



SAMUEL GOLDING

EXECUTIVE CONSULTANT

CONTACT



Phone
+1 415.404.5283



Email
golding@communitychoicepartners.com



Linked
<https://www.linkedin.com/in/samueltgolding>

MOTIVATION

Community	Adaptation
Collaboration	Resilience
Bipartisanship	Affordability
Effectiveness	Innovation

CAPACITY

Awareness	<div style="width: 100%;"></div>
Originality	<div style="width: 100%;"></div>
Teamwork	<div style="width: 75%;"></div>
Leadership	<div style="width: 100%;"></div>

EXPERTISE

Agency Design	<div style="width: 100%;"></div>
Agency Operations	<div style="width: 100%;"></div>
-Risk Management	<div style="width: 100%;"></div>
-Origination	<div style="width: 100%;"></div>
-Distributed Energy	<div style="width: 100%;"></div>
-Retail Products	<div style="width: 100%;"></div>
-Regulatory Affairs	<div style="width: 100%;"></div>
-Compliance	<div style="width: 100%;"></div>
-Budgeting	<div style="width: 100%;"></div>
-Change Management	<div style="width: 100%;"></div>
Board Engagement	<div style="width: 100%;"></div>
Public Engagement	<div style="width: 100%;"></div>
Industry Connections	<div style="width: 100%;"></div>

PROFILE

Political Economist, analyst and executive management consultant.

Architect of Community Choice agency governance and operating models, utility partnerships, regulatory strategies and market reforms.

Educator recognized as an industry expert, technologist & strategist.

Advisor to Community Choice agencies, Investor Owned Utilities, public power, municipalities, public advocates, labor and civic groups, and technology firms.

EXPERIENCE

- Community Choice Partners, Inc.** 2013- Present
Principal Consultant & Founder

Architect of Community Choice "2.0 & 3.0" maturity models.

Advisor to executives and senior staff on agency design and operational realignments, key performance indicators, vendor assessments, staffing plans and culture, regulatory intelligence and strategies, public relations and political campaigns, and stakeholder education.

- Local Power, Inc.** 2011 - 2013
Managing Director

Consultancy that created Community Choice Aggregation.

Responsibilities included managing projects, staff, and daily operations, in addition to consulting on financial modeling, Distributed Energy and customer-facing smart grid applications.

- KEMA, Inc.** 2007 - 2011
Senior Energy Analyst

Global leader in Smart Grid and utility management consulting.

Responsibilities included tracking hundreds of emerging technologies, Distributed Energy forecasting for states and utility territories, supporting grid integration simulations and 'Utility of the Future' management consulting teams.

EDUCATION

- Bachelor of Arts, International Political Economy** 2006
Colorado College
Study Abroad: Fudan University & Maastricht University
Thesis: "Retreat from Kyoto", analyzing why and how Federal energy policy became increasingly undemocratic over a period of 40 years.

SELECT PROJECT QUALIFICATIONS

UTILITY CONSUMER ACTION NETWORK

Nonprofit “utility watchdog” in San Diego. Lead expert in Phase 2 PCIA workshops and proceeding. Analysis of utility retail value chain barriers, cost shifting implications, and mitigating solutions re: structural market reform.

Q1 2019 — ONGOING

IBEW LOCAL 11 & NECA LOS ANGELES

Local labor union & electrical contractors association. Engaged to educate broad range of stakeholders in Los Angeles on CCA 2.0 & 3.0 design and the PCIA reform risk through reports, meetings and board presentations. Initial focus on “South Bay” and “West Side” cities that subsequently joined the Clean Power Alliance. Work products received endorsements from: a Governor of the California Independent Grid Operator (CAISO), the former Assistant General Manager of the Northern California Power Agency (NCPA), the Chair of the Democratic Party Environmental Caucus, the California Alliance for Community Energy (CACE), the Executive Director of 350.org, the Sierra Club Angeles Chapter, and other civic organizations.

Q3 2016 — Q1 2017

COUNTY OF LOS ANGELES

Drafting and submittal of “PCIA Homework” filing to CPUC. Summarized extant PCIA methodology, methodological flaws that would have to be reformed prior to further growth of CCA industry, and a variety of related issues (e.g. IRP coordination, POLR, CAM). Recommended procedural steps for CPUC along with CCA 2.0 & 3.0 design strategies for the industry to manage near-term risks. Subsequent recognition for correctly identifying ‘over the horizon’ issues that are challenging the industry at present.

Q1 2016

CITY OF SAN DIEGO

Subcontractor to the Protect Our Communities Foundation. Correctly identified that San Diego was sufficiently large to trigger the reformation of the PCIA (an ‘industry first’). Recommended a partial enrollment strategy to manage regulatory risk, and provided CCA energy and financial proforma forecasts accompanied by CCA 2.0 design advice. **Q4 2013 — Q4 2014**

CCA Agency: CPUC proceeding survey and strategic advice on DER services & utility Grid Modernization

Q2 2019 — ONGOING

LONG BEACH ENERGY RESOURCES DEPT

Engaged by municipal utility staff to support their CCA feasibility study effort. Review of bid submissions, scope of work negotiations with multiple contractors, regular project management support, analytical peer review, education for city staff on CCA issues and assistance in coordination with operational CCAs, public power entities and SCE over the course of the project.

Q2 2018 — Q4 2019

EAST BAY COMMUNITY ENERGY

Expert review and advice in the selection of a portfolio manager to assist in the launch and early-stage operations of the CCA; strategy discussions to evolve front-office structures and risk management capabilities.

Q4 2017

SONOMA CLEAN POWER

Technical, financial and strategic consulting services during Phase 2 and 3 (full enrollment) through staff onboarding: load & revenue forecasting; customer data analytics (CCA INFO Tariff and utility EDI data); power supply contract management; procurement support including forecasting of open energy and capacity positions; validation of invoiced PPAs and CAISO wholesale market pass-through costs (charge codes); a variety of monthly, quarterly and annual compliance reports (EIA, CAISO, CEC and CPUC); select regulatory intelligence, business process streamlining & CCA staff tutorials; and program financial “proforma” modeling (for internal budgeting & to support creditworthiness assessments of the agency as a counterparty to suppliers).

Q4 2013 — Q4 2014

DISTRIBUTED ENERGY ASSESSEMENTS

2011 to 2013

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION
CALIFORNIA ENERGY COMMISSION (PIER)
CITY OF BOULDER, COLORADO**

2007 to 2010

**UTILITIES: PG&E, SCE, SDG&E, SoCalGas (CA); HECO, MECO, MELCO (HW); XCEL ENERGY, PRPA (CO); NIPSCO (IN).
STATES OF RHODE ISLAND, CONNECTICUT & MISSOURI
CALIFORNIA PUBLIC UTILITIES COMMISSION**

CONFIDENTIAL CLIENTS

Investor Owned Utility: community partnership advice for markets in which CCA is not enabled

Q2 2019 — ONGOING

SPEAKING ENGAGEMENTS

The Waking Giant: Community Power Market Design (webinar). Municipal Sustainable Energy Forum. 15 July 2020.

Community Power: Design Insights for New Hampshire (panelist). Clean Energy NH's Local Energy Solutions Conference. 15 Nov 2019.

Impacts and Opportunities of Extending the Day Ahead Market to the Energy Imbalance Market (moderator) and **Aligning Transmission with Local Capacity Needs** (panelist). Infocast 11th Annual Transmission Summit West. 22-23 Oct 2019.

Community Power Design for New Hampshire. Conservation Law Foundation's Municipal Roundtable. 18 Sept 2019 & City of Lebanon Energy Action Committee. 29 Aug 2019.

Deep Decarbonization: Reforming Governance (webinar). Municipal Sustainability Forum. 23 July 2019.

Actionable Reforms to Governance and Operational Models to Rapidly Decarbonize Across Different Market Structures. Presentation at the National Renewable Energy Laboratory, workshop on *"Maximizing DER Value for All Stakeholders"*. 30 May 2019.

Community Choice: Insights for Utility & Community Partnerships. CCA CEO panel + Q&A for the Board and Executives of an Investor Owned Utility. Q2 2019.

Meeting RPS Requirements in the Customer Choice Era. Panel with Monica Padilla and Amanda Singh. Infocast California Renewable Energy Procurement Summit. 30 April 2019.

Requirements to Operate a Community Choice Agency (presenter), **Data Analytics: Best Practices and a Vision for the Future** (moderator) and **Load Profiling and Other Fundamentals of Effective Procurement** (moderator). Infocast CCA Summit in San Francisco. 28-30 Dec 2018.

Community Choice Aggregation 101. Presentation to the American Public Power Association (at the CEO's request). 6 Sept 2018.

Emerging Opportunities in California. Panelist at The Business of Local Energy Symposium CCA Conference. 4 June 2018.

Energy & Community Choice Aggregation. Panelist with Nick Chaset, Pradeep Gupta and Don Bray. Association of Bay Area Governments (ABAG) General Assembly. 31 May 2018.

Community Choice 2.0 & 3.0 Insights. Interview for the Stratton Report. 15 May 2018.

CCA 2.0 and 3.0 Tutorial Workshop. Organizer of 8-hour workshop at the Infocast CCA Summit. 24 April 2018.

Community Choice Aggregation — Power to the Community. Panel with Ted Bardacke and Julia Pyper (Green-tech Media) at the UCLA & USC Energy Innovation Conference. 16 April 2018.

Community Choice Aggregation: Best Practices, Lessons Learned & Distributed Energy Integration (webinar). Municipal Sustainability Forum. 30 Nov 2017.

What's your view of the PCIA exit fee debate and how does this relate to Community Choice 2.0 and 3.0? Interview for the Stratton Report. 15 Nov 2017.

Strategic Insights from Deconstructing CCA & IOU Economics. Presentation at the Infocast Community Choice Energy Summit. 14 Nov 2017.

LA Cities Meetup: CCA 2.0 & 3.0 Program Design Options + LACCE Review. Workshop presentation for the City of Santa Monica. 2 Nov 2017.

Expert Panel: Debate on California's Energy Future & Community Choice. Panel with Matthew Marshall and Gerry Braun. Municipal Sustainability Forum. 22 May 2017.

Executive Briefing: The Community Choice Aggregation Market. Panel with Mark Fillinger and Amanda Rosenberg. Solar Power Finance & Investment Summit. 21 March 2017.

Expert Panel: Updates on Community Choice Aggregation Structures in US, CA and NY Panel with Neil Alexander. Municipal Sustainability Forum. 18 April 2017.

Community Choice Aggregation: Program Design Evolution and Outlook (webinar). Municipal Sustainability Forum. 17 Jan 2017.

SELECT PUBLICATIONS & ANALYSES

Community Power Design for New Hampshire. The Conservation Law Foundation's Municipal Roundtable. 18 September 2019.

Bill is step toward true community energy. The Concord Daily. Community Choice Partners, Inc. 23 July 2019.

SB 286-FN-Local, Relative to Aggregation of Electric Customers by Municipalities and Counties. Strategy memo to the New Hampshire Governor's Office of Strategic Initiatives. Community Choice Partners, Inc. 17 July 2019.

Understanding the Community Choice Energy (R)evolution in California. LinkedIn article. Community Choice Partners, Inc. 15 Oct 2018.

Energy Risk Management Policies of Community Choice Agencies. Comments to the California Public Utilities Commission "Customer Choice En Banc". Community Choice Partners, Inc. 2018.

The Theory and Evolution of Community Choice in California. Comments on the California Public Utilities Commission "draft Green Book". Community Choice Partners, Inc. 2018.

Protest Letter to SCE Advice Letter No. 3781-E. Comments to the California Public Utilities Commission. Community Choice Partners, Inc. 2018.

Advanced Energy Services: Interviews with Five Leading Portfolio Management Companies. South Bay Clean Power initiative. Community Choice Partners, Inc. 2017.

CCA Financial Strategy and Regulatory Risk Analysis. South Bay Clean Power initiative. Community Choice Partners, Inc. 2017.

CCA 2.0 & 3.0 Business Plan. South Bay Clean Power initiative. Community Choice Partners, Inc. 2017.

Response of the County of Los Angeles to Optional Homework Assignment in Preparation for the March 8 Workshop on PCIA Reform. Comments to the California Public Utilities Commission. Community Choice Partners, Inc. 2016.

CCA 2.0 as a Service: Bid in Response to RFP 15-001. Submission to Redwood Coast Energy Authority. Community Choice Partners, Inc. 2016.

San Luis Obispo Renewable Energy Secure Community. California Energy Commission, Public Interest Energy Research (PIER). Local Power, Inc. 2013.

CleanPowerSF (various reports and proforma results). San Francisco Public Utilities Commission. Local Power, Inc. 2013.

Boulder's Energy Future: Localization Portfolio Standard – Electricity and Natural Gas. City of Boulder, Colorado. Local Power, Inc. 2011.

Fast Automated Demand Response to Enable the Integration of Renewable Resources. Lawrence Berkeley National Laboratory and KEMA, Inc. 2012.

Assessment of the Benefits and Costs of Seven PIER-Supported Projects. California Energy Commission. KEMA, Inc. 2010.

Review of Energy Efficiency Program Savings Estimations in Annual Reports and Measurement and Evaluation Studies. California Energy Commission. KEMA, Inc. 2010.

Missouri Statewide DSM Market Potential Study. Missouri Public Service Commission. KEMA, Inc. 2010.

Colorado DSM Market Potential Assessment. Xcel Energy. KEMA, Inc. 2010.

Connecticut Electric Residential, Commercial, and Industrial Energy Efficiency Potential Study. Connecticut Energy Conservation Management Board. KEMA, Inc. 2010.

Platte River Authority Climate Action Plan. Platt River Power Authority. KEMA, Inc. 2009.

Pacific Gas & Electric SmartAC™ 2008 Residential Ex Post Load Impact Evaluation and Ex Ante Load Impact Estimates. PG&E. KEMA, Inc. 2009.

Final Report: Pacific Gas and Electric SmartAC™ Load Impact Evaluation. PG&E. KEMA, Inc. 2008.

2004/2005 Statewide Express Efficiency and Upstream HVAC Program Impact Evaluation. CPUC, CEC, PG&E, SCE, SDG&E, SoCalGas. Itron and KEMA, Inc. 2008.

COMMUNITY POWER SUMMIT

“By Communities, For Communities”

Friday, June 5th, 2020

1 PM to 4 PM

Dear Community Leaders of New Hampshire,

Thank you for accepting this invitation to join your fellow community leaders, and town, city, and county staff and officials for this three hour online interactive workshop on Community Power.

The Community Power Law ([RSA 53-E](#)) enables local governments (cities, towns, and counties) to become the default electricity providers for their residents and businesses – to offer innovative customer services and local programs, to competitively procure electricity supply, and to work with regulators, utilities, and businesses to modernize our electricity system. Community Power Aggregations (CPAs) represent an enormous opportunity for our communities and our state as a whole, and it is you, our state’s local and community leaders, that are now equipped with the authority and the tools to lead the evolution of our electricity system.

In this workshop, we will come together to learn about Community Power and efforts to establish Community Power New Hampshire (CPNH), a locally governed public power nonprofit to provide enabling services to participating CPAs. We look forward to collaborating with you in leading the development of New Hampshire’s Community Power marketplace.

Sincerely,

CPNH Organizing Group

www.communitypowernh.org

COMMUNITY POWER SUMMIT SCHEDULE

12:45 PM — 1:00 PM: *log-in early for assistance using the online platform (optional)*

1:00 PM – 1:40 PM: *Welcome | Breakout Group Introductions | Context*

1:40 PM – 2:10 PM: *Keynote by Girish Balachandran, CEO of Silicon Valley Clean Energy | Q/A*

2:10 PM – 3:40 PM: *CPNH Joint-Action: Panel Discussion & Breakout Groups | Report Back*

3:40 PM – 4:00 PM: *Road Map to Community Power and CPNH Launch | Adjourn*

COMMUNITY POWER SUMMIT PURPOSE

1. Build understanding of Community Power and CPNH Joint Action
2. Foster peer-to-peer engagement and relationship building
3. Hear new insights and concerns to inform the organizational design of CPNH
4. Assess which resources should be prioritized and developed to enable Community Power implementation for participating communities

ZOOM VIRTUAL MEETING GUIDELINES & TIPS

- You can control whether you see all the participants or just the speaker by going to the top right corner of your Zoom screen and toggling between Gallery View and Speaker View.
- **Please mute your microphone when you are not speaking.** You can find the microphone by hovering over the bottom of the screen with your cursor. The microphone will be on the far-left side. Click on the microphone icon and it will toggle between Mute and Unmute.
- **If you want to speak or ask a question, please type an asterisk (*) into the Chat box.** We will use these asterisks to create a “stack” of participants who would like to speak. We will call on participants in the order that they sent an asterisk.
- You can **find the Chat by hovering over the bottom of the Zoom screen** and looking for the Chat icon. Click on the icon and a Chat area will appear on the right side of your Zoom screen. To send an asterisk to the Chat, go to the bottom of the Chat area (where it says “To: Everyone”), type an asterisk (*) and hit Return.

COMMUNITY POWER SUMMIT AGENDA

Welcome | Breakout Group Introductions | Context

1 PM – 1:40 PM

The Summit will begin with a short summary of “*How to Use Zoom*” and “*Guidelines for Participating in Virtual Meetings*.”

We will then set the stage with an overview of the Summit Agenda & Purpose, along with a review of the opportunities Community Power presents to democratize energy governance, lower energy costs, spur decarbonization and local renewable energy development, and harness market competition to drive innovation in electricity markets.

Afterwards, all participants will be divided into random breakout groups of five and be asked to:

1. Briefly introduce themselves;
2. Share a 60-second story of one energy project their community is proud to have implemented (or looks forward to implementing).

We will then regroup before transitioning to our keynote speaker.

Keynote by Girish Balachandran, CEO of Silicon Valley Clean Energy | Q&A

1:40 PM – 2:10 PM



Girish Balachandran
Chief Executive Officer



Silicon Valley Clean Energy (SVCE) is redefining the local electricity market in Santa Clara County, California, by providing its residents and businesses with new renewable and carbon-free clean energy choices at competitive rates. For the thirteen communities that govern SVCE, the community-owned agency serves as the official electricity provider — on a mission to reduce dependence of fossil fuels by providing carbon-free, affordable and reliable electricity and innovative programs at-scale across all communities.

As the Chief Executive Officer, Girish Balachandran develops and implements strategies to empower the Silicon Valley Clean Energy (SVCE) team and community to achieve its ambitious decarbonization goals. Girish leads the passionate employees of SVCE as they creatively solve challenges in the electric supply, built environment and transportation sectors. Girish has more than 29 years of experience in California utilities, including serving as the General Manager of Riverside Public Utilities (RPU) and Alameda Municipal Power (AMP) and previously working for the City of Palo Alto Utilities.

- *Participants who have questions are invited to type their questions, or to type an asterisk (“*”) into the Zoom Chat during the presentation.*
- *After the Keynote, participants who have indicated they have a question for the speaker by typing an asterisk (“*”) into the Zoom Chat will be called upon to ask their question.*
- *We will follow-up to answer any questions left unaddressed (due to time constraints).*

CPNH Joint Action: Panel & Breakout Group Discussions | Report Out

2:10 PM – 3:40 PM

CPNH JOINT ACTION PANEL DISCUSSION (45 minutes)

The communities of Hanover, Lebanon, Nashua, and Cheshire County are leading an effort to establish CPNH as a new, locally governed public power nonprofit to provide enabling services to Community Power Aggregations through a voluntary and flexible membership structure.

Representatives from these communities will provide an update on the status of CPNH development in a panel discussion format.

Joint Action Panelists



Julia Griffin is the Town Manager of Hanover, a position she has held since 1996. Prior to that, she was City Manager for the City of Concord. As Hanover staff for the Sustainable Hanover Committee, she spends considerable time working on sustainability and renewable energy programs for the Town and its residents.

Clifton Below is serving his 3rd term on the Lebanon City Council where he serves as Assistant Mayor and Chair of the Lebanon Energy Advisory Committee (which acts as the Lebanon Electric Aggregation Committee pursuant to RSA 53-E:6). He served as a Public Utilities Commissioner for the State of New Hampshire (2005-2012) and in the state legislature as a Representative and Senator (1992-2004) where he always served on the energy committees.



Mr. Below is the primary author of SB286 (the Community Power Law) and co-authored RSA 374-F (the “*Electric Utility Restructuring Act*”).



Rod Bouchard is Assistant County Administrator for Special Projects & Strategic Initiatives for Cheshire County. He serves as senior manager for operational issues with Cheshire County. Mr. Bouchard has over 40 years of experience in information technologies with firms such as AT&T’s Advanced IP division, Intel On-line Services, The Hartford Insurance Group, and Computer Systems Research of Avon, CT (where he was a principal partner).

Doria Brown is the Energy Manager for the City of Nashua, where she works on energy efficiency projects, greenhouse gas accounting, and energy procurement.

Prior to her work with the City of Nashua, Ms. Brown was the Sustainability Specialist at Worthen Industries, where she helped to implement the manufacturing company’s sustainability programs.



Ms. Brown graduated from Franklin Pierce University with a BS in Environmental Science (concentrating in Hydrology and Chemistry), enjoys working in the industry and thinks that “*It’s an amazing time to be in Energy in New Hampshire!*”

JOINT ACTION BREAKOUT GROUPS (45 minutes)

Following the Panel Discussion, attendees will be divided into twelve separate Breakout Groups:

- Each breakout group will have approximately 6-8 participants.
- The Facilitator will open the breakout group by reading aloud the purpose of the breakout group:

“To facilitate engagement and discussion among participants, and to collect comments, questions, and feedback. Not all questions will be answered during the breakout session, but questions will be recorded and collected for follow up after the Summit.”

The facilitator will be responsible for ensuring each participant has opportunity to contribute to each discussion question (including themselves), and for keeping the group on-track and on-time.

- Each Breakout Group will include a “CPNH Affiliate and Note-Taker” (who has been involved with the organizing of CPNH). This person will answer questions about CPNH (to the best of their ability at this early stage) and will take notes.

Discussion Questions for Participants

1. What is your name, affiliation, and in one sentence, one thing you would like your community to achieve through Community Power? (5 minutes)
2. What unanswered questions or concerns do you have about Community Power or about CPNH? (10 minutes)

(We will follow-up to address any unanswered questions, which will also inform CPNH’s next steps.)

3. Is your community interested in participating in CPNH? (25 minutes)
 - a. What’s your understanding of how the organization would function in practice?
 - b. What level of participation would your community expect to contribute to CPNH’s governance, oversight of staff & operations, legislative affairs, other committees, etc.?
 - c. What resources should CPNH committees prioritize developing and sharing to enable participating member communities to implement Community Power?
 - d. What’s the best way for communities to collaborate prior to the formal launch of CPNH?
4. Facilitator invites each Breakout Group Member to share any closing thoughts? (5 minutes)

Roadmap to Community Power & CPNH Launch | Adjourn

3:40 PM – 4 PM

Following the Breakout Groups, CPNH affiliates will share one key takeaway from the discussions with collective group.

We will conclude the Summit with a roadmap from today through the launch of CPNH and the first-mover Community Power Aggregations, next steps, and closing remarks.

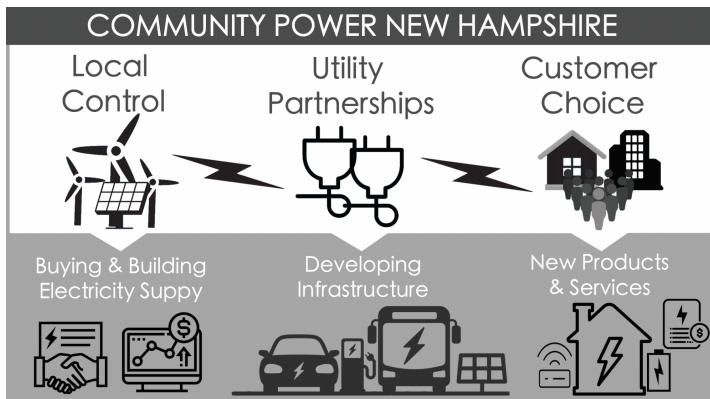
Post-Summit, attendees will receive:

1. Additional follow-up materials;
2. Responses to any questions left unaddressed (due to time constraints).

Community Leaders Join Together to Develop Community Power New Hampshire

This article is authored jointly by a coalition of community representatives and supporting partners working to form Community Power New Hampshire

New Hampshire's Community Power law (SB 286; RSA 53-E) became effective October 1, 2019. It authorizes local governments (cities, towns, and counties) to become the default electricity provider for their residents and businesses — to offer innovative customer services and programs that communities want, to competitively procure electricity supply, and to work with regulators, utilities and competitive businesses to modernize our electrical grid and market infrastructure.



Unlocking the full range of municipal authorities enabled by RSA 53-E could be a game changer for our communities, local infrastructure and the competitive retail electricity market. Successful implementation requires coming up to speed on industry best-practices, navigating complex regulations, coordinating across utilities, and contracting for an array of sophisticated services. That takes a level of expertise and scale beyond the capacity of many municipal governments — now more than ever, given the COVID-19 crisis and our economic outlook.

New Hampshire

Town and City

Magazine -

May/June 2020

Community Choice Aggregation (CCA) Empowers Municipalities to Take Control of their Community's Energy Costs

Community Leaders Join Together to Develop Community Power New Hampshire

Moving Toward a More Democratized Electric System

Improving the Resiliency of New Hampshire's Buildings

What Every New Hampshire Town & City Needs to Know About Solar Energy Today

NHMA's Government Finance Director, Barbara Reid, to Retire in June!

LEGAL Q&A: Using Revolving Funds for Municipal Group Net Metering

We believe that joining together to launch Community Power programs is the surest way to create a more coordinated, competitive, decarbonized, and locally governed electricity sector. That's why our group — representing energy committees, town managers and sustainability staff, elected officials, city energy managers, county administrators, and regional planning commissions — is developing Community Power New Hampshire (CPNH).

CPNH is being designed as a new joint action legal entity — governed by communities to serve communities under a voluntary and flexible membership structure — to clear the way for cities, towns, and counties across New Hampshire to launch Community Power programs in 2020 and 2021. Each community will help oversee the enterprise, while controlling their individual electricity rates, program services and policy goals. Once formed, CPNH will competitively enlist best-in-class service providers to support the launch of initial Community Power Programs and provide new members with a menu of services. As CPNH grows, all members will benefit from greater economies of scale, proven best-practices and expert regulatory and policy engagement — all of which supports the evolution of our statewide competitive retail market.

To guide the design of CPNH, we have identified the following goals for Community Power Programs (CPPs), some of which may be prioritized over others by different communities:

1. Strengthen local control and choice: CPPs may craft their own energy portfolios and evolve them over time, set rates for their customers, and allocate surplus revenues for their community.
2. Control and reduce cost: CPPs will have access to competitive rate offerings relative to their utility's de-fault energy service, and the ability to better manage electricity cost drivers (e.g. capacity costs).
3. Accelerate decarbonization through renewable energy: CPPs may procure renewable energy by purchasing Renewable Energy Credits, contracting with existing renewable energy generators, or enabling construction of new renewable energy systems.
4. Stimulate competitive, local markets to benefit customers and communities: CPPs will enable market-driven innovation in customer services and distributed energy technologies (including dynamic and real-time pricing options, onsite generation,

**HR REPORT: Proposed
"Card Check" Union
Election Bills –
Historical Context for
an Old Proposal**

**NHARPC CORNER: Rail
Trail Planning in New
Hampshire Enhancing
Transportation,
Recreation, Economies,
and Health**

**TECH INSIGHTS: Is
Your IT Ready to
Support Remote Work?**

energy storage, electrification of transportation and heating sectors, and energy efficiency).

5. Modernize infrastructure to strengthen markets and energy resiliency: CPPs may further enable retail market innovation, Smart Cities and energy security for critical facilities through the targeted deployment of advanced meters and communications, distributed energy technologies and microgrids — working in partnership with distribution utilities and others to modernize our shared infrastructure and regulations.
6. Enhance local and regional coordination: CPPs may collaborate on electrifying transportation, streamlining permitting for innovative technologies, and removing other barriers to progress — working together with Regional Planning Commissions, counties, and other partners and coordinating with the Public Utility Commission and Legislature.

CPNH development activities are organized into the four working groups listed below. We're working together upfront to leverage our collective re-sources, minimize staff time and avoid duplicative overhead — and invite local governments interested in Community Power to join and support any area of interest:

Governance Agreement

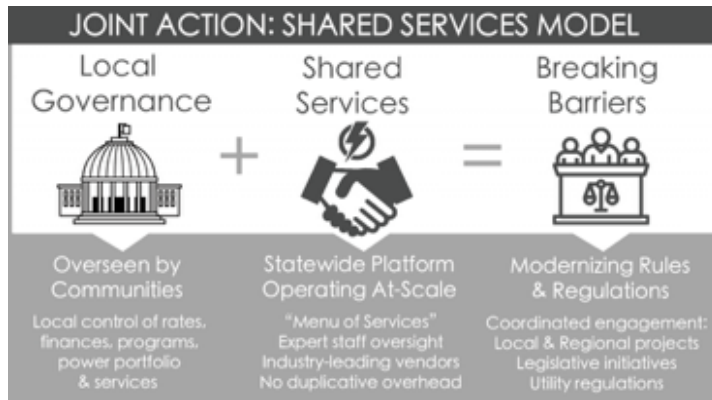
Municipal attorneys are reviewing a Joint Powers Agreement (authorized by RSA 53-A), a contract among local governments to create CPNH. Over the coming months, we will work together to refine the details including the process by which additional local governments may join CPNH.

Regulatory and Legislative Engagement

The Public Utilities Commission is considering a rulemaking process that will affect Community Power programs. Coordination with electric distribution utilities is an important part of Community Power, and the process for enabling the full range of authorities granted by RSA 53-E needs to be clarified by the Commission. CPNH organizers are already actively engaged in this regulatory process.

Operating Model Design

CPNH will likely rely on expert staff for oversight along with competitive service providers for operations, including: (1) active management of a diversified portfolio of wholesale energy contracts and participation in ISO New England electricity markets, and (2) retail customer services including meter communications, data management, call centers and billing.



Careful thought will be given to how CPNH's in-house expertise and contracted services will evolve with the market over time.

Community Engagement

Municipalities across New Hampshire, seventy of which have Local Energy Committees, are interested in how Community Power could offer meaningful control over their energy future.

We believe CPNH is the most efficient and pragmatic way to secure that objective and invite other communities to join our initiative. Over the coming months, we will provide toolkits and templates, and work with partners like NHMA, Clean Energy NH and Regional Planning Commissions to spread the word.

Learn more about CPNH and how to join via our website: www.CommunityPowerNH.org.

Save the Date: CPNH will host a virtual Community Power Summit on Friday June 5th.

NH Community Power coalition members:

Town of Bristol: Paul Bemis, Bristol Energy Committee

Town of Harrisville: Mary Day Mordecai, Ned Hulbert, Planning Board

Town of Hanover: Julia Griffin, Town Manager; April Salas, Sustainability Director

City of Lebanon: Clifton Below, Assistant Mayor; Tad Montgomery, Energy and Facilities Manager

City of Nashua: Doria Brown, Energy Manager

Cheshire County: Rod Bouchard, Assistant County Administrator / Special Projects and Strategic Initiatives

Community Power NH supporting partners:

Dori Drachmann, Co-founder, Monadnock Sustainability Hub

Dr. Amro M. Farid, Thayer School of Engineering at Dartmouth

Samuel Golding, President, Community Choice Partners

Jill Longval, Rockingham Planning Commission

Henry Herndon, Clean Energy NH



New Hampshire Municipal Association
25 Triangle Park Dr.
Concord, NH 03301
603.224.7447
nhmainfo@nhmunicipal.org

Contact NHMA
Member Login
Classifieds
Public Notices
Site Map

Electric Reliability Council of Texas Technical Advisory Committee Procedures

TAC Approved: May 29, 2020

Effective as of June 1, 2020

ERCOT

Technical Advisory Committee Procedures

These Technical Advisory Committee (TAC) Procedures are based upon incorporated provisions of the ERCOT Bylaws. Upon amendment of the ERCOT Bylaws, these Procedures should be reviewed to ensure consistency with any Bylaws revisions.

I. FUNCTIONS OF TAC

A. Duties

The TAC shall make recommendations to the Board as it deems appropriate or as required by the Board and perform any other duties as directed by the Board. TAC shall have the authority to create subcommittees, task forces and work groups, as it deems necessary and appropriate to conduct the business of TAC. TAC shall review and coordinate the activities and reports of its subcommittees.

B. Studies

The TAC shall itself, through its subcommittees, or through ERCOT staff, make and utilize such studies or plans as it deems appropriate to accomplish the purposes of ERCOT, the duties of its subcommittees and the policies of the Board. Results of such studies and plans shall be reported to the Board as required by the Board.

C. Prioritization of Projects Proposed by the Market

The TAC shall be responsible for setting the priority of projects approved through the NPRR, SCR and guide revision processes. TAC may delegate the responsibility for recommending the priority of market projects to one of its subcommittees.

II. MEMBERSHIP

A. Qualifications and Appointment

TAC Representatives, as defined in the ERCOT Bylaws Section 3.1, TAC Representatives, shall be elected or appointed according to the provisions of the ERCOT Bylaws and procedures established by the ERCOT Board. An Entity and its affiliates that are Members of ERCOT shall have no more than one representative on TAC.

B. Term of Representatives

TAC Representatives shall be selected annually in December of each year for service in the following calendar year.

C. Membership

The TAC shall be comprised of Representatives of Members from each Market Segment as defined in the ERCOT Bylaws: Independent Retail Providers (and Aggregators), Independent Generators, Independent Power Marketers, Municipals, Cooperatives, Investor Owned Utilities, and Consumers. The Corporate Members of each Segment are responsible for electing or appointing their Representatives to TAC. In addition, the ERCOT Chief Operating Officer (COO) or the ERCOT CEO's designee shall be an ex-officio, non-voting member of TAC. If a Member elects to

ERCOT

Technical Advisory Committee Procedures

engage a consultant to represent them at TAC and/or TAC subcommittees, such consultant shall disclose the Entity or Entities it is representing at each meeting.

D. Vacancies

Vacancies shall be filled in the manner prescribed by the ERCOT Bylaws.

III. CHAIR AND VICE-CHAIR

A. Qualifications and Appointment

As provided in the ERCOT Bylaws, the Chair and Vice-Chair shall be elected by TAC and confirmed by the ERCOT Board.

B. Duties

The Chair shall be responsible for setting the agenda and presiding over all TAC meetings. The Chair shall also report to the Board on behalf of TAC. The Vice-Chair shall act as Chair at TAC meetings in absence of the Chair.

C. Election Process

ERCOT staff will open the floor for nominations for the Chair. Once nominations have been closed, TAC Representatives will cast votes on the nominations for Chair. If there is more than one nomination, ballots will be used for casting votes. Each TAC Representative will be allowed one vote. The candidate receiving a simple majority (51%) of TAC Representatives voting will be elected. If no simple majority is reached, ERCOT staff will identify the two candidates receiving the most votes and conduct another vote. Votes will be conducted until either a simple majority of the TAC is reached or an acclamation of TAC. Following election of the Chair, the Chair election process will be utilized for selecting the Vice-Chair.

IV. MEETINGS

A. Quorum and Action

As provided in the ERCOT Bylaws: Fifty-one percent (51%) of eligible, Seated Representatives of TAC shall constitute a quorum required for the transaction of business; and abstentions do not affect calculation of a quorum. Each voting member represented on TAC may designate, in writing, an Alternate Representative who may attend meetings, vote on the member's behalf and be counted toward establishing a quorum. Each voting member represented on TAC may designate in writing a proxy who may attend meetings and vote on the member's behalf, but shall not be counted toward establishing a quorum. If the TAC Representative wishes to designate an Alternate Representative or proxy, a notification of the designation of such Alternate Representative or proxy must be sent to ERCOT and shall be valid for the time period designated by the TAC Representative. TAC Representatives may participate in the meeting via telephone, but may not vote via telephone and participation via telephone shall not count towards a quorum.

ERCOT
Technical Advisory Committee Procedures

B. Meeting Schedule

The TAC and its subcommittees shall meet as often as necessary to perform their duties and functions.

C. Participatory Voting:

As provided in the ERCOT Bylaws, each Segment may choose to utilize "Participatory Voting" as follows:

If a Segment chooses to engage in Participatory Voting, each TAC Representative elected to serve and present at the meeting shall be required to vote the decision of the majority of Corporate Members of their Segment in attendance at a TAC meeting. A Corporate Member may delegate an employee or agent other than the Member representative to vote on its behalf for purposes of Participatory Voting. If a Corporate Member of a Segment using Participatory Voting is unable or does not wish to attend a TAC meeting, such Member may deliver a written proxy, at any time prior to the start of the meeting to a Participatory Voting delegate of any Member of the same Segment. A Corporate Member delegate in attendance at a TAC meeting may give written proxy to a Participatory Voting delegate of any Member of the same Segment during such meeting. If the consumer Segment chooses to utilize "Participatory Voting", each consumer type (retail, commercial and industrial) with representative(s) present shall each have equal voting strength in determining how the TAC Representatives of the Segment shall vote.

D. Notification

As provided in the ERCOT Bylaws, all meetings of the TAC shall be called by the Chair and all such meeting notices shall be sent in writing (including e-mail or fax) to each member at least one week prior to the meeting. All agenda items requiring a vote of TAC must be noticed for a vote with supporting documentation published at least one week prior to the meeting. Material that becomes available less than one week prior to the meeting may be considered if a majority of the TAC agrees to consider the additional material. An emergency meeting of the TAC may be held with less than one week notice if a majority of the members of TAC consent to the meeting. Any ERCOT Member may request notification of TAC meetings.

E. Conduct of Meetings

The Chair shall preside at all meetings and is responsible for preparation of agendas for such meetings. In the absence of the Chair, the Vice-Chair or another TAC Representative shall preside at the meeting. The Chair, or the presiding Member, shall be guided by Appendix A, ERCOT Meeting Rules of Order, in the conduct of the meetings. ERCOT staff shall be responsible for recording minutes of TAC meetings and distributing such minutes and other communications to all members of TAC and any other parties who express an interest in receiving such information. TAC meetings and TAC subcommittee meetings may be attended by any interested observers; provided, however,

ERCOT
Technical Advisory Committee Procedures

persons may be excluded from portions of TAC meetings and TAC subcommittee meetings where third party confidential information is presented or discussed (e.g., confidential vendor or bid information and generation unit information). Participants shall disclose the Entity or Entities they are representing at each TAC and/or TAC subcommittee meeting.

F. Voting

In matters determined by the Chair to require a vote of TAC, or when any TAC Representative requests a vote on an issue, each TAC Representative shall have one vote. As provided in the ERCOT Bylaws, an act of TAC requires affirmative votes of: (i) two-thirds of the Eligible Voting Representatives of TAC; and (ii) at least 50% of the total Seated Representatives. For purposes of voting on TAC, TAC representatives shall not have their votes included in the total number of votes from which the requisite percentage of affirmative votes is required for action if: (i) they are not present and have not designated a proxy, or (ii) they abstain from voting.

G. Electronic Mail Voting

In matters determined by the Chair to require a vote of TAC which are urgent or otherwise require action prior to the next meeting, a vote via electronic mail (e-mail vote) may be utilized. A request for an e-mail vote can only be initiated by the Chair or Vice Chair. An e-mail vote is permitted provided a notification is distributed to the TAC distribution list that includes a detailed description of the issue or proposition and accompanied by supporting documentation. For e-mail votes, a quorum of Standing Representatives must participate in the vote. Participation requires casting a vote or abstaining. Votes shall be submitted to ERCOT for tallying by the close of two Business Days after notification of the vote. Votes are tallied in the same manner as a regular meeting. The final tally shall be distributed to the TAC distribution list and posted on the ERCOT website.

V. SUBCOMMITTEES

A. Duties

Subcommittees shall make recommendations to TAC as they deem appropriate or as required by TAC and shall perform any other duties as directed by TAC.

B. Alternate Representatives and Proxies

Each Standing Representative of a subcommittee may designate in writing an Alternate Representative who may attend meetings, vote on the Standing Representative's behalf and be counted toward establishing a quorum. Each Standing Representative of a subcommittee (except for the Protocol Revision Subcommittee (PRS)) may designate, in writing, a proxy who may attend meetings and vote on the member's behalf, but shall not be counted toward establishing a quorum. If the Standing Representative wishes to designate an Alternate Representative or proxy, a notification of the designation of such Alternate Representative or proxy must be sent

ERCOT Technical Advisory Committee Procedures

to ERCOT and shall be valid for the time period designated by the Standing Representative. Alternate Representatives, if not employed by the voting member thereby represented, must be confirmed in writing by such member (signed by a duly authorized representative of the member).

C. Chair and Vice Chair

Unless otherwise directed by TAC, the Standing Representatives of each subcommittee shall elect a Chair and Vice-Chair from the subcommittee's standing membership for a term of one year on a calendar year basis. The Chair and Vice-Chair shall be confirmed by TAC. Each Chair shall be responsible for setting the agenda and presiding over respective subcommittee meetings. The Chair shall also report on subcommittee activities and present recommendations to TAC. The Vice-Chair shall act as Chair at subcommittee meetings in the absence of the Chair.

D. Meetings and Notification

The subcommittee Chair is responsible for calling meetings as often as necessary for the subcommittee to perform its duties and functions. Meeting notices shall be sent to each Standing Representative, the subcommittee distribution list, and posted on the ERCOT website at least one week prior to the meeting, unless an emergency condition requires a shorter notice.

In addition, subcommittee meetings are attended by ERCOT Staff person(s) who coordinate ERCOT support of the meeting, including meeting arrangements, meeting minutes, and ERCOT Staff participation in the meeting.

E. Appeal Procedures

Any Entity that demonstrates it is affected by a TAC subcommittee decision (including but not limited to those listed in Protocol Section 21, Revision Request Process) may appeal the TAC subcommittee vote to TAC utilizing the following process:

1. Any appeal (including requested relief) must be submitted to ERCOT (RevisionRequest@ercot.com) within seven days after the date of the TAC subcommittee vote.
2. Appeals shall be heard at the next regularly scheduled TAC meeting that is at least seven days after the date of the requested appeal.
3. The appropriate TAC subcommittee Chair or Vice-Chair shall designate a TAC subcommittee advocate to defend the TAC subcommittee vote prior to the TAC meeting.
4. ERCOT shall notify the TAC and the relevant TAC subcommittee of the appeal and the TAC subcommittee advocate.
5. The appealing party and the TAC subcommittee advocate shall provide a position statement to ERCOT prior to the TAC meeting. Any other interested Entity may also provide a position statement to ERCOT prior to the TAC meeting. Position

ERCOT Technical Advisory Committee Procedures

statements should be submitted to ERCOT by no later than 1700 Central Prevailing Time on the day prior to the TAC meeting.

6. ERCOT will distribute all position statements to the TAC.
7. The TAC Chair or Vice-Chair will allocate a designated amount of time on the agenda for consideration of the appeal allowing for the appealing party, TAC subcommittee advocate, and any Entities providing position statements to address the TAC on the TAC subcommittee vote.
8. An appeal of a TAC subcommittee vote does not require a motion by the TAC. TAC shall vote on the appealing party's requested relief after consideration of the appeal. If the TAC vote fails to grant the appealing party's requested relief, the appeal shall be deemed rejected by TAC unless at the same meeting TAC later votes to recommend approval of, defer, remand or refer the issue. The rejected appeal as well as any other TAC votes shall be subject to appeal pursuant to ERCOT Board Policies and Procedures, Section VIII. Appeal Procedures.
9. The TAC Chair or Vice-Chair may override any deadline in this Section for good cause shown.

An expedited process may be utilized for appeals of (a) TAC subcommittee votes related to decisions on items designated as Urgent; or (b) any other TAC subcommittee vote that the TAC Chair or Vice-Chair designates as urgent. Such appeals must be submitted to ERCOT (RevisionRequest@ercot.com) within 48 hours after the end of the relevant TAC subcommittee meeting and shall be heard at the next regularly scheduled TAC meeting.

F. Working Group/Task Force

1. Comments or Revision Requests. Working groups and task forces must obtain approval from the governing TAC subcommittee (or TAC if the working group or task force reports directly to TAC) prior to submitting to ERCOT for official posting of new Revision Requests or comments on Revision Requests when the governing TAC subcommittee (or TAC if the working group or task force reports directly to TAC) is not the next approval authority of such new Revision Requests or comments.
2. Chair and Vice Chair. Participants at working group and task force meetings will offer nominations for Chair and Vice Chair which will be subject to approval by TAC or the governing TAC subcommittee.

G. Standing TAC Subcommittees

There shall be four standing TAC subcommittees with representatives as follows:

1. Retail Market Subcommittee (RMS); Reliability and Operations Subcommittee (ROS); and Wholesale Market Subcommittee (WMS)

ERCOT
Technical Advisory Committee Procedures

Membership: Membership shall consist of one to four Standing Representatives from each Segment elected or appointed by the voting members of the respective Segment, with the exception of the Consumer Segment. The Consumer Segment shall consist of three subsegments (Residential, Commercial, and Industrial). The number of Standing Representatives for each Segment shall be determined by the TAC members representing that Segment. Standing Representatives, if not employed by the voting member thereby represented, must be confirmed in writing by such member (signed by a duly authorized representative of the member). These will be the voting members of the subcommittee. ERCOT shall appoint appropriate staff member(s) to attend and participate in the subcommittee meetings. A Member entity and its affiliates that are also ERCOT Members shall have no more than one representative per TAC subcommittee as it pertains to Section V. G. 1.

Quorum: At least one Standing Representative from each of four Segments and a majority of the Standing Representatives must be present at a meeting to constitute a quorum. Standing Representatives may participate in the meeting and vote via telephone, but participation via telephone shall not count towards a quorum.

Votes: Each Segment shall have a Segment Vote of 1.0 except the Consumer Segment, which shall have a Segment Vote of 1.5. Segment Votes shall be equally divided into Fractional Segment Votes among the Standing Representatives, designated Alternate Representatives and proxies of each Segment that cast a vote. The Consumer Segment Vote shall be equally divided into a Fractional Segment Vote of 0.5 for each of the three subsegments. The Fractional Segment Vote for each subsegment of the Consumer Segment is allocated to the Standing Representatives, designated Alternate Representatives, and proxies of the subsegment casting a vote. For the Consumer Segment, if no Standing Representative from a subsegment is present at a meeting, the Consumer Segment vote is allocated equally to the subsegment(s) that cast a vote. If a representative from a subsegment abstains from a vote, the fraction of the Consumer Segment Vote allocated to such representative is not included in the vote tally.

Voting: Only Standing Representatives, their designated Alternate Representative, or proxy may vote. A motion of the subcommittee passes when a majority (unless a two-thirds vote is required for the motion as prescribed in Appendix A, ERCOT Meeting Rules of Order) of the aggregate of the Fractional Segment Votes are (i) affirmative, and (ii) a minimum total of three. The results of all votes taken will be reported to TAC, whether or not the vote passed.

Abstentions: In the event that a voting member, their designated Alternate Representative, or proxy, is not present during a roll call vote, or abstains from voting, that member's fractional vote will be reallocated equally among the remaining voting members of that Segment; except for the Consumer Segment.

ERCOT Technical Advisory Committee Procedures

E-Mail Voting: An e-mail vote is permitted provided a notification is distributed to the subcommittee distribution list that includes a detailed description of the issue or proposition. A request for an e-mail vote can only be initiated by the Chair or Vice Chair. A quorum of Standing Representatives must participate in the e-mail vote. Participation requires casting a vote, or abstaining. Votes shall be submitted to ERCOT for tallying by the close of two Business Days after notification of the vote. Votes are tallied in the same manner as a regular meeting. The final tally shall be distributed to the subcommittee distribution list and posted on the ERCOT website.

2. Protocol Revision Subcommittee (PRS)

The PRS is mandated by the ERCOT Protocols.

Membership: Membership shall consist of two Standing Representatives from each Segment. Each Standing Representative may designate in writing an Alternate Representative who may attend meetings, vote on the Standing Representative's behalf and be counted toward establishing a quorum. However, Standing Representatives at PRS may not assign proxy

Quorum: In order to take action, a quorum must be present. A quorum is defined as at least one Standing Representative in each of at least four Segments.

Votes: At all meetings, each Segment shall have one Segment Vote. The representative of each Voting Entity, present at the meeting and participating in the vote, shall receive an equal fraction of its Segment's Vote, except for the Consumer Segment which shall be divided into three subsegments (Residential, Commercial, and Industrial) that receive one third of the Consumer Segment Vote. Within each Consumer Segment subsegment, the representative of each Voting Entity casting a vote shall receive an equal fraction of its subsegment's vote. For the Consumer Segment, if no representative from a subsegment casts a vote, such subsegment's fractional vote is allocated equally to the subsegment(s) that cast(s) a vote. For purposes of counting votes in the Consumer Segment, an abstention shall not be considered as a cast vote.

Voting Entities: Entities entitled to vote (Voting Entities) are ERCOT Corporate Members, ERCOT Associate Members, and ERCOT Adjunct Members. Voting Entities must align themselves each calendar year with a Segment for which they qualify or, for Adjunct Members, a Segment to which they are similar. Voting Entities that align themselves with a Segment must be aligned with that same Segment for all TAC subcommittees, and remain aligned with that Segment for the entire calendar year. For each Subcommittee that is part of Section V. G. 2., a Member entity and its affiliates that are also ERCOT Members must designate one Segment in which to participate and vote for the Subcommittee term

ERCOT
Technical Advisory Committee Procedures

regardless of the Segment for which the entity or its affiliate qualifies. Once the designation is made an entity and its affiliates may not vote in another Segment for one calendar year in that Subcommittee; provided, however, that if due to changed circumstances Members subject to such designation become no longer affiliated, the Members no longer affiliated shall each, upon notifying ERCOT, thereafter be eligible to participate and vote in the Subcommittee in a Segment for which it is eligible. If multiple affiliates attend a meeting, the Corporate Member shall designate the Voting Entity.

If Alternate Representatives are not employed by the voting member thereby represented, they must be confirmed in writing by such member (signed by a duly authorized representative of the member). Voting Entities must be present at the meeting to vote as they are not allowed to vote via the telephone or to designate a proxy.

Voting: Only one representative of each Voting Entity present at the meeting may vote. Voting Entities may be represented by a direct employee, or may file a letter of agency designating an individual not directly employed by the Voting Entity to vote on its behalf. Agents holding letters of agency for more than one Voting Entity may vote on behalf of only one Voting Entity at any particular meeting.

A motion of the subcommittee passes when a majority (unless a two-thirds vote is required for the motion as prescribed in Appendix A, ERCOT Meeting Rules of Order) of the aggregate of the fractional Segment Votes are (i) affirmative, and (ii) a minimum total of three. The results of all votes taken will be reported to TAC, whether or not the vote passed.

Abstentions: In the event that a representative of a Voting Entity abstains from a vote, the Segment Vote is allocated among the members casting a vote. Abstentions within the Consumer Segment shall be addressed as described above.

E-Mail Voting: An e-mail vote is permitted provided a notification is distributed to the subcommittee distribution list that includes a detailed description of the issue or proposition. E-mail votes for PRS are primarily conducted for administrative purposes. A request for an e-mail vote can only be initiated by the Chair or Vice Chair. For e-mail votes, each Standing Representative shall have one vote and a quorum of Standing Representatives must participate in the vote. Participation requires casting a vote or abstaining. The affirmative votes of eight Standing Representatives shall be the act of the subcommittee by e-mail vote. Votes shall be submitted to ERCOT for tallying by the close of two Business Days after notification of the vote. A PRS e-mail vote on a request for Urgent Status shall be submitted to ERCOT for tallying within 48 hours. The final tally shall be distributed to the subcommittee distribution list and posted on the ERCOT website.

ERCOT
Technical Advisory Committee Procedures

VI. ~~NOTICE OF REMOTE MEETINGS FOR TAC AND TAC SUBCOMMITTEES~~

Under extenuating circumstances (an emergency or public necessity, including but not limited to an imminent threat to public health or safety, or a reasonably unforeseen situation) and after consulting with the TAC Chair and Vice Chair, the ERCOT General Counsel may declare that remote voting is permitted for TAC and TAC Subcommittee duties and functions. A notice will be sent to all ERCOT Members and a Market Notice will be sent to all Market Participants when such a declaration begins and when the return to normal meeting procedures resumes. Any such meeting must use conference telephone or other similar communications equipment, or another suitable electronic communications system, including videoconferencing technology or the Internet, or any combination, if the telephone or other equipment or system permits each person participating in the meeting to communicate with all other persons in the meeting. Participation in a meeting shall constitute presence in person at such meeting, except where a person participates in the meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened. In such meetings, TAC and TAC Subcommittees may vote via such electronic communications system. If necessary as determined by the Chair and Vice Chair, validation of the votes taken via such electronic communications system will be conducted after the meeting.

VII. AMENDMENT

These Procedures may be amended upon motion by any member of TAC and approval of that motion by vote of TAC, provided such amendment may not be in conflict with the ERCOT Bylaws, Board Procedures, or Board resolutions. The ERCOT Board may, upon its own motion, amend these Procedures upon reasonable notice to the TAC membership.

ERCOT
Technical Advisory Committee Procedures

Appendix A, ERCOT Meeting Rules of Order

Introduction:

These rules of order provide parliamentary procedure at all TAC and TAC Subcommittee meetings and are intended to ensure order and fairness in the decision making process. The minimum quorum to convene a meeting shall be as described in the TAC Procedures for each respective stakeholder group. Robert's Rules of Order shall guide stakeholder meetings in all areas not addressed by the ERCOT Protocols, ERCOT Bylaws, TAC Procedures, subcommittee charters, or these rules. Any conflicts between these rules and Robert's Rules of Order shall be determined in favor of these rules.

Main Motions

Main motions are used to present new business, such as action to be taken on Revision Requests, concepts, and methodologies.

Main Motion Examples:

YOU WANT TO:	YOU SAY:	2ND?	DEBATE?	AMEND?
Endorse "X" methodology	I move to endorse "X" methodology	Yes	Yes	Yes
Take action as defined in Protocol Section 21 on an NPRR (e.g., recommend approval, reject, defer decision, refer or remand)	I move to recommend approval of NPRR	Yes	Yes	Yes

Secondary Motions

Secondary motions address procedural issues and assist with the order and management of the meeting. They are applicable to pending main motions and discussion items equally.

Secondary Motion Examples:

YOU WANT TO:	YOU SAY:	2ND?	DEBATE?	AMEND?
Close the meeting	I move to adjourn	Yes	No	No
Take break	I move to recess for	Yes	No	Yes
Lay aside temporarily	I move to table/defer	Yes	Yes	Yes
Return to a previously tabled item	I move to remove from the table the item regarding*	Yes	Yes	Yes
Stop debate and vote	I call the question*	Yes	No	No

ERCOT
Technical Advisory Committee Procedures

Limit or extend debate	I move that debate be limited/extended to*	Yes	No	No
Refer to another stakeholder group	I move to refer the motion/discussion to	Yes	Yes	Yes
Modify the wording of a motion	Will you accept a friendly amendment to	No	No	No
Modify the wording of a motion	I move to amend the motion to	Yes	Yes	Yes
Withdraw motion	I withdraw my motion	No	No	No
Reconsider a previous motion	I move to reconsider	Yes	Yes	Yes
Ask a question on the rules	Question on the rules/point of order	No	No	No
Suspend the rules of Notice	I move to waive notice for*	Yes	Yes	No

* Requires a two thirds vote in favor for approval.

Motion Descriptions:

Table:

This motion postpones a discussion item indefinitely or for a specified time. If a time is specified the group may return to the discussion item prior to the expiration of the specified time with the adoption of a motion to *take from the table*. If no time to return to the item was specified the chair may direct the return to the item at their discretion.

Call the question:

This motion closes debate and is applicable only to the immediately pending motion. Once adopted, no further debate is allowed and a vote on the pending question must immediately be conducted. If a *motion to call the question* is adopted while an amendment is pending, then a vote is taken immediately on the amendment. Once the vote on the amendment is complete, then debate on the main motion may continue. To be applicable to a main motion, a *motion to call the question* must be adopted while the main motion is immediately pending. This motion requires a two thirds vote in favor for approval.

Limit/Extend debate:

The *motion to limit debate* requires that all debate regarding a particular pending motion be completed before the expiration of a specified amount of time. The allotted time for discussion may be extended through a *motion to extend debate*. The chair must immediately conduct a vote on the pending motion at the expiration of time. This motion requires a two thirds vote in favor for approval.

ERCOT Technical Advisory Committee Procedures

Refer:

The Chair may, without objection by any voting member, direct any discussion item to any working group or task force of the subcommittee, or request review by any other TAC Subcommittee. If adopted, this motion requires the Chair to take this action per the direction of the motion.

Friendly Amendment:

This is a request to revise the language of a pending motion and is directed at the mover and second of a pending motion. If accepted by the mover and the second, the pending motion is amended without the need for action by the group. If the friendly amendment is opposed by either the pending motion mover or the second, then the pending motion remains in its original form. If the friendly amendment is accepted by the mover, but opposed by the main motion second, and the second is withdrawn, the Chair may solicit an alternate second. If an alternate second is provided, the pending motion is amended without the need for action by the group. This motion has the same class and rank order as the more formal *motion to amend*. A pending motion may also be amended through the formal amendment process (see “Amend” below).

Amend:

If adopted, this motion revises the language of the pending motion regardless of opposition by the pending motion mover or second. This motion itself requires a second and is adopted by a vote of the group per TAC Procedures.

Waive Notice:

The usual course of business for TAC and TAC Subcommittees is to post and distribute a meeting agenda indicating items upon which respective groups will be voting at least one week in advance. Adoption of a *motion to waive notice* authorizes a vote upon items with insufficient notice. This motion requires a two thirds vote in favor for approval.

Withdraw:

This is a unilateral action by the mover or the second of a pending motion. If the mover withdraws, the pending motion is terminated. If the second withdraws, then the motion remains as a properly laid motion without a second for which any other member may second. A *withdrawal* by either the mover or the second ceases to be available once the Chair has begun the vote on the motion or while a *motion to call the question* is pending.

Reconsider:

This motion renews consideration of a particular item or motion previously considered during the current meeting. The mover of a *motion to reconsider* must be a member that voted on the prevailing side of the motion to be reconsidered, and must clearly identify the motion or action to be reconsidered. Once a *motion to reconsider* has been adopted by the committee, any member may move to void, amend or, reinstate the motion or decision that is reconsidered. If a *motion to reconsider* has been adopted regarding a particular item, but no further action is then taken, the previous motion or decision remains in effect as if the *motion to reconsider* had not been adopted. For the purposes of this paragraph, a meeting held over multiple days shall

ERCOT
Technical Advisory Committee Procedures

be considered as a single meeting if it is held by the same stakeholder group and the days of the meeting are contiguous.



ERCOT TAC Representatives – 2020

Consumer	Residential: Shawnee Claiborn-Pinto – OPUC Residential: Eric Goff Commercial: Phillip Boyd – City of Lewisville Commercial: Chris Brewster – City of Eastland Industrial: Garrett Kent – CMC Steel Texas Industrial: Bill Smith – Air Liquide
Cooperative	John Dumas – Lower Colorado River Authority Clif Lange – South Texas Electric Cooperative Roy True – Brazos Electric Power Cooperative Michael Wise – Golden Spread Electric Cooperative
Independent Generator	Bob Helton – Engie North America Ian Haley – Luminant Generation Colin Meehan – First Solar Bryan Sams – Calpine Corporation
Independent Power Marketer	Kevin Bunch – EDF Trading North America Jeremy Carpenter – Tenaska Power Services Clayton Greer – Morgan Stanley Resmi Surendran – Shell Energy North America
Independent Retail Electric Provider	Bill Barnes – Reliant Energy Retail Services Eric Blakey – Just Energy Texas Sandy Morris – Direct Energy Shannon McClendon – Demand Control 2
Investor Owned Utility	Walter Bartel – CenterPoint Energy Collin Martin – Oncor Electric Delivery Keith Nix – Texas-New Mexico Power Company Richard Ross – AEP Service Corporation
Municipal	Dan Bailey – Garland Power and Light Jose Gaytan – Denton Municipal Electric Alicia Loving – Austin Energy David Kee – CPS Energy



Electric Reliability Council of Texas

RETAIL MARKET SUBCOMMITTEE PROCEDURES

**TAC Approved
May 24, 2018**

Effective as of June 1, 2018

AUSTIN
7620 Metro Center Drive
Austin, Texas 78744
Tel. 512.225.7000
Fax 512.225.7020

www.ercot.com

TAYLOR
2705 West Lake Drive
Taylor, Texas 76574
Tel. 512.248.3000
Fax 512.248.3095

ERCOT Retail Market Subcommittee

Subcommittee Structure

The structure of the subcommittee is included in the Technical Advisory Committee Procedures, Section V, Subcommittees. The Retail Market Subcommittee (RMS) will follow the election process as described in the Technical Advisory Committee Procedures, Section III, Chair and Vice-Chair, C, Election Process.

Scope

The Retail Market Subcommittee (RMS), reporting to the Technical Advisory Committee (TAC), evaluates, and reviews issues related to the operation of the retail market in the ERCOT Region and makes recommendations for improvement, when deemed appropriate, to TAC. The RMS will be responsible for monitoring Public Utility Commission (PUC) rulings as they apply to Retail Markets and Retail Market Participants and ensure that PUC requirements are reflected in the ERCOT Market Guides and Protocols. The guiding principle behind the work of the RMS is to help ensure an efficient and nondiscriminatory retail market for all Market Participants.

The functions of this subcommittee include oversight of, but are not limited to:

- Retail transactions and business processes
- Retail market testing
- Retail Reports and Extracts
- Data Transport
- Retail Metering
- Market Participant communication needs for retail operations issues
- Load Profiling
- Retail Market Training

The subcommittee will also promptly prepare and submit a revision request for any issues identified that require a change to the ERCOT Protocols and Guides. The subcommittee shall communicate with other TAC subcommittees, and shall report back to the RMS on a regular basis. Furthermore, the subcommittee will review Nodal Protocol Revision Requests for effects on the retail market.

The subcommittee will report to TAC on a regular basis or as otherwise directed by TAC. The subcommittee will continually evaluate subcommittee functions to identify those that could potentially be performed by ERCOT and submit any recommended changes to TAC. The subcommittee chair will normally attend TAC meetings.

Standing and Ad Hoc Working Groups

In order to discharge its responsibility, the subcommittee may form standing working groups and temporary or ad hoc working groups with representation of each working group being appointed or approved by the subcommittee. The members of the working group shall elect from amongst themselves a chair and vice chair, subject to confirmation by the RMS, for a one-year term on a calendar year basis or until the working group is no longer required. The subcommittee will direct these working groups, make assignments and retire the working groups as necessary.

All subcommittee working groups are responsible for reporting planned activities/projects and results to the subcommittee for review and to submit any budget requirements to the subcommittee to be forwarded to TAC for approval. All working group actions are subject to subcommittee review. Materials submitted by working groups that require RMS approval will be submitted to RMS members for review one week prior to the scheduled RMS meeting.

TAC Approved June 24, 2020

1. Align Retail Market Subcommittee Goals with TAC goals and the strategic vision of the ERCOT Board of Directors.
2. Maintain rules that support Retail Market processes and promote market solutions that are consistent with PURA and PUC.
3. Collaborate with WMS to ensure the incorporation of demand response and load participation in the Wholesale market including participation in the ERCOT annual demand response survey.
4. Support ERCOT's initiatives to develop retail processes for integrating or transitioning Load into ERCOT as needed.
5. Explore and implement Retail Market enhancements, process improvements, cost efficiencies, and evaluate lessons learned from previous events.
6. Maintain market rules that support open access to the ERCOT retail market.
7. Continue to work with ERCOT to develop Protocols and other market improvements that support increased data transparency and data availability to the market.
8. Assess and develop Retail Market training initiatives that may include ERCOT's Learning Management System's (LMS) online modules and Instructor Led Market Training courses and/or webinars.
9. Assess and improve communications and notifications processes for all Market Participants including ERCOT.
10. Work with ERCOT staff and Transmission and Distribution Service Provider staff to address issues and facilitate improvements to market rules pertaining to load profiling as reflected in the ERCOT Protocols and the Load Profiling Guide.
11. Monitor Retail Load Profiling Annual Validation.
12. Support retail system testing and implementation and continue to monitor performance post-implementation.
13. Support ERCOT's Summer preparedness efforts including Mass Transition drill and associated workshops.



ERCOT RMS Representatives – 2020

Consumer	Chris Brewster – City of Eastland Shawnee Claiborn-Pinto – OPUC
Cooperative	Christian Powell – Pedernales Electric Cooperative Connie Hermes – South Texas Electric Cooperative Daniel Kueker – Brazos Electric Power Cooperative Frank Wilson – Nueces Electric Cooperative
Independent Generator	John Schatz – Luminant Generation Angela Ghormley – Calpine Corporation
Independent Power Marketer	John Moschos – Tenaska Power Services Emily Black-Huynh – EDF Trading North America
Independent Retail Electric Provider	Eric Blakey – Just Energy Norm Levine – Direct Energy Kyle Patrick – Reliant Energy Retail Services Amir Khan – Chariot Energy
Investor Owned Utility	Jim Lee – AEP Service Corporation Debbie McKeever – Oncor Electric Delivery Diana Rehfeldt – Texas-New Mexico Power Company Kathy Scott – CenterPoint Energy
Municipal	Wayne Callender – CPS Energy Timothy Crabb – City of College Station Robert Heimer – Austin Energy David Werley – Bryan Texas Utilities



Electric Reliability Council of Texas

RELIABILITY AND OPERATIONS SUBCOMMITTEE PROCEDURES

**TAC Approved
March 23, 2017**

AUSTIN
7620 Metro Center Drive
Austin, Texas 78744
Tel. 512.225.7000
Fax 512.225.7020

www.ercot.com

TAYLOR
2705 West Lake Drive
Taylor, Texas 76574
Tel. 512.248.3000
Fax 512.248.3095

ERCOT Reliability and Operations Subcommittee

Subcommittee Structure

The structure of the subcommittee is included in Section V. of the Technical Advisory Committee (TAC) Procedures.

Scope

The Reliability and Operations Subcommittee (ROS), reporting to the TAC, evaluates and reviews ERCOT system studies and is responsible to review operations of ERCOT in relation to system security, Operating Guides application, and emergency operations. The ROS will be responsible for monitoring Public Utility Commission (PUCT) rulings as they would apply to Market Participants responsible for reliability and ensure that PUCT requirements are reflected in the Operating Guides and Protocols. The ROS performs such other duties as it deems appropriate and makes recommendations to TAC. It is the TAC's expectation that the subcommittee chairs will coordinate with each other, particularly on issues being addressed in one subcommittee that may have an impact on or require input from another subcommittee.

The primary functions of ROS are the development, review and maintenance of Operating Guides, Planning Guides, and other planning criteria and the review of ERCOT reports and operations related to the reliable operation of the ERCOT System. The ROS will perform ERCOT Protocol required review of Ancillary Service provision and commercially significant constraints. The ROS will periodically review ERCOT reports and procedures relating to planning assessment, Partial Blackout or Blackout restoration procedures, coordination of protective relay settings, operational communication facilities, operating reserve obligations, emergency operations, abnormal system conditions, transmission interconnections to generation, coordination of Outage schedules and other activities as they apply to reliability and operations. The ROS will review ERCOT Protocol revisions as they may impact ERCOT System reliability and operations.

The subcommittee will report to the TAC on a regular basis or as otherwise directed by the TAC. The Subcommittee chair will normally attend TAC meetings.

Standing and Ad Hoc Working Groups

In order to discharge its responsibility, the subcommittee may form standing working groups and temporary or ad hoc task forces with representation on each working group being appointed or approved by the subcommittee. The subcommittee chair, with subcommittee approval, will appoint the chair for each working group to the shorter of a one-year term on a calendar year basis or until the working group is no longer required. The subcommittee will direct these working groups and make assignments as necessary.

Black Start
Dynamics
Network Data Support

Operations Training
Operations
Outage Coordination
Performance, Disturbance, and Compliance
Planning
Resource Data
Steady State
System Protection
Voltage Profile

The Subcommittee may form other standing working groups and temporary or ad hoc task forces on an as needed basis.

All subcommittee working groups are responsible to report planned activities/projects and results to the subcommittee for review and to submit any budget requirements to the subcommittee to be forwarded to TAC for approval. All working group actions are subject to subcommittee review.

Working Group/Task Force Comments or Revision Requests

ROS Working Groups and Task Forces shall submit Revision Requests and comments per paragraph (F) of Section V, Working Group/Task Force Comments or Revision Request, of the TAC Procedures.

Electric Reliability Council of Texas

WHOLESALE MARKET SUBCOMMITTEE PROCEDURES

**TAC Approved
May 25, 2017**

AUSTIN
7620 Metro Center Drive
Austin, Texas 78744
Tel. 512.225.7000
Fax 512.225.7020

www.ercot.com

TAYLOR
2705 West Lake Drive
Taylor, Texas 76574
Tel. 512.248.3000
Fax 512.248.3095

ERCOT Wholesale Market Subcommittee

Subcommittee Structure

The structure of the subcommittee is included in Section V. of the TAC Procedures.

Scope

The Wholesale Market Subcommittee (WMS), reporting to the Technical Advisory Committee (TAC), evaluates, and reviews issues related to the operation of the wholesale market in the ERCOT Region and make recommendations for improvement, when deemed appropriate, to TAC. The WMS will be responsible for monitoring Public Utility Commission (PUC) rulings as they apply to Wholesale Markets and Wholesale Market Participants and ensure that PUC requirements are reflected in the ERCOT Market Guides and Protocols. The guiding principle behind the work of the WMS is to help ensure an efficient and nondiscriminatory wholesale market for all Market Participants.

The functions of this subcommittee include, but are not limited to:

- Provide input into changes to Ancillary Services provisions of the Protocols
- Provide policy input into evaluations of Resource adequacy in the ERCOT Region
- Involvement in the Settlement rules review and compliance process at the QSE level
- Review and comment on Settlement metering standards and guides
- Monitor of Ancillary Service market operation, Competitive Constraints and congestion
- Review/monitor the dispatch process and dispatcher behavior

The subcommittee will also promptly prepare and submit a revision request for any issues identified that require a change to the ERCOT Protocols. The subcommittee shall communicate with other TAC subcommittees, and shall report back to the WMS on a regular basis. Furthermore, the subcommittee will review Nodal Protocol Revision Requests for effects on the wholesale market.

The subcommittee will report to TAC on a regular basis or as otherwise directed by TAC. The subcommittee will continually evaluate subcommittee functions to identify those that could potentially be performed by ERCOT and submit any recommended changes to TAC. The subcommittee chair will normally attend TAC meetings.

Standing and Ad Hoc Work Groups

In order to discharge its responsibility, the subcommittee may form standing work groups and temporary or ad hoc work groups with representation on each work group being appointed or approved by the subcommittee. The subcommittee chair, with subcommittee approval, will appoint the chair for each work group to the shorter of a one-year term on a calendar year basis or until the work group is no longer required. The subcommittee will direct these work groups and make assignments as necessary.

All subcommittee work groups are responsible to report planned activities/projects and results to the subcommittee for review and to submit any budget requirements to the subcommittee to be forwarded to the TAC for approval. All work group actions are subject to subcommittee review.



Electric Reliability Council of Texas

PROTOCOL REVISION SUBCOMMITTEE PROCEDURES

December 1, 2011

ERCOT Protocol Revision Subcommittee

Purpose

These procedures are intended to define the roles of participants in the Protocol Revision Subcommittee (PRS), the process for addressing revisions requests, and the relationship with the Technical Advisory Committee (TAC) and other TAC Subcommittees.

Subcommittee Structure

The structure of the PRS is included in Section V. Subcommittees, of the TAC Procedures. The PRS will follow the election process as described in the Technical Advisory Committee Procedures, Section III, Chair and Vice-Chair, C, Election Process.

Scope

The PRS, reporting to the TAC, is responsible for reviewing and recommending action on formally submitted Nodal Protocol Revision Requests (NPRRs) and System Change Requests (SCRs) (“Revision Request”). PRS may refer Revision Requests to working groups or task forces that it creates or to existing TAC subcommittees, working groups or task forces for review and comment on the Revision Requests; however, the PRS shall retain ultimate responsibility for the processing of all Revision Requests. The PRS is also responsible for assigning a recommended priority and rank for any Revision Requests and guide revisions that require an ERCOT project for implementation.

The procedure and timeline for addressing Revision Requests is detailed in Protocol Section 21, Revision Request Process.

Urgent Revision Requests

Protocol Section 21.5, Urgent Nodal Protocol Revision Requests and System Change Requests, defines Urgent Revision Requests. Revision Requests meeting the criteria will require special processing by the PRS. The following addresses the procedure the PRS will follow when presented with a Revision Request for which Urgent status is requested.

1. If a submitter requests Urgent status, the complete Revision Request is forwarded to the e-mail distribution list of the PRS and Urgent status will be considered at the next regularly scheduled PRS meeting or, if PRS leadership deems necessary, a special meeting of the PRS.
2. If the PRS acts to grant the Revision Request Urgent status, the Urgent Revision Request will be considered on an urgent timeline as outlined in Protocol Section 21.5.

TAC

The PRS shall communicate and submit a PRS Report to TAC for all Revision Requests submitted to and reviewed by the PRS according to the timeline described in Protocol Section 21.

1. The PRS shall respond to clarifying questions from TAC, relating to the PRS Report.
2. The PRS shall respond to a Revision Request that has been remanded to PRS from TAC with an amended PRS Report.

Emergency and Special Meetings

Emergency and special meetings will be called at the discretion of the PRS Chair or Vice-Chair to facilitate discussions related to Revision Requests and/or guide revisions.

2020 PRS Goals
TAC Approved June 24, 2020

- Process NPRRs and SCRs in accordance with Protocol Section 21, Revision Request Process.
- Review the Business Case for each NPRR and SCR that requires an ERCOT project for implementation to ensure that it provides adequate justification for the project.
- Assign a recommended priority and rank for each NPRR, SCR, and guide revision that requires an ERCOT project for implementation.
- Consider requests and assignments from the ERCOT Board and TAC in a timely and diligent manner.
- Review Other Binding Documents (OBDs) annually for elimination or incorporation into Protocols/Market Guides.
- Review aging projects at least annually and make recommendations if additional actions are needed.