OUR COOPERATIVE **ROADMAP**

Transforming the Future



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COOPERATIVE INTRODUCTION

United Power is a not-for-profit electric cooperative, powering nearly 114,000 meters at homes, businesses, and farms along Colorado's northern Front Range. The very name "cooperative" speaks to the nature of its operation – United Power exists to work cooperatively with its members to provide them power, but there are so many more ways the cooperative powers its communities. United Power knows the real power of the cooperative lies in the connections with its members.

ROOTED IN A RICH HISTORY

United Power was originally founded as Union Rural Electric Association in 1938 by farmers from Adams, Boulder, Gilpin, Jefferson, and Weld counties committed to powering farms and ranches along the rural Front Range. Roughly a year after the cooperative was incorporated, construction began on 300 miles of distribution line that would serve 750 members.

Fifty years later, the cooperative's name was changed to United Power, a visible sign of a new, more powerful entity emerging in the electric industry. Today, United Power continues to innovate and support members with services and electricity to power the vitality and prosperity of its member communities.

THE COOPERATIVE DIFFERENCE

Cooperatives are unique because they are owned by the consumers they serve, regulated by a member-elected board of directors, and guided by a set of seven principles that ensure that members are well-informed, have a voice in the cooperative's operation, and share in the success of the organization.

United Power's directors serve staggered terms, and as members themselves, they represent the needs and interests of all co-op members. Directors are charged with overseeing the overall strategic direction of the cooperative's business, including ensuring financial accountability and transparency, setting equitable rates, and advocating for members' best interests.

A GROWING SERVICE TERRITORY

Surrounding Denver on three sides, the cooperative energizes 17 metro area communities across 900 square miles along the north central Front Range of the Colorado Rockies. The service territory wraps around the north and west borders of Denver International Airport and includes major metropolitan corridors along Interstates 25 and 76, State Highways 7, 52, and 85, and E-470. The territory also extends west to a noncontiguous service area through Golden Gate and Coal Creek canyons.

Since the turn of the century, the co-op has often ranked among the top 10 fastest growing electric cooperatives in the country and fastest growing utilities in Colorado. In 2021, the cooperative surpassed the 100,000-meter milestone, and steady growth driving new residents and businesses into the United Power service area pushed the cooperative over 113,000 meters in 2024.

COOPERATIVE POWER MIX

United Power is an electric distribution cooperative, meaning it purchases wholesale electricity and delivers it to end-use consumers – the cooperative's members. In May 2024, the cooperative transitioned from a traditional single wholesale power supplier, allowing it to build a flexible and responsible portfolio of energy resources. This transition resulted in an immediate and impressive 26% reduction in carbon intensity.

United Power now provides power from a diverse portfolio of generation resources that produce electricity from low or zero-carbon sources, such as large-scale solar installations. Additionally, United Power continues to be a leader in integrating rooftop solar from its members. More than 12,600 United Power members produce electricity via rooftop solar systems, returning any excess power they generate onto the cooperative's grid for local consumption.

As is evidenced by the significant investment in United Power by the U.S. Department of Agriculture (USDA) through the Empowering Rural America (New ERA) Program, United Power is committed to meeting legislative greenhouse gas (GHG) reduction targets while balancing the demand for affordable, sustainable, and reliable power.

COMMITTED TO INNOVATION

United Power has built a reputation for adopting and implementing innovative technology to deliver effective, efficient, and beneficial power to its members. Since powering the Sol Partners[®] Cooperative Solar Farm in May 2009, the first cooperative community solar project in the nation, the co-op has kept an eye on emerging technology that will provide safe, reliable energy.

The cooperative is among the top utilities nationwide for its cumulative rooftop solar installations and integration of renewable projects. Complementing these renewable energy resources, United Power is the leader among Colorado utilities in distributed battery energy storage systems (BESS), deploying advanced battery systems with a combined capacity exceeding 100 MW connected to its distribution grid. These systems are pivotal in enhancing load balancing, system resiliency, and energy security.

In response to the rapidly changing demands of members, the cooperative is implementing a hyper-localization strategy to offer more choices and integrate more renewable resources. This strategy not only provides a resilient grid to power the local area, but this seamless connectivity provides added value for members with rooftop solar and storage. A connection to a stable delivery system provides the freedom to produce, store, and share energy with the community, while ensuring reliable service and support from the cooperative for all members at the end of the line.

The cooperative will continue exploring opportunities to make electric vehicle (EV) ownership more practical and accessible and remains committed to maintaining a menu of rebates and incentive programs to empower members to invest in energy-efficient appliances, adopt smart home technologies, and participate in demand response programs. More than just innovative energy improvements, these initiatives also make economic sense for the cooperative's members while providing reliable energy.



*As of December 31, 2024.



113,890 Meters Served*

Miles of Line*

7,072



900 Square Miles



649 MW System Peak*



VISION

Powering Lives, Powering Change, Powering the Future – The Cooperative Way

MISSION

To safely and responsibly deliver reliable electricity and excellent service for our members.

COOPERATIVE PRINCIPLES

Cooperatives, like United Power, operate according to a set of guiding principles. These principles put the needs of members first.



OPEN & VOLUNTARY **MEMBERSHIP**

Cooperatives are voluntary organizations, open to everyone who is able to use their services and is willing to accept the responsibilities of membership.

DEMOCRATIC MEMBER CONTROL

Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions.



MEMBER ECONOMIC PARTICIPATION

Members contribute equitably to, and democratically control, the capital of their cooperatives.



AUTONOMY & INDEPENDENCE

Cooperatives are independent, self-help organizations controlled by their members.

EDUCATION, TRAINING, & INFORMATION

Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the development of their cooperatives.



COOPERATION AMONG COOPERATIVES

Cooperatives serve their members most effectively and strengthen the cooperative movement by working together.



CONCERN FOR COMMUNITY

While focusing on member needs, cooperatives work for the sustainable development of their communities.



EXECUTIVE SUMMARY

Our Cooperative Roadmap captures the collective vision, guiding principles, and strategic priorities essential to successfully deliver on United Power's mission and vision.

This document serves as a guide for the allocation of people, resources, and leadership attention as the cooperative drives toward an increasingly dynamic, sustainable, and complex energy future. It enables and informs conversations within United Power and with the board of directors, its membership, and the communities in which it serves about the co-op's future.

Our Cooperative Roadmap, initially published in 2022, led to the successful transition toward a low carbon future and more flexibility in power supply. It not only unlocked major funding opportunities but also directed United Power's focus toward hyper-localization of resources and the adoption of a "no-regrets" technology strategy, preparing United Power for the new electric future. As a result, it positioned the cooperative to secure a \$261 million New ERA Program grant, an investment that will ensure the acquisition of clean energy resources and a significant reduction in GHG emissions. As a cooperative, United Power recognizes the vital role of its members and is committed to meeting their evolving energy needs. Just as the founders of United Power (then called Union REA) decided more than 85 years ago, the future is worth the investment. The cooperative is building and preparing for a dynamic future, which entails a transition to cleaner energy on a local, reliable, flexible, and resilient distribution system.

As member demands, markets, and regulatory requirements continue to expand, United Power understands that to keep pace with the rapid progression of the electric industry, it must also evolve its tools, resources, and expertise. Growth in manufacturing, EVs, solar, battery storage, the emergence of hyperscalers (i.e., large-scale data centers), and the electrification of oil and gas operations are among the forces reshaping electricity loads and investments for local grids today. With increasing electricity demand and infrastructure needs, robust utility planning for reliable, resilient, and affordable electricity systems is more important than ever.

The future will require optimizing power supply capacity, leveraging local power resources, and reimagining business practices and investments to adapt to the evolving environment. United Power is committed to enhancing its infrastructure for load growth, adaptability, and resilience. It aims to balance cost, reliability, and flexibility in serving members' needs, while staying agile



through the deployment of innovative technologies. The cooperative will explore the value and assess and mitigate the risk in the ethical use of machine learning and other artificial intelligence (AI) solutions throughout the organization. Further, it will manage power prices, leverage new energy markets, and implement grid technologies, like battery storage, in a hyper-localized fashion.

United Power is leading the industry in a move toward the distribution system operator (DSO) model. This operating model will allow a more collaborative service and interactive approach to energy delivery. This strategic approach is essential for United Power as the electrical landscape evolves with increasing integration of distributed energy resources (DERs) like solar panels, battery systems, and EVs; multiple power suppliers; and additional generation assets. The goal is to give members more flexibility and a wider range of energy choices. In recognition of the cooperative's commitment to innovation, knowledge sharing, and moving the industry forward, United Power was honored with the Survalent Industry Innovation Award in 2024.

Investments from the USDA and the Department of Energy (DOE) will play a crucial role in advancing these strategies and supporting United Power members and critical community resources. New ERA Program funds awarded by the USDA are earmarked for projects that reduce overall GHG emissions. This investment will be used to offset the cost of United Power's transition to a strategic portfolio of clean energy that includes power purchase agreements that will provide more than 760 megawatts of renewable resources to its members by 2030. Additionally, DOE grant funds support rural emergency services, add microgrids for resiliency, and support critical infrastructure.

Amid these changes, the co-op's dedicated workforce remains committed to the mission of providing safe, reliable power and excellent service to members. United Power takes pride in supporting community organizations and contributing to the success and wellbeing of its communities. Employees actively participate in community events, industry forums, and advocacy efforts to ensure that legislation and regulations align with Our Cooperative Roadmap's vision. These actions are intentional steps to ensure a strong and resilient future for the cooperative's growing membership and to keep the power flowing.

United Power is **Here for Good**, committed to providing long-term, reliable electricity and services that support its communities' economic growth and vitality.

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DSO ACTION PLAN

United Power is leading the industry in a move toward a DSO model to transition from a traditional electricity distributor to a facilitator of a dynamic, decentralized, and member-centric energy ecosystem, enabling a sustainable and reliable grid for the future.

The shift to a DSO model is driven by several key factors, including the growing demand for integration of local renewable energy sources; regulatory policies driving electrification and decarbonization of major industries like oil and gas operations; new smart technologies that can be leveraged for grid optimization, security, and efficiency; and the necessity for a resilient and modern grid to meet the future's increasing energy needs.

The flow of energy used to only move in one direction, but this model is quickly changing. Technology, like EVs and distributed generation such as solar photovoltaic systems and batteries, are changing the way cooperative members use electricity and interact with the local grid.

United Power has developed a DSO Action Plan to ensure it can deliver a reliable and efficient flow of electricity within its distribution network by maintaining critical infrastructure, such as substations, transformers, and power lines to ensure safety and reliability, and managing the integration of DERs, like solar panels and battery storage, while facilitating connections for new members and opportunities for independent energy generators.

The DSO model also drives grid modernization by analyzing data from smart devices and sensors to enable a smarter, more flexible system to support technologies like EVs and demand response tools. This grid modernization also ensures increased resiliency through the integration of hyper-local energy generation, microgrids, and other adaptive measures.

Essentially, the transition to a DSO will ensure that United Power members, who are increasingly becoming both consumers and producers of energy, have a reliable electrical distribution network that maximizes the transfer and use of electricity from DERs to their homes, businesses, and industries.

HYPER-LOCALIZATION

Hyper-localization is a vision of providing power on a system that has local producers and consumers. It is the culmination of providing more choice, integrating more local resources, and balancing all these factors to create a system that meets the needs of local consumers.

DISTRIBUTION SYSTEM OPERATOR MODEL



FOUNDATIONAL SUPPORTS

Risk Management, Workforce Development, Financial Strength, Asset Management, and Cooperative Culture are essential foundational elements that underpin United Power's business operations and strategic ambitions. These areas enable the cooperative to navigate challenges, capitalize on opportunities, and achieve its overarching business objectives.

By integrating these elements into Our Cooperative Roadmap, United Power creates a cohesive framework that drives sustainable growth and operational efficiency. This approach ensures the cooperative can navigate challenges, seize opportunities, and achieve business goals, reinforcing its commitment to a resilient and forward-thinking organization.



RISK MANAGEMENT

Risk is an element in all aspects of the cooperative's operations, from the inherent dangers faced daily by field employees to physical and cybersecurity threats targeting co-op assets.

Protecting United Power's interests and the members it serves necessitates a robust and comprehensive approach to risk management.

Managing risks requires a safety-first culture, strategic maintenance, and relentless mitigation. United Power regularly monitors, evaluates, and reviews potential threats to ensure it is implementing effective programs, policies, measures, and training to protect both persons and property. Our Cooperative Roadmap outlines how United Power will take a systematic yet agile approach to long-term risk management while always focusing on safety. The cooperative will continue to connect with the community and partner with local organizations to educate them about electrical safety through safety demonstrations, public awareness campaigns, and school programs.

United Power acknowledges that risks will shift over time as technology, tactics, and ideology adapt. Therefore, its plans and areas of focus will continually evolve and adapt to the current threat environment affecting United Power and its operations. Effective risk management will help the cooperative anticipate and mitigate potential issues. Further, United Power is committed to maintaining appropriate insurance policies to provide a financial buffer to protect the cooperative and the interest of its members.

WORKFORCE DEVELOPMENT

United Power views its employees as a strategic investment.

The cooperative's workforce development is guided by principles incorporating diversity, equity, and inclusion; competitive compensation and benefits; and proven earn-and-learn models like apprenticeships and internships.

Through initiatives such as registered apprenticeships, internships, training, educational reimbursement, career ladder expansion, and succession planning, United Power supports its employees' continual growth and skill development. This investment is critical to ensure that employees feel engaged with the mission of the organization and invested in their own career advancement. United Power is committed to fostering an inclusive and welcoming environment where diverse perspectives and opinions are valued. The cooperative benefits from partnering with educational institutions, labor unions, and community-based and economic development organizations. This approach not only drives innovation and resilience within the cooperative but also enhances employees' understanding of one another and the communities they serve.

Our Cooperative Roadmap will steer the future of United Power's workforce development strategy, ensuring that the way the workforce is recruited, hired, and retained best meets the co-op's goals and objectives.

Financial strength is fundamental to Our Cooperative Roadmap, ensuring stability, enabling flexibility, and supporting longterm growth and sustainability.

As a member-owned, not-for-profit electric distribution cooperative, United Power returns eligible operating margins to its member-owners and thereby maintains a tax-exempt status. This tax savings allows the cooperative to remain competitive with larger investor-owned utilities. Margins are allocated to members each year and are held as patronage capital until such time as the board of directors determines it is financially feasible to retire outstanding capital credits and return funds to members. During the intervening years, the cooperative utilizes the retained patronage capital to fund on-going capital and operating expenditures.

Cooperatives, like United Power, are not subject to the jurisdiction of the Colorado Public Utilities Commission. Rather, the member-elected board of directors serves as the cooperative's regulatory body and establishes United Power's rates. This rate-setting structure allows the cooperative to remain nimble and adjust rates as business needs require.

United Power's business strategy is to operate, maintain, and invest in distribution infrastructure to provide reliable, affordable power to its members. For the past two decades, United Power has operated under the principle that "growth pays its way," meaning members contribute the necessary funds to cover the capital costs of added load. Collecting costs of capital construction from members specifically benefiting from system expansions protects the cooperative and ensures those costs are not carried by all members through rate base.

In 2024, United Power earned an "A" investmentgrade credit rating from Fitch Ratings. The rating agency looked closely at the cooperative's past financial performance and weighed the growth opportunities in its service territory. Public power entities and cooperatives are rated in the same pool as investor-owned utilities, and as such, this "A" rating indicates the financial strength of the cooperative and is a testament to the hard work of its dedicated employees.

United Power's finance team plays a crucial role in supporting the cooperative's roadmap by meticulously monitoring the budget and developing comprehensive financial forecasts. This process ensures that financial resources are effectively allocated to align with strategic goals and support key initiatives. United Power's finance team, supported by oversight from the board of directors, ensures that all expenditures and investments meet internal guidelines, lender requirements, and indenture obligations.

As United Power expands and optimizes system capacity, improves infrastructure, and leverages technology to upgrade equipment and stay ahead of growth in a rapidly changing energy environment, it is critical to consider the financial impacts. With robust financial health, United Power is more agile in responding to new opportunities and adapting to market changes. The cooperative has the freedom to invest in innovative projects, explore new business ventures, and adjust strategies as needed.

ASSET MANAGEMENT

Asset management is a cornerstone of United Power's operations, maintenance, and planning, underpinning both the reliability and efficiency of service delivery.

Effective asset management ensures that all physical assets such as transformers, power lines, substations, fleet, and other critical infrastructure are accounted for, maintained, upgraded, and utilized to their fullest potential. By taking a holistic and proactive approach to managing assets throughout their lifecycles, the cooperative can drive down costs, improve planning, target maintenance, and ultimately provide better service to United Power members. This is an ongoing program targeting the entire asset lifecycle from planning and design through construction and maintenance.

In 2024, United Power built a construction management system incorporating process improvement, project tracking, and close out. This is the first step toward the cooperative's goal of a comprehensive asset management program. In future years, United Power will work with stakeholders to build out an asset management system that provides a "single source of truth" to help it bring together geospatial data, asset condition, stakeholders, and AI tools to build a best in class asset management program.

COOPERATIVE CULTURE

A strong culture is essential for securing United Power's future success.

The cooperative's strategic initiatives are aimed at cultivating a dynamic, high-performing, and innovative culture to support and advance business strategies.

A powerful organizational culture is fundamental to achieving excellence. United Power has been actively engaging with its employees to address and enhance culture, understanding its role in shaping the cooperative's organizational identity and operations. United Power has committed to evolving culture in alignment with the vision articulated in Our Cooperative Roadmap. The goal is to build a unified, healthy, and highperforming organization capable of embracing and thriving in a promising future. Delivering on the commitment to United Power members is crucial to maintaining a cohesive cultural thread throughout the cooperative. Implementing feedback-driven initiatives such as enhanced communication strategies and cross-organizational activities, evaluating progress consistently, and using the insights gained to address cultural challenges and set actionable goals for the coming year are key strategies. Ongoing reflection and reassessment ensures that United Power stays aligned with its cultural objectives and continuously strengthens its organizational fabric.

ROADMAP OVERVIEW

GUIDING PRINCIPLES

The following guiding principles were used to develop this roadmap. They are the lenses through which United Power evaluates options, particularly when there are trade-offs.



SAFETY

United Power prioritizes safety in every decision and action. By fostering a culture of transparency, trust, and teamwork, the cooperative ensures that safety is reflected in every aspect of its operations to protect employees, members, and communities.



RELIABILITY

United Power strives to deliver highquality, uninterrupted service to members through the design, operation, protection, and maintenance of a robust and resilient electric distribution system.



AFFORDABILITY

United Power is committed to securing fair and competitive wholesale rates, managing costs, and responsibly allocating those costs across the membership with stable and transparent rate options.



FLEXIBILITY

United Power demonstrates maximum agility and adaptiveness through forward-looking plans, versatile and innovative programs and business models, and diverse power supply options as the cooperative responds to changes in its environment and the needs of members and communities.



RESPONSIBILITY

United Power acts ethically, sustainably, and in the best interest of its members and communities as the cooperative manages operations and secures resources.

STRATEGIC FOCUS AREAS

Our Cooperative Roadmap centers around four strategic focus areas. These are the critical areas where the cooperative must excel to achieve its vision and mission.

EMI EMI MEI

EMPOWER AND ENGAGE WITH MEMBERS AND COMMUNITIES

- Engage with members in meaningful ways.
- Support members and their communities.
- Support economic development in the communities served.

PROVIDE FLEXIBLE, AFFORDABLE, RESPONSIBLE POWER AND SERVICES

- Optimize power supply.
- Provide members flexible options for services.
- Integrate power supply and services into the DSO model.

CONTINUOUSLY OPTIMIZE THE ELECTRIC DISTRIBUTION SYSTEM

- Expand electric distribution system capacity.
- Enhance system reliability through strategic maintenance.
- Implement future-oriented design and operational practices.

ACHIEVE AND MAINTAIN BUSINESS AGILITY AND RESILIENCE

- Continuously evolve and refine the business continuity plan.
- Cultivate a business technology environment that supports resilience, reliability, and future enhancement.

EMPOWER AND ENGAGE WITH MEMBERS AND COMMUNITIES

Electric cooperatives are owned by the members they serve, which means the members are not just consumers but stakeholders in the cooperative's success.

This relationship between United Power and its members gives the cooperative an advantage over other energy service providers and allows it to be responsive to members' evolving energy needs, create sustainable change and improvements, and seize opportunities for economic innovation and investment.

As member expectations evolve, United Power will continue to invest in energy programs and education, broad communication to members, and ongoing training for employees and its board. Enhancements to communications and processes will ensure members can easily interact with their cooperative and receive the information and resources they need to manage their account, cooperative membership, and energy usage. The energy needs across United Power's communities and business sectors are diverse. Strong relationships with community leaders and organizations enable the cooperative to better understand and serve their goals for economically secure, innovative, and vibrant communities. Partnerships with community organizations are key to leveraging grant funding that will further the resiliency of local communities, increase access to renewable power, and strengthen the local distribution grid. And from small businesses to large commercial accounts, the cooperative is also investing in resources and expertise to provide power and tailored energy solutions that help local businesses improve energy load factors, meet environmental goals, and gain efficiencies in their operations.

Building deeper connections with members and community stakeholders not only strengthens local economies and drives job creation, but ensures the cooperative remains relevant, responsive, and beneficial to the people it serves.



ENGAGE WITH MEMBERS IN MEANINGFUL WAYS

SUPPORT MEMBERS AND THEIR COMMUNITIES

SUPPORT ECONOMIC DEVELOPMENT IN THE COMMUNITIES SERVED



EMPOWER AND ENGAGE WITH MEMBERS AND COMMUNITIES

ENGAGE WITH MEMBERS IN MEANINGFUL WAYS

- Establish United Power as a trusted energy advisor.
- 1.1 Purposefully understand and address the unique energy needs of United Power members and communities to serve as a resource for energy information and programs that help members manage energy use, utilize more renewable power, and integrate electric technologies.
- 1.2 Engage and educate members and stakeholders on the evolving energy landscape and benefits of grant-funded energy projects, while fostering strong relationships with policymakers to ensure the cooperative is involved in discussions on energy initiatives that affect its members.

Optimize member interactions.

- 2.1 Utilize technology and a 'voice of the member' focus to improve business processes so members can interact with the cooperative seamlessly through a variety of channels and devices.
- 2.2 Implement tools to increase member access to activities and programs like innovative energy solutions, convenient billing and payment options, and the cooperative's annual meeting and director elections.

SUPPORT MEMBERS AND THEIR COMMUNITIES

- 3 Seek involvement opportunities where United Power can provide support to the mutual benefit of the community and the cooperative.
- 3.1 Support key organizations that serve United Power members through monetary contributions, energy expertise, or employee volunteerism.
- 3.2 Coordinate outreach activities that support the cooperative's future workforce, develop local leaders, and engage members.
- 4 Demonstrate commitment to fostering an inclusive and diverse cooperative.
- 4.1 Seek a broad range of representation on advisory boards and member committees to ensure the cooperative hears from diverse perspectives.
- 4.2 Promote an inclusive, respectful, and responsive culture for United Power's workforce, members, and communities.

- 5 Create and execute community benefit plans in support of the New ERA Program and other grant programs through the DOE and the state of Colorado.
- 5.1 Engage with community stakeholders to ensure the benefits of grant funding are flowing to the local workforce and disadvantaged communities as intended by the USDA, DOE, and other funding entities.
- 5.2 Monitor milestones in partnership with local communities and workforce organizations to foster a sustainable clean energy infrastructure.

SUPPORT ECONOMIC DEVELOPMENT IN THE COMMUNITIES SERVED

- 6 Help the cities and towns United Power serves build toward their goals.
- 6.1 Seek to understand the unique needs, challenges, and goals of each community the cooperative serves and provide support based on the needs and goals of each community.
- 6.2 Provide and gather information to support the short-term and long-term goals being set by local officials, town planning commissions, and economic development organizations.

Provide excellent service and innovative solutions that support major employers.

- 7.1 Partner with area businesses by providing energy advice and expertise and offering energy solutions that help them meet their goals and comply with legislative or regulatory targets.
- 7.2 Explore options and evaluate the feasibility of programs to attract and retain major employers to the service territory.

PROVIDE FLEXIBLE, AFFORDABLE, RESPONSIBLE POWER AND SERVICES

As the needs of the distribution system have increased, so has the need for United Power to evolve and optimize the supply of power and services to its members.

Electric transmission has become increasingly difficult to obtain. Affordable renewable energy and battery systems enable members to provide their own energy supply. Rising peak demand requires resources capable of managing and offsetting that peak. Increasing loads mandate additional energy resources be procured and delivered to United Power's territory.

In May 2024, United Power exited its former wholesale power contract, successfully transitioning to an independent electric distribution cooperative. Rather than be bound to restrictive requirements of a single supplier contract, United Power now has the freedom and flexibility to secure power resources that better meet the needs of its members. The cooperative is focused on optimizing its power supply through efforts such as diversification, competitive bidding, and hyper-localization, which involves generating power close to where it is consumed. Hyper-localization provides additional benefits to local communities, including the generation of jobs, increased tax revenue, and support for community development.

United Power is moving to a DSO model to facilitate local energy exchange and optimize distributed resources. This shift involves moving beyond the traditional one-way delivery of electricity, enabling members to actively engage in the energy ecosystem through load management, localized energy projects, and tailored services. This approach will be guided by the cooperative's DSO Action Plan which clearly defines what a DSO is for United Power. The plan supports the integration of local resources and new technologies while ensuring grid stability, reliability, and an enhanced member experience.

United Power's need for providing power goes beyond procuring and delivering generation. Communities and regulators expect United Power to provide a sustainable power supply that demonstrates its commitment to the future. Federal and state investments in rural clean energy will greatly enhance the strategies United Power is adopting and a considerable investment from the New ERA Program will allow the cooperative to secure additional renewable generation and significantly reduce GHG emissions.

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OPTIMIZE POWER SUPPLY

PROVIDE MEMBERS FLEXIBLE OPTIONS FOR SERVICES

INTEGRATE POWER SUPPLY AND SERVICES INTO THE DSO MODEL

PROVIDE FLEXIBLE, AFFORDABLE, RESPONSIBLE POWER AND SERVICES

OPTIMIZE POWER SUPPLY

Hyper-localize generation.

- 1.1 Seek and cultivate new generation within the cooperative's footprint by connecting transmission and acquiring land in areas where generators can be placed to enhance costefficiency and improve the reliability of power for United Power members.
- 1.2 Strategically engage with existing generators within the service territory to maintain reliable and affordable generation for cooperative members.

2 Develop and expand generation portfolio.

- 2.1 Stay current with and support the development of emerging generation technologies to enhance United Power's energy supply, ensuring that it can adapt to increased demand and future changes in fuel.
- 2.2 Diversify generation assets to enhance flexibility in power supply and effectively meet United Power members' growing needs.

Evaluate methods to reduce risk.

- 3.1 Develop methods and metrics to evaluate the cooperative's position in the wholesale energy market, ensuring it effectively understands the cost and value of dispatch and transaction decisions within a market.
- 3.3 Develop evaluation criteria to balance risk exposure effectively, enabling United Power to stabilize energy prices while minimizing costly risks.

Optimize participation in the wholesale energy market.

- 4.1 Prepare and plan for changes in market structures.
- 4.2 Develop an integrated resource plan to evaluate generation alternatives necessary to ensure an optimal selection of energy resources and supply agreements.

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PROVIDE MEMBERS FLEXIBLE OPTIONS FOR SERVICES

5 Optimize load management and enhance member-supplied options.

- 5.1 Expand the distributed energy resource management system (DERMS) to include demand response and load management services for commercial members by collaborating with DERMS providers to integrate capabilities tailored to commercial energy needs.
- 5.2 Enhance the DERMS platform to control a broader range of DERs, including EVs, solar inverters, battery systems, and smart panels, by integrating new functionalities and technologies.
- 5.3 Standardize DER interconnections by developing and implementing uniform procedures for integrating new DER technologies, ensuring seamless grid compatibility and minimizing delays.

6 Embrace cooperative principles in local project implementation.

6.1 Build community partnerships and seek local funding opportunities for energy projects

that align with both United Power's goals and community needs, focusing on mutual benefits and cooperative principles.

6.2 Leverage the procedures and processes developed for current grants to streamline future applications, enhancing efficiency and serving as a resource for local communities to secure funding for energy projects.

7 Implement services that support members.

- 7.1 Enhance member visibility into their energy usage by providing accessible and user-friendly data tools.
- 7.2 Continue to offer and expand Energy-as-a-Service programs, integrating these offerings into existing platforms when possible.
- 7.3 Broaden the scope and range of supported and compatible devices in thermostat and EV programs to ensure more members can participate in and benefit from these programs.

INTEGRATE POWER SUPPLY AND SERVICES INTO THE DSO MODEL

Integrate DERs into the DSO model.

- 8.1 Evaluate options for additional DERs on United Power's system. As the distribution system expands to facilitate a growing membership, finding opportunities to bring on additional DERs builds the cooperative's ability to provide local, affordable energy.
- 8.2 Optimize DERs through forecasting, aggregation, and development of controls for dispatching DERs in bulk.

Integrate power supply into the DSO model.

- 9.1 Evaluate the cooperative's power supply for new options by coordinating with power suppliers, reviewing technologies, and diversifying generators.
- 9.2 Facilitate local power supply options by acquiring land, developing the distribution system, and supporting delivery and receipt of large amounts of energy.

Integrate services into the DSO model.

- 10.1 Implement advanced forecasting models and real-time data analytics to accurately predict and manage the variability of DERs within the grid.
- 10.2 Optimize and standardize the interconnection process to accelerate the integration of cooperative and member-owned DERs, minimizing barriers and facilitating the seamless integration of new technologies while improving overall grid efficiency and reliability.
- 10.3 Enhance grid management capabilities with flexible systems that dynamically adjust to real-time changes in load and generation, ensuring reliable integration of DERs.

CONTINUOUSLY OPTIMIZE THE ELECTRIC DISTRIBUTION SYSTEM

The optimization of the electric distribution system is paramount as the cooperative confronts increasing demands and complexities driven by rapid electrification, the integration of DERs, and the evolving expectations of members.

As residential, commercial, and industrial sectors electrify, and as the rise of DERs and the growing demand from hyperscalers and other large power users reshape load patterns and system dynamics, United Power must adapt continuously to these new realities.

Through risk analysis and strategic maintenance, the cooperative maintains a robust, flexible, and future-proof electric grid. Embracing technological advancements will be crucial for addressing these complexities. Investments in advanced information technology (IT) and operational technology (OT) systems such as advanced metering infrastructure (AMI), advanced distribution management system (ADMS), DERMS, and Al-driven analytics are essential for real-time monitoring, predictive maintenance, and optimizing energy flows. Strategic infrastructure investments, including upgrades to substations, transformers, and distribution circuits, are necessary to accommodate future load growth and increased DER integration. Moreover, continuous workforce training is critical to equip cooperative employees with the skills needed to operate these sophisticated technologies and systems.

A strategic focus on large load industries is vital for continued growth as a utility. Specifically, United Power's electric delivery model will play a key role in assisting oil and gas members and other large load centers in achieving their electrification and decarbonization goals. Continued strategic discussions with these members will help guide them in meeting federal, state, and local emissions reduction requirements and ensure the cooperative maintains focused and timely energy delivery.

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EXPAND ELECTRIC DISTRIBUTION SYSTEM CAPACITY

ENHANCE SYSTEM RELIABILITY THROUGH STRATEGIC MAINTENANCE

IMPLEMENT FUTURE-ORIENTED DESIGN AND OPERATIONAL PRACTICES

CONTINUOUSLY OPTIMIZE THE ELECTRIC DISTRIBUTION SYSTEM

EXPAND ELECTRIC DISTRIBUTION SYSTEM CAPACITY

- Proactively monitor and adapt to load growth and DER integration trends.
- 1.1 Assess and analyze load growth patterns and DER integration to anticipate system needs and implement necessary upgrades proactively, preventing strain and outages.
- 1.2 Monitor system capacities to ensure readiness for changes in demand and integration, maintaining optimal system performance and reliability.

2 Leverage technology to enhance outage prevention and response.

- 2.1 Utilize advanced analytics and predictive tools to identify and address potential failure points before they cause disruptions, improving overall system reliability.
- 2.2 Follow United Power's detailed bulk infrastructure improvement plan, ensuring timely completion of substation and transformer upgrades according to the cooperative's long-range plan.
- 2.3 Deploy distribution capital resources through short-range construction work plans, with regular updates and adjustments to align with budget and system needs, ensuring proactive system enhancement and reliability.

ENHANCE SYSTEM RELIABILITY THROUGH STRATEGIC MAINTENANCE

- 3 Develop and maintain United Power's electrical system on a comprehensive schedule and scale that allows for work prioritization and changing requirements.
- 3.1 Progress and expand the maintenance program to include thorough survey and analysis of key equipment and systems, prioritization based on operational importance, and regular inspections, testing, and servicing according to duty cycles and usage.
- 3.2 Conduct comprehensive substation maintenance inspections that include testing, repairing, and replacing vital equipment, and schedule impending maintenance tasks via a preventative maintenance process.

- Expand and optimize the use of emerging technologies in system inspections to proactively manage system reliability.
- 4.1 Deploy drones to conduct regular inspections of the distribution system, enabling efficient identification of maintenance needs in hard-to-reach areas.
- 4.2 Explore emerging technologies to analyze inspection data, proactively identifying potential failure points and enhancing overall system reliability.

IMPLEMENT FUTURE-ORIENTED DESIGN AND OPERATIONAL PRACTICES

- **5** Update system protection plans to accommodate future electrification.
- 5.1 Review and revise system protection standards to align with emerging electrification trends, ensuring the grid remains reliable and resilient as the energy landscape evolves.
- 5.2 Regularly update and test protection plans to incorporate new technologies and practices, maintaining system integrity and reducing the risk of outages as electrification increases.
- 5.3 Conduct an annual review and update of system protection plans to ensure they reflect the latest electrification trends and technological advancements, maintaining up-to-date standards and practices.

6 Develop and implement a comprehensive risk management strategy.

- 6.1 Thoroughly assess potential risks to operations, identifying vulnerabilities that could lead to system disruptions or financial losses.
- 6.2 Implement mitigation strategies to address identified risks, safeguard operations, and ensure the long-term stability and resilience of United Power.

- 6.3 Strengthen and execute the co-op's Wildfire Mitigation Plan, including advanced predictive growth modeling and partnerships with local organizations for early detection, to reduce firerelated risks and protect critical infrastructure.
- 7 Develop and implement a strategic plan for oil and gas members, hyperscalers, and other large load centers to aid in their decarbonization efforts.
- 7.1 Engage oil and gas members to advise the cooperative on how it can best provide for their electrification needs and support emission reduction efforts, through mutually beneficial projects.
- 7.2 Research and develop risk mitigation efforts to ensure United Power and its members are protected should a large load center drastically reduce power consumption.
- 7.3 Continue monitoring of the distribution system to prevent overloading due to large load centers.

ACHIEVE AND MAINTAIN BUSINESS AGILITY AND RESILIENCE

Business agility and resilience are key investments of United Power's strategic and operational plan.

In a rapidly growing and changing industry, it is more important than ever to take a comprehensive approach to anticipate, adapt, and act. United Power achieves and maintains business agility and resilience through targeted strategies and processes that prioritize risk management and a business technology environment that consistently pursues innovation, reliability, and resilience. The cooperative continually evaluates and refines processes, structures, and strategies to be prepared to rapidly respond to emerging needs, threats, and dynamics.

CONTINUOUSLY EVOLVE AND REFINE THE BUSINESS CONTINUITY PLAN

CULTIVATE A BUSINESS TECHNOLOGY ENVIRONMENT THAT SUPPORTS RESILIENCE, RELIABILITY, AND FUTURE ENHANCEMENT

CONTINUOUSLY EVOLVE AND REFINE THE BUSINESS CONTINUITY PLAN

- Maintain a comprehensive business continuity plan to reduce the impact of potential threats and risks.
- 1.1 Regularly review mission-critical business processes across all functional areas to identify potential risks and outline mitigation strategies to anticipate and address vulnerabilities proactively, ensuring all impacted personnel are involved and trained as needed.
- Continuously improve the business continuity plan through review, update, and testing.
- 2.1 Through organization-wide business continuity exercises, test the coordination and interdependencies of critical processes and iterate through a continuous improvement cycle to adapt cooperative strategies and foster agility in response to evolving risks.

CULTIVATE A BUSINESS TECHNOLOGY ENVIRONMENT THAT SUPPORTS RESILIENCE, RELIABILITY, AND FUTURE ENHANCEMENT

3 Continuously improve business technology operations.

- 3.1. Improve reliability, performance, and resiliency through continual evaluation and enhancement of business infrastructure.
- 3.2 Provide solutions that automate and optimize the extraction of data from multiple sources and load it efficiently into the data platform.
- 3.3 Evolve the geographic information system (GIS) suite of products to improve reliability, performance, and resiliency.
- 3.4 Continue the analysis of foreseeable future requirements for AMI and meter data management (MDM) systems, exploring options and solutions that support the flexibility needed to support member energy management and the DSO model.
- 3.5 Research emerging technologies in alignment with business objectives to identify potential business value.

Achieve excellence in service delivery.

- 4.1 Persistently develop the IT asset management program, incorporating assets of all classes, tangible and intangible.
- 4.2 Continually improve IT service delivery processes and the IT service desk platform, optimizing processes.

Continuously evolve and improve cybersecurity programs.

5.1 Improve and advance the cybersecurity program to prepare for evolving threats.

Continuously evolve and improve data governance and privacy programs.

6.1 Enhance and continue to integrate data management practices to support evolving data privacy compliance.



CLOSING REMARKS

The updating of Our Cooperative Roadmap orients United Power for continued success supporting its communities and the members it serves – and has proudly served for more than 85 years.

Meeting cooperative members' needs, while striving to provide cleaner, economical, and responsive power, is the underlying goal of the cooperative's roadmap. United Power's strategy includes integrating leading edge technologies to support the co-op's ongoing energy transition, while meeting the goals of each unique community and business it serves. It is a plan that incorporates technology with the human touch that differentiates cooperatives from other business models.

The revolution in electrification has begun, and United Power has chosen to be on the leading edge of this

transformation. Whether the cooperative is focusing on DERs or electrification in the oil fields, these changes in member behavior and industry expectations impact how United Power does business. Meeting these needs will require the cooperative to remain nimble and responsive to industry changes and innovations, while maintaining an industry leading level of customer service in every facet of its business operations.

Our Cooperative Roadmap captures United Power's goals and tactical strategies to meet the changes coming to the industry. This document serves as a guide for the cooperative's future but remains flexible enough to allow United Power to pivot to meet critical changes in the industry, to remain responsive to legislative mandates, and to efficiently integrate innovative technology that will help to manage costs and deliver an improved member experience in every area. The ability to anticipate coming changes, respond quickly to meet new industry requirements, and continue to meet member expectations will define United Power as a leader in electric distribution.

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GLOSSARY OF TERMS

Advanced Distribution Management System (ADMS) A

software platform that helps utility personnel anticipate potential issues and troubleshoot system problems. ADMS integrates supervisory control and data acquisition, outage management system, and distribution management system functionality in a common user interface to help utility personnel effectively monitor and control the electric distribution system – from substation to meter.

Advanced Metering Infrastructure (AMI) An integrated system of meters, communications networks, and data management systems that enables two-way communication between utilities and customers.

Artificial Intelligence (AI) A machine-based system that uses algorithms and data to perform tasks traditionally requiring human intelligence, including predicting outcomes, providing recommendations, making decisions, and generating new content or solutions.

Business Continuity Plan A documented strategy designed to enable an organization to carry out critical business processes during significant operation interruptions.

Consumption The amount of electricity measured in kilowatts used by the members of the utility over a given period of time. This is usually referred to in conjunction with demand which is the amount of electric usage at any one point in time measured in kilowatt hours.

Cooperative A business owned and managed by the consumers who use and benefit from its services (i.e., its members).

Demand The rate at which energy is consumed by end users during a specific period. It is a key metric used by utilities to plan for production, infrastructure needs, and grid reliability. High energy demand periods, known as "peak demand," require additional generation or load management strategies.

Distributed Energy Resource (DER) Small-scale generators, loads, and storage connected to the distribution grid such as solar, electric vehicles, and batteries.

Distributed Energy Resource Management System (**DERMS**) Centralized software used for exchanging data and control commands with distributed energy resources such as smart thermostats and batteries.

Distribution Management System (DMS) Part of the supervisory control and data acquisition and outage management systems that allow a utility to collect, organize, and analyze data from an electric distribution system at a real-time rate.

Distribution System Operator (DSO) A DSO focuses on actively managing and coordinating the distribution of electricity in a local area, integrating and managing various sources of energy generation and consumption while ensuring the grid remains reliable, stable, and efficient.

Electric Distribution System The facilities and equipment connecting a utility to its members/consumers.

Electric Grid The interconnected network designed to provide electricity from its generation to the customers/members. Comprised of three main sections – generation, transmission, and distribution.

Electric Vehicle (EV) Any vehicle whose primary or secondary energy source is electricity from the grid. Light duty EV refers to common commuter vehicles whereas medium and heavy-duty EV refers to large commercial trucks and buses.

Electrification The process of replacing technologies that use fossil fuels (coal, oil, and natural gas) with technologies that use electricity generated from renewable energy sources (solar, wind, and hydro). Examples include driving an electric vehicle instead of a gasoline-powered vehicle or converting machinery to operate with electricity. Electrification helps to meet the growing demand for renewable energy and reductions in greenhouse gas emissions.

Energy As it relates to electricity, energy is defined by the movement of electrons. In the electric industry it is looked at as an electric charge that lets work be done.

Energy-as-a-Service A business model that combines the price of the electricity delivered with the costs of equipment and installation into a fixed price. For example, the price of electricity for electric vehicle charging combined with the equipment and installation of the electric vehicle charging infrastructure.

Fitch Ratings A company that evaluates the integrity of debt instruments like bonds based on the financial stability of the issuing company or government body. The role of Fitch Ratings is to determine the likelihood that the issuing body will default and fail to repay its debt.

Generation & Transmission (G&T) Generation is the process of producing electricity from centralized plants such as coal, natural gas, hydro, solar, nuclear, and wind. Transmission is the process of carrying that generated electricity from the generation plants to the load centers where it can be used.

Geographic Information System (GIS) A computer system for capturing, storing, checking, and displaying data related to spatial and geographic data. In simple terms, mapping.

Hyper-localization Hyper-localization of generation refers to the connection of generation resources on a local system that is tailored to local producers and consumers. Hyper-local generation resources do not require transmission service, have low risk of curtailment, and provide additional benefits to the local grid, such as voltage support.

Hyperscaler A type of large-scale data center that offers massive computing resources, typically in the form of an elastic cloud platform. Organizations use them to deploy and manage large-scale applications and services.

Informational Technology (IT) The common term for the entire spectrum of technologies for information processing, including software, hardware, communications technologies, and related services.

Integrated Resource Plan A planning process performed by electric utilities to evaluate the preferred mix of supply and demand side resources needed to reliably serve projected energy demand. **Kilowatt (kW)** The conventional unit of measurement of electrical power at any given time. A kilowatt is equivalent to 1,000 watts.

Load The total demand for electricity from the grid measured in kilowatts or megawatts.

Load Forecast The projected demand and consumption of electricity anticipated on the system in some future period for which the utility has an obligation to serve.

Margin The remaining funds once all expenses are netted against revenues.

Megawatt (MW) 1,000 kilowatts; common unit of measurement for large-scale generators and loads.

Member A person who consumes, receives, purchases, or otherwise uses the cooperative services, and who agrees to comply with and be bound by the governing documents and such tariffs, rules, regulations, and policies of the cooperative.

Meter Data Management (MDM) System software that performs long-term data storage and management for the vast quantities of data delivered by smart metering systems.

Operational Technology (OT) The hardware and software that detects or causes a change, through the direct monitoring and/or control of industrial equipment, assets, processes, and events.

Outage Management System (OMS) A variety of computer systems used by utilities to assist in the restoration of outages in the electric distribution system.

Power The rate, per unit of time, at which electricity is transferred in a defined electric circuit; measured in watts.

Power Purchase Agreement (PPA) A contract to purchase a variable amount of electricity at a fixed or escalating price over the life of the contract. Applies to both renewable and fossil-fueled generators.

Power Supply The source of electricity needed to perform work; the supplier for an electric load.

Supervisory Control and Data Acquisition (SCADA) A system of software and hardware elements that allows organizations to monitor, control, gather, and process real-time data.

Utility Entity responsible for the ownership, field operation, billing, and maintenance of the infrastructure and equipment of the electric distribution system.

Voice of the Member Insight into members' feedback about their experiences with the cooperative's products or services, focusing on member needs, expectations, and sentiment to improve the member experience.

Watt The standard unit of power measuring the rate at which energy is used or generated. It is commonly used to express the power output of devices or the consumption of electrical energy, such as a 60-watt light bulb or a 1,000-watt appliance.

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