WHITE PAPER -
EXECUTIVE SUMMARY

PRINCIPLES OF ACCOUNTING FOR RENEWABLE ELECTRICITY IN THE U.S.
State renewable portfolio standards (RPS) and the favorable economics of renewables have led to more renewable electricity being delivered to the power grid in the U.S. A growing number of large energy buyers in the commercial and industrial sector, like corporates, support holistic policies and programs that accelerate grid decarbonization to green the grid faster and more affordably for all energy customers. Large energy buyers are interested in guidance on whether and how to count the base amount of renewable electricity on the grid in their renewable electricity and carbon footprint reporting. The purpose of the Principles of Accounting for Renewable Electricity in the U.S. Whitepaper is to establish a shared understanding among corporate leaders, relevant leadership initiatives, and key stakeholders of the basic principles of accounting for standard delivery renewable electricity in the U.S.

The Principles of Accounting for Renewable Electricity in the U.S. Whitepaper uses a market-based accounting framework for energy usage claims and greenhouse gas (GHG) accounting to provide guidance to energy buyers in the U.S. on when standard delivery renewable electricity can be claimed as specified electricity. In the context of this whitepaper standard delivery refers to electricity that is delivered to a customer by their local supplier without any action by the customer to procure a unique resource mix. Specified electricity refers to electricity consumption traceable to specific generation sources by a contractual instrument in line with market-based accounting principles, such as the purchase of specified electricity through a green tariff. The market-based accounting framework and general principles used in this whitepaper are drawn from the World Resources Institute’s GHG Protocol Scope 2 Guidance, as well as renewable electricity claims guidance and regulations described in more detail in Appendix A: A Primer on Market-based Accounting.

This white paper analyzes three aggregate generation data types often used to reflect the fuel mix of standard delivery electricity to determine whether they support specified electricity claims in a market-based accounting framework, including grid mix, supplier-specific mix, and residual mix. Grid mix is defined in line with the GHG Protocol Scope 2 Guidance (GHGP scope 2 guidance) as a locational construct and the lowest quality data source in the market-based data hierarchy that does not support credible claims to specified electricity. Supplier-specific mix and residual mix are defined in line with the GHGP scope 2 guidance as a market-based constructs that, when developed via a methodology that incorporates credible contractual instruments, can support claims on consumption of specified electricity.
Given the right data quality, a reporting entity can rely on a supplier-specific mix or a residual mix to claim consumption of specific renewable electricity resources on the grid. Unfortunately, there are significant issues with data quality and access for both data types that complicate the ability to substantiate a credible claim on consumption of specified electricity in the U.S. Where the aggregate generation data source does not incorporate contractual instruments the data source cannot be disaggregated to claim consumption of specified electricity.

This whitepaper provides context on sustainability leadership that underpins whether organizations should, from an impact perspective, count standard delivery renewable electricity in their sustainability reporting, but a detailed evaluation is outside this whitepaper’s scope.

Improving accessibility and quality of data for standard delivery renewable electricity can help all market actors, including government entities, energy suppliers, and energy buyers make more informed renewable electricity policy and procurement decisions. The whitepaper concludes by outlining potential solutions market actors can collaborate on to address these data quality and availability issues, including:

1. Encourage voluntary supplier-specific mix reporting by utilities, building off an initiative from Edison Electric Institute (EEI).
2. Study and develop a national infrastructure and mandate for consistently reporting emissions and resource mixes for all load-serving entities.
3. Build consensus around which data sources commonly used to represent standard delivery electricity can support specified electricity consumption claims.