

Summary: A Smarter Way (NMEPRA 004)

The Transition: From Centralized to Distributed Resilience

Santa Fe County's current energy model is aging and increasingly vulnerable, with **45% of its transmission lines over 30 years old**. To meet the **Energy Transition Act (ETA)** goal of 100% renewable energy by 2045, the county must shift from a rigid, centralized system to a **Hybrid Smart Grid**. This "Smarter Way" replaces ad hoc projects with an orchestrated network of **Smart Nodes, Microgrids, and Virtual Power Plants (VPPs)**.

The Three Pillars of the Smart Grid

- **Distributed (Smart Nodes):** Individual homes or facilities equipped with solar panels and batteries act as active participants rather than passive consumers.
- **Federated (VPPs):** Local microgrids are grouped into "federations" that can be dispatched as a single utility-scale resource to prevent blackouts.
- **Hybrid (Bulk Energy):** The system integrates distributed networks with the **Santa Fe County Energy Park**, a 1,200-acre site near Stanley designed to house large-scale battery storage safely away from communities.

Economic and Physical Necessity

The documents argue that this transition is inevitable due to both a **"push"** and a **"pull"**. **The Push** of a traditional grid suffers from **single points of failure**; weather-related outages cost billions annually. **The Pull** due to Solar-plus-storage costs has **dropped 70% since 2010**. VPPs are **50% cheaper** for utilities than building new gas peaker plants. **Consumers benefit** from participating in a VPP, which can save the average household approximately **\$150 per year** in energy costs.

Strategic Path to Public Ownership

The document suggests using **Community Solar** as a "training wheels" program for a **Publicly Owned Utility (POU)**. **Community Choice Aggregation (CCA)** enables the county to avoid the \$1 billion "exit fee" traps that defeated cities like Boulder, CO.

A Phased Implementation Plan

1. **Phase 1 (Organize):** Form a Smart Grid Task Force, launch **Resilience Hub** pilots at critical facilities (fire stations, community centers), and secure federal seed funding via the **DOE's C-MAP** program.
2. **Phase 2 (Network):** Build the "Federation" by incentivizing Smart Nodes and microgrids, ensuring **30% capacity** is allocated to low-income residents.
3. **Phase 3 (Scale):** Develop the **Energy Park** to provide bulk energy storage while maintaining local control over revenues to fund county services.

The Approach to Santa Fe County Resolution 2025-124

CEC advocates an approach to "Future-Proof" the county into the 2050s. While the county has no direct responsibility for delivering power, CEC urges officials to "Take on the role of Leadership." CEC has framed a Plan for the execution of County Resolution 2025-124. From the resolution, project Guiding Principles and High-Level Requirements have been derived. An Execution Plan is also described. The Execution Plan ensures that the resolution evaluation criteria (Technical, Stakeholder Roles, Timeline & Milestones, Costs and Funding, Legal Pathways, and Public Engagement) are addressed.