools based on their computers’ operating systems).
  + A: The Tool could be an Excel file, docx, PDF, zip file, or URL. The Zip file provides the option for multiple files packaged in a single download. The rich text description, which allows hyperlink, is another location to describe/provide multiple locations to access tools; (PDF, pg 30 -> DESCRIPTION)
  + A: The Functional Specs includes just one button (file or link) per tool.
    - [Potential enhancement] Allow multiple files (of different types) upload for each tool link. FE
* Q: Is there also a link for the User Manual with each tool?
  + A: The Functional Specs includes just one button (file or link) per tool; the Zip file approach can be used to package an excel tool with a PDF manual, for example. If the user manual is located in an external site, the rich text description can also be used to link to that site; *note, eTRM doesn’t verify the validity of the URL* (PDF, pg 30 -> DESCRIPTION)
* Q: People using or developing the tool will want to know “heritage” of the tool (Chas)
  + A: We can use the rich text field for this information; there is no character limit for the rich text; Admin user populates the rich text field when creating a new Tool, so we can control the content and structure of the rich text field. Additionally, tool and all of its related documents can be put into a zip folder and upload to the custom library.
  + INPUT: What “heritage” information should be included?
* Q: What is the approval process?
  + A: The Custom Tools will follow the workflow for shared data. There is interest in establishing an official approval process for custom tools.
* Q: What are the different status labels, if they are not all CPUC Approved.
  + A: See functional spec, the list of existing statuses (use widely in the eTRM).
  + INPUT: What status options should be available for Calculation Tools?

**Calculation Tool Versions**

* Q: Is there a character limit on change descriptions?
  + A: There isn’t any character limit for the change description
* Q: What are the versioning rules for workbooks? Are we locked into the existing convention for version numbers?
  + A: The current functional specifications follow the eTRM version conventions.
  + A: Custom tool version follows deemed workflow (ToolName-###). The three-digits number indicates the version of the tool. This number is automatic (at increment of 1).
  + [Potential enhancement]: When download a tool, the download file name should include the tool’s version. FE
* Q: Is there a way to match the tool developer versioning (e.g., for eQUEST)?
  + A: This information (name and developer version number) can be captured in the Tool title, tool description and description in the message log for version updates, so it is always visible.
  + INPUT: [needs additional follow-up to understand need and potential solutions]

**Importing a Calculation Tool into a Custom Measure**

* Update: Show tool version (eTRM version) in the download button
  + See Calculation Tools section
* Q: What happens when the tool gets updated (e.g., new version), but the measures do not get updated?
  + A: Measures will have to “opt into” the updated tool version.
  + A: Similar to deemed measures (not shown in the wireframe), in the Dependencies tab of the custom measure, calculation tools (imported from the Custom Library) will have a color-coded layer-icon. When the tool version used in a measure is out-of-date, the icon is yellow. Green icon means the tool is of the latest version. It is up to the lead measure developer to update the measure to use the latest tool – this may or may not trigger a new measure version.



* Q: Can a Custom Measure import a version of a Tool that is not the latest version? E.g., can a Custom Measure import multiple versions of the same Tool?
  + A: A custom measure can import any version of the tool. However, it cannot import multiple versions of the same tool.
* Q: Are “tool” and “measure” creation independent?
  + A: Yes. We can create Calculation Tools in the Custom Library without assigning the tool to a particular Custom Measure. Similarly, we can create Custom Measures in the eTRM without linking to a Custom Tool. (Note: We may want to create a more structured process for this.)
* Q: Can you cross over references on the deemed side? E.g., can a deemed measure characterization reference something in the Custom Library?
  + A: No (we are pretty sure). FE
* Q: How does one know what the tool works for and does not work for?
  + A: There are several pieces of information to show what a tool is for: (1) the rich text description describes the tool; (2) the “Dependencies” tab shows which Custom Measures are linked to that tool; each Custom Measure will have information in the Measure Characterization about linked tools and how they are used for that particular measure
  + A: The “Dependencies” tab in the custom tool’s detail page (Wireframe PDF, pg 6) is one potential to view all measures that reference/link to the specific custom tool.
* Q: Can the Custom Measures link to other types of documentation, such as Standard Practice documentation, CALMAC references, etc.?
  + A: Yes, other types of documentation can be included in the Custom Library; also, traditional eTRM references (e.g., CPUC policy reference) can be used within the Custom Measure Characterization materials.
  + INPUT: What types of documentation users may want to link to Custom Measures, and should those documents should be in the Custom Library or traditional references?

**Including a Calculation Tool in a Characterization (Embedded links for Calculation Tools)**

* Note: Agreement that this is helpful; no opposition.
* Q: If there are multiple embedded links and a tool version has changed, do ALL the embedded links need to be updated, too?
  + A: Within each custom measure, the version of a custom tool is updated in the Dependencies tab only. The version update should then apply throughout the measure; all links in the Calculations and Characterization tab are automatically updated to use the version specified in the Dependencies tab.

**Custom Measures in the Measure Catalog**

* Q: Will the addition of custom measures affect measure reports?
  + A: In Phase 1, Custom Measures will not be available for measure reports. We can address measure reports in a future enhancement.
  + Note: “Measure Type” will be added to the data dictionary, so it’s a field that can be used for filtering in the future.

**Creating a Calculation Tool**

* INPUT: What other attributes – beyond Name, Description, Tool Type (Calculation Tool, M&V Plan, Other, etc.), and Status – should be included in a tool creation as part of the tool’s property (Wireframe PDF, page 30)?
  + Start and End Dates. [Need further discussion on the implication of expired date for tools; relate to the tool’s approval process]
  + Stakeholder owned (e.g., IOU calculator) vs. externally-owned (e.g., eQUEst)
  + Original or copy
  + Developer version (e.g., what is the associated eQuest version?)
* Q: What are the options for status?
  + A: Current functional specs state that the status options of workbooks in the Custom Tools Library is identical to versioning of other eTRM Shared Data objects. Below shows a sample of available statuses; see the functional spec for the comprehensive list.
    - Draft, Peer Review, Manager Review
    - Cal TF Staff Review, Cal TF Affirmation
    - POU Ready
    - CPUC Review, CPUC Approved, CPUC Rejected
    - Hold, Cancelled
* INPUT: What are the most appropriate status levels for Calculation Tools?
  + For custom, CPUC typically does not approve tools upfront; IOU have their own tools recommended for certain applications
  + Need to have an option for a “Retired” status; should include a reference to a disposition.

**Creating a Custom Measure**

* INPUT: What other attributes should be included when creating a Custom Measure?