

ATTACHMENT 2

NCUC Docket Nos. E-2, Sub 1314, E-7, Sub 1289,
E-2, Sub 1315, E-7, Sub 1288

April 26, 2023

24/7 Carbon-Free Energy Transition Tariffs

Stakeholder Process Kickoff Meeting

24/7 Project Goals

- Establish a constructive national dialogue around 24/7 carbon-free energy
- Examine technical challenges to implementing 24/7 CFE
- Create 24/7 CFE transition tariff options
- Assist implementation in several geographic locations

Ground Rules

- Change your name in Zoom to first name, last initial and organization
- Please keep your line muted when not speaking
- Use “raise hand” function if you'd like to say something
- Respect “democracy of time”



Agenda

- Introduce project team
- Introduce stakeholder organizations
- Provide overview of 24/7 stakeholder project process
- Preview focus of 24/7 workgroups
- Introduce next steps

1 Introductions



RAP Team

Emissions Team

Dave Farnsworth

Jessica Shipley

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Loads, Resources & Reliability Team

Carl Linvill

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Ratemaking Team

Mark LeBel

Josie Gage

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Communications/ External Strategy Team

Damali Harding

Donna Brutkoski

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Stakeholders

Regulators

Illinois
Colorado
Oregon
California

Consumer/ Equity Advocates

Maryland Office of
People's Counsel (OPC)
/ National Association of
State Utility Consumer
Advocates (NASUCA)

California Office of
Ratepayer Advocates
(ORA)

Elevate Energy

Minnesota Citizens
Utilities Board (CUB)

Utilities

Portland General
Xcel – Colorado
Con Ed
National Grid
Duke

Stakeholders

Commercial Entities

Google

Microsoft

Nucor

Iron Mountain

Target

Local Governments and CCAs

Boulder, Colorado

Des Moines, Iowa

Peninsula Clean Energy

Sonoma Clean Power

Valley Clean Energy

Federal Agencies

White House Council on Environmental Quality (CEQ)

U.S. Department of Energy (DOE)

National Renewable Energy Laboratory (NREL)

U.S. Environmental Protection Agency (EPA)

U.S. Department of Defense (DoD)

Stakeholders

Energy Companies

Constellation
PowerOptions
Pattern Energy
Dominion Energy
AES

Public Interest/ Trade Organizations

RMI
Great Plains Institute
(GPI)
World Resources Institute
(WRI)
Center for Resource
Solutions (CRS)
Electric Power Research
Institute (EPRI)
Clean Energy Buyers
Association (CEBA)

Emissions Experts

Energy Tag
Singularity
Northbridge Group
Midwest Renewable
Energy Tracking
System (M-RETS)

2 Project Process Plan



Working Definition – UN Compact

24/7 carbon-free energy (CFE) means that every kilowatt-hour of electricity consumption is met with carbon-free electricity sources, every hour of every day, everywhere. It is both the end state of a fully decarbonized electricity system, and a transformative approach to energy procurement, supply, and policy design that is critical to accelerating its arrival.

Source: <https://www.un.org/en/energy-compacts/page/compact-247-carbon-free-energy>

A Three-Phase Project This Year



Three Technical Work Groups

- Emissions technical WG
 - Framing at May meeting (May 23, noon ET)
 - Proposed solutions in August
- Loads, resources & reliability technical WG
 - Framing at June meeting
 - Proposed solutions in August
- Ratemaking issues technical WG
 - Framing at July meeting
 - Proposed solutions in September

Sample Tariff Work Groups

- Up to three sample tariffs
 - Chosen by the stakeholders by mid-June
 - Each with a specific context and scope
- Sample tariff work groups formed in June
 - Stakeholders may opt into a work group (or not)
- These work groups will:
 - Fold in learning from technical work groups
 - Produce drafts by September

Clarifying Questions?

3 Technical Workgroup Framing Sessions Preview

Sep 05 2023

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Emissions Framing Session

- To ensure that 24/7 marketing claims are defensible, it is necessary to be able to characterize, on an hourly basis, the source, or sources of electricity as well as related characteristics, including effects on emissions.
- The goal of this workshop is for participants to understand the tracking and verification challenges associated with 24/7 carbon free energy procurement, and consequential effects on power grid emissions.
- Workshop #2 – Emissions Verification and Accounting
May 23, 12 pm ET

Loads, Resources & Reliability Framing Session

- To ensure that 24/7 CFE portfolios meet participating consumer loads while maintaining reliability for participating and non-participating customers fairly and cost effectively requires the ability to accurately characterize customer needs, distribution system needs and CFE energy capabilities on an hourly basis.
- The goal of this workshop is for participants to consider the customer data, distribution system data, bulk system data and CFE resource data necessary to evaluate the reliability, fairness and cost-effectiveness of 24/7 CFE portfolio options.
- Workshop #3 – Last two weeks of June, specific date TBD, 12 pm ET.

Ratemaking Framing Session

- To ensure that 24/7 CFE portfolios meet participating customer needs with ratemaking that fairly accounts for the costs and benefits of any associated investments by the utility and non-utility in establishing rates for participating and non-participating consumers.
- The goal of this workshop is to identify the key ratemaking issues for both participants and non-participants at a high level, including cost allocation, retail customer pricing, and resource compensation.
- Workshop #4 – Last two weeks of July, specific date TBD, 12 pm ET.

4 Wrap-Up and Next Steps



Announcements

- Next meeting: May 23 emissions framing
- RAP will follow up with each organization over the coming week for feedback, suggestions and questions
- A project site where you can view meeting materials and resources will be established soon

Useful Resources / Pre-Reads

- EPRI, 24/7 Carbon-free Energy: Matching Carbon-free Energy Procurement to Hourly Electric Load
- M-RETS, 24/7 Carbon-Free Energy: It's In the Data
- Peninsula Clean Energy, Achieving 24/7 Renewable Energy by 2025
- Ricks et al (Princeton Univ.), Minimizing emissions from grid-based hydrogen production in the United States
- TCR, A Comparison of Strategies for Tackling Corporate Scope 2 Carbon Emissions