



Cal TF DATA CHARETTE

Select Comments from CEC Workshop on
Energy Data Modernization and Analytics
2023-02-23

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Today's Agenda

- Issues/Topics

Council comments in response to the CEC Commissioner Workshop on Energy Data Modernization and Analytics on January 13, 2023

- Use Case Prioritization
- California Analysis Tool for Locational Energy Assessment (CATALENA)
- Development Needs for Demand Flexibility Success



Use Case Prioritization

- Issues/Topics

The Council identified a range of use cases that are possible during the workshop and recommends the Commission prioritize use cases that leverage existing billing and interval data and impact policy objectives.

In no particular order, we recommend the following:

1. Evaluation, Measurement and Verification (EM&V)
2. Customer Engagement
3. Load Forecasting

R.08-12-009 ALJ Ruling to Establish Data Use Cases, Timelines for Provision and Model Non-Disclosure Agreements (2/27/2013) identified eight (8) Use Cases



USE CASE 1: Evaluation, Measurement and Verification (EM&V)

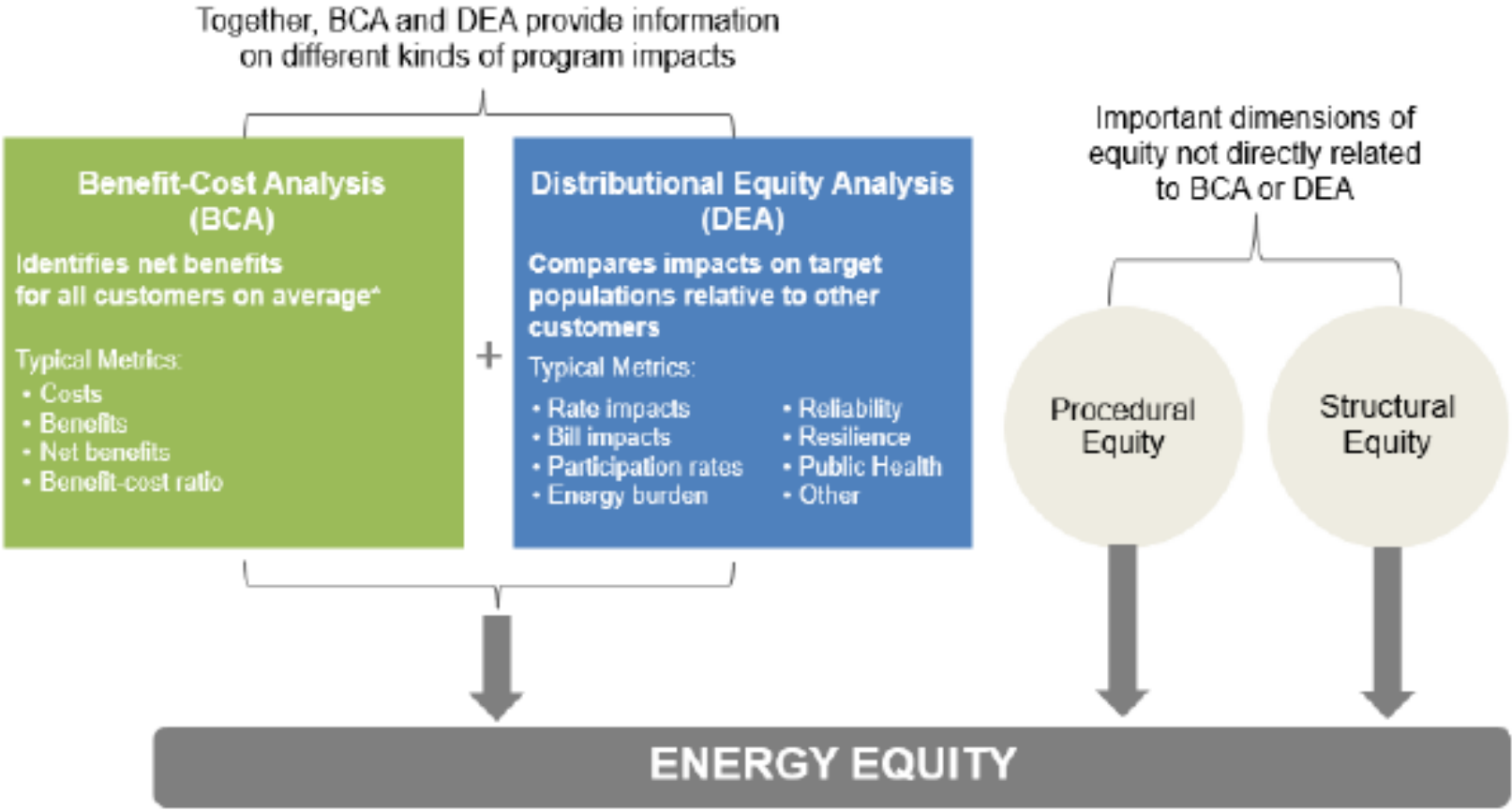
CEC data can be used to

- Understand and improve performance
- Verify contract performance
- Evaluate cost- effectiveness
- Support electricity system planning
- Validate demand flexibility value
- Support energy policies and programs



USE CASE 1: Evaluation, Measurement and Verification (EM&V) (cont.)

For example, meter data can be used to support Distributional Equity Analysis (DEA) for assessing customer equity



USE CASE 2 - Customer Engagement

CEC data can support customer engagement.

- For example, many different load shapes exist within the same customer class.
- Analysis of those load shapes is important for clustering and can prove useful for program target marketing.
- Supporting the development of Apps and Tools is another activity that increases the
- value of CEC's data.



USE CASE 3 - Load Forecasting

Analyzing times-series meter data in combination with other data sources to improve load forecasts is a high priority for many agencies in the state and should be a priority from the Commission.

- California Analysis Tool for Locational Energy Assessment (CATALENA)



Development Needs for Demand Flexibility Success

California has embraced the adoption of distributed energy resources (DERs) as an important strategy to meet its commitments to increase renewable and zero-carbon resources. In order to meet the full potential of DERs, and the State's load-shifting goals, modified or new approaches will be needed to accurately assess demand flexibility performance.

While existing practices are sufficient for most applications today, modified or new assessment approaches will be needed to assess demand flexibility[6] performance in the future.

- Continuous or near-continuous demand flexibility
- Using multiple demand flexibility modes
- Load modulation in sub-seconds to seconds
- Increased use of combinations of DERs
- Demand flexibility provided at the individual end-use level or individual device level
- Managed electric vehicle charging
- Reduced complexity for consumers and other market participants