

Best Practices for Power Source and Emissions Disclosure

Initiative Proposal | October 2023

1. Problem Statement

The approximately 3,000 utilities in the United States face different regulatory requirements and other considerations that influence whether and how they calculate and communicate power source and emissions information to retail customers. Many states have some sort of Power Source Disclosure (PSD) or environmental disclosure labeling for their electricity customers. Utilities operating in other states sometimes provide this information to customers voluntarily. As a part of a previous CEAP initiative on Standard Delivery Renewable Energy, CRS found [significant variation](#) among existing state program requirements and voluntary reporting. As a result of these differences and incomplete reporting, end use customers even within the same region can receive very different information about the power they are receiving, and generation can easily be double counted or missing altogether. This variation can be found in resource categories, methodologies, reporting timeframes and frequency, and the treatment of Energy Attribute Certificates (EACs), for example. In the absence of comprehensive all-generation certificate tracking, uniformly collecting data for state compliance programs, GHG emissions totals, and general customer use can be challenging.

This CEAP initiative will answer the question:

- *What are best practices for power source and emissions disclosure to electricity customers in the United States?*

2. Proposal Summary

This CEAP initiative will produce best practices for power source and emissions disclosure for select scenarios covering different electricity market structures and attribute tracking capabilities in the United States. To do this, this initiative will first identify general scenarios and review existing state and voluntary program requirements, as well as any existing best practices or guidance related to retail electricity end use GHG emissions accounting. It would then identify common objectives and principles for retail disclosure, and finally apply those principles to develop best practices for specific market and tracking circumstances. We will consider different reporting timeframes, and the accounting and procurement timeframe (e.g., hourly/annual) against available data sources and consumer expectations. While the implementation would be varied in different regions, providing best practices will help align different environmental labeling programs and assist customers in understanding these complex products.

To disclose specific power sources and their associated emissions, it is important to account for all the power and emissions delivered to customers, and to have consistent accounting regionally. This initiative should consider different retail products, including standard offer or green power programs. For each product, considerations should include utility-specific direct

emissions and indirect emissions associated with purchased power delivered to retail customers, generation resource types, and aggregated (CO₂e) and disaggregated (CO₂, CH₄, N₂O, etc.) GHG emissions presentations. Aside from a backgrounder on state PSD programs and a guidance report on best practices, this initiative will produce an associated template(s) to facilitate data consistency and disclosure.

3. Summary Table

This table will further define the initiative along specific parameters and criteria and inform the working group stage.

Scope limitations:	<ul style="list-style-type: none"> Will not identify specific emissions data to be used. Limited to utilities operating within the U.S. Focus on retail product disclosure.
Potential outcomes:	<ul style="list-style-type: none"> Help utilities and regulators standardize and disclose power source and emissions data using general principles, rules, and methodologies tailored to general market and data scenarios. Create comparable, utility-specific, hourly/annual resource mix and emissions information for customer usage and GHG accounting claims. Increase the availability of utility-specific information. Increase regulatory and voluntary market coordination.
Reasons for urgency:	<ul style="list-style-type: none"> Standardized utility-specific information will better inform local, state, regional, and federal climate policy. Customer demand for standardized utility-specific data, especially at the hourly level. Federal interest in grid-supplied electricity calculation methodologies.
Anticipated deliverable(s):	<ul style="list-style-type: none"> Backgrounder on state PSD programs and their requirements. User-friendly report detailing best practices for power source and emissions disclosure by general market and tracking scenario. Template(s) to facilitate data consistency and disclosure.
Other relevant initiatives:	<ul style="list-style-type: none"> None identified
Relation to existing CEAP initiatives:	<ul style="list-style-type: none"> This work relates to CEAP's Calculating a Residual Mix initiative with a focus on utility-specific information and disclosure. This work also relates to CEAP's Calculating Hourly Utility Emission Factors initiative.
Available resources:	<ul style="list-style-type: none"> TCR's Electric Power Sector Protocol and related resources EEl's Electric Company Carbon Emissions and Electricity Mix Reporting Database Data Sources: Accounting for Standard Delivery Renewable Energy Green-e® Energy Code of Conduct for Canada and the United States
Potential challenges:	<ul style="list-style-type: none"> Best practices may conflict with current state disclosure rules and will not change utility disclosure obligations in those cases. 24/7 readiness at utilities and balancing authorities. Some amount of attribution is often not accounted for or coordinated within renewable energy tracking systems.

Key working group stakeholders:

- Investor-owned, publicly owned, and cooperative utilities
- State PUC staff
- RPS/CES experts
- Balancing authorities
- ISO/RTO/grid operators
- Tracking systems
- Federal agencies - EPA, EIA, FEMP, CEQ
- GHG accounting professionals
- EEI
- TCR
- WRI