

DATE: February 4, 2015
TO: WSAC
FROM: Planning Subcommittee
SUBJECT: Proposed approach for improving and agreeing upon Evaluation Criteria

This memo describes the process that the Planning Subcommittee proposes to follow in order to finalize the Committee’s evaluation criteria.

Background

By the end of the WSAC meeting in December, the Committee had spent some focused time discussing issues related to the evaluation criteria, subcriteria, and rating scales used in the MCDS model runs. (For the purpose of this discussion, criteria and subcriteria are all going to be referred to as criteria.) In particular, those discussions focused on creating common (and agreed upon) definitions of criteria, better, clearer, more understandable and agreed upon scales, and the organizational structure of those criteria.

After reviewing the notes from December’s meeting, it’s clear that the lively discussion that the Committee had on the topics of criteria and rating scales, is not, for the most part, completely captured in a usable set of criteria or scales, so there is much work to be done to prepare for our Decision Phase discussions.

The following table summarizes the state of the various criteria and scales.

Criteria and sub-criteria	Needed? (Y / N / Portfolio Attribute / Solution Attribute)	Criterion Definition		Scale Definition		Notes
		Complete?	Tech input needed?	Complete?	Tech input needed?	
Implementability						
Technical feasibility	Y	Y	N	N	N	
Legal feasibility	Y	N	N	N	N	
Regulatory feasibility	Y	N	N	N	N	
Political feasibility	Y	N	N	N	N	
Cost-Effectiveness						
Cost to City: Upfront Costs	Portfolio Attribute	N	?	N	?	
Cost to Customer: Rates	Portfolio Attribute	N	?	N	?	
Cost to Customer: Individual Purchase	Solution Attribute	N	?	N	?	
Community well being						
Regional Water Stability	?	N	N	N	N	Is this part of the Committee's remit?
Local Economy	?	N	?	N	?	Tech input needs depend upon criterion definition
Environmental well being						
Energy	?	N	Y	N	Y	How to separate from energy-related opex?
Marine Ecosystem Health	Y	N	?	N	?	
Freshwater and Riparian Health	Y	N	?	N	?	
Groundwater Resources	Y	N	?	N	?	
Terrestrial Ecosystem Health	Y	N	?	N	?	
Adaptability						
Infrastructure Resilience	Y	N	Y	N	Y	
Reliability	Y	N	Y	N	Y	
Scalability	Y	N	Y	N	Y	
Preserves Future Choices	Y	N	N	N	N	
Effectiveness						
Yield	Portfolio Attribute	Y	N	Y	N	
Flexibility	Y	Y	N	Y	N	Perhaps rename "Operational Flexibility"
Addresses Peak Season Demand	Portfolio Attribute	Y	N	Y	N	

As you can see, the various criteria and ratings differ in their completeness as well as with respect to who has primary responsibility for finalizing them:

- Some need work on both criterion and scale definition
- Some need work only on scale definition
- Some of those criteria and scales fall to the Committee (such as “political feasibility”); others require input from the technical team (such as “resilience” and “reliability”)
- Some may not even amount to “ratable” criteria, but rather are either solution or portfolio attributes (such as “yield”)

Proposal

The Planning Subcommittee proposes that the Committee follow a multi-step process to create a finalized and agreed-upon set of evaluation criteria and scales. The Subcommittee proposes that the Committee’s technical team play a substantial role in that process.

Here is a summary of the process we propose:

1. Technical staff and team would create a “baseline” set of criteria and scales, based on the work that the Committee has done to-date and the technical team’s guidance (where appropriate).
 - Would incorporate Committee’s input to-date: MCDS “notes”, December’s discussions, etc.
 - May mean eliminating or combining some criteria
 - May mean adding some new ones (such as “adequately addresses supply/demand gap” or “mitigates operational risk”)
2. The Planning Subcommittee would then review / refine baseline; technical team would issue revised baseline.
3. Full Committee would then review / refine baseline; technical team would issue revised baseline, which becomes our “working baseline” going forward.
 - This will likely require substantial discussion at one or more Committee meetings.
4. Finalization would take place over time, as the Committee’s work progresses. We would expect that there will be tuning throughout the Decision Phase.

Some key considerations:

1. This will be an iterative process through the Decision Phase; as we’ve seen, use of the criteria to evaluate solutions helps the Committee understand and fine-tune the criteria and scales.
2. We need a consistent, documented process and a single party who is responsible for tracking the process. That responsibility will fall to the technical team, reporting to the Planning Subcommittee and the full Committee.
3. Note that we need to get this finalized timely so that Philip can update the MCDS for use during the Decision Phase.