

<b>DOCKETED</b>	
<b>Docket Number:</b>	21-DR-01
<b>Project Title:</b>	Supply Side Demand Response
<b>TN #:</b>	240026
<b>Document Title:</b>	Recurve Comments for Working Group Principles Comments - Recurve Comments for Working Group Principles
<b>Description:</b>	N/A
<b>Filer:</b>	Courtney Wagner
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	10/8/2021 3:45:03 PM
<b>Docketed Date:</b>	10/8/2021

## Stakeholder Comments Template - Proposed Consolidation of Principles

**Submit comments to:** [Tom.Flynn@energy.ca.gov](mailto:Tom.Flynn@energy.ca.gov)

**Comments are due October 1 by 5:00 p.m.**

All comments received will be posted to CEC Docket 21-DR-01

Instructions: CEC staff is requesting stakeholder comments on the set of nine principles retained, combined, and/or reworded based on stakeholder discussion during the Principles WG meetings held on September 13 and 27. This discussion also resulted in some principles being dropped.<sup>1</sup> Each proposed principle is followed by three questions; please provide a response to each question, as applicable, in the space provided. Toward the end of this comments template, CEC staff is requesting comments, as applicable, in two other areas.

### **Comments on the refined set of principles**

- I. Principles #1, #5, #11 combined – **“The QC methodology, including ex-post performance measurement, should be transparent, replicable, and understandable.”**
  - a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*  
*Recurve supports this principle as written.*
  - b. If your organization would require changes to support, what changes would your organization suggest? *Response:*
  - c. Explain your organization’s support or opposition of this principle. *Response:*  
*Recurve recommends that the California state agencies (CEC, CPUC, and CAISO) adopt open-source methods and code-bases. At the absolute minimum quantification or qualification methods should be publicly available but consistent operationalization of the methods*

---

<sup>1</sup> Principles #4, #7, #13, #14, #15, #16, #17, #18, #20, #21, #22 were dropped based on stakeholder discussion.

*requires the addition of an open-source code base. Without transparency, replicability, and understandability, market transactions will suffer from issues of trust and lack mutual accountability around performance.*

II. Principles #2, #3 combined – **“The QC methodology should be forward-looking and use the most current information regarding resource capabilities, including historical performance data where possible.”**

- a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*  
*Recurve supports this principle as written.*
- b. If your organization would require changes to support, what changes would your organization suggest? *Response:*
- c. Explain your organization’s support or opposition of this principle. *Response:*  
*Recurve agrees that the method should be informed by actuarial data (historical performance) where possible and appropriate, but also account for future-focused parameters like participation, extreme weather, etc.*

III. Principle #6 – **“The QC methodology should be sufficiently fast and easy to update to enable DR providers to participate in all capacity solicitations.”**

- a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*  
*Recurve supports the principle as written.*
- b. If your organization would require changes to support, what changes would your organization suggest? *Response:*
- c. Explain your organization’s support or opposition of this principle. *Response:*  
*Recurve recommends that the California state agencies (CEC, CPUC, and CAISO) adopt open-source methods and code-bases to enable DR providers to quickly update and thereby optimize their offerings for a variety of capacity solicitations. This will also enable "speedier" review of outputs, as a result of transparency.*

IV. Principle #8 – **“The QC methodology should be compatible with individual DR resources and aggregations of resources.”**

- a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*
- b. If your organization would require changes to support, what changes would your organization suggest? *Response:*

*Recurve supports with modification:*

*The QC methodology should be applied consistently to ~~compatible with~~ individual DR resources and aggregations of resources."*

- c. Explain your organization's support or opposition of this principle. *Response:*

*Recurve believes that the core QC methodology should be designed such that it will be able to be applied consistently to all resources and aggregations of resources and generate reliable results. If deviations in the method are needed, they should be explicitly outlined and justified in relation to the core method. Without a core-consistent method, customized and bespoke approaches will proliferate and undermine the comparability of resource performance.*

V. **Principle #9 – "The QC methodology should be consistent and compatible with the RA program."**

- a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*
- b. If your organization would require changes to support, what changes would your organization suggest? *Response:*
- c. Explain your organization's support or opposition of this principle. *Response:*

*Recurve supports the principle as worded.*

*Recurve believes that continuity in assessing performance across state agencies and their processes is paramount to building trust and performance accountability for the market. Therefore the QC methodology should most certainly be consistent and compatible with the RA program and reflected in settlement processes.*

VI. **Principle #10 – "The QC methodology should account for all factors that substantially influence DR variability."**

- a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*

- b. If your organization would require changes to support, what changes would your organization suggest? *Response:*

*Recurve could support the principle with the following change:*

*The QC methodology should account for ~~all~~ the primary factors that ~~substantially~~ influence DR variability.*

- c. Explain your organization's support or opposition of this principle. *Response:*

*It is impossible for a methodology to account for all factors. The primary factors that influence DR variability are participation and weather. Other factors are a function of the design of the program or service offering and should be able to be captured based on actuarial analysis.*

VII. Principle #12 – **“The QC methodology should account for the use-limited, availability-limited, and variable-output nature of DR.”**

- a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*

*Recurve supports this principle as worded but it is not essential.*

- b. If your organization would require changes to support, what changes would your organization suggest? *Response:*

- c. Explain your organization's support or opposition of this principle. *Response:*

*No specific comments.*

VIII. Principle #19 – **“The QC methodology should accurately account for DR's contribution to reliability.”**

- a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*

*Recurve supports this principle as worded but it is not essential.*

- b. If your organization would require changes to support, what changes would your organization suggest? *Response:*

- c. Explain your organization's support or opposition of this principle. *Response:*

*No specific comments.*

IX. Principle #23 – **“The QC methodology should, to the extent possible, rely on software or code that is available at nominal cost to DR providers.”**

- a. Indicate whether your organization supports the principle as worded, would require changes to support, or opposes the principle. *Response:*

- b. If your organization would require changes to support, what changes would your organization suggest? *Response:*

*Recurve supports this principle but recommends strengthening it to read:*

*The QC methodology ~~should, to the extent possible, rely on software or~~ **must publish** code that is **publicly** ~~available at nominal cost~~ **without licensing restriction** to DR providers.*

- c. Explain your organization's support or opposition of this principle. *Response:*

*Recurve strongly recommends that the California state agencies (CEC, CPUC, and CAISO) adopt open-source methods and code-bases. At the absolute minimum detailed quantification methods to enable replication and reproduction should be publicly available. Consistent operationalization of the methods requires the addition of an open-source code base. With open-source code, vendors in the market can continue to provide value add to a wide variety of products and services. Our industry should not compete on core methods like the QC methodology. Without transparency, replicability, and understandability, market transactions will suffer from issues of trust and lack mutual accountability grounded in a shared understanding of performance. California can no longer afford to coddle proprietary black-box models that are essential to market transactions as is the QC methodology.*

### **Comments about principles not included**

Please provide any comments concerning principles that your organization believes are missing from the refined set of principles.

*Response:*

*Recurve does not believe that there are any missing principles. We emphasize that the two principles that are most important are:*

- *The QC methodology, including ex-post performance measurement, should be transparent, replicable, and understandable*
  - Operationalized with open-source code
  - Accessible to all market actors
- *The QC methodology should be consistent and compatible with the RA program.*

- Support a feedback loop and continuity of assessing performance across the three primarily responsible California state agencies.
- Applied consistently across individual DR resources and aggregations of resources.

### **Any additional comments**

Please provide any additional comments that your organization would like to make.

*Response:*

*Recurve adds reference to our [Electricity Journal Article](#) titled: "Decarbonization of electricity requires market-based demand flexibility" that explains the essence of how demand flexibility can be integrated as a grid resource. This article is directly relevant to the consideration to the California Energy Commission and the Public Utilities Commission in revising the M&V Methodologies for Qualifying Capacity by highlighting a future of integration grounded in a common understanding of performance.*

*The article discusses:*

- *How behind-the-meter flexibility, including energy efficiency, demand response, electrification, and storage can play an important role in grid stability.*
- *How open source methods and software can provide transparent and reproducible measurement of savings load shapes (resource curves) that enable the integration of demand flexibility into energy, capacity and carbon markets, and as a transmission and distribution resource.*
- *How a performance-based approach can drive innovation and attract private investment.*
- *How this approach to transparent measurement is already allowing innovative utilities to procure demand flexibility in the same way they procure other resources through price signals sent through pay-for-performance markets.*
- *How the industry is responding with innovative business models and technology, and structured project finance and investment-grade performance insurance.*