

Released January 2020



TRI-STATE

# RESPONSIBLE ENERGY PLAN

RESPONSIBLE TO OUR EMPLOYEES, OUR MEMBERS,  
OUR COMMUNITIES, AND OUR ENVIRONMENT

*Cooperative power. Transformed.*

To learn more about our Responsible Energy Plan, visit [www.tristate.coop](http://www.tristate.coop)

A Touchstone Energy<sup>®</sup> Cooperative 



# Tri-State Generation and Transmission Association Responsible Energy Plan

## Responsible to our employees, our members, our communities, and our environment

At Tri-State, we're implementing a clean energy transition that will expand renewable generation and reduce greenhouse gas emissions while ensuring reliable, affordable, responsible electricity for our member cooperatives and public power districts, and for the communities they serve. Our Responsible Energy Plan (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.

As a cooperative, we're owned and governed by our members, and we're accountable to them and their retail consumers. Our member-comprised board of directors established in July 2019 that our cooperative would pursue a transition to a cleaner energy portfolio by developing a Responsible Energy Plan. The board set a goal for our cooperative to comply with all applicable environmental and renewable energy requirements while striving to reduce members' rates, preserve electricity reliability and affordability, and maintain financial strength. We've been working together since then to develop a REP that reflects this direction. Our plan is also informed by input from a collaboration with an external advisory group – convened and facilitated by Colorado Governor Bill Ritter and the Center for the New Energy Economy – composed of stakeholders gathered from across the region and across interests.

Our Responsible Energy Plan allows Tri-State to work toward the commitments and goals that follow and be responsible to our employees, our members, our communities, and our environment.

While this energy transition comes with challenges, we are confident that by working together and maintaining our commitment to our mission — to provide reliable, affordable, responsible power to our members — we can make it a success.

Tri-State's Responsible Energy Plan outlines an energy transition that makes it possible for us to deliver on our mission while achieving compliance with state and federal regulations. It will ensure significant emission reductions while maintaining our strong financial position and competitive rates in all four states we serve. As a cooperative wholesale electricity provider serving, owned by and governed by members in Colorado, Nebraska, New Mexico, and Wyoming, this regional view was a key consideration as we developed this plan and determined how we would accomplish the commitments and goals we identified.



### REDUCING EMISSIONS

We're eliminating 100% of emissions from our New Mexico coal facilities by closing Escalante Station by the end of 2020, and we're eliminating 100% of emissions from our Colorado coal facilities by closing Craig Station and the Colowyo Mine by 2030.



### INCREASING CLEAN ENERGY

By 2024, we're bringing over 1 gigawatt of wind and solar resources online, meaning 50% of the energy our cooperative consumes will come from renewables.



### INCREASING MEMBER FLEXIBILITY

Our members are working together to increase contract flexibility and options to develop more local renewable generation.



### EXTENDING THE BENEFITS OF A CLEAN GRID

We're helping consumers save money and reduce emissions.



### COMMITTING TO COMMUNITY AND EMPLOYEES

We're committed to supporting employee and community transition.



### LOOKING FORWARD TO A BRIGHTER FUTURE

We're working together to bring this bright future and clean grid in reach.

Tri-State Generation and Transmission Association is a not-for-profit wholesale electric cooperative association of 45 members, including 42 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.

## REDUCING EMISSIONS

In New Mexico, we're committing to a 100% reduction in emissions from coal generation by closing Escalante Station by the end of 2020, in support of New Mexico's SB19-489 zero carbon by 2050 goal

In Colorado, we're committing to a 100% reduction in emissions from coal generation by closing Craig Station and the Colowyo Mine by 2030, in support of Colorado's HB19-1261 emission reduction goals

In Colorado, we anticipate working with the General Assembly to achieve, by 2030 and relative to 2005 levels:

- A 90% reduction in CO<sub>2</sub> emissions across the generation facilities we own or operate in Colorado, and
- A 70% reduction in CO<sub>2</sub> emissions associated with Colorado wholesale electric sales

We're committing not to add more coal to our system

Our cooperative is working to shift our generation portfolio to cleaner energy sources to meet member demand, comply with environmental regulations in Colorado and New Mexico, and in response to a changing energy landscape. We believe it is possible to provide reliable, affordable, responsible power to our members while implementing these emission reduction steps to meet broader public policy goals. With engagement and support from partners like the Colorado General Assembly and other natural resource stakeholders, we can achieve an efficient, cost-effective and equitable transition.



### KEY STEPS:

- Retire Escalante Generating Station by the end of 2020
- Retire Craig Station Unit 1 by the end of 2025
- Retire Craig Station Units 2 & 3 and the Colowyo Mine by 2030
- Cancel the Holcomb Station coal expansion project

## ADVISORY GROUP

To develop our REP commitments, we collaborated with a diverse advisory group, facilitated by Colorado State University's Center for the New Energy Economy (CNEE) and Colorado Governor Bill Ritter, on key elements regarding emission reductions. This group included representatives from across the states Tri-State serves from academic, agricultural, cooperative, electric industry, environmental, rural, and state and local government

groups. These advisors gathered to learn with us, share with us, challenge us, and roll up their sleeves to work with us on some of the details that will make our energy transition vision a reality. We are grateful to Governor Ritter and the CNEE advisory group participants for their good-faith contributions and efforts to find common ground in the pursuit of ambitious but actionable commitments and challenging but attainable goals, as reflected here.

---

### CNEE ADVISORY GROUP INVITEES

- Dan Arvizu, New Mexico State University
- Kim Christiansen, Nebraska Rural Electric Association
- Bob Easton, Western Area Power Administration (retired)
- Howard Geller, Southwest Energy Efficiency Project
- Megan Gilman, Holy Cross Energy Board
- Keven Groenewold, New Mexico Rural Electric Cooperative Association
- Renny MacKay, Wyoming Governor's Office
- Jim Macy, Nebraska Department of Environment & Energy
- John Nielsen, Western Resource Advocates
- Sarah Cottrell Propst, New Mexico Department of Energy, Minerals & Natural Resources
- John Putnam, Colorado Department of Public Health & Environment
- Kent Singer, Colorado Rural Electric Association
- John Stulp, Agriculture & Rural Communities Representative
- John Swartout, Colorado Counties, Inc.
- Shawn Taylor, Wyoming Rural Electric Association
- Will Toor, Colorado Energy Office
- Colorado Public Utilities Commission (PUC) observed

## INCREASING CLEAN ENERGY

**By 2024, 50% of the energy our cooperative consumes will come from renewable resources**

Our members have asked for more renewable resources, so as we accelerate retirement of our coal generation, we're replacing it with clean energy in locations across our members' service territories. To start, we're adding six utility-scale solar projects and two utility-scale wind projects, bringing our system up to over 2 gigawatts of renewables by 2024. This will include the most solar of any cooperative in the nation.

### KEY STEPS

- Bring over 1 gigawatt of additional utility-scale renewable wind and solar projects online by 2024 in seven of our members' service territories — enough to power nearly 850,000 homes

#### Projects coming online by 2024

- |  |                                       |
|--|---------------------------------------|
| <b>1</b> Niyol Wind, 200 MW            | <b>5</b> Dolores Canyon Solar, 110 MW |
| <b>2</b> Crossing Trails Wind, 104 MW  | <b>6</b> Axial Basin Solar, 145 MW    |
| <b>3</b> Spanish Peaks II Solar, 40 MW | <b>7</b> Escalante Solar, 200 MW      |
| <b>4</b> Coyote Gulch Solar, 120 MW    | <b>8</b> Spanish Peaks Solar, 100 MW  |

#### Existing Wind

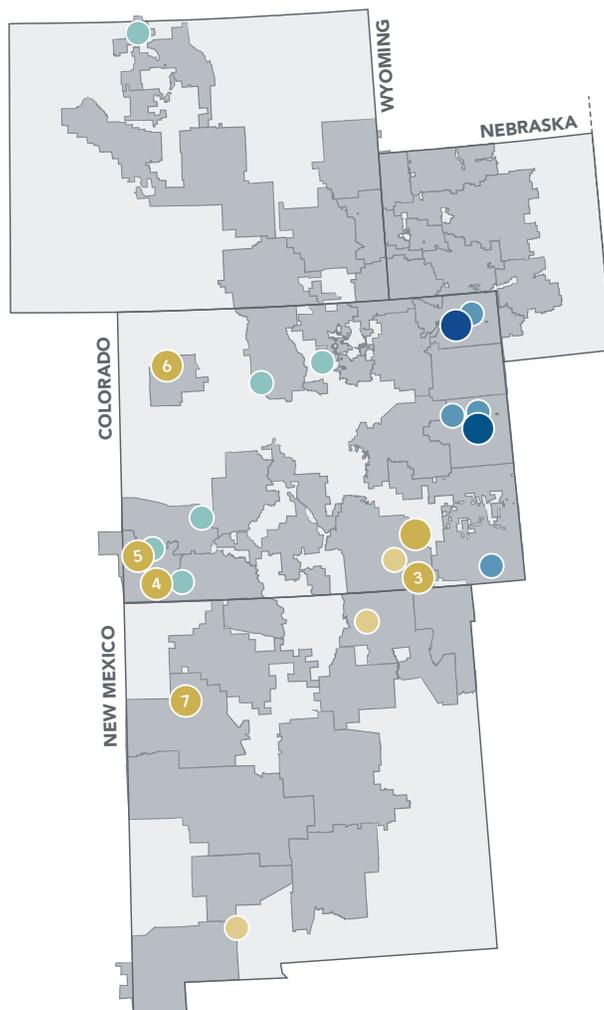
 367 MW total

#### Existing Solar

 85 MW total

#### Existing Hydro

 26.56 MW small hydro total, plus WAPA allocations



## INCREASING MEMBER FLEXIBILITY

**Our members are working together to develop a more flexible contract structure so they can self-generate more renewable energy than ever before**

**We're making it more affordable for members that choose to self-generate to take advantage of that opportunity**

In April 2019, our members voted to pursue changes to their contracts with Tri-State and each other to make it possible to locally generate more than 5% of their energy, as previously agreed. By the end of 2019, we implemented a provision so members have the option to build community solar to serve an additional 2 megawatts or 2% of their consumption.

In April 2020, we expect the member-comprised contract committee that has been reviewing flexible contract and self-generation options to make their recommendations to the Tri-State Board of Directors so they can vote on their preferred changes and we can implement those adjustments.

### KEY STEPS

- Implement the board's decision regarding partial-requirements contracts and additional self-generation
- Partner with a solar and energy services provider to make local renewables easier and more affordable to build



## EXTENDING THE BENEFITS OF A CLEAN GRID

We're committing nearly \$2 million to extend the electric vehicle (EV) charging network across our members' service territories and are otherwise promoting EVs and EV solutions in rural areas

We're expanding programs to help consumers save money and energy while cutting emissions through energy efficiency (EE), beneficial electrification (BE) and other initiatives

As we rapidly transition to power the grid with clean energy, there are more and more opportunities to power products with low-cost, reduced-emission electricity. These are some of the exciting benefits of the energy transition, but not all of them are readily available to the rural communities we serve. An electric vehicle (EV), for example, will only take you as far as there's a place to charge it, and there aren't any charging stations in a lot of rural areas. That's why we're working with our members to expand the regional EV charging network by allocating each member \$45,000 to install charging stations in their service territories. Access to these charging facilities will give rural consumers the option to choose EVs the next time they buy vehicles by making charging available in their communities. It will also substantially expand the regional and state EV charging networks for everyone to use.

We're committing to expand more of the benefits of a clean grid than just access to EVs and charging. We know beneficial electrification (BE) can save consumers money at the same time that it lowers emissions. We know energy efficiency (EE) can lower energy bills and energy use, and demand-side management (DSM) can lower the total amount of energy we all use so we don't need as many resources to meet our



combined power needs. Together, this suite of tools can make it possible for all of us to enjoy energy savings – on our power bills through lower costs and out on the grid through lower demand and emissions. Tri-State is studying how much those savings might be, and how we can share more of them.

### KEY STEPS

- Allocate \$45,000 per member — nearly \$2 million in total — to install EV charging stations in their service territories, and promote solutions to increase rural EV usage and equity
- Promote BE, EE and DSM and study opportunities to bolster programs, like through support of the Beneficial Electrification League of Colorado and other state chapters
- In Colorado, study potential emissions reductions associated with BE



## COMMITTING TO COMMUNITY AND EMPLOYEES

We're providing retraining and transition support for employees affected by these changes

We're committed to working with impacted communities to find meaningful economic development opportunities

We're working with local, state and federal leaders to support a truly just transition from coal

Our REP will change Tri-State as a cooperative, including by directly impacting nearly half of our employees and many of the communities in which they live and work. After their commitment to keeping the lights on for all of us, Tri-State is committing to help them better-manage the challenges of the transition.

## KEY STEPS

- For Escalante employees, offer generous severance packages, options to apply to positions at other Tri-State facilities, assistance for financial planning and education, and supplemental funding for health benefits
- For the Escalante area, contribute a \$5 million financial package to invest in community development and execute a new \$200 million solar project on Escalante Station property
- For Craig Station, the Colowyo Mine and the surrounding areas, work with employees and community members to develop and begin to implement economic development, retraining and other strategies to ease the transition over time, including executing a new solar project on the Colowyo Mine property
- Work with local, state, federal, and industry leaders to develop, fund and implement retraining, educational and economic development solutions in addition to those we provide



## LOOKING FORWARD TO A BRIGHTER FUTURE

We're striving for 100% clean energy in Colorado by 2040, and will outline steps for 2030-2040 reflecting our effort to achieve that goal in our 2024 resource plan for the Colorado PUC

We're striving to maintain or reduce rates for members in all states we serve as we implement the REP

We're promoting a western Regional Transmission Organization (RTO) to efficiently and cost-effectively integrate more renewables into the grid

Our REP, like the broader energy transition, is dynamic. Expectations and goals, not to mention technologies and costs, are always changing, and we expect that our REP will change, too. While we work to accomplish the initiatives outlined here, we know we will add more in our pursuit of delivering on our mission: to provide reliable, affordable and responsible power to our members.

We all use electricity, and we are all part of the energy transition. How we all work together to achieve this transition is what will make the difference to the people who provide electricity for us all to use. We will all enjoy the benefits of this energy transition. Imagine what we can accomplish if we all work together to lessen its negative impacts.

We are energized by the potential of this transition, even as we work to manage the challenges that remain. To be able to efficiently, cost-effectively and equitably implement this REP and a broader energy transition, there's an immediate need to work together on solutions that achieve:



- **Dedicated and meaningful support for transitioning communities**, so communities that lose employment, tax and royalty payments, and other benefits associated with existing generation and production facilities don't have to carry the weight of the transition alone.
- **Treatment for cooperative debt and stranded assets**, so cooperative associations can retire coal generation and add renewables in accordance with state regulations without endangering financial stability.
- **The formation of an RTO**, to secure electricity reliability and affordability while transitioning to a clean grid in a cost-effective and efficient manner.
- **Streamlined siting and permitting for necessary infrastructure**, to be able to build transmission and generation infrastructure that meets the time and cost expectations of the clean energy transition.

The REP will have regional impacts, and consideration of these impacts is paramount to Tri-State because our 42 utility members serve more than a million consumers across four states, and this plan changes our cooperative. It will directly impact almost half of our employees. It will require significant investment and disinvestment decisions. If we work together it will also ensure significant emission reductions, a strong financial position, predictable flat to reduced member rates in all states, and create as much time as possible for us, our employees and communities to plan for the future.

Balancing these impacts will not be an easy task, but it is a necessary one, and Tri-State is committed to working with our employees, their communities and others across the region to smooth the effects of this transition. As a cooperative, we believe that if we work together, a bright future and clean grid is in reach.

*Cooperative power. Transformed.*

