

Hourly Utility Product Design Options in the U.S. (Updated)

Revised Initiative Proposal | September 2024

1. Problem Statement

Vertically integrated utilities are well positioned to provide a range of hourly clean energy products to their customers as they own and operate all stages of the electricity supply chain, including power generation, transmission lines, and distribution networks. However, the variations between each utilities' portfolio and circumstances create the potential for a disconnect between what is being provided and the benefits that customers expect. In practice, hourly products from different providers may look and work very differently in terms of customers and their load data, generation resources and data, and product specifications and terms. The novelty of hourly offerings poses both an opportunity and challenge for growth in the sector, specifically when attempting to standardize tracking and reporting. While some product variation is necessary and expected, standardization around product design options will help ensure credible clean energy accounting and increase access to hourly products. This initiative will aim to answer the question:

- *How should different hourly utility product options for vertically integrated utilities in regulated markets be designed to support credible clean energy sales?*

2. Proposal Summary

This initiative will outline the range of possible design specifications and considerations for an hourly clean energy utility product offered by vertically integrated utilities in regulated U.S. markets. The outcome will provide guidance on different product options available and general guidance on the data and conditions necessary to facilitate verification.

Specifications included in the product offerings may be:

1. Level of matching
2. Geographic sourcing requirements
3. Type and source of load data
4. Options for disclosure to participating customers and marketing language
5. Resource types
6. Constraints on resource types that are clean - not green (e.g. nuclear)

Considerations for the proposed product offers may be:

1. How utilities allocate or match (e.g. price based, resource-based model)
2. Customers that would participate and how they would enroll in the program
3. Standard delivery of clean energy vs voluntary clean energy generation
4. Options for selling (e.g. specified percentage in blocks, etc.)
5. Participation in wholesale markets by utilities
6. Format of generation data
7. Different tracking system coverage and functionality (e.g. WREGIS)

This initiative will build off the Regulatory Assistance Project (RAP)'s work on 24/7 Carbon Free Electricity Transition Tariffs, which outlined five fundamentals as the foundation for 24/7 transition tariffs.

3. Summary Table

Scope Limitations:	<ul style="list-style-type: none"> ▪ Focused on delivery of hourly specified energy in the U.S. on ▪ Only vertically integrated utilities in regulated markets will be considered ▪ Considerations for product design will not include rates or billing ▪ Will not consider emissions accounting
Potential Outcomes:	<ul style="list-style-type: none"> ▪ Best practices and foundational principles for vertically integrated utilities to utilize when designing new hourly product offerings ▪ Increase proliferation of hourly utility products, providing access to more customers in vertically integrated utilities service areas
Reasons for Urgency:	<ul style="list-style-type: none"> ▪ Limited supply of hourly products available, despite significant interest in hourly clean energy accounting ▪ Existing products often tailored to specific buyers with large energy footprints ▪ Meeting demand for hourly products may help incentivize technology solutions (e.g., storage and transmission) necessary to decarbonize the grid ▪ The U.S. executive order requires hourly products for government agencies and existing regulations in the EU are mandating hourly reporting for EU-based companies' operations in the U.S.
Anticipated Deliverable:	<ul style="list-style-type: none"> ▪ Report on different utility product design specification ▪ Example language that utilities can use in product offerings for their customers, and the data needed to support such disclosure language
Other Relevant Initiatives:	<ul style="list-style-type: none"> ▪ EnergyTag Granular Certificate Scheme Standard and Granular Certificate Matching Standard ▪ Singularity Open Grid Emissions Initiative ▪ WRI/Institute for Electric Innovation dialogue & local government cohort ▪ UN hourly Carbon-free Energy Compact, provides resources for signatories ▪ Regulatory Assistance Project: hourly Carbon-Free Electricity Transition Tariffs: A Regulatory Tool for Accelerating Decarbonization

<p>Available Resources:</p>	<ul style="list-style-type: none"> ▪ Existing hourly servings and utility products (PCE, SVCE, AES, Entergy) <ul style="list-style-type: none"> ▪ Google Policy Roadmap for hourly CFE ▪ Google hourly CFE paper ▪ Peninsula Clean Energy's "Our Path to hourly Renewable Energy by 2025" ▪ WRI's collection of relevant resources ▪ U.S. Executive Order 14057 Implementation Guidance ▪ U.S. EPA Guide to Purchasing Green Power Ch. 4 ▪ Tracking system initiatives <ul style="list-style-type: none"> ○ M-RETS ○ PJM ○ NEPOOL-GIS 	
<p>Potential Challenges:</p>	<ul style="list-style-type: none"> ▪ Scale of diversity in utility operations ▪ Limited specified resource data available for wholesale market transactions ▪ Challenges securing load data at the right granularity and frequency ▪ Accounting for the role of DER and storage in hourly products 	
<p>Key Working Group Stakeholders:</p>	<ul style="list-style-type: none"> ▪ Vertically integrated utilities in regulated markets ▪ Hourly clean energy buyers/sellers/trading platforms ▪ U.S. EPA 	<ul style="list-style-type: none"> ▪ National lab (NREL) ▪ Public utility commissioners ▪ EAC tracking systems (in particular, M-RETS, PJM, NEPOOL-GIS) ▪ Grid operators (ISO's, RTO's) ▪ Data providers