

The Customer-Centered Clean Energy Transition

BALANCING TECHNOLOGY, PEOPLE & THE PLANET





The Customer-Centered Clean Energy Transition:

BALANCING TECHNOLOGY, PEOPLE & THE PLANET

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Introduction

Electricity is an essential service, and regulations provide that electric companies have an obligation to serve all customers reliably and at just and reasonable rates. Regardless of the factors driving the transition to cleaner energy—whether environmental concerns, evolving technologies, customer and investor expectations, corporate goals, state and local government policies, or some combination thereof, the provision of electric service should remain customer-centered. Additionally, state commissions, consumer advocates, and electric companies ("three core groups" or "three core communities") have key roles in ensuring a customer-centered outcome in the current transition to clean energy and in all future transitions as the energy sector continues to evolve.

A customer-centered clean energy transition requires coordination and planning amid considerable uncertainties and challenges. In some jurisdictions, energy policies may expand to include, or place additional priority on, objectives such as clean energy and resilience. States and electric companies may set new targets and timelines and propose new energy investment, upgrades, or retrofits to existing infrastructure. Innovative technologies are likely to emerge. Some customers will demand new or improved services; others will express concern about the impact on their bills. Again, state commissions, consumer advocates, and electric companies have key roles in navigating these uncertainties and challenges in a manner that meets clean energy objectives, effectuates the regulatory compact, and maintains reliability, affordability, and other customer-centered priorities.

While drivers, circumstances, definitions, timelines, and specific approaches regarding the transition to clean energy vary significantly across the country, states and electric companies clearly are experiencing similar opportunities and challenges. Thus, collaboration among state commissions, consumer advocates, and electric companies on these issues offers exceptional value.

In late 2021, the Critical Consumer Issues Forum (CCIF) leadership recognized the value in discussing these issues and identified *The Customer-Centered Clean Energy Transition: Balancing Technology, People & the Planet*, as a topic for which exploration was increasingly important and timely. To support that exploration and advance the dialogue on the interaction between the clean energy transition and the regulatory process, CCIF facilitated a series of discussions that culminated in this report.

CCIF Series Overview

CCIF virtually introduced the new topic at its Twelfth Annual Kickoff Forum in December 2021. While it remained to be seen to what extent the federal government would provide additional policy direction, CCIF endeavored to best position states, and particularly the three core groups, for their continued leadership on meeting the growing demand for clean energy while maintaining reliable, resilient electric service at just and reasonable rates.

To that end, the CCIF Virtual Kickoff and the Summit Series that followed in the spring of 2022 aimed to identify and address several critical issues, such as how to:

- Encourage adoption of a range of transformational technologies that will be necessary to achieve clean energy objectives in a timely manner while maintaining reliability at just and reasonable rates.
- Provide for a just transition for all customers, with specific emphasis on economically impacted communities.

With a different approach than CCIF's typical consensus-building summit format, the CCIF Summit 1 Virtual Education Session featured an educational-style background discussion from experts on several

technologies that likely will be considered and used in the transition to clean energy but that are at various stages of research, development, and deployment, including:

- Grid-enhancing technologies to facilitate deployment of renewables.
- Advanced nuclear energy (fission and fusion).
- Zero-carbon fuels (hydrogen, etc.).
- Carbon capture, utilization, and storage.
- Long-duration storage.
- Advanced demand efficiency.

Participants engaged with the featured technology experts on several related issues, especially regarding the stage of, or prospects for, research, commercial viability, and financing and development for each of these technologies. This discussion provided an educational foundation upon which to build in the summits that followed.

Summit 2 in Phoenix and Summit 3 in Pittsburgh marked CCIF's return to meeting in-person and the usual summit consensus-building process. At each summit, participants candidly engaged on several issues pertaining to customers and clean energy, sharing their experiences and ultimately developing and honing consensus principles. The principles either acknowledge something significant to the three core groups or call for some type of action on their behalf with respect to the following five subtopic areas:

- Evolving Roles in the Customer-Centered Clean Energy Transition
- Meeting Clean Energy Objectives by Seizing Opportunities & Managing Risks
- Facilitating Engagement with Customers & Stakeholders
- Ensuring Customer Equity & Access
- Federal/State Coordination

In the post-summit process, participants from the summits and CCIF leadership engaged in additional refinement of the eleven consensus principles featured within this report.

* * *

Throughout the customer-centered clean energy transition, the three core groups will have critical roles in addressing a plethora of issues. CCIF encourages continued exploration of these important issues in a collaborative manner to the extent possible. We trust that the following consensus principles will serve as a solid foundation upon which state commissions, consumer advocates, and electric companies may work more closely together and with other relevant stakeholders in their states and communities—and with federal counterparts as necessary—to best position states for their continued leadership on meeting the growing demand for clean energy while maintaining reliable and resilient electric service at just and reasonable rates.

Subtopic 1: Evolving Roles in the Customer-Centered Clean Energy Transition

- 1. CCIF participants acknowledge that:
 - a. While the pace is constantly changing given individual drivers and circumstances, the U.S. transition to clean energy is underway at various stages around the country, and it is expected to accelerate given ambitious public, private, and community clean energy goals across all sectors of the economy.
 - b. Such a transition will require significant investment, ongoing partnership, and a strategy to achieve clean energy objectives and serve customers' current and future energy needs reliably, affordably, cost-effectively, and equitably.
 - c. Multiple clean energy-related goals, directives, and regulations across different levels of government and across different administrations may create inconsistencies with the various planning, investment, and regulatory timelines necessary and may not give appropriate consideration to affordability.
 - d. State commissions, consumer advocates, and electric companies serve critical—and in some cases, evolving—roles in facilitating a customer-centered transition to clean energy while continuing to maintain a focus on preserving reliability at just and reasonable rates.
 - e. The speed of the regulatory review process for proposed clean energy projects is important and may impact both the opportunities available and the ultimate cost to customers.
 - f. Adequate staffing and competitive pay for state commissions and state consumer advocates are necessary to facilitate an efficient and orderly clean energy transition and to enable informed, robust, and proactive conversation; technical capacity; and timely responses.
 - g. The ongoing collaboration of state commissions, consumer advocates, and electric companies is essential to developing and implementing successful plans for meeting clean energy transition objectives in a way that is affordable for customers.

Subtopic 2: Meeting Clean Energy Objectives by Seizing Opportunities & Managing Risks

- 2. Participants **acknowledge** that achieving a clean energy future may warrant adoption of emerging and promising—but sometimes not quite economic—technologies. State commissions, consumer advocates, and electric companies **should** consider the potential of such technologies; explore ways to demonstrate these technologies; assess their risks, costs, and benefits; determine approaches to develop equitable cost recovery; and work constructively to advance their development where doing so is in the public interest.
- 3. Participants **acknowledge** that known, established processes are a tool for understanding and managing risk. To help manage future risks and facilitate a customer-centered clean energy transition in a manner that preserves reliability and just and reasonable rates, states and electric companies **should** establish a clear process for evaluating a broader array of technology options, which may include the following:
 - a. Commercially available clean energy generation, energy efficiency, and demand side management technologies.

- b. Advanced clean energy transition technologies including, but not limited to, grid-enhancing technologies to facilitate deployment of renewables; advanced nuclear energy; zero-carbon fuels; carbon capture, utilization & storage; advanced demand efficiency; and long-duration storage.
- c. Conventional energy resources with carbon-mitigating upgrades or retrofits.
- d. Transmission and distribution system optimization and upgrades (buildout and fortifying/strengthening) to integrate more renewables and other clean energy transition technologies (e.g., electric transportation) into the energy grid and to enhance reliability and resilience.
- 4. Participants **acknowledge** that lengthy planning horizons, evolving clean energy targets, and emergent technologies may present stranded cost risk to companies and customers. State commissions, consumer advocates, and electric companies **should** collaborate to:
 - a. Establish mechanisms to address the stranded cost risk of existing facilities.
 - b. Minimize potential new future stranded assets caused by or associated with the transition to clean energy.

While not endorsing a specific method, alternative financing options may be considered to address such stranded costs.

Subtopic 3: Facilitating Engagement with Customers & Stakeholders

- 5. Participants **acknowledge** the importance of building a common understanding and vocabulary on clean energy transition topics to enable clear communication on the concepts of equity and equity principles such as affordability, environmental justice, energy justice, and just transition.
- 6. Participants acknowledge that the regulatory process—including decisions related to ensuring a customer-centered clean energy transition—is best served when customers and other stakeholders are proactively informed and meaningfully engaged. Stakeholders, state commissions, consumer advocates, electric companies, and community-based organizations should (independent of a contested case) collaborate to:
 - a. Develop or improve trust and systems of accountability to enable sustained engagement.
 - b. Emphasize customer and other stakeholder outreach and education.
 - c. Enable accessible and meaningful opportunities for customer participation, particularly from historically underrepresented populations, in state commission proceedings.
- 7. Participants **acknowledge** that meeting clean energy transition objectives *on an accelerated schedule* may provide benefits but also may put upward pressure on electricity customer rates/bills. Thus, the federal government, state commissions, consumer advocates, and electric companies **should** build on enhanced efforts and lessons learned in response to the COVID-19 crisis to:
 - a. Identify, reach, and assist customers in need (intended to broadly refer to low-income customers, customers in arrears, energy insecure customers, and customers at-risk for loss of service or adverse health impacts from service interruption).

- b. Make relevant customer data (whether from the electric company, non-traditional third parties, or combination of both) to assist customers in need more streamlined, accessible, and transparent.¹
- c. Reach and meaningfully engage eligible customer populations that have disproportionately low participation rates in customer assistance programs.
- d. Coordinate and integrate state, electric company, and federal programs (e.g., energy efficiency, demand response, weatherization, and payment assistance, such as the Low Income Home Energy Assistance Program (LIHEAP)) to provide more streamlined access for customers in need.

Subtopic 4: Ensuring Customer Equity & Access

- 8. To ensure that the clean energy transition is customer-centered and equitable, state commissions, consumer advocates, and electric companies **should**, at minimum, consider the following factors when reviewing regulatory filings and making decisions concerning clean energy transition investment:
 - a. Safe, reliable, and resilient services for all.
 - b. Affordability.
 - c. Diverse perspectives.
 - d. Potential disproportionate environmental impacts, particularly on vulnerable communities (i.e., environmental justice²).
 - e. Access to, and equitable distribution of, the benefits of technologies and programs that are in the public interest.
 - f. Lowest reasonable cost approach that results in just and reasonable rates.
 - g. Other applicable jurisdictional requirements.
- 9. Participants **acknowledge** that the closure, or fuel conversion, of power generation facilities may result in disruption to workers and their communities. State commissions, consumer advocates, electric companies, and relevant federal, state, and local stakeholders **should** recognize these effects and, as appropriate, take actions within their respective authorities that could include:
 - a. Encouraging state and federal efforts to address broader community needs related to the closure, or fuel conversion, of power generation facilities.
 - b. Retraining and upskilling disrupted workers.
 - c. Utilizing existing infrastructure going forward.
 - d. Facilitating other just transition strategies.

¹ Participants recognize that customer data disclosures will be subject to potential limitation by customer protection and data privacy laws and regulations, as well as by company or stakeholder confidentiality policies.

² According to the U.S. Department of Energy and the U.S. Environmental Protection Agency, environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Subtopic 5: Federal/State Coordination

- 10. To capitalize on the opportunities to defray the costs to electricity customers of meeting applicable clean energy transition objectives, state commissions, consumer advocates, and electric companies should proactively collaborate regarding applicable federal and state policy structure and funding opportunities, such as those provided in the Infrastructure Investment and Jobs Act.
- 11. To identify appropriate vehicles for facilitating a customer-centered clean energy transition, state commissions, consumer advocates, and electric companies **should** coordinate and seek federal actions to:
 - a. Improve federal infrastructure, siting, and permitting processes for advanced clean energy transition technologies in a manner that preserves state authority.
 - b. Invest in, and provide economic incentives for, the research, development, demonstration, and deployment of advanced clean energy transition technologies.
 - c. Make relevant federal research data available and easier to access (i.e., a clearinghouse) and discern key findings.
 - d. Increase funding and flexibility for income-qualified assistance programs (e.g., LIHEAP and weatherization) to alleviate rate pressures that may be associated with meeting clean energy transition objectives and other ongoing priorities (e.g., reliability, resilience) for as many eligible customers as possible.
 - e. Assist potentially economically distressed communities in the clean energy transition with workforce development, training, application processes, and other economic development opportunities.
 - f. Identify the proper vehicles and channels for federal and state coordination on specific issues.
 - g. Provide federal funding status updates.
 - h. Support tax credits, such as investment tax credits and production tax credits, for a range of clean energy technologies that may be used by electric companies and other power producers.



During CCIF Summit 3 in Pittsburgh, NASUCA's David Springe, Maryland Public Service Commissioner Odogwu Linton, NorthWestern Energy's Cyndee Fang, and Pennsylvania Office of Small Business Advocate's Teresa Wagner consider proposed principles concerning the customer-centered clean energy transition.

Conclusion

Objectives Met

State commissioners, consumer advocates, and electric company representatives (and their respective teams) participated in a series of important and timely dialogues and worked together on the consensus principles featured in this report. Recognizing that the report does not address all issues with respect to the topic, CCIF trusts that this report will serve as a useful foundation for additional dialogue and collaboration among the three core communities as well as policymakers and other stakeholders.

Special Recognition

The CCIF Executive and Advisory Committees would like to thank the following individuals and organizations whose valuable contributions resulted in this report:

- The National Association of Regulatory Utility Commissioners (NARUC), the National Association of State Utility Consumer Advocates (NASUCA), and the Edison Electric Institute (EEI), particularly the guidance of their respective leaders and the valuable time, input, and hard work of their respective teams.
- Participating commissioners, commission staff, consumer advocates, and electric company representatives.
- Speakers at the 2021 Virtual Kickoff Forum, the 2022 Summit 1 Virtual Education Session, Summits 2 and 3, and the Breakfast & Report Release.

Disclaimer

The principles developed within the 2022 summit process—or other featured information within this report—are not intended to override any individual or collective policies or positions developed by state commissioners, commission staff, consumer advocates, electric companies, or by NARUC, NASUCA, EEI, or other organizations represented by certain participants. Instead, CCIF work products are meant to complement such policies or positions and to provide a framework for additional discussion and policy development.

Acknowledgment of 2022 Summit Participants

Due to the nature of the collaborative process and the extensive degree of participation, specific principles developed within the 2022 summit process or other featured information within this report should not be attributed to specific individuals or to the organizations that he or she represents. With that understanding, CCIF acknowledges the following individuals* who participated in CCIF events focused on the topic, *The Customer-Centered Clean Energy Transition: Balancing Technology, People & the Planet*:

Chris Ayers North Carolina Utilities Commission Public Staff

Hon. Philip L. Bartlett II Maine Public Utilities Commission

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Hon. Maida Coleman Missouri Public Service Commission

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Hon. Odogwu O. Linton Maryland Public Service Commission

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Hon. Jason M. Stanek Maryland Public Service Commission

Tim Tessier Iowa Office of Consumer Advocate Dave L. Thompson Connecticut Office of Consumer Counsel

Hon. Mary Throne Wyoming Public Service Commission

Teresa Wagner Pennsylvania Office of Small Business Advocate

*List represents individuals and their organizations at the time of participation in the summits.



Colorado Office of the Utility Consumer Advocate's Joseph Pereira and District of Columbia Public Service Commission's Shanelle Patterson are ready to engage on the topic of a customer-centered clean energy transition at CCIF Summit 3 in Pittsburgh.

CCIF Events on Topic of Customer-Centered Clean Energy Transition

CCIF appreciates all those who were involved in making the following series of events a success:

Virtual Kickoff Forum

December 8, 2021

Summit 1 Virtual Education Session March 1-2, 2022

Summit 2 in Phoenix, Arizona March 30-31, 2022

Summit 3 in Pittsburgh, Pennsylvania April 28-29, 2022

Breakfast & Report Release in San Diego, California

July 19, 2022



NARUC's Jasmine McAdams thoughtfully considered how to improve a proposed consensus principle under discussion at Summit 3.



Along with other Summit 3 participants, AEP's Matt Satterwhite carefully weighed the potential implications of the proposed consensus language.

CCIF Overview

CCIF Formation, Leadership, and Process

Formed in 2010, the Critical Consumer Issues Forum (CCIF) brings together state commissions, consumer advocates, and electric companies to tackle consumer-focused energy issues through interactive discourse and debate, to find consensus when possible, and, at a minimum, to achieve a clearer understanding of—and appreciation for—each other's perspectives and positions.

CCIF Executive and Advisory Committees, each with balanced representation from the three core communities, provide leadership and guide CCIF initiatives at each of the following steps in the process:

- 1. Kickoff forum, typically collocated with the NARUC & NASUCA Annual Meetings, to introduce a topic and to initiate discussion among CCIF's three core communities and other stakeholders.
- 2. Series of invitation-only summits in which the three groups engage in facilitated dialogue.
- 3. Issuance of a report to share key takeaways with the broader stakeholder community and to serve as a foundation for additional dialogue on numerous fronts.

CCIF Value & Successful Track Record

By providing a non-adversarial, collaborative environment in which participants from the three core groups candidly can discuss and proactively can address a variety of energy issues with potentially broad impacts on electricity customers, CCIF consistently has produced credible reports that demonstrate support for key concepts to the broader stakeholder community; demonstrate leadership of the three core groups; initiate, inform, or focus dialogue at the state level (regulatory and broader policy dialogue); and focus on consumer aspects of energy topics and facilitate proactive consumer education and protection.

Specifically, the following CCIF reports have contributed to energy policy debate in a constructive way:

- <u>Grid Modernization Issues with a Focus on Consumers</u>, July 2011
- Focus on the Regulatory Process, July 2012
- <u>Policy Considerations Related to Distributed Energy Resources</u>, July 2013
- DG: A Balanced Path Forward: Providing Customer Choice While Ensuring Reliability, July 2014
- <u>The Evolving Distribution System: Helping Consumers Navigate Access to Products, Services and</u> <u>Technologies</u>, July 2015
- <u>Consumer Solutions: Meeting Consumer Needs on All Levels</u>, July 2016
- <u>Connecting Communities: Smart Cities, Enabling Technologies, and the Grid</u>, July 2017
- <u>Security & Resilience at the Distribution Level: Integrating Technologies at the Grid Edge</u>, July 2018
- <u>Driving a Customer-Focused Energy Future: Examining Policies for Delivering Smart Mobility and</u> <u>Other Customer Solutions</u>, July 2019
- Planning for the Electric System of the Future: The Path to a More Resilient Energy Grid, July 2020
- <u>Supporting Electricity Customers Through Times of Crisis: Being There When It Matters Most</u>, July 2021

All CCIF reports are available for download at <u>www.CCIForum.com</u>.

CCIF Leadership

Executive Committee



Judith W. Jagdmann Virginia State Corporation Commissioner & NARUC President

Advisory Committee



Maida J. Coleman Commissioner Missouri Public Service Commission



William I. Fine *Utility Consumer Counselor* Indiana Office of Utility Consumer Counselor



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Christopher J. Ayers North Carolina Utilities Commission Public Staff Executive Director & NASUCA President



David W. Danner *Chairman* Washington Utilities and Transportation Commission



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Philip D. Moeller *EEI Executive Vice President of Business Operations Group and Regulatory Affairs*



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Office: 615.905.1375 Fax: 888.526.6883 Email: <u>Katrina@CCIForum.com</u> Web: <u>www.CCIForum.com</u> Twitter: @CCIForum A former Florida Public Service Commissioner (2006–2009), Katrina McMurrian draws upon extensive regulatory experience to organize and facilitate relevant policy forums and to advise an array of entities on key regulatory and policy issues in the energy arena.

McMurrian currently serves as the Executive Director of the Critical Consumer Issues Forum (CCIF), a unique national forum in which state utility regulators, consumer advocates, and electric companies—via a series of facilitated, interactive dialogues engage in productive debate and often develop consensus on key issues of importance to consumers and policymakers. CCIF has produced reports on a range of energy topics including grid modernization, distributed generation, consumer solutions, smart communities, electric transportation, resilience, and supporting electricity customers through times of crisis (COVID-19).

McMurrian also serves as the Executive Director of the Nuclear Waste Strategy Coalition (NWSC), an ad hoc organization representing the collective interests of member state utility regulators, state consumer advocates, other state officials, tribal governments, local governments, electric companies with operating and shutdown nuclear reactors, and other experts on nuclear waste policy matters.

McMurrian serves on the Southwest Research Institute Board of Advisory Trustees and as a member of the American Nuclear Society (ANS), the Institute for Nuclear Materials Management (INMM), and U.S. Women in Nuclear (U.S. WIN).

A Northwest Florida native, McMurrian received a Bachelor's degree in finance and an MBA from Florida State University. She and her husband currently reside near Nashville, Tennessee.



Save the Date for 13th Annual CCIF Kickoff Forum



Saturday, November 12, 2022 2:00–5:00 pm

(Reception to follow)

New Orleans Marriott New Orleans, LA

- **Registration** Please save the date on your calendar and check <u>www.CCIForum.com</u> for information as the date approaches. There is no charge to participate, but a separate registration with CCIF is required.
- **For More Info** At this time, we are planning for an in-person meeting. However, this could change based on the COVID-19 pandemic. Information and updates about the forum will be posted at <u>www.CCIForum.com</u>. You may also contact Katrina McMurrian, CCIF Executive Director, by e-mail at: <u>katrina@CCIForum.com</u> or by phone at **615-905-1375**.

This event is funded by the Edison Electric Institute. It is not sponsored by NARUC or NASUCA and is not a part of the agendas of the 2022 NARUC Annual Meeting & Education Conference or the 2022 NASUCA Annual Meeting.





For more information about CCIF or this report:

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