

Nevada's electricity sales could double by 2029. Your capital plan has to build for it.

A historic wave of data-center demand is landing on NV Energy at the same time coal retires, a \$4.2 billion transmission backbone goes up, and record heat tests the grid. Each of those forces reshuffles the projects on your list. Invizion helps electric utilities re-sequence a capital portfolio in a click — and defend every decision.

2x¹ Projected growth in NV Energy electricity sales — doubling by 2029.	~22 GW³ Data-center interest inquiries at NV Energy; ~6 GW already under executed agreements.	\$4.24B⁸ Greenlink Nevada — the statewide 525-kV transmission build.	120°F⁴ Las Vegas's all-time record high (July 2024) — the heat now driving grid investment.
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Last updated August 2026 · 16 sourced references

THE NEVADA LANDSCAPE

Four forces are moving your project list at once

None of these is theoretical, and none of them waits for your next budget cycle. Together they mean the capital plan you approved last year may already be the wrong plan.

DEMAND — DATA CENTERS**A load surge without recent precedent**

NV Energy's 2026 resource plan projects electricity needs 47% higher than just two years earlier, with sales doubling by 2029. It has fielded roughly 22 GW of data-center inquiries, with about 6 GW already under executed agreements³

Data centers could be 64% of Nevada's power demand by 2046, pushing system capacity from ~10 GW toward 20+ GW²

RELIABILITY — HEAT & PEAKS**Record heat, rising peaks**

Las Vegas hit an all-time record 120°F in July 2024⁴ and NV Energy's system peaked at 8,135 MW in July 2023⁵

With capacity potentially doubling by 2050, every reliability project competes with load-growth and transition capital for the same dollars²

TRANSMISSION — GREENLINK**A \$4.2 billion backbone, on a deadline**

Greenlink Nevada is a \$4.24 billion, statewide 525-kV build — Greenlink West (~350 miles, ~2027) and Greenlink North (~210 miles, ~2028) — to unlock renewables and firm up reliability⁸

Nevada already draws 26% of its power from solar and is the #2 geothermal state,⁷ and the plan adds thousands of MW of solar and storage — all of which has to be sequenced.

CAPITAL — TRANSITION & WILDFIRE**Coal out, hardening up**

Nevada's last coal units (North Valmy) retire in 2025, converting to gas by end of 2026.⁶

NV Energy's 2024–2026 disaster-protection plan runs \$373 million, heavily weighted to wildfire-prone northern Nevada — on top of ~\$3 billion of northern capital and a \$3.2 billion substation program tied to data-center load.^{10,11}

WHO RUNS NEVADA'S GRID

One dominant investor-owned utility, with cooperatives at the edges

Nevada's grid is overwhelmingly served by NV Energy, with rural cooperatives, power districts, and a municipal utility covering the rest. The scale concentration means a handful of capital programs shape most of the state's grid spending.

Investor-owned utility

Rates & IRPs regulated by the PUCN

NV Energy — Nevada Power South / Las Vegas · ~1.0M⁹

NV Energy — Sierra Pacific Power North / Reno · ~350,000⁹

Owned by Berkshire Hathaway Energy ~1.3M customers · ~44,400 sq mi⁹

The 2026 resource plan carries ~\$3B of northern capital plus a \$3.2B substation program tied to data-center load.¹¹

Cooperatives & municipal

Member- and community-governed

Nevada Rural Electric Association 9 member utilities statewide

Valley Electric Association Pahrump / southern Nevada

Boulder City Municipal Utility Municipal provider

Every capital dollar has to be defensible

In Nevada, most large-grid capital decisions run through the state commission or NV Energy's Integrated Resource Plan — and the question is always why this project, why now, why at this cost.

PUCN regulates NV Energy's rates and reviews its Integrated Resource Plans.¹²

Nevada Power's 2025 rate case sought about a 9% increase (\$215.7M) and an ROE rising toward 10.25%, citing record-heat infrastructure costs.¹³

The 2026 IRP proposes thousands of MW of new solar, storage, and gas — the capital roadmap the PUCN is reviewing now¹

Nevada's clean-energy standard requires 50% renewables by 2030 with a 100% carbon-free goal by 2050 — a hard target the load surge makes tougher.¹⁴

The money is moving — can your plan absorb it?

Federal grid dollars are flowing to Nevada alongside a massive private build. The constraint is readiness: which projects qualify, which are shovel-ready, and how the timing lines up.

DOE GRIP: \$77M to a Western coalition led by NV Energy to harden the grid against extreme weather (2024)¹⁵

~\$10.5M in Grid Resilience formula grants administered by the Governor's Office of Energy¹⁶

Greenlink cost recovery spreads a \$4.24 billion transmission investment across ratepayers over decades⁸

IRA direct-pay credits and USDA New ERA support the solar-and-storage economics behind the state's clean-energy standard¹⁴

NEVADA'S GRID, IN BRIEF

Questions Nevada utility leaders are asking

Short, sourced answers — the same facts we dig into with utilities looking at their capital programs.

Why is Nevada's electricity demand growing so fast?

Data centers. NV Energy's 2026 plan projects sales doubling by 2029, on roughly 22 GW of data-center inquiries with ~6 GW already under agreement — potentially 64% of state demand by 2046¹³

What is Greenlink Nevada?

A \$4.24 billion, statewide 525-kV transmission build — Greenlink West (~2027) and Greenlink North (~2028) — to unlock renewables and improve reliability across the state.⁸

Is Nevada retiring coal?

Yes — the last coal units at North Valmy retire in 2025 and convert to gas by end of 2026, while Nevada leans on solar (26% of generation) and the nation's #2 geothermal fleet.⁶⁷

Who regulates NV Energy's rates?

The Public Utilities Commission of Nevada regulates NV Energy's rates and reviews its Integrated Resource Plans; rural cooperatives and municipal utilities are self-governed.¹²

What grid funding is available in Nevada?

A \$77 million DOE GRIP award to an NV Energy-led coalition, about \$10.5 million in Grid Resilience formula grants, plus ratepayer cost recovery for the \$4.24 billion Greenlink build.¹⁵¹⁶⁸

How does Invizion help Nevada electric utilities plan capital?

Invizion is scenario-based capital portfolio optimization for utilities. It lets you model how a load surge, a transmission milestone, or a retirement date reshuffles your whole project list, re-sequence the portfolio automatically, and keep a defensible record for the PUCN or your board.

REFERENCES

Sources

Every figure in this briefing is tied to a primary or authoritative source.

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ABOUT INVIZION

Capital program optimization for utilities

Invizion is a purpose-built capital lifecycle management platform for utilities. It integrates budgeting, CIP, scenario analysis, and funding-source tracking in one system — so utilities can re-sequence a capital portfolio in a click and demonstrate audit-ready, defensible decisions to regulators, boards, and rating agencies.

See how utilities keep capital plans current and defensible with Invizion.

Explore Invizion →