

TRANSITIONING TRI-STATE

A joint publication of the Center for the New Energy Economy
and Tri-State Generation and Transmission Association



TRI-STATE



Colorado State University

About the Center for the New Energy Economy

Founded in 2011 as a department of Colorado State University, the Center for the New Energy Economy (CNEE) is an initiative led by Colorado's 41st Governor, Bill Ritter, Jr. and a team of energy and environmental policy experts. The Center provides technical and strategy support for governors, legislators, regulators, utilities, and stakeholders working to implement policies that support America's transition to a clean energy economy.

About Tri-State

Tri-State Generation and Transmission Association is a not-for-profit wholesale electric cooperative association of 46 members, including 43 electric distribution cooperatives and public power districts across Colorado, Nebraska, New Mexico, and Wyoming.

Tri-State and our members power more than a million predominantly rural consumers across nearly 200,000 square miles of the West - an area greater than California.

Our mission is to provide our member systems a reliable, affordable and responsible supply of electricity in accordance with cooperative principles.



Foreword

Last July, Tri-State Generation and Transmission Association approached the Center for the New Energy Economy (CNEE) at Colorado State University with a vision for the future in which the benefits of an economy-wide clean energy transition are shared with everyone, from cleaner air to economic opportunity to reliable, affordable, responsible electricity. Accompanying this vision was a request for help in charting the path to that bold new energy future.

With the participation of an advisory group comprised of individuals with diverse backgrounds, Tri-State and CNEE identified pathways by which Tri-State can preserve its financial stability and deliver on its mission to provide reliable, affordable, responsible power to its members, while also meeting state policy goals as cost-effectively, efficiently and equitably as possible.

Thanks to the good-faith contributions of the CNEE-led advisory group, their shared enthusiasm for collaboration, and robust discussion of both current realities and innovative new ideas, Tri-State was able to integrate meaningful input into its Responsible Energy Plan, which outlines ambitious but actionable commitments and challenging but attainable goals.

While Tri-State's plan details the cooperative's path for its energy transition, we acknowledge that it is not the end of the road: there is more work to do and there are many challenges ahead. Providing meaningful support and opportunities for transitioning communities, addressing cooperative debt and stranded assets, promoting a regional transmission organization in the West, improving siting and permitting processes for new infrastructure, and establishing a greenhouse gas emissions accounting system are some of the important issues that must be addressed to successfully implement this energy transition.

Still, the cooperative spirit that brought Tri-State, CNEE and the advisory group together to work across interests is proof of what we can accomplish when we work together to solve problems and take advantage of new opportunities.

While this transition will be a challenge, we are confident that by working together in a cooperative manner we can make it a success, and realize all the benefits a clean grid has to offer.

Governor Bill Ritter,

CNEE Director

Duane Highley,

Tri-State CEO

Contents

- Executive Summary**3
- Background to a wholesale electric cooperative energy transition**4
- CNEE-led Advisory Group**5
 - Process5
 - Participants.....6
 - Sessions7
 - Outcomes.....8
- Additional opportunities associated with the energy transition**10
 - Support for impacted employees and communities.....10
 - Treatment for cooperative debt and stranded assets10
 - Participation in an RTO10
 - Improved processes for siting and permitting of necessary infrastructure.....11
 - Developing a GHG emissions accounting system.....11
- Concluding Remarks from Tri-State’s CEO**13

Executive Summary

Tri-State Generation and Transmission Association is implementing a clean energy transition that will expand renewable generation and reduce greenhouse gas (GHG) emissions while ensuring reliable, affordable, responsible electricity for its member cooperatives and public power districts, and for the communities they serve. Tri-State's Responsible Energy Plan (REP), released January 2020, outlines the steps the cooperative will take as it works to deliver on this mission and meet state policy goals as cost-effectively, efficiently and equitably as possible.

The REP includes input from an advisory group led by Governor Bill Ritter and Colorado State University's Center for the New Energy Economy (CNEE). The advisory group was comprised of representatives with academic, agricultural, cooperative, electric industry, environmental, rural, and state and local government interests from across the four states Tri-State serves. These diverse stakeholders helped identify and provided input on a number of key elements from which Tri-State built its energy plan. The feedback and guidance from the advisory group helped establish a foundation for an energy transition capable of gathering broad support across different interest groups.

One aspect of the advisory group sessions was the discussion of legislative issues for consideration by the Colorado General Assembly that would help Tri-State implement the Colorado-specific measures of its REP. Legislation passed in Colorado last year allows *retail* electric cooperatives and investor-owned utilities (IOUs) to submit clean energy plans to the Colorado Public Utilities Commission (PUC) and requires the Colorado Air Quality Control Commission (AQCC) to consider those plans when establishing rules for compliance with state GHG emission reduction goals. The legislation provides legal and regulatory certainty to retail cooperatives and IOUs submitting clean energy plans, provided that those plans achieve a targeted level of emission reductions. The legislation does not, however, contemplate *wholesale* electric cooperatives. Since Tri-State is a wholesale rural electric cooperative, rather than a retail cooperative or IOU, it is necessary to codify the components of Tri-State's REP related to emission reductions for Tri-State to opt-into those programs outlined in Colorado law.

The legislation Tri-State seeks would deliver the legal and regulatory certainty that Tri-State realizes is necessary for it and impacted areas to better-manage the timing and effects of the transition on employees and communities, to achieve early and significant emission reductions while managing impacts on member rates, and to comply with state laws without affecting the jurisdictions of neighboring states that Tri-State serves.

The CNEE-led advisory group also discussed five additional key challenges to the energy transition. They are, without specific order: 1) prioritizing support for impacted employees and communities, 2) treatment of cooperative debt and stranded assets, 3) promoting participation in a regional transmission organization (RTO) in the West, 4) improving processes for siting and permitting new infrastructure while maintaining environmental safeguards, and 5) developing a GHG emissions accounting system. Yet with engagement from the many interests across the region, these challenges can be overcome and the bright promises of the energy transition can be realized.

Background to a wholesale electric cooperative energy transition

Tri-State is a not-for-profit wholesale electric cooperative association of 46 members, including 43 electric distribution cooperatives and public power districts across Colorado, Nebraska, New Mexico, and Wyoming. Tri-State and its members power over a million predominantly rural consumers across nearly 200,000 square miles of the West - an area greater than California but with a fraction of the population.

Tri-State's mission is to provide its member systems a reliable, affordable and responsible supply of electricity in accordance with cooperative principles. Tri-State's members founded the association over 65 years ago to make electricity available in their rural areas, which were unprofitable for investor-owned utilities (IOUs) to serve. Tri-State has collaborated with its members since then to ensure power remains available and affordable for these communities.

As a not-for-profit cooperative, Tri-State is owned and governed by its board of directors. This is one of the characteristics that distinguish cooperatives from other utilities: a cooperative is accountable to its members and their rate-paying consumers rather than to shareholders. Tri-State, therefore, works closely with its members to address their needs and preferences, and the Responsible Energy Plan (REP) is a reflection of this dynamic.

While the REP was initiated and led by board and member direction, it is also responsive to legislation passed in Colorado and New Mexico in 2019. In Colorado, HB19-1261 outlines ambitious statewide greenhouse gas (GHG) emission reduction goals of 26% by 2025, 50% by 2030 and 90% by 2050 relative to 2005 levels. In New Mexico, SB19-489 increases the state renewable portfolio standards (RPS), setting RPS requirements of 40% by 2025, 50% by 2030, 80% by 2050, and a zero-carbon target by 2050.

In light of these new laws, Tri-State determined that defining its GHG emission reductions by proactively developing a plan to comply would be advantageous for both the cooperative and all four states in which it operates. However, Colorado's HB19-1261 and SB19-236 create the opportunity for *retail* electric utilities to implement clean energy plans after approval by Colorado's Public Utilities Commission (PUC) and Air Quality Control Commission (AQCC). Tri-State's development of a clean energy plan, as a *wholesale* electricity provider, is not currently contemplated in Colorado code and it is not able to opt-into these programs.

While the REP includes specific actions that Tri-State will take to reduce its GHG emissions, it is not a clean energy plan for the purposes of compliance with requirements under Colorado HB19-1261 or an Electric Resource Plan (ERP) for the purposes of compliance with Colorado PUC requirements, as outlined in Colorado SB19-236. Tri-State will separately prepare and submit for approval by the PUC an ERP in compliance with that requirement, and seeks legislation in order to codify its emission reduction plans in compliance with HB19-1261 requirements.

CNEE-led Advisory Group

Process

Early in Tri-State's development of its Responsible Energy Plan, it sought the formation of an external advisory group comprised of representatives with diverse interests from across the association's service territory to facilitate and contribute to the development of the plan. In particular, this broad stakeholder engagement was intended to open a dialogue across perspectives, promote frank and productive discussion about what the association's energy transition might look like, and begin the conversation about how to overcome the challenges associated with that transition.

The goals of the advisory group process were to collaboratively identify ideas, issues and concerns, and to contribute to Tri-State's development of a plan that would achieve reliable and affordable GHG emission reductions while securing broad stakeholder support.

Tri-State approached Governor Bill Ritter and Colorado State University's Center for the New Energy Economy (CNEE) to organize and convene this stakeholder engagement process. Governor Ritter and CNEE agreed to facilitate a series of sessions to help inform and contribute to the development of a Tri-State REP that would meet both member needs and broader state policy goals.

CNEE's role included: contacting and convening a diverse group of stakeholders from all four states of Tri-State's service area, including relevant experts, to contribute to the process; chairing the meetings and working to find consensus among the group; and working collaboratively to develop this report to outline the areas of consensus, describe the process and outcomes, and note the issues remaining at the conclusion of the process.

The CNEE-led advisory group process, as is the case for the REP itself, is and was not intended to be a substitute for or replace other resource planning processes required under state and federal laws, nor to replace any other established state regulatory processes.

CNEE-led Advisory Group

Participants

Advisory group participants were identified with the objective of assembling a cross-section of the many organizations and individuals who share an interest in Tri-State. This included representatives gathered from Colorado, Nebraska, New Mexico, and Wyoming from academic, agricultural, cooperative, electric industry, environmental, rural, and local and state government groups. The invited advisory group participants were:

Dan Arvizu

Chancellor and NREL Former Director
New Mexico State University

Kim Christiansen

General Manager
Nebraska Rural Electric Association
(Kristen Gottschalk represented NREA
at one meeting)

Bob Easton

Retired, VP of Transmission Services
Western Area Power Administration

Howard Geller

Executive Director
Southwest Energy Efficiency Project

Megan Gilman

Board Chair
Holy Cross Energy Board

Keven Groenewold

CEO
New Mexico Rural Electric Cooperative
Association

Renny MacKay

Policy Director
Wyoming Governor's Office

Jim Macy

Director
Nebraska Department of
Environment & Energy

John Nielsen

Director - Clean Energy Program
Western Resource Advocates

Sarah Cottrell Propst

Cabinet Secretary
New Mexico Energy, Minerals & Natural
Resources Department

John Putnam

Director - Environmental Programs
Colorado Department of Public Health
& Environment

Kent Singer

Executive Director
Colorado Rural Electric Association

John Stulp

Former Colorado Ag Commissioner
Ag/Rural Communities Representative

John Swartout

Executive Director
Colorado Counties, Inc.

Shawn Taylor

Executive Director
Wyoming Rural Electric Association

Will Toor

Executive Director
Colorado Energy Office

Observer

Colorado Public Utilities Commission

In addition to the individuals noted above, participants from CNEE included:

Bill Ritter Jr.

Former Colorado Governor

Patrick Cummins

Senior Policy Advisor

Suzanne Tegen

Assistant Director

Dennis Arfmann

Senior Policy Advisor

Tom Plant

Senior Policy Advisor

Tri-State participants included:

Duane Highley

CEO

Barbara Walz

SVP Policy & Compliance, CCO

Tom Dougherty

Independent Consultant

Pat Bridges

SVP Finance, CFO

Rob Wolaver

Senior Manager Energy Resources

Jim Martin

Independent Consultant

Rick Gordon

Board Chairman

Sessions

The advisory group met four times over the course of the fall of 2019. Highlights from these sessions included:

Session 1 | September 11

Topics Covered Included

Extensive introduction to Tri-State including its operations, resources, finances, obligations, and desired outcomes

Round-table discussion of advisory group questions, concerns, goals, and expectations

Presenters Included

Tri-State executive staff

Governor Ritter
CNEE staff and advisors

Session 2 | October 7

Topics Covered Included

Presentations on energy transition-driven impacts in rural communities, with emphasis on the Colorado Western Slope

Confirmation of areas of agreement to date, and presentations and discussion on energy generation, financial and community impacts of GHG reduction options

Presenters Included

Suzanne Tegen
CNEE
Northwest Colorado
community representatives

Tri-State staff

Session 3 | November 1

Topics Covered Included

Presentations on opportunities associated with beneficial electrification, energy efficiency, and demand-side management, including Tri-State's support in establishing the independent Beneficial Electrification League of Colorado

Discussion of a potential GHG reduction scenario and strategies for implementation and support

Presenters Included

Tom Wilson
EPRI
Howard Geller
SWEEP
Tri-State staff

Tri-State staff

Session 4 | November 19

Topics Covered Included

Review of the potential GHG reduction scenario

Presentation of legislative issues and potential solutions

Discussion of a potential framework for this report and a brainstorming session for addressing remaining challenges

Presenters Included

Duane Highley
Tri-State

Duane Highley
Tri-State

Governor Ritter
CNEE staff and advisors

Outcomes

At the outset, the sessions featured presentations designed to inform the advisors about the financial and operational challenges and opportunities of Tri-State's energy transition. As the group worked toward a common understanding of Tri-State's system and what its transition framework might look like, the participants discussed goals from the perspectives of affordability, community impacts, environmental issues, jurisdictional considerations, reliability, and state goals.

Through this dialogue, agreement was reached on a starting point from which Tri-State could approach and build support for its REP:

- Tri-State's goal is and should remain delivering reliable, affordable, responsible electricity;
- Tri-State, as a cooperative, is fundamentally different from other types of electric utilities;
- If Tri-State pursues transition too quickly or aggressively, it risks causing significant negative financial impacts and rate increases in rural areas; and
- The advisory group should begin with a "blank sheet" approach to most-effectively, economically and equitably help develop Tri-State's transition plans.

Over the course of the CNEE sessions, legislative concepts were discussed that could help Tri-State to deliver on its commitments and goals in compliance with Colorado's new energy policies. These initial concepts were presented to the entire group during the final November 19 session and provided a starting point for legislative language that Tri-State seeks to submit for consideration by the Colorado General Assembly to help Tri-State implement the Colorado-specific measures of its REP.

The legislation Tri-State seeks would deliver legal and regulatory certainty for Tri-State, as a *wholesale* electric cooperative, to develop and achieve its emission reduction goals through a codified process similar to and giving parity with the one that exists for *retail* cooperatives and IOUs. This is important because Colorado SB19-236 and HB19-1261 apply to *retail* electric utilities, but Tri-State, as a *wholesale* not-for-profit electric cooperative, is not contemplated under the current programs.

Colorado SB19-236 and HB19-1261 allow *retail* cooperatives and IOUs to submit clean energy plans to the Colorado PUC and requires the Colorado AQCC to consider those plans when establishing rules to comply with state GHG emission reductions. The legislation provides legal and regulatory certainty to *retail* cooperatives and IOUs submitting clean energy plans, provided those plans achieve a targeted level of emission reductions. The legislation does not, however, contemplate or provide this same certainty for *wholesale* cooperatives.

Since Tri-State is a wholesale rural electric cooperative, rather than a retail cooperative or IOU, it is necessary to codify the components of Tri-State's REP related to emission reductions for Tri-State to opt-into those programs outlined in Colorado law.

To that end, Tri-State seeks to bring forward for consideration by the Colorado General Assembly a proposal to create a law allowing it, as a wholesale cooperative, to file a clean energy plan in much the same way that a retail distribution cooperative or IOU already can. Through this proposal, Tri-State seeks a mechanism, like that which exists for retail utilities, to allow it to implement an emissions reduction plan subject to approval by the PUC and AQCC.

Tri-State is working with legislators, leadership and key stakeholders in Colorado during this legislative session to adopt such legislation to achieve several key benefits:

- Early and significant reductions in emissions in Colorado and New Mexico while managing rate impacts for all members;
- Regulatory and legal certainty for Tri-State and areas affected by the transition to be able to better-manage the timing and impacts on employees and communities; and
- Tri-State's compliance with Colorado and New Mexico laws without affecting the jurisdictions of Nebraska and Wyoming.

Among the key components of this legislation are clarity regarding an emissions baseline methodology from which Tri-State can commit to reduce, in Colorado, by 2030 and relative to 2005 levels:

- CO₂ emissions from all Tri-State owned or operated coal facilities in Colorado by 100%
- CO₂ from the stack from all Tri-State owned or operated plants in Colorado by 90%
- CO₂ associated with member sales in Colorado by 70%

Additional highlights from Tri-State's REP may be found at
tristate.coop/responsible-energy-plan

Additional opportunities associated with the energy transition

Tri-State's REP is based on a vision for the future in which the benefits of an economy-wide energy transition - from cleaner air to economic opportunity to a greener grid - are shared with everyone. The plan allows Tri-State to work toward commitments regarding emission reductions, clean energy, member flexibility, clean grid benefits like energy efficiency and beneficial electrification, and community support while being responsible to its employees, members, their communities, and the environment.

While the CNEE-led advisory group sessions helped address certain obstacles, the group identified five key issues, listed without order below, that will require further effort to resolve to facilitate implementation of Tri-State's REP and to achieve a timely, cost-effective and inclusive energy transition. Tri-State, CNEE and the advisory group participants support collaborating with others to find effective solutions to these obstacles that will make it possible for everyone to enjoy the benefits of the energy transition.

■ **Support for impacted employees and communities**

As the energy industry transitions to cleaner generation sources, many rural communities will be challenged by the loss of employment, tax and royalty payments, and other benefits associated with existing generation plants and fossil fuel-related industries. Any transition to a cleaner economy will require economic development, retraining and educational opportunities and other support for affected rural energy-producing employees and communities. For example, Tri-State, CNEE and others are working with partners from federal and state officials to community leaders to develop solutions that ensure employees and communities get the assistance they need for the just and equitable transition they deserve, today and in the future. This includes coordinating events like job fairs to help employees find new employment opportunities to working on legislation that ensures funding is available for impacted communities to pursue economic development.

■ **Treatment for cooperative debt and stranded assets**

Accelerating the retirement of generation facilities and their associated debt constrains Tri-State's ability to recover its investments in those facilities at the same time that it seeks to reduce members' rates and make significant investments in new renewable generation. While there are numerous financial tools available for IOUs to manage debt and depreciation, most of these tools do not work for not-for-profit cooperatives, creating a risk that the cooperative's debt may become stranded, or unrecoverable. For example, securitization is a tool designed for IOUs but that provides no benefit to cooperatives. This challenge could be addressed with a portfolio of cooperative-specific financial tools for retiring fossil fuel-related debt that allows a reduction in GHG emissions and minimizes impacts to members' rates.

- **Participation in an RTO**

The lack of an organized market for wholesale electricity and transmission service in the Rocky Mountain region hampers energy providers' ability to transition to a cleaner grid in a cost-effective and efficient manner, and will increasingly challenge reliability and affordability of the electricity supply. Incentives and regulatory reforms that encourage all regional utilities to join in or create an organized market in the region would address this challenge.

- **Improved processes for siting and permitting of necessary infrastructure**

Rapid expansion of renewable generation will require significant construction of infrastructure in order to meet the time and cost expectations of the clean energy transition. Incentives and reforms that decrease the costs, timelines and risks to plan, site, permit, and construct new generation and transmission while maintaining environmental and community safeguards could improve the multiple levels of regulatory requirements that currently impede cost-effective and efficient development of necessary infrastructure.

- **Developing a GHG emissions accounting system**

Currently, there is no uniform method for determining the emissions baseline necessary to accurately track and account for emission reductions. Developing a GHG emissions accounting system on which to base compliance with state regulations will deliver certainty regarding the level of reductions required, that reductions must be made from, and how reductions will be calculated going forward.



Concluding Remarks from Tri-State's CEO

At Tri-State, we are grateful to Governor Ritter, CNEE and the advisory group participants for their contributions in developing our Responsible Energy Plan.

After working in cooperatives for all of my career, I am a strong proponent of what this model and its members can accomplish when they work together. Fortunately, our CNEE-led advisory group shared this enthusiasm for collaboration, and this varied group of stakeholders came together to learn with us, challenge us, and roll up their sleeves to work with us on the details of how we can bring our vision for the energy transition within reach. Thanks to their good-faith contributions and their commitment to finding common ground, Tri-State's Responsible Energy Plan outlines ambitious but actionable commitments and challenging but attainable goals.

The REP and the legislation we seek are significant undertakings for Tri-State and historic actions within the cooperative world. With support from the many other partners with an interest in energy, our communities and our environment, Tri-State can deliver on our obligation to provide reliable, affordable, responsible power to our members, and achieve compliance with state regulations.

We appreciate the contributions that our CNEE-led advisory group partners have made to our plan. The energy transition we are embarking on has the potential to empower our members and meet both their needs and, thanks to our partners' input, broader state policy goals that are important, too. While this transition has its challenges, I am confident that by maintaining our commitment to our mission - to provide reliable, affordable, responsible electricity to our members - we can make this transition a success.

If we work together, this bright future and clean grid is in reach.

Duane Highley,
Tri-State CEO

