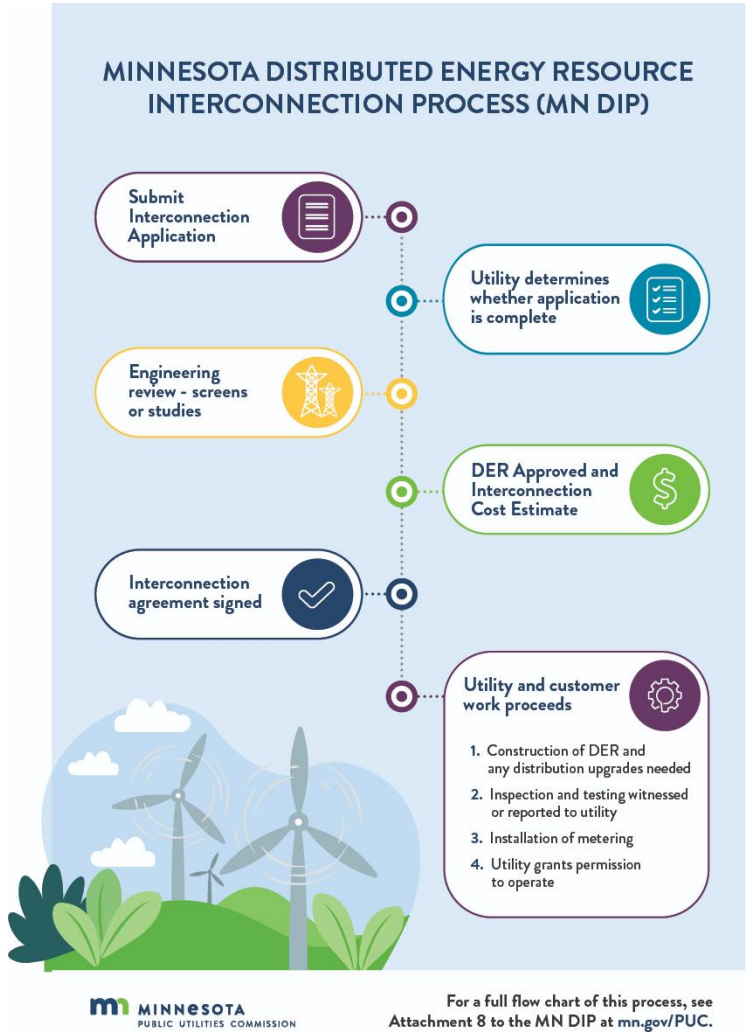
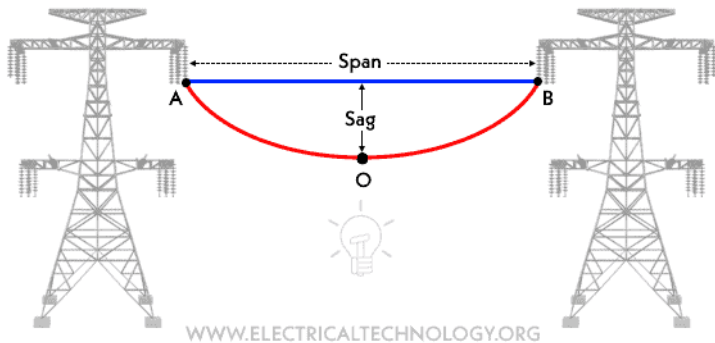


Grid Modernization 101

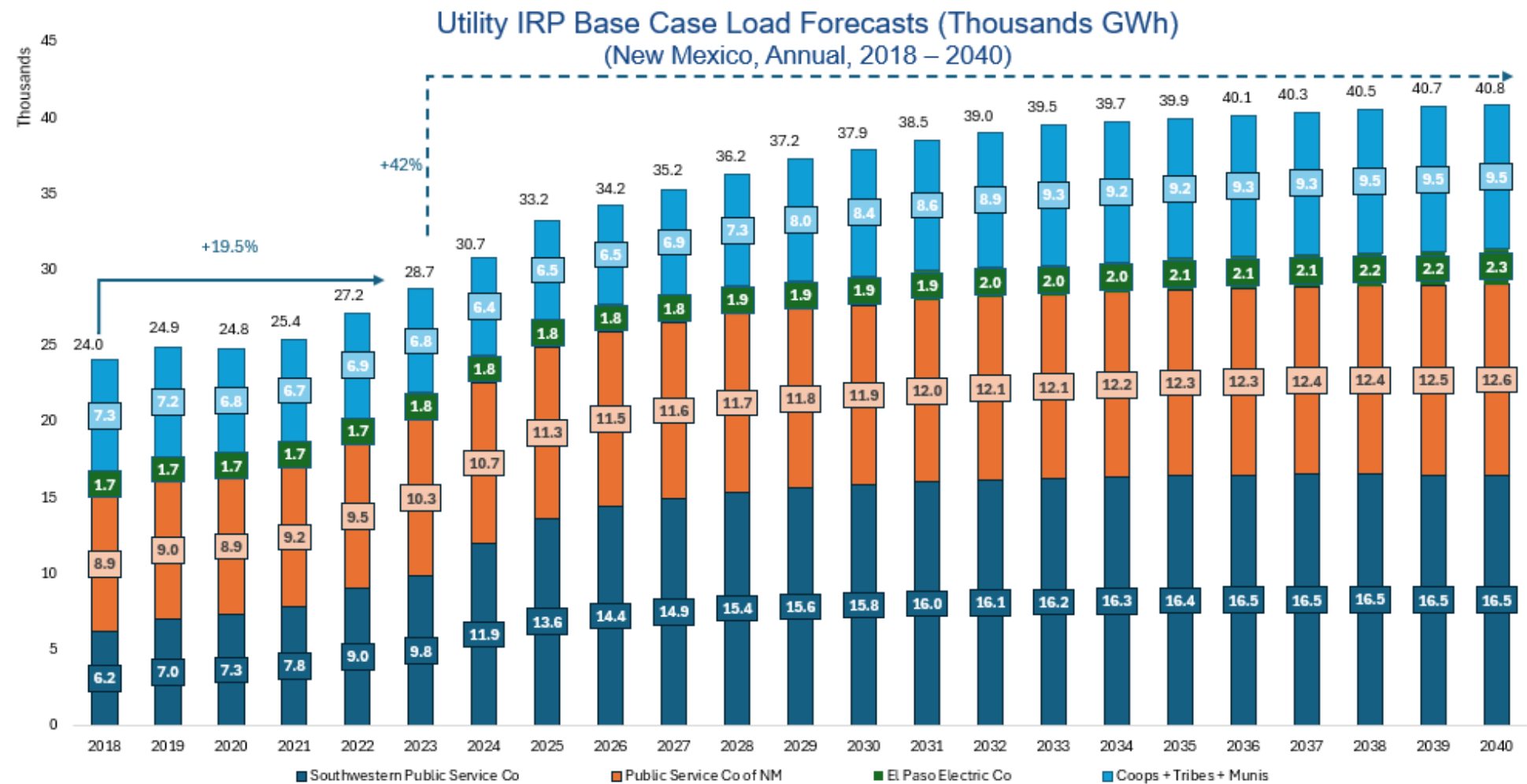


Energy, Minerals & Natural Resources Department
Energy Conservation and Management Division

How do we know the electric grid is aging/out of date?

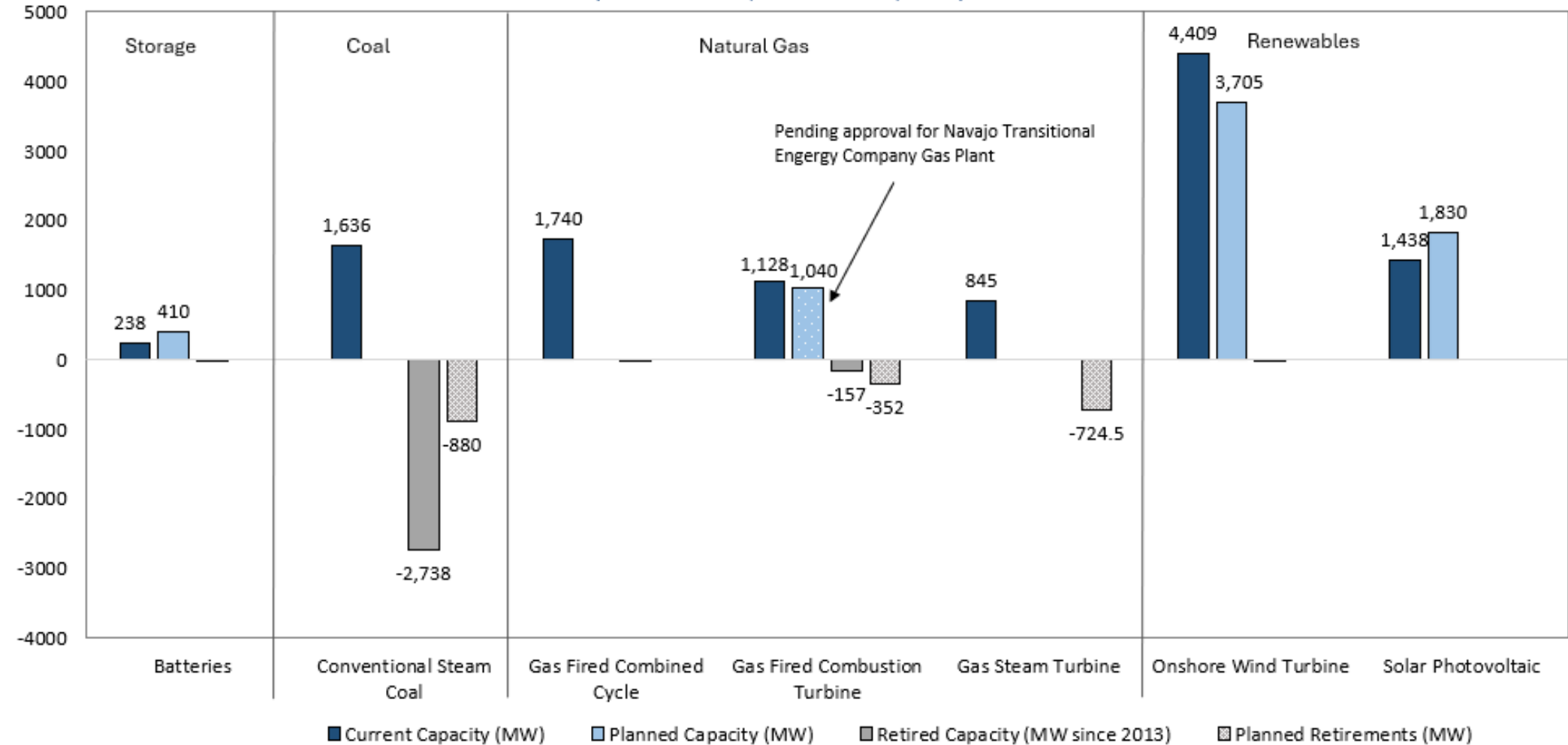


We are asking more of the grid...



We are asking more of the grid...

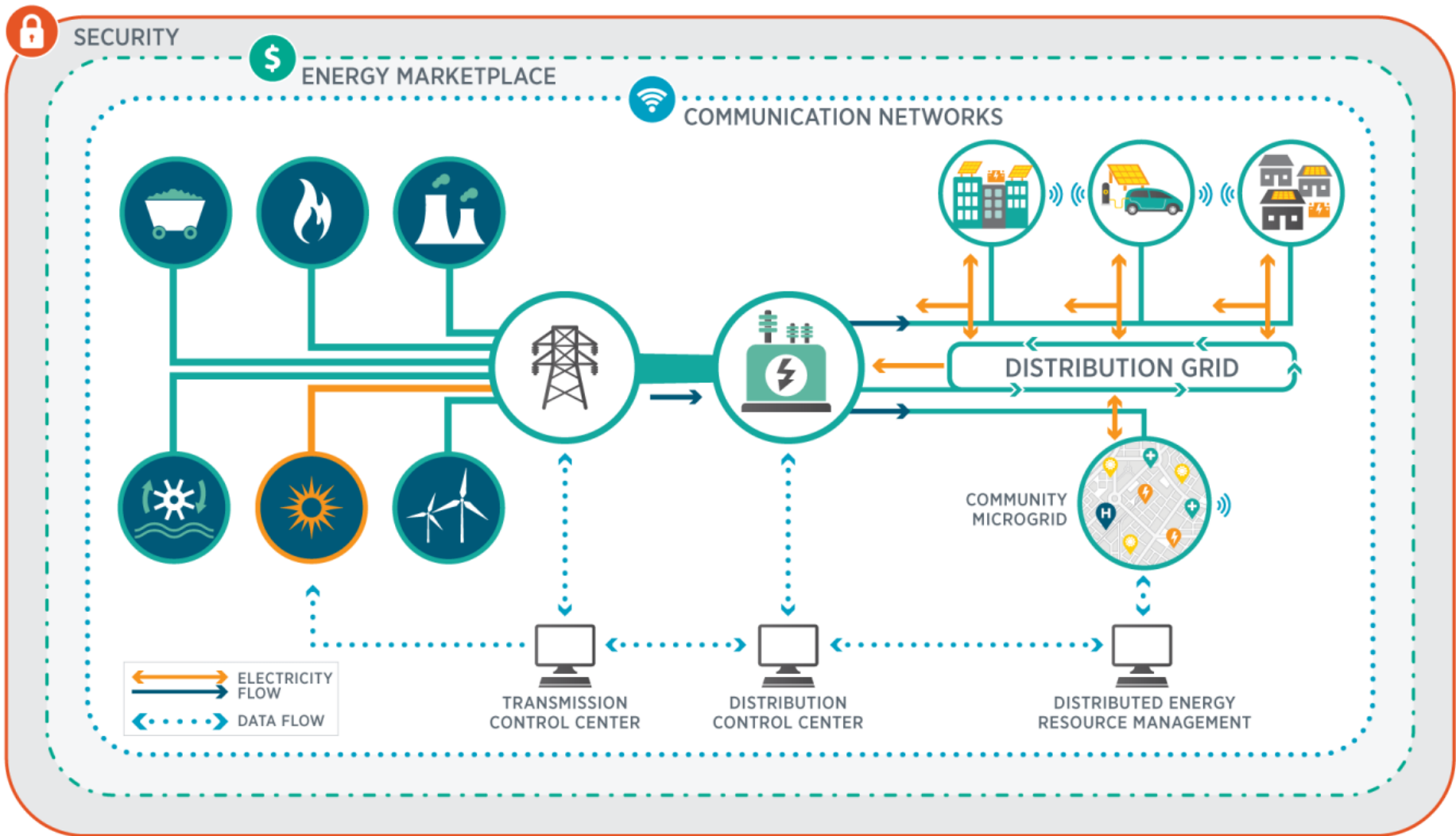
Statewide Generating Capacity Adds and Retirements
(New Mexico, since 2013, MW)



We are asking more of the grid...



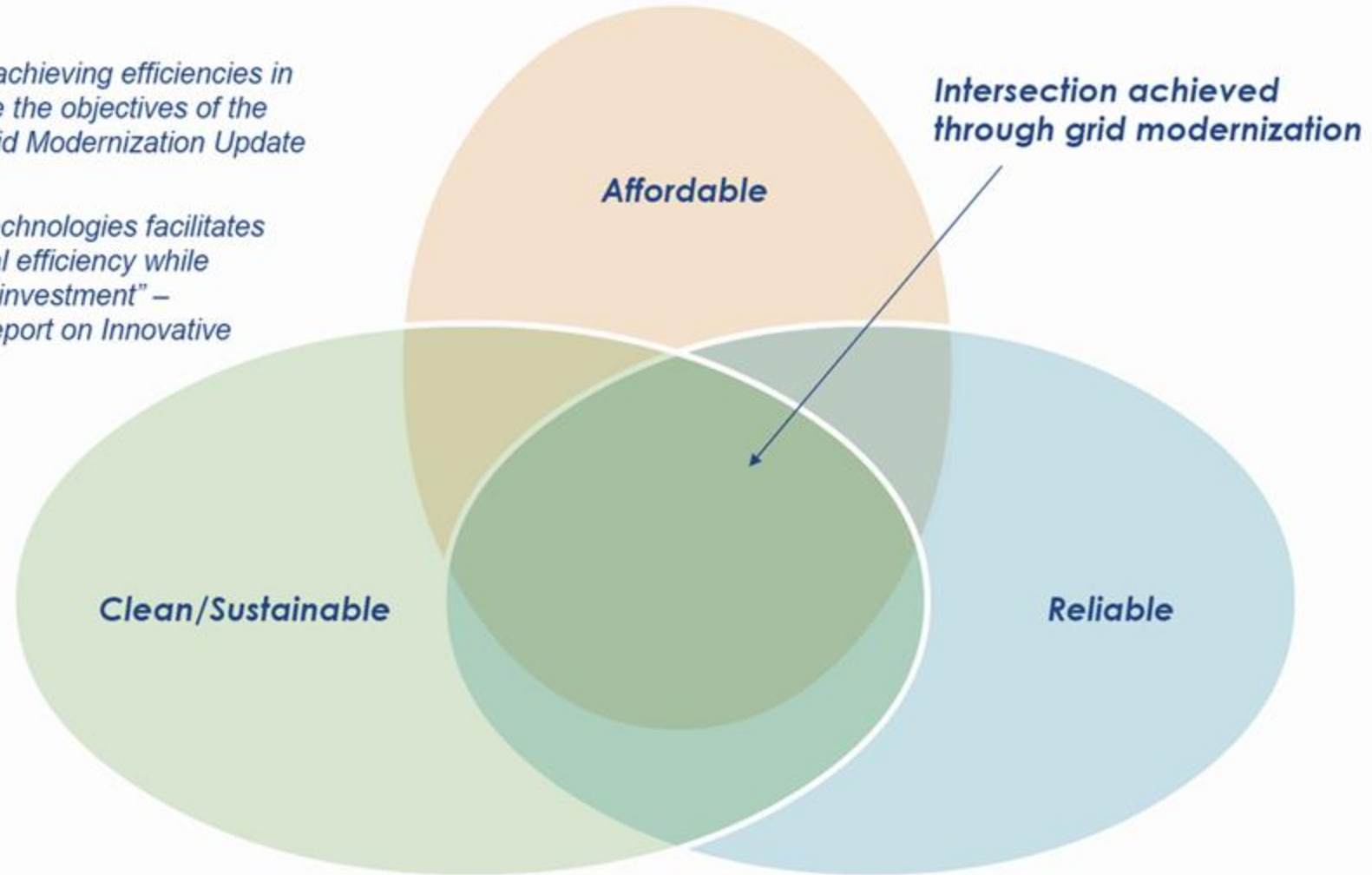
We are basically changing how the grid functions...



Big-Picture Policy Objectives

“Grid modernization is a means of achieving efficiencies in the energy system that synchronize the objectives of the energy transition” - ECAM 2025 Grid Modernization Update

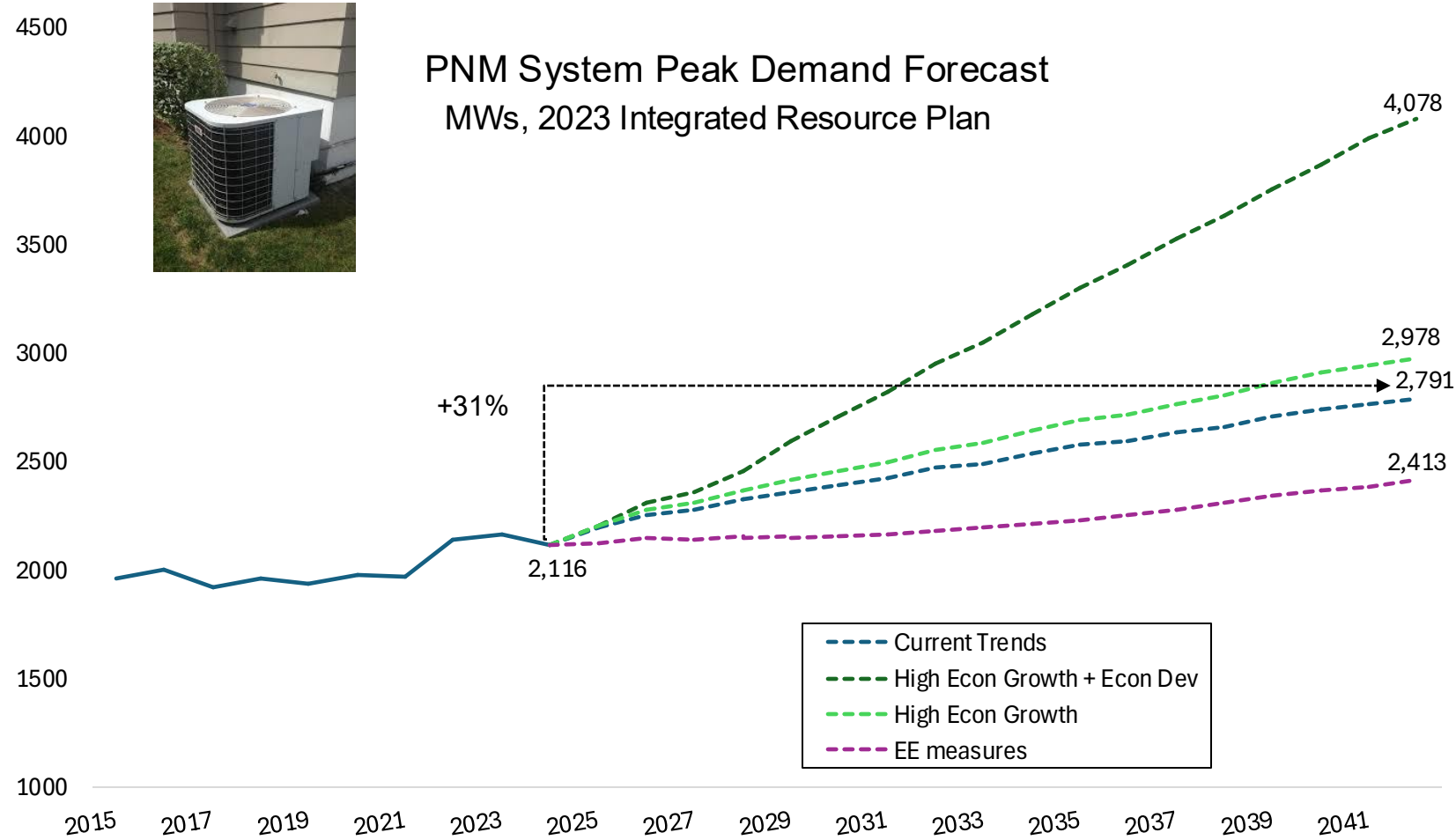
“The deployment of innovative grid technologies facilitates grid operators’ maximization of capital efficiency while serving multiple goals with the same investment” – Department of Energy 2024 Liftoff Report on Innovative Grid Technologies



Managing Peak Load for Affordability



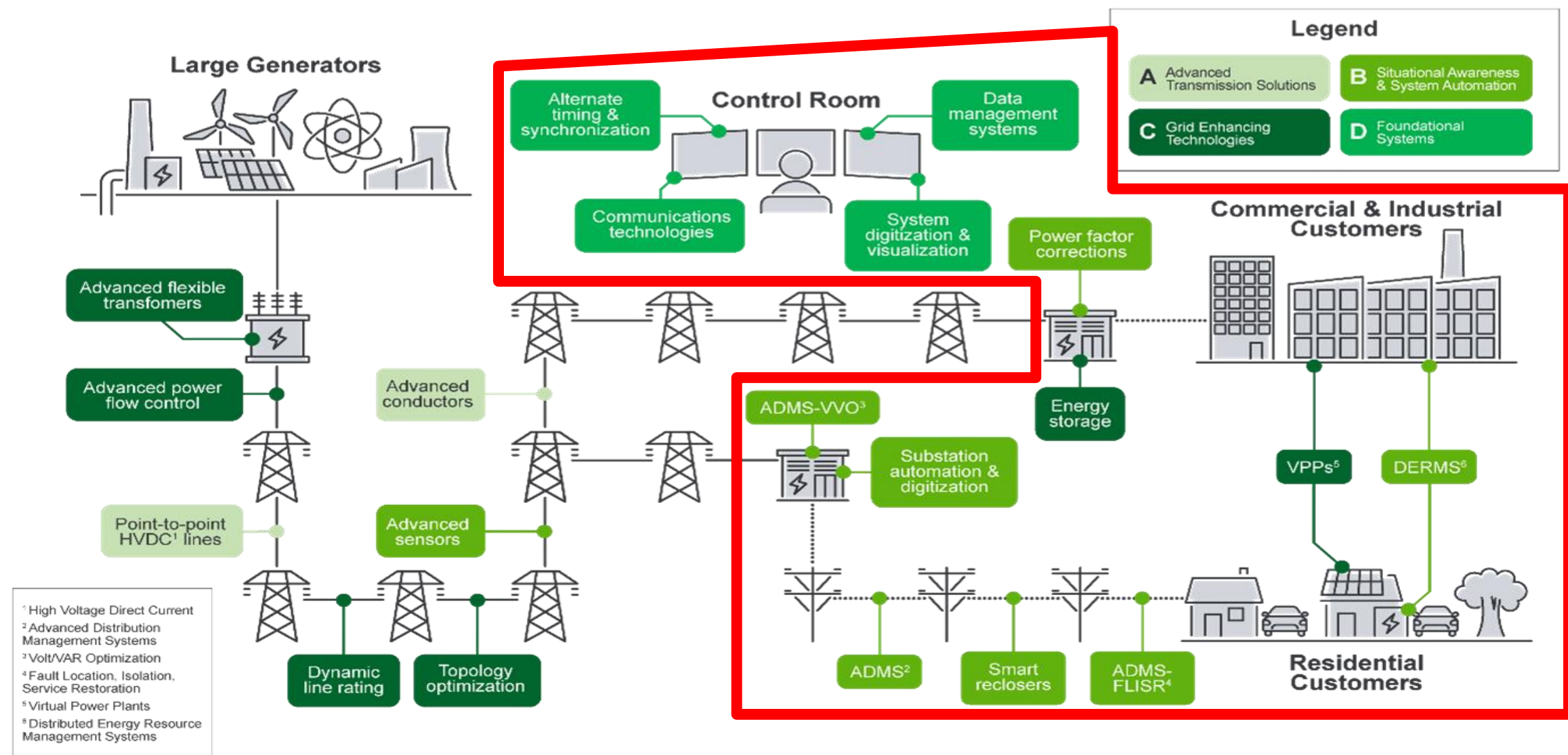
PNM System Peak Demand Forecast
MWs, 2023 Integrated Resource Plan






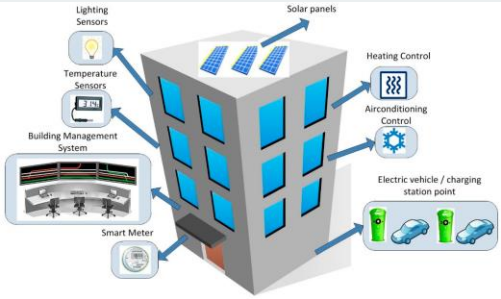
- Building to serve the peak = lower average load served by the bulk power system
- As peaks grow, ratepayers are increasingly paying for capital assets that utilities procure but rarely use

PNM's base case scenario forecast estimates +31% peak demand growth for the system by 2042

Grid Technology Solutions



Customer Side of the Grid

Grid Mod Technology	Example Project Type	Ownership
	<p>A school district wants to add storage to a solar array to use for managing peak load (daytime learning and bus charging).</p> <p>Or a school district wants to aggregate multiple solar projects to create a virtual power plant.</p>	Customer
	<p>A remote town wants to add a microgrid control system for back-up power for critical facilities during outages.</p>	Customer
	<p>A county wants to add more EV chargers with vehicle-to-grid capability for vehicles in its fleet.</p>	Customer
	<p>A town wants real-time visibility into production of energy assets (e.g., solar carports), energy use and possible energy waste. It installs metering devices that allow for real time analysis of energy use and production.</p>	Customer

How do eligible entities contribute to modernization and plug into \$70 million of funding?

- Case studies
 - BRAIN Project
 - Microgrid
 - Virtual Power Plant