

2022 TAG Meeting: Electricity

Version March 3, 2022

All Sector-Specific Meetings will take place from 1:00 – 4:00 pm MT

Join by Zoom

<https://us02web.zoom.us/j/3073142385>

Or by phone: 346-248-7799 | Meeting ID: 307 314 2385

Materials

- Charter
- Electricity Slide Deck
- Electricity sector brief
- Notes Template

Agenda

Part 1: Quick Review & Prioritize Discussions

1:00 Welcome, Opening, Land Acknowledgements

1:05 NM TAG Charter

1:15 Review: Sector Goals & Implementing Actions, ask questions

Jacqueline Waite/NM Agency Staff

Part 2: Small Group Work

1:30 Small Group Work: In Depth Discussion of Electricity Goal & Implementing Actions

- We will check in as a full group at 2:30 and take a ten-minute break.
- Groups are pre-assigned, and will have an assigned facilitator/note-taker.

Part 3: Debrief & Wrap UP

3:30 Report Back, Debrief

3:55 Wrap Up, Next Meeting



Electricity Sector Emission Reduction Goals

New Mexico Climate Change Task Force

Technical Advisory Group

Summary

The main overarching goals for the Electricity sector are 1) to meet the targets established by New Mexico's Energy Transition Act, and 2) to enable the clean energy transition of other sectors of the economy. The goals represent ways to accelerate the transition to clean electricity, while also addressing access¹ to clean electricity for all New Mexicans.

Issues

- The Electricity sector is the third largest contributor to GHGs in New Mexico.
- The Renewable Portfolio Standards (utility retail sales decarbonization goals), as specified in the Energy Transition Act, will go a long way toward decarbonizing the Electricity sector by 2030, but there is still more to do within the sector.
- The Electricity sector plays a key role in enabling the decarbonization of other sectors (e.g., through beneficial electrification of heating and transportation).
- New Mexico is seeing an all-of-the-above approach to the energy transition, which may mean that human and capital resources are sometimes not working in sync.
- For the Electricity sector transition, EMNRD's Grid Modernization Program recommends a focus on the decarbonization goals as specified in the 2019 Energy Transition Act and working towards those in the most reliable and cost-effective way possible.
- Increasing the demand for electricity by electrifying other sectors, coupled with grid modernizing upgrades, might impact costs of energy for consumers.
- There are other benefits of the energy transition such as economic diversification.
- New Mexico has an abundance of renewable resources!

Recommendations

Goal 1: Promote development of 11 GW of total renewables operating by 2030 (7 GW solar, 4 GW wind).

Possible implementing actions:

- a. Develop and pass legislation that establishes an energy storage procurement target, i.e., 1 GW of long-duration (> 8-hour) by 2026 or other action to drive energy storage infrastructure to increase reliability. Given seasonal variation in wind and diurnal variation in solar these longer-duration options will be necessary.
- b. Develop a strategy to streamline renewable energy project permitting across jurisdictions, potentially working with a local government to develop a model process that other local governments can adopt.
- c. Expand renewable energy leases on state trust lands.

¹ Access can mean through a utility, through grid-tied distributed generation, and through off-grid resources where applicable. Access also implies an element of affordability. We considered rate increases for different customer classes (residential, commercial and industrial) and energy burden.

Rationale: The increased capacity of dedicated renewable resources, coupled with high voltage transmission can accelerate the transition (e.g., potential for 80 percent sales from renewable resources as opposed to 50 percent by 2030).

Caveats: Enforcement of the ETA-specified RPS targets is crucial, and anything beyond the target would be voluntary at this point. That is, utilities with surpluses that participate in wholesale markets could sell power beyond New Mexico.

Goal 2: Enable universal clean electricity access for all New Mexicans by 2030.

Possible implementing actions:

- a. Identify households without electricity access in order to develop and fund a program or partnerships to enable universal electricity access across New Mexico.
- b. Continue existing programs (e.g., Solar Tax Credit, now also a rebate).
- c. Work to expand access to energy efficiency programs to buffer rising costs of energy.

Rationale: Equity.

Caveats: Off-grid resources will require significant financial investments. The total impact of grid-tied distributed resources on customer costs is not known.

Goal 3: Deploy 6 GW transmission capacity to connect new renewables and coordinate statewide transmission planning.

Possible implementing actions:

- a. Establish a formal process for identifying priority transmission corridors and a streamlined statewide transmission planning process.

Rationale: High voltage transmission moves energy from utility-scale renewable installations to population centers.

Caveats: Transmission is expensive. Having the ability to export to regional markets can help pay for this transmission (end-use customers pay). The key is meeting our own in-state needs (see note about enforcement of RPS).

Goal 4: Incorporate distributed energy resources (DER)² integration and distribution system updates in state and PRC planning.

Possible implementing actions:

- a. Work with PRC and others to implement Grid Modernization Roadmap recommendations (e.g., updating New Mexico's Interconnection Rule)
- b. Work in close coordination with other sectors on energy efficiency and transportation planning to shed light on grid issues.

Rationale: Given societal demands, decreasing technology costs and current subsidies (federal and state), DER (particularly solar generation) are expanding rapidly in certain parts of New Mexico, and utilities need a way to integrate them onto the distribution grid without compromising the reliability of the system as a whole. DER can also provide flexibility in bulk

² DER include distributed generation, distributed energy storage, energy efficiency, demand response and electric vehicles. (Source: Pacific Northwest National Laboratory/U.S. DOE Grid Modernization Project)

power generation and investments. After 80 percent renewables on the grid, exploiting flexibility in demand-side (customer-supplied) resources will likely be necessary.

Caveats: For reliable integration and for utilities to benefit from DER (e.g. load flexibility), many additional mechanical and digital parts must be added to the existing grid. These are expensive. Currently customers without DER support localized upgrades. The current benefit to utilities of DER is minimal when it comes to meeting the ETA-specified targets (e.g., a small reduction in the retail sales denominator/demand in some markets) and yet require significant staff time and resources. Rate designs have not evolved to incentivize DER.

Goal 5: Advocate for New Mexico’s interests in western states’ dialogue around regional electricity coordination.

Possible implementing action:

- a. Assess impacts of participation in Western Energy Imbalance Market³ on supply/demand and per kWh cost.
- b. Continue with regional dialogues/regional participation.

Rationale: Regional dialogues are occurring and New Mexico needs strong advocates for its consumers. Western regional collaboration (e.g., a Western Regional Transmission Organization⁴- RTO) can help bolster renewable resource supply and resilience, similarly to how the Southwest Power Pool supports Xcel/SPS and many of our cooperatives which reside on the eastern grid.

Caveats: Participation in an RTO will require transmission links and new export hubs.

Contact

For further information, contact Jacqueline Waite at 505-629-2858 or jacqueline.waite@state.nm.us.

³ The Energy Imbalance Market (full name, California Independent System Operator’s EIM) is a real-time energy market. For more information see: <https://www.powermag.com/how-does-the-western-energy-imbalance-market-work/>. PNM has been a member since 2021.

⁴ A regional transmission organization (RTO) is an electric power transmission system operator that coordinates, controls, and monitors a multi-state electric grid. The transfer of electricity between states is considered interstate commerce, and electric grids spanning multiple states are therefore regulated by the Federal Energy Regulatory Commission (FERC). The purpose of the RTO is to promote economic efficiency, reliability, and non-discriminatory practices while reducing government oversight.

NM Technical Advisory Group (TAG)

Meeting Summary

Kickoff Meeting – March 2, 2022, 12:30 – 4:00 pm MST

Attendees

TAG Members: Josue De Luna Navarro, Rico Gonzales, Patrick Padilla, Valinda Shirly, Rikki Seguin, Erin Dayl, Colin Messer, Matt Eales, Joseph Hernandez, Dr. Virginia Necochea, Gerald Weseen, Julia Bernal, Raymond Martinez, Tammy Parker, Camilla Feibelman, Priscilla Lucero, Gabe Pacyniak, Cydney Beadles, Denise Castillo Gonzalez, Jordan Kessler, Tiffan Rivera, Amy Miller, Kaye Whitefoot

NM Agency Staff: Sandra Ely, Erin Taylor, AnnaLinden Weller, Claudia Borchert, Jacqueline Waite, Dana Bahar, Alyssa Latuchie, Jeremy Klass

Facilitators: Deb Kleinman, Sophie Carillo-Mandel

Guests: Patrick Commins, Andrew Sand, Kyle Clark-Sutton

Meeting Objectives

- TAG members get to know each other, facilitators, staff, and key partners
- TAG members get up to speed on purpose, work done to date, draft goals/objectives
- TAG members begin to discuss how to integrate equity principles into work
- TAG members approve charter

Meeting Materials & Presentations

- Climate Equity Guiding Principles
- Technical Advisory Group Draft Charter and Operating Procedures
- [New Mexico Climate Action website](#)
- Presentation slide decks:
 - 2021 New Mexico Climate Planning
 - New Mexico CCTF Technical Advisory Group Process Summary
 - New Mexico CCTF Action Planning Workshops Post-Workshop Progress Update
 - State of New Mexico Climate Action For Technical Advisory Group

Meeting Summary

NM agency staff and technical experts involved in the Climate Change Task Force presented an overview of the climate planning work done to date and the purpose/tasks for the TAG.

Kyle Clark-Sutton gave an overview of the emissions modeling work completed by the Rocky Mountain Institute.

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Representatives from each of the Climate Action Teams presented a brief overview of their respective draft goals and implementing actions: Electricity, Buildings, Transportation, Oil & Gas, Natural & Working Lands, and Market Mechanisms.

Two representatives of the Equity Working Group (Joseph Hernandez and James Povijua) now serve on the TAG and shared highlights of their work on the Climate Equity Guiding Principles, as well as their thoughts on how the TAG could translate those principles into action. This was followed by a small group conversation exploring that question. Summary notes from those breakout groups follow.

Equity Principles Breakout Group Outcomes

TAG members broke into small groups to identify questions that can be used during sector-specific meetings to identify, understand, and address equity considerations of draft goals and implementing actions. These questions, along with suggestions and questions about the greater CCTF process are provided below, grouped by theme.

Equity Considerations Questions

Questions that were mentioned multiple times are asterisked.

Overarching

- How does this recommendation align with or promote the equity principles?*

Community Input

- Who is impacted by this recommendation and how can they be engaged in the planning process?*
- How will we consider the perspective of those not at the table and/or bring them into the decision making process?*
- What public engagement has already been done for this recommendation? What public input has been provided, and has it been addressed?*
- What is the earliest process point at which the public can be engaged in this recommendation?
- What is the best way to engage stakeholders/impacted community? Is there a convening or network to engage with?
- What education and information are needed to increase intellectual public access?
- Is the recommendation addressing a real community concern? According to whom?

Honoring, Engaging, and Impacting Tribes

- How are the tribal sovereign nations engaged?
- How does this affect tribal communities (economically, politically, socially, ecologically, healthwise)?
- Have initial impact studies been tribe-specific?
- How can traditional ecological knowledge (TEK) be incorporated into this recommendation?

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Impacts and Benefits

- What are the benefits and impacts of this recommendation to communities (ex. environmental, economic, social)?* Think beyond a cost-benefit analysis.
- Are the goals/principles behind this recommendation aligned with the goals/principles of the communities it affects?
- How can this be of benefit on the local/individual scale?
- What is the full potential of community benefits? What would it take to achieve that?
- Does this recommendation expand access (to utilities, to GHG reduction, to economic benefits, to heat/cooling safety, to infrastructure) to the greatest and widest amount of people?
- Does this recommendation have a sufficiently wide and deep level of impact? Not just to the immediate beneficiaries, but quantifiable by an extended, layered network analysis.
- Are we building capacity to integrate community benefits, whether they be economic, participation, services, resources, or pollution reductions associated with GHG reductions?
- How will this recommendation have continued accountability and consider unintended negative impacts on overburdened communities? How can these impacts be remedied?

Implementation Considerations

- Who is missing from the implementation planning conversation and why?
- How will the implementing agency show that they are incorporating the equity principles? Who holds them accountable for this?
- What are the data sources informing this recommendation? Are these sources trusted by overburdened communities?
- How will equity be incorporated into data collection?
- Is compatible data available across communities and efforts? How is data quality controlled?
- Does this project provide an opportunity to remediate past damage?
- Who pays for implementation, operations, and maintenance? Who should pay for it?

Supporting Specific Climate-Conscious Outcomes

- How does this solution shift our extractive paradigm and help move away from an extractive economy?
- Does this solution move us beyond a tradeoff economy, towards a more community-based, profit-sharing, and community-building model?
- Does this recommendation provide an opportunity for land-based practices to be centered/remembered?
- Is this action holistic to encompass many different quality of life benefits (ie: huge transmission lines include charging stations, trails, rest stop, wildlife, etc)? See Complete Streets and Bureau of Land Management's Multiple-Use Mission as examples.

Broad CCTF Process Questions and Suggestion

Process Suggestions

- Do land acknowledgements before meetings.
- Create space for land-based practices to be centered/remembered.
- Start the process with a community agreement that everyone verbally agrees to, not something assigned in a packet.
- Be transparent
- Go slowly in discussing equity and be patient because many people are still learning what it means to center equity
- Center equity across the process and in each meeting.
- Weight policies that provide more local/individual benefits
- Implementers should use the equity principles as a guide and integrate them in the work.
- Show equity in action and practice, not just in narrative.
- In each TAG meeting, share with how the administration proposes to implement the equity principles for the proposals in each sector that is under discussion.
- Each final recommendation should have public engagement and tribal engagement requirements.

Incorporating Equity Questions

- Does equity include accountability for past harm caused?
- What are equity-based reasons to decline a recommendation?
- How can communities hold the CCTF accountable for integrating the equity terms?
- How can the CCTF center equity across the process and in each meeting, given the challenges to doing this across state agencies?

Public Engagement Questions

- How are the ideas, concerns, and solutions from overly burdened communities being solicited and incorporated? What has already been done?
- How does the State capture diverse voices within a community?
- How does the State record and report about engagement to tribes?
- How to provide tools (capacity? Funding? expertise?) to communities in order for them to meaningfully engage?
- What type of metric can be used to show/validate that we have successfully engaged the public?
- How do we characterize and include regional and location specific quality-of-life metrics to capture equity?
- How far back in the energy chain do we go when considering impacts on “overly burdened communities”?
- How do you record and report engagement to tribes?

Tools and resources

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