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October 6, 2026

MEMORANDUM

TO: Council Members

FROM: Nathaniel Clayville

SUBJECT: Idaho Power: Resource Planning and Making Growth Pay for Growth

BACKGROUND:

Presenter: Jared Ellsworth, Transmission, Distribution and Resource Planning Director at Idaho Power Co.

Summary: The presentation will address how Idaho Power's resource plans are evolving to meet growing electricity demand while achieving its reliability requirements in a least-cost / least-risk manner. The presentation will also address the role of new natural gas generation in Idaho Power's resource strategy and the considerations driving those investments.

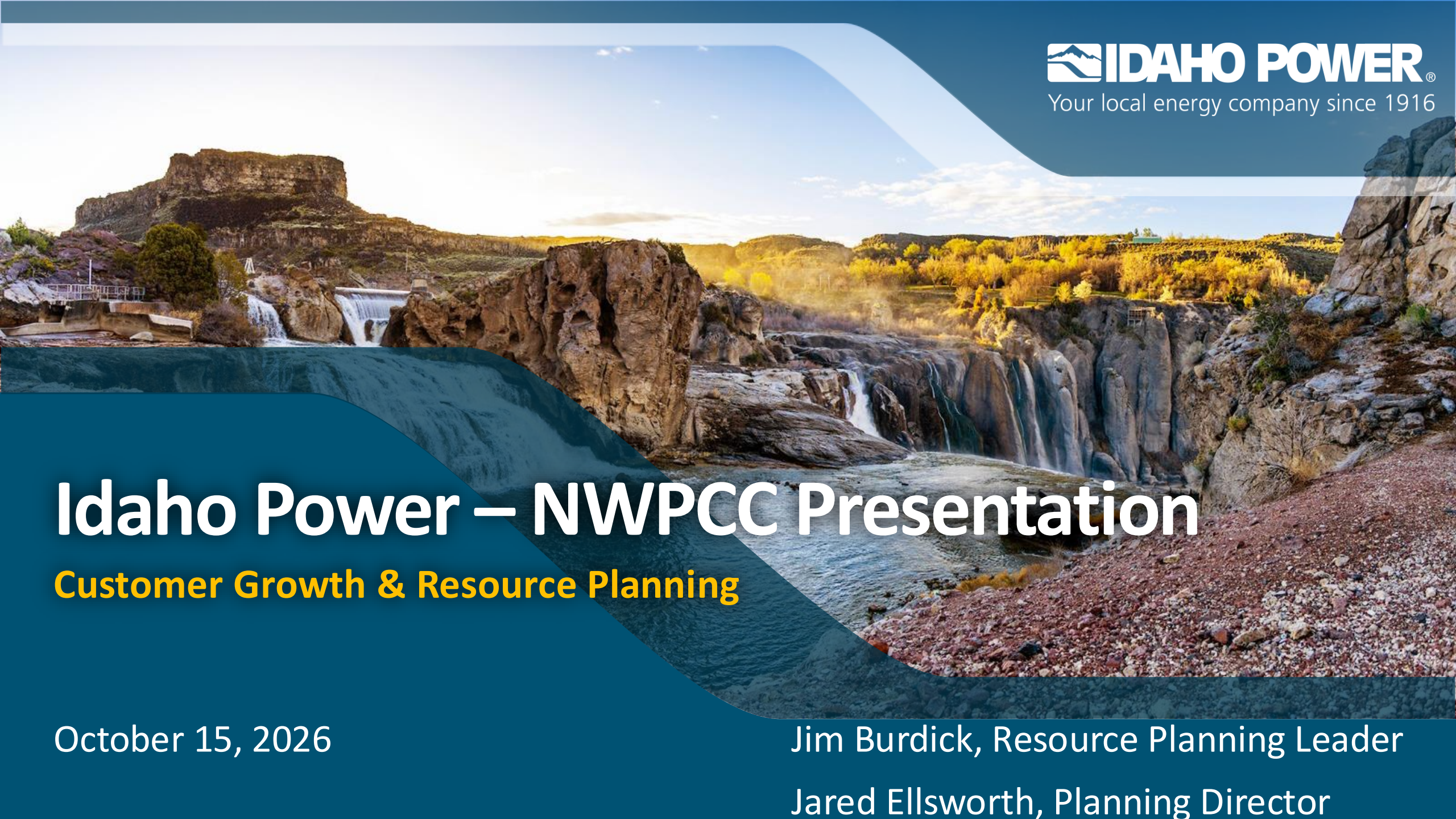
Mr. Ellsworth will also discuss Idaho Power's approach to making "growth pay for growth," including how the company addresses the costs of serving data centers and other large new loads. The discussion will focus on how Idaho Power plans for those customers while seeking to protect existing customers from costs associated with new demand.

Background: Idaho Power's 2025 Integrated Resource Plan identifies a mix of generation, storage, transmission, energy efficiency, and demand response to meet future customer needs. Its near-term action plan includes pursuing additional natural gas, wind, solar, and storage resources.

The presentation will provide a utility perspective on two issues relevant to the Council's regional planning: how resource portfolios are adapting to changing electricity needs, and how utilities are addressing the costs and risks of substantial load growth. It will offer an opportunity to discuss the relationship between Idaho Power's resource decisions, its clean energy goals, and its approach to serving new customers.

More info: Idaho Power's Integrated Resource Plan and planning materials:
<https://www.idahopower.com/about-us/energy/planning-and-electrical-projects/our-twenty-year-plan/>

Idaho Power's 2025 Integrated Resource Plan:
<https://docs.idahopower.com/pdfs/AboutUs/PlanningForFuture/2025IRP/2025%20IRP%20Final.pdf>



Idaho Power – NWPCC Presentation

Customer Growth & Resource Planning

October 15, 2026

Jim Burdick, Resource Planning Leader

Jared Ellsworth, Planning Director

IRP Modeling



How it started



How it's going

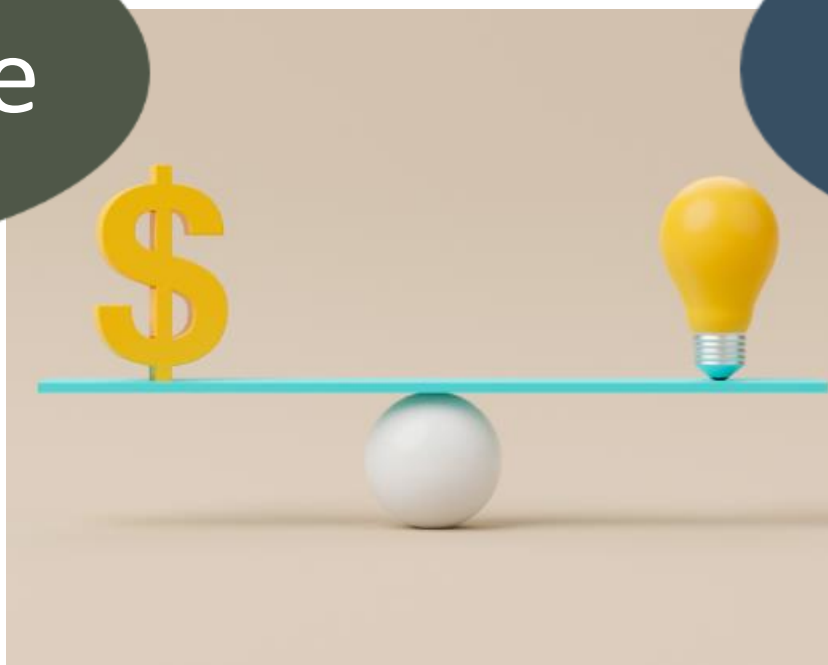


- Filed June 2025!
- Next IRP in June 2027

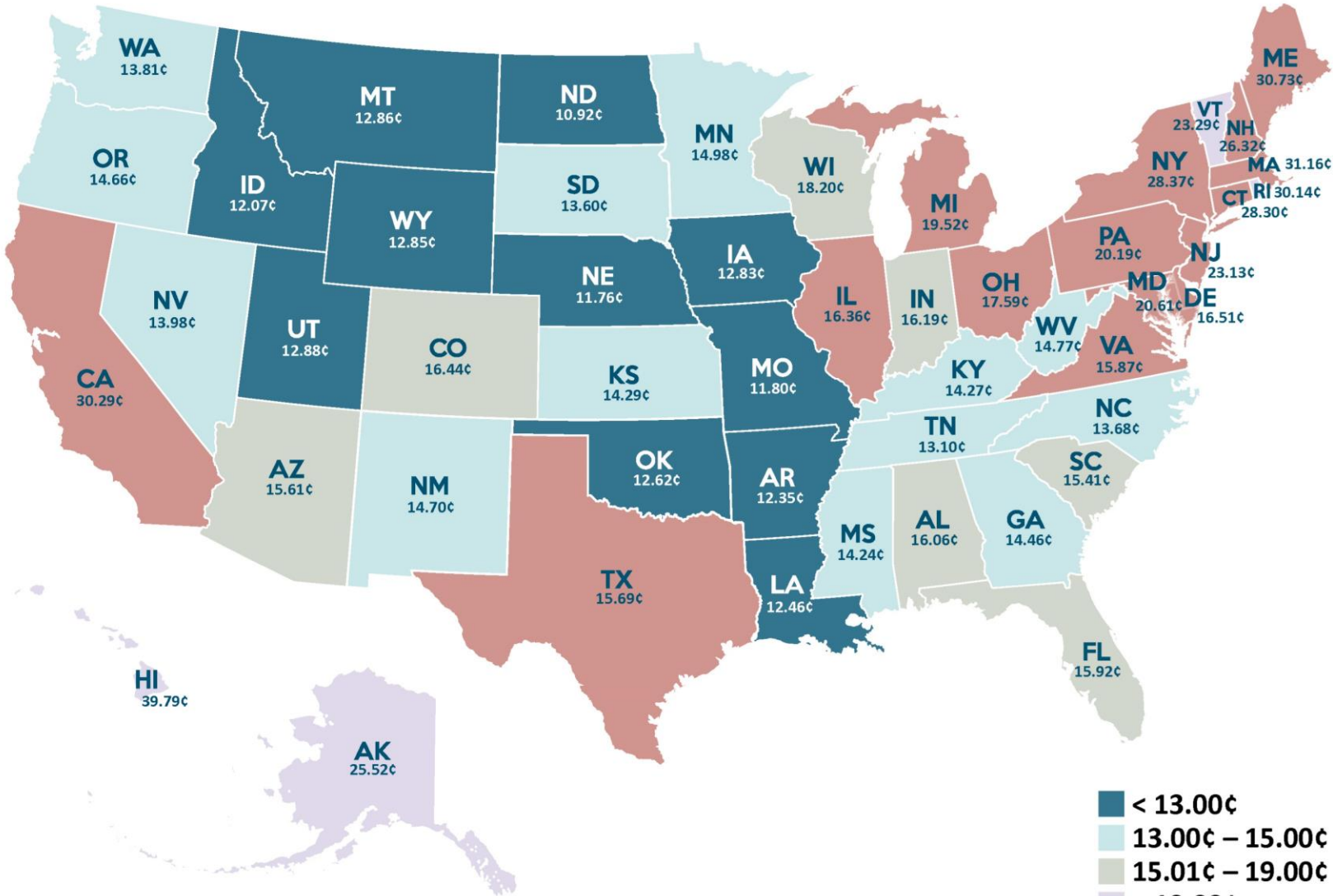
Process - Balance

Affordable

Reliable



State-wide average cost of electricity per kWh



Our Growth Story



	5-Year Forecasted Annual Growth Rate		20-Year Forecasted Annual Growth Rate	
	Retail Sales (Billed MWh)	Annual Peak (Peak Demand)	Retail Sales (Billed MWh)	Annual Peak (Peak Demand)
2025 IRP	8.3%	5.1%	2.7%	1.9%
2023 IRP	5.5%	3.7%	2.1%	1.8%
2021 IRP	2.6%	2.1%	1.4%	1.4%

Is this data centers



New Future Demand

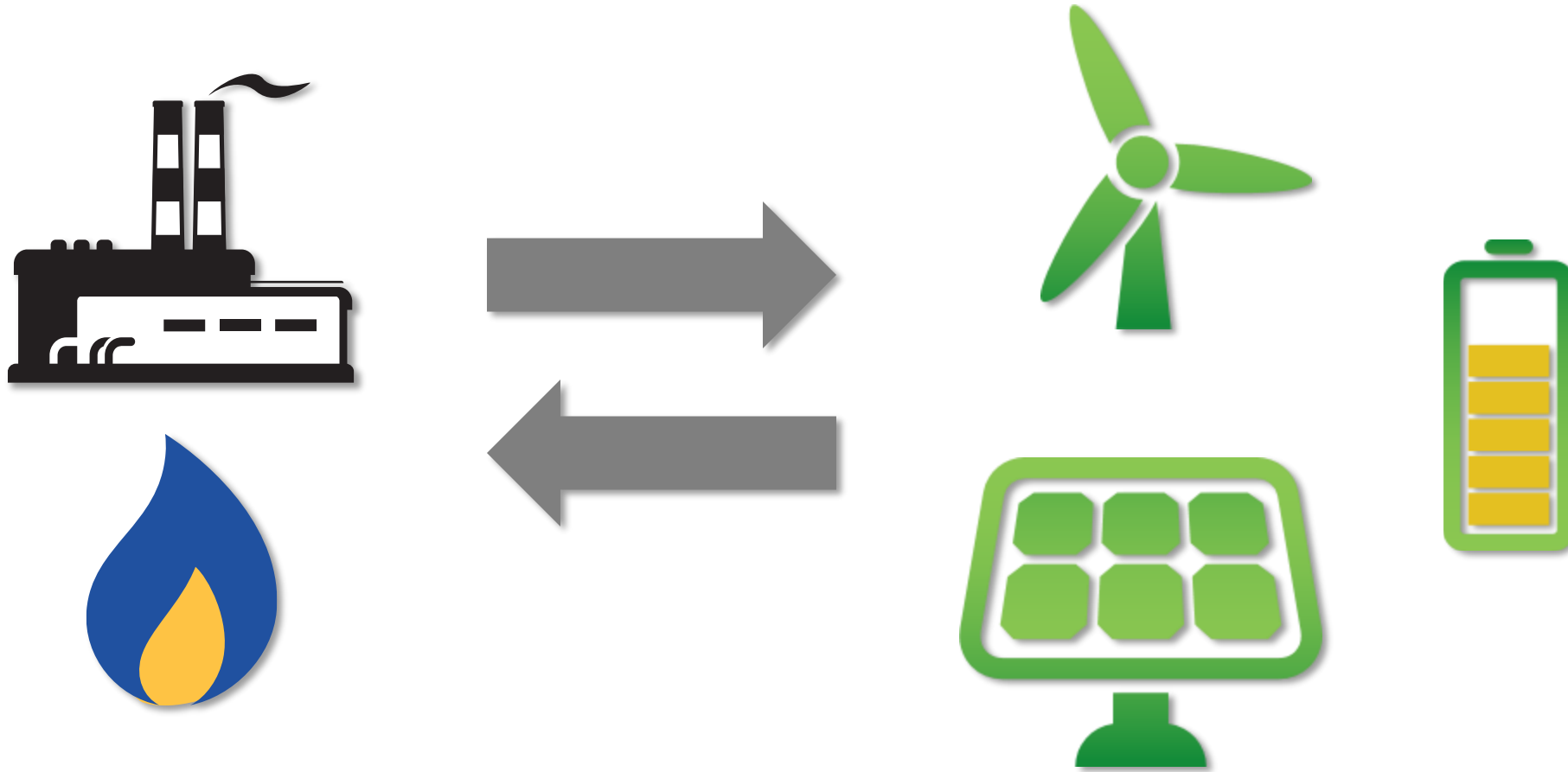
Meta Announces Kuna as Location of New Data Center



**Micron to Invest 15 Billion in
New Idaho Fab, Bringing
Leading-Edge Memory
Manufacturing to the US**



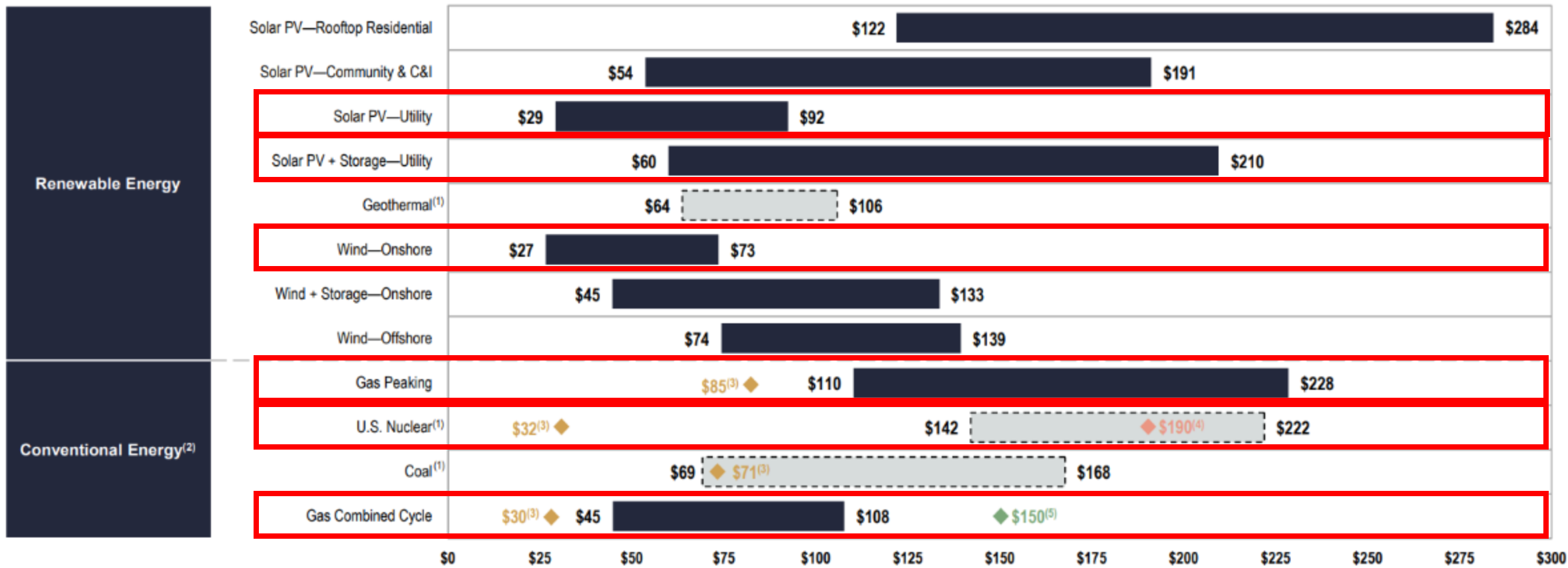
Shifting Economic Resources



Resource Cost Comparison- Levelized Cost of Energy (LCOE) \$/MWh

Levelized Cost of Energy Comparison—Version 17.0

Selected renewable energy generation technologies remain cost-competitive with conventional generation technologies under certain circumstances



Preferred Portfolio

Preferred Portfolio (MW)											
Year	Coal Exits	Conv. Gas	New Gas	Wind	Solar	4Hr	100Hr	Trans.	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	125	250	0	0	0	18	0
2027	0	0	0	600	420	100	0	0	0	14	0
2028	0	0	0	0	100	200	0	B2H	0	15	0
2029	0	0	150	100	0	155	0	SWIP-N	10	16	0
2030	-350	350	300	0	100	0	0	GWW	0	16	0
2031	0	0	0	0	400	0	0	0	0	17	8
2032	0	0	0	0	200	0	0	0	0	17	0
2033	0	0	0	0	100	50	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	5	0	0	0	12	0
2041	0	0	50	0	0	5	0	0	0	12	0
2042	0	0	0	0	0	5	0	0	10	11	3
2043	0	0	50	0	0	5	0	0	0	11	0
2044	0	0	0	0	0	55	0	0	0	11	7
2045	0	0	0	0	0	5	50	0	0	8	2
Sub Total ²	-484	611	550	700	1,445	835	50		20	287	58
Total	4,071	Portfolio Cost: \$10,965M									

Peak Demand: 3,793 MW (2024) – ~5,876 MW (2033 estimate)

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2028	0	0	~~0~~ 167	0	~~100~~ 200	~~200~~ 100	0	B2H	0	15	0
2029	0	0	~~150~~ 220	~~100~~ 0	0	~~155~~ 0	0	SWIP-N	10	16	0
2030	-350	350	~~300~~ 430	0	100	0	0	GWW	0	16	0
2031	0	0	0	0	400	0	0	0	0	17	8
2032	0	0	0	0	200	0	0	0	0	17	0
2033	0	0	0	0	100	50	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	16	5
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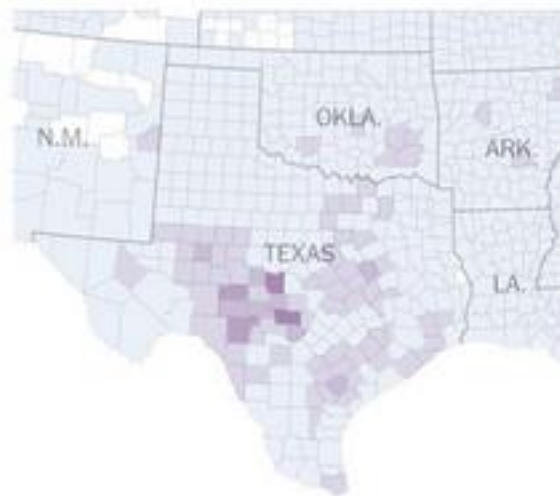


Texas 2021 Winter Storm

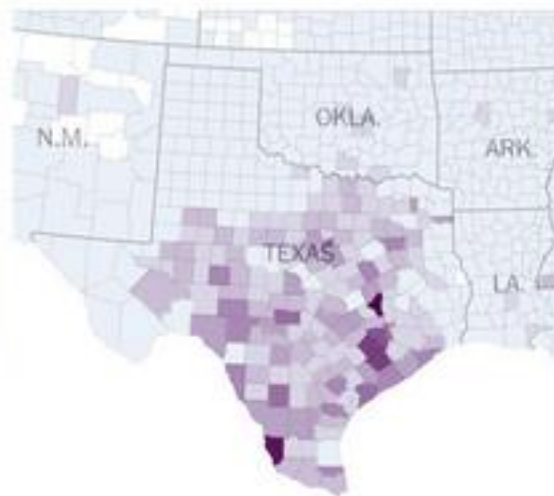
Percentage of customers without power



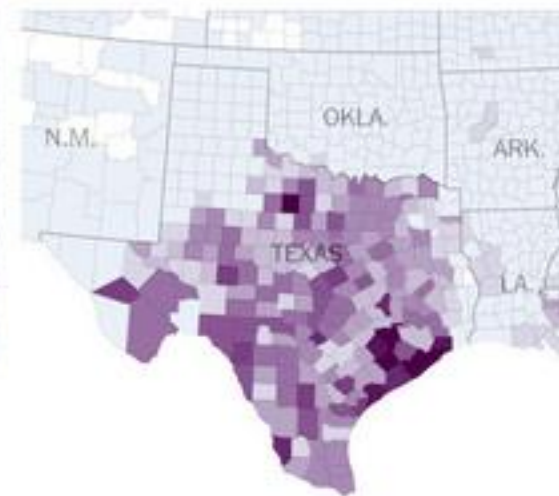
Sunday, 7 p.m.



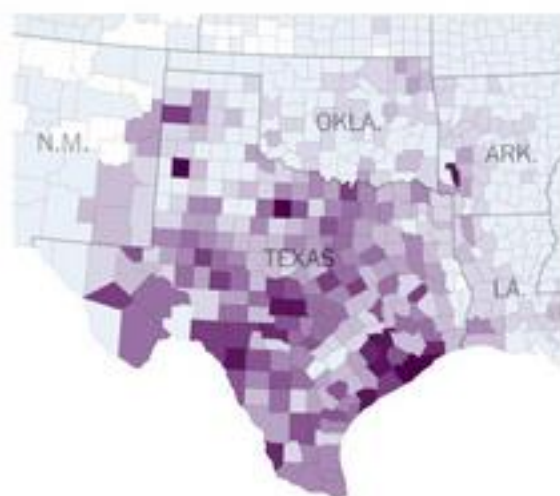
Monday, 3 a.m.



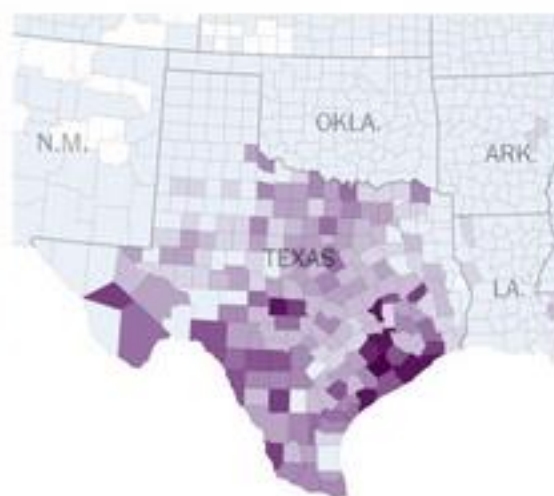
Monday, 10 p.m.



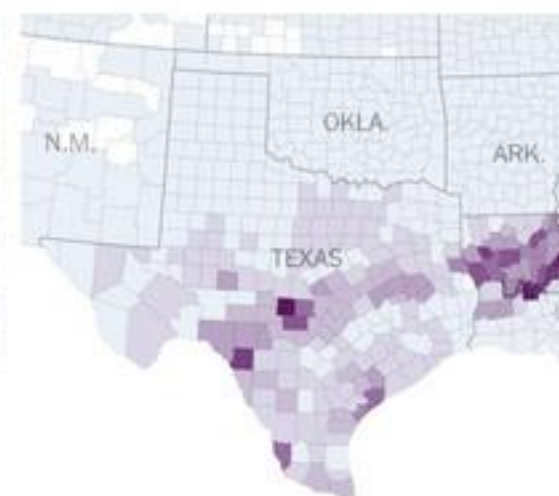
Tuesday, 12:15 p.m.



Wednesday, 11:30 a.m.



Thursday, 10:30 a.m.

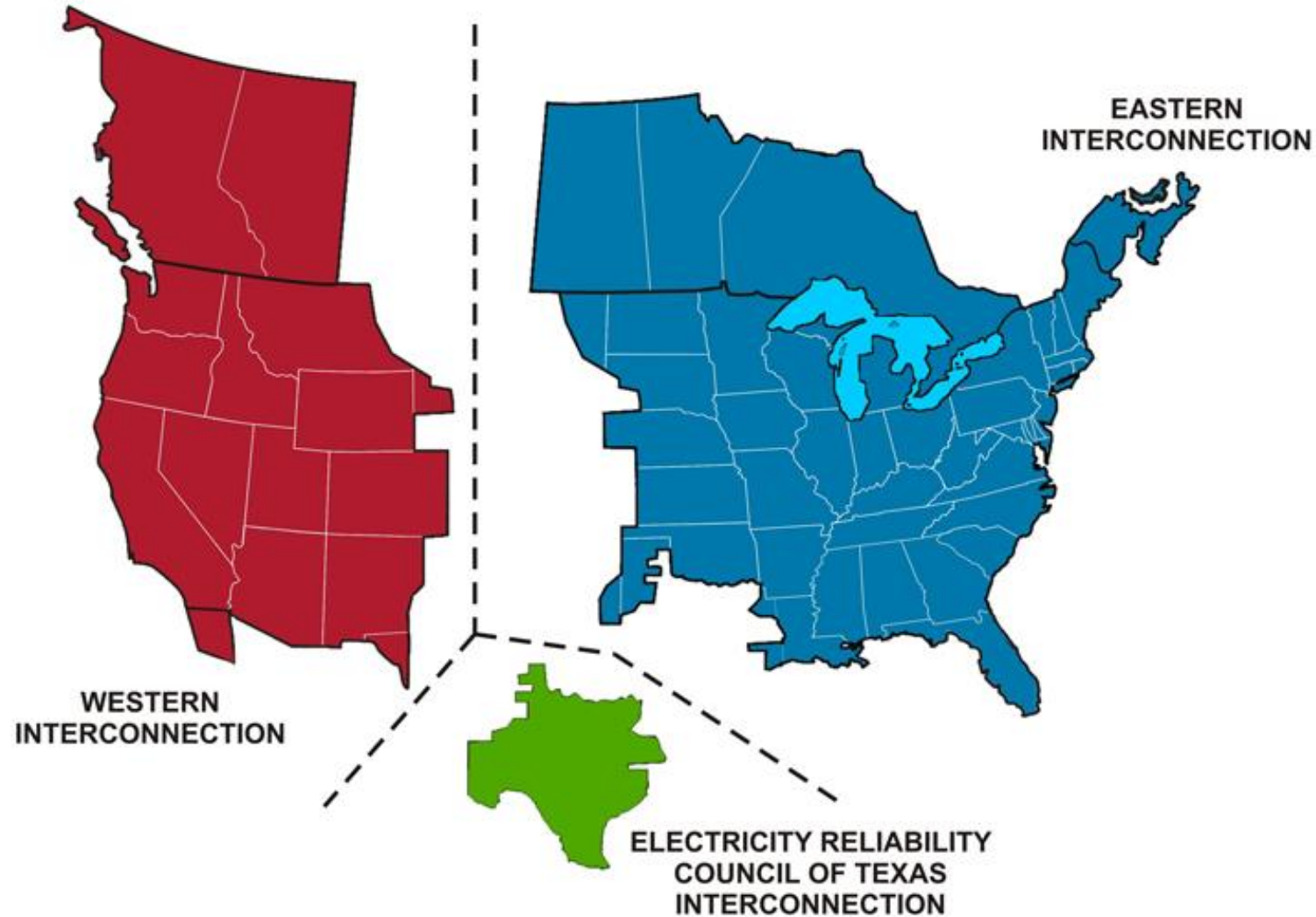




Texas Frozen Resources

Isolation

North American Electric Reliability Corporation Interconnections





4. SAN FRANCISCO AREA DETAIL



6. LOS ANGELES AREA DETAIL



7. LAS VEGAS AREA DETAIL



5. PORTLAND AREA DETAIL



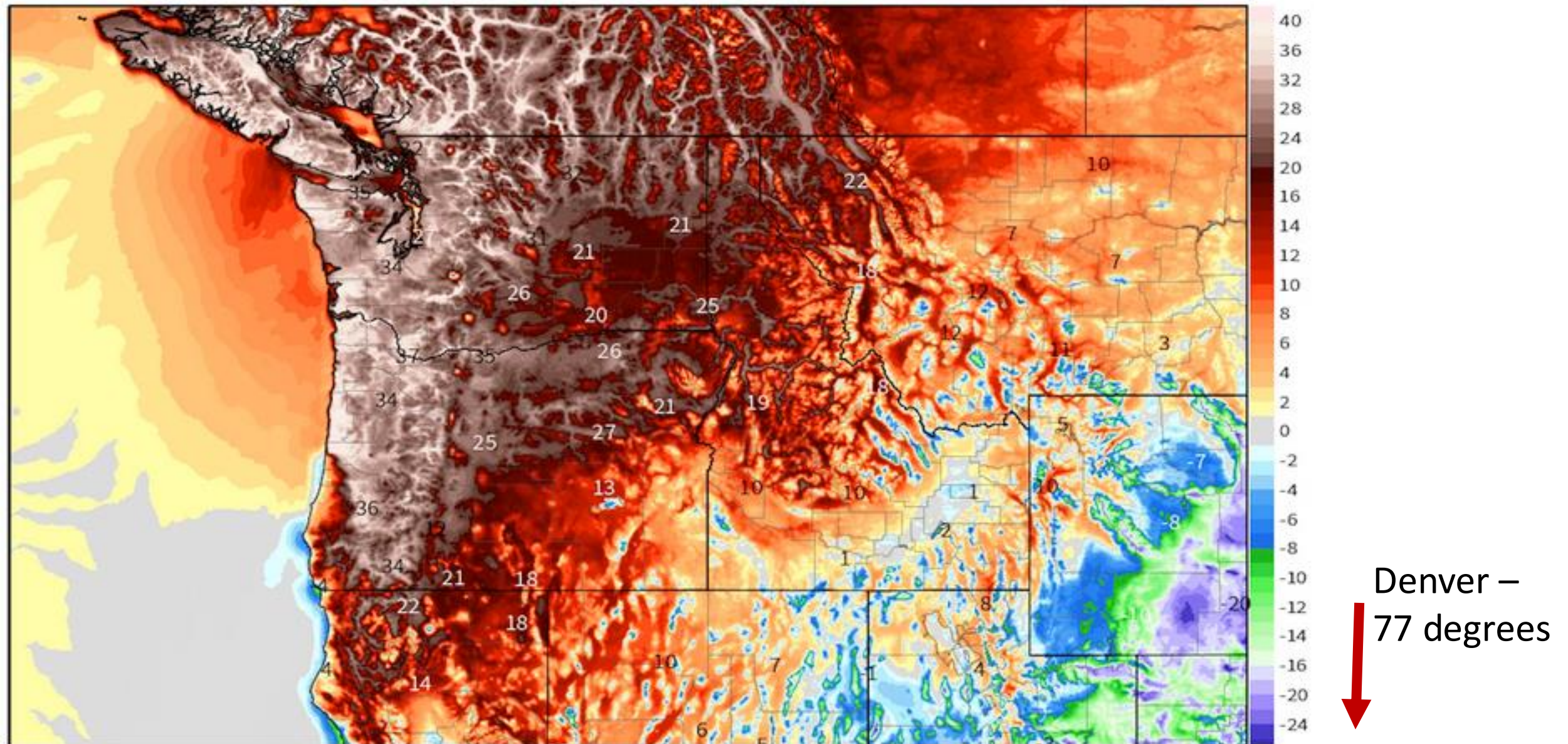
9. DENVER AREA DETAIL



8. PHOENIX AREA DETAIL



2021 Pacific Northwest Heat Dome

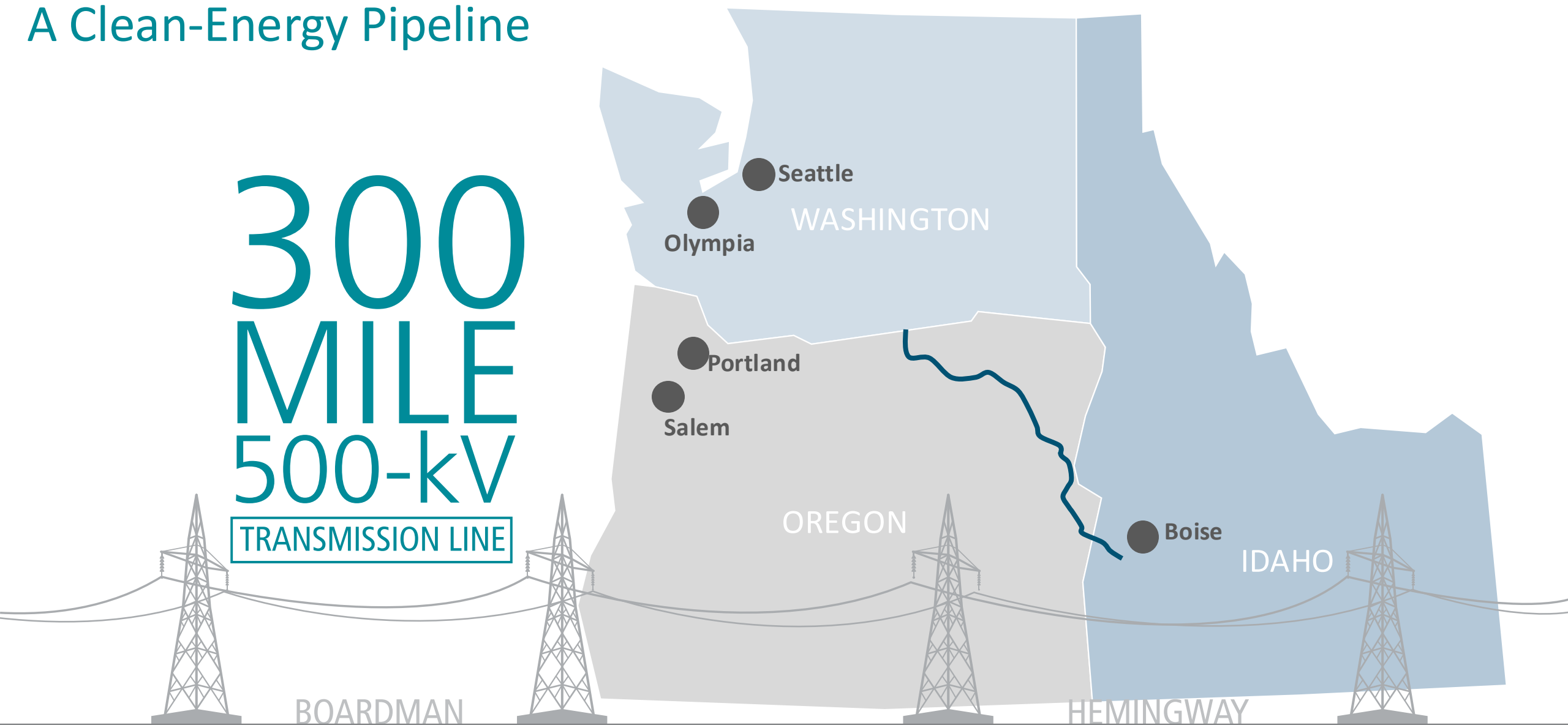


Boardman to Hemingway

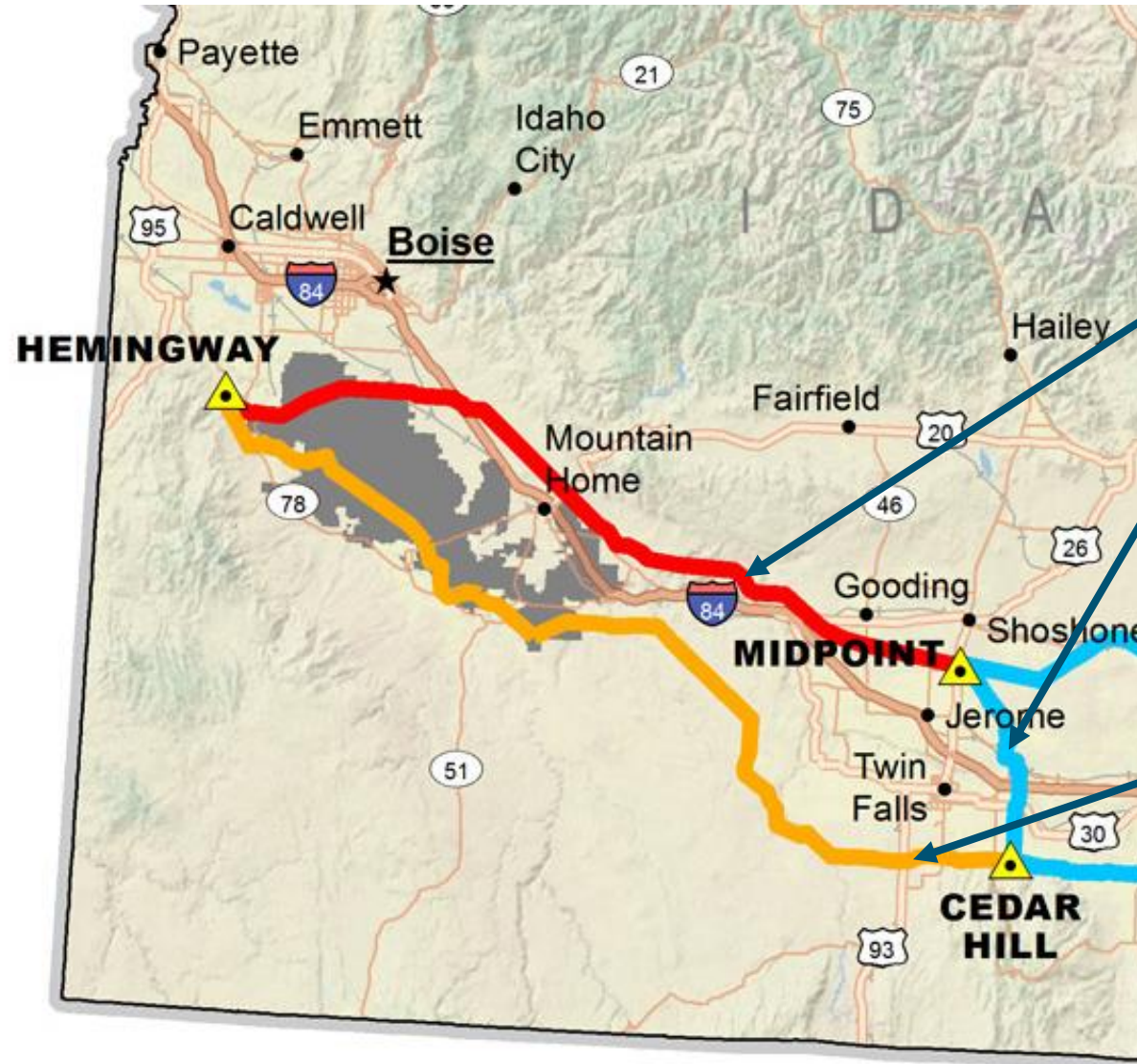
A Clean-Energy Pipeline

300
MILE
500-kV

TRANSMISSION LINE



Gateway West Evaluation



Gateway West
Phase 1

Gateway West
Phase 2

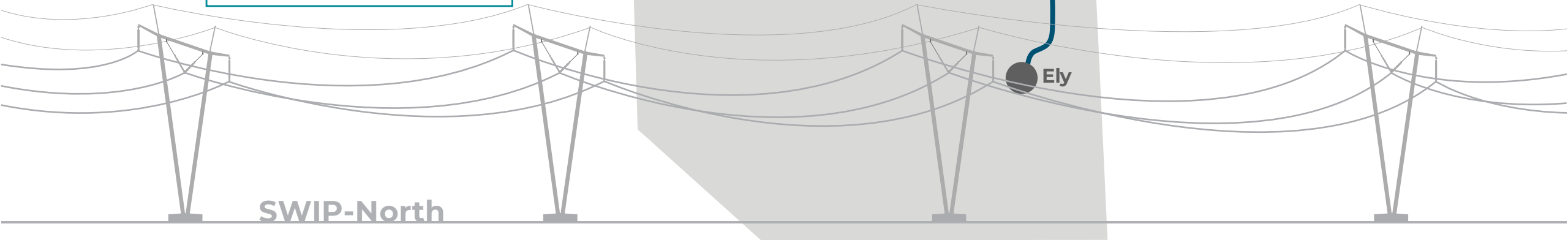
Southwest Intertie Project – North

(SWIP-N)

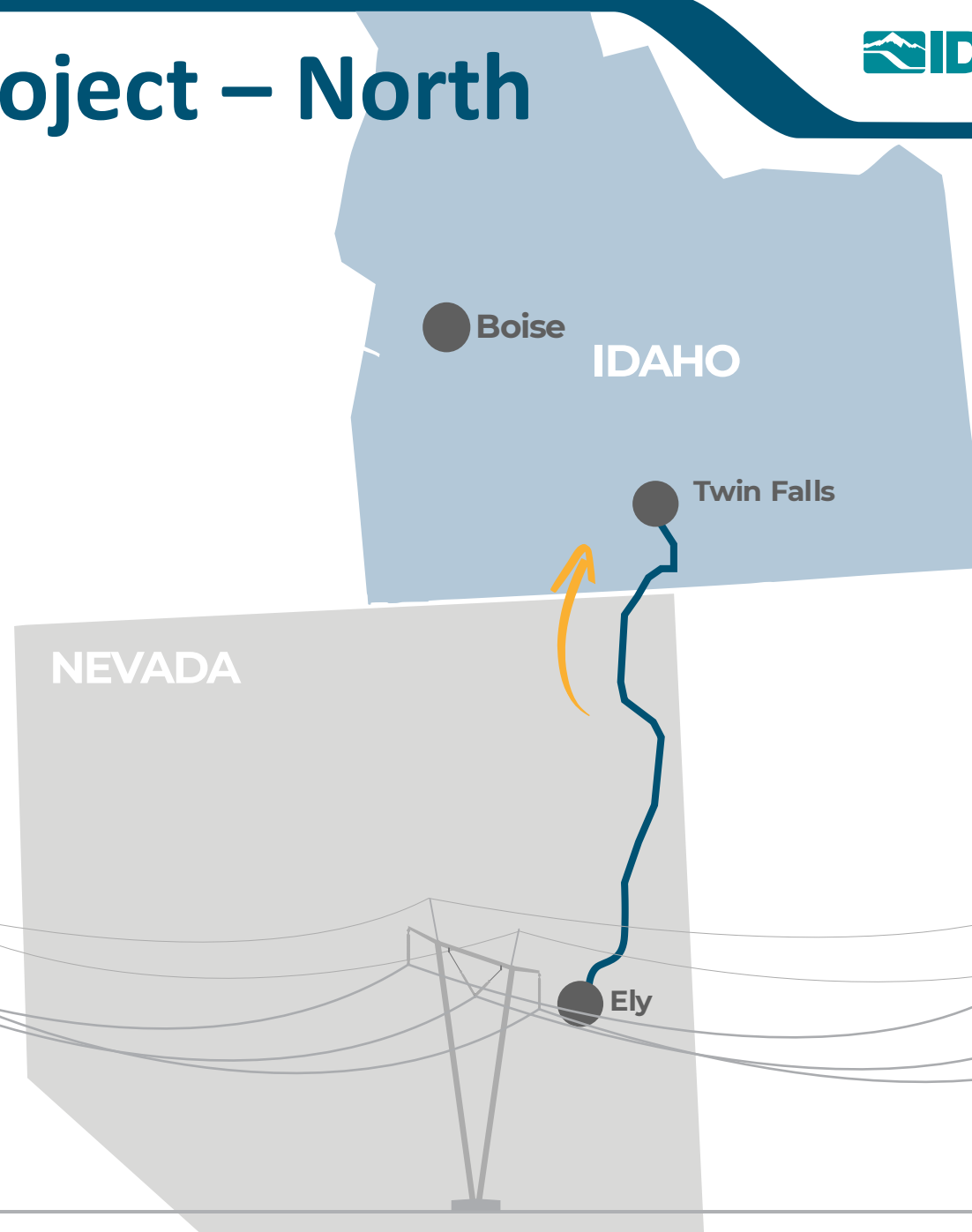


285
MILE
500-kv

TRANSMISSION LINE



SWIP-North



Boise

IDAHO

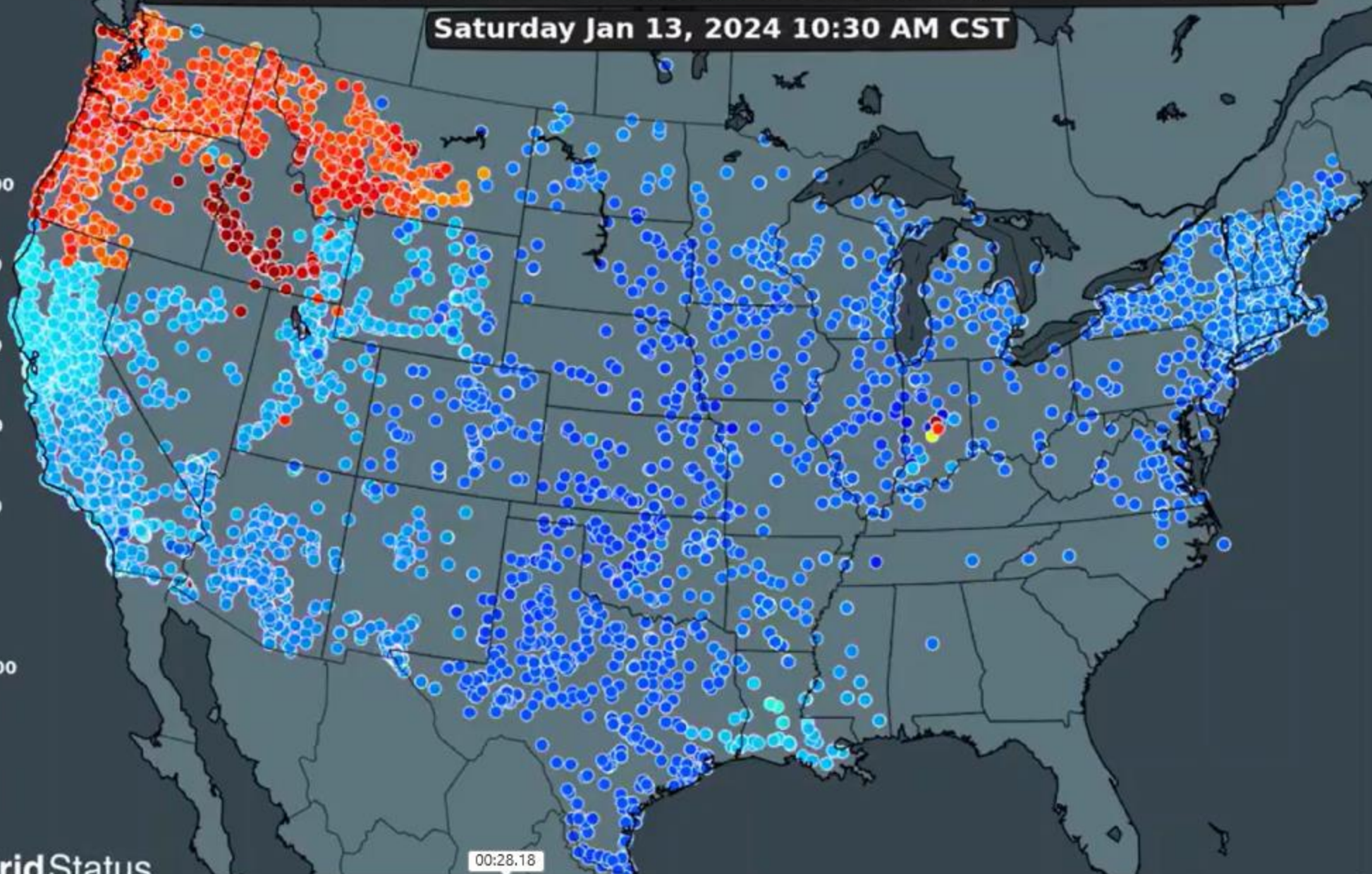
Twin Falls

NEVADA

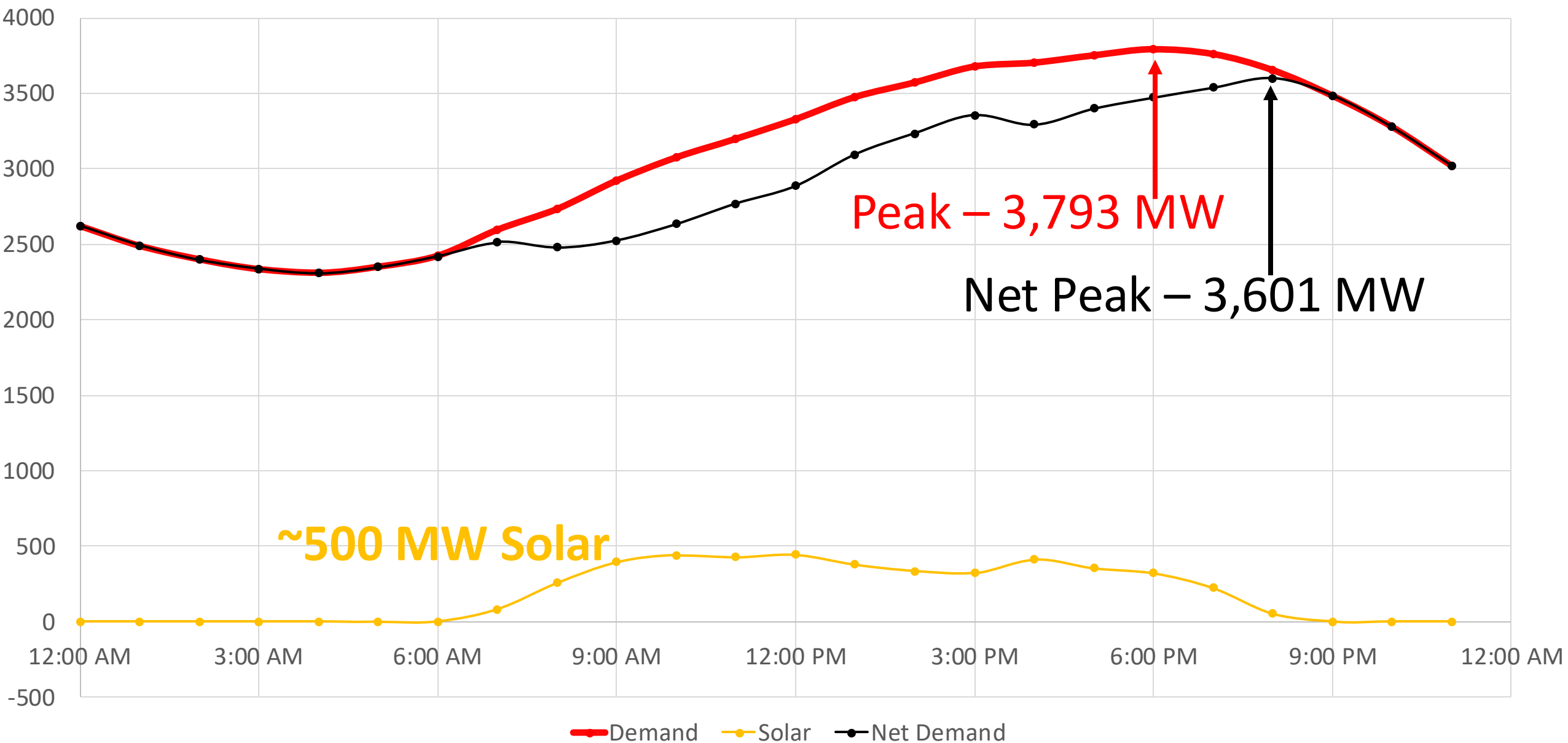
Ely

Real Time Wholesale Electricity Prices January 12th to the 14th

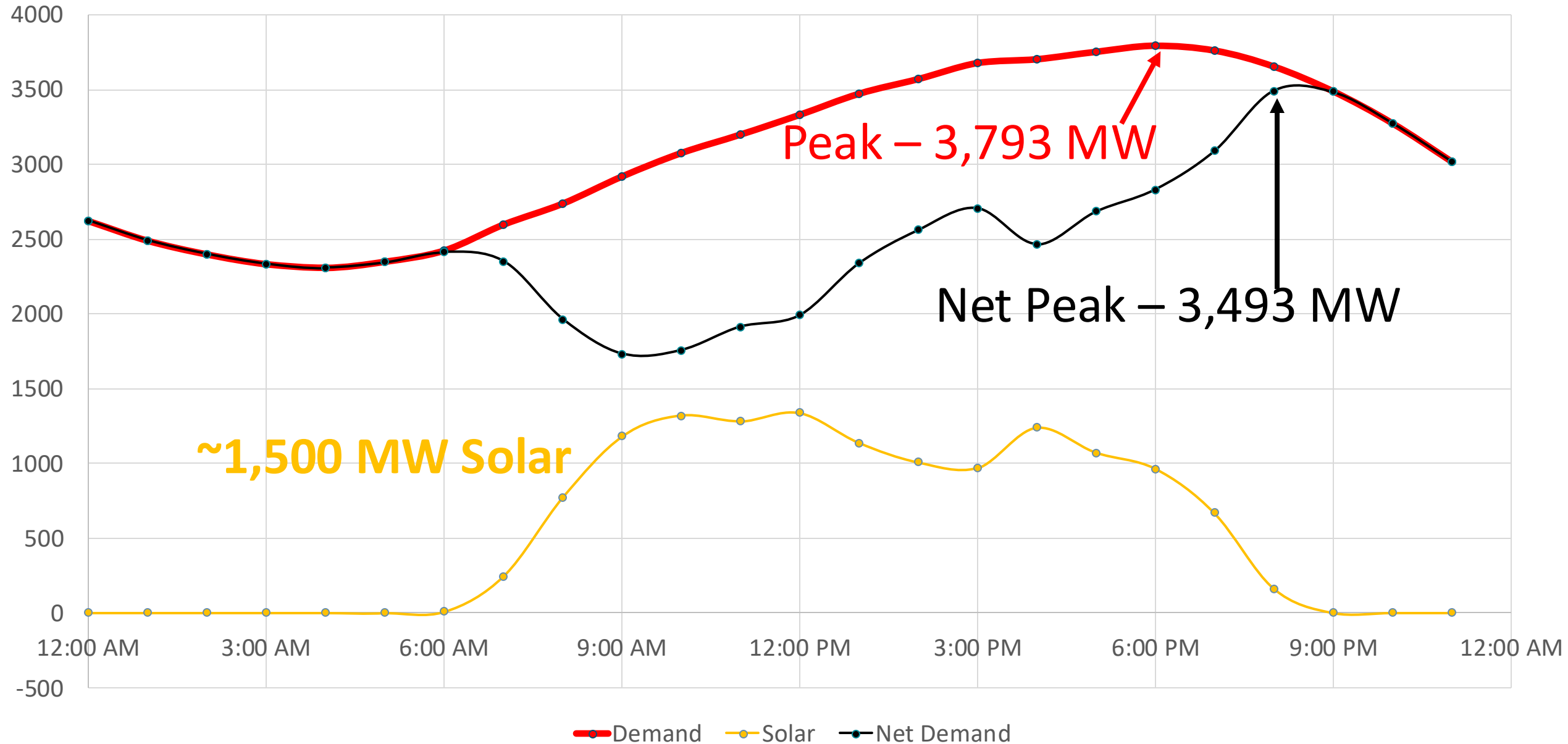
Saturday Jan 13, 2024 10:30 AM CST



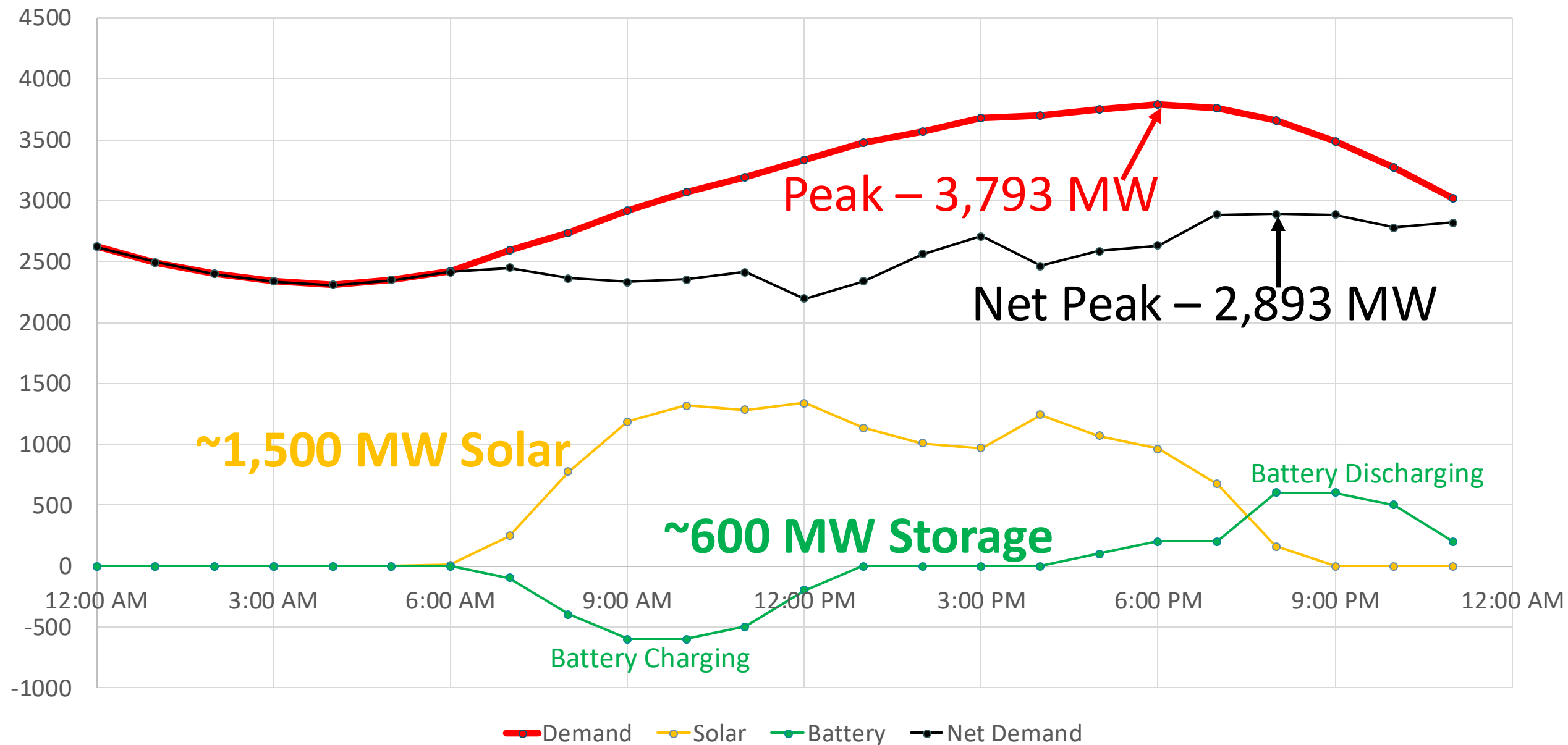
Demand v “Net” Demand (for Electricity)



Demand v “Net” Demand (for Electricity)

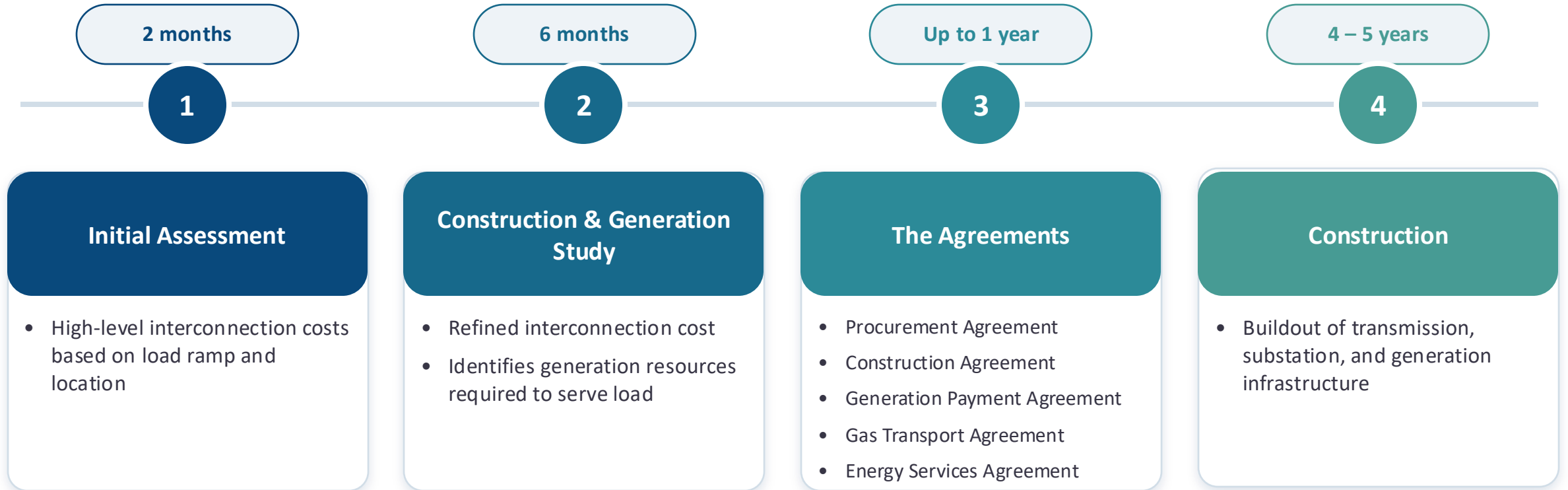


Demand v “Net” Demand (for Electricity)



The Interconnection Process

The Interconnection Process



End to end: approximately 5-6 years from first conversation to energized service

How We Engage with Large Loads

- 1 Growth pays for growth
- 2 Rate structure – no cost shifting to other customers
- 3 Take-or-pay for capacity and energy
- 4 Termination payment
- 5 Credit and security provisions



The Regulatory Process

How Idaho Power's Regulatory Process Protects Other Customers



Requests for service exceeding 20 MW are subject to this process.
Steps 1–3 establish cost responsibility; Steps 4–5 provide independent Commission review and ongoing oversight.

Establishing Cost Responsibility Before Service Begins

1. Study the Project

- IRP or generation study identifies resource adequacy needs.
- Construction study identifies local transmission, substation, and distribution needs.
- Generally, the studies establish the technical requirements, costs, timing, and risks associated with serving the proposed load.

2. Assign Customer-Specific Costs

- The customer provides up-front funding for the facilities required to interconnect and serve its project.
- Customer-specific rates are developed to recover the full cost of service, including the customer's share of system generation and transmission resources.
- Costs are related to the customer's load, timing, and operating characteristics.

3. Negotiate Enforceable Protections

- Contract demand and minimum billing commitments (i.e., "take or pay" requirements)
- Credit and collateral requirements
- Early-exit and termination protections
- Forecast, notice, and operational obligations

Before Idaho Power plans and invests to serve the load, the customer must demonstrate meaningful financial commitment.

Commission Review and Ongoing Regulatory Oversight

4. Commission Review and Approval

- The large customer cannot simply take service under an unreviewed private agreement.
- The Energy Services Agreement (ESA) and associated tariff schedule are filed with the IPUC.
- The IPUC reviews the rates, contract terms, and no-harm demonstration before service is provided.

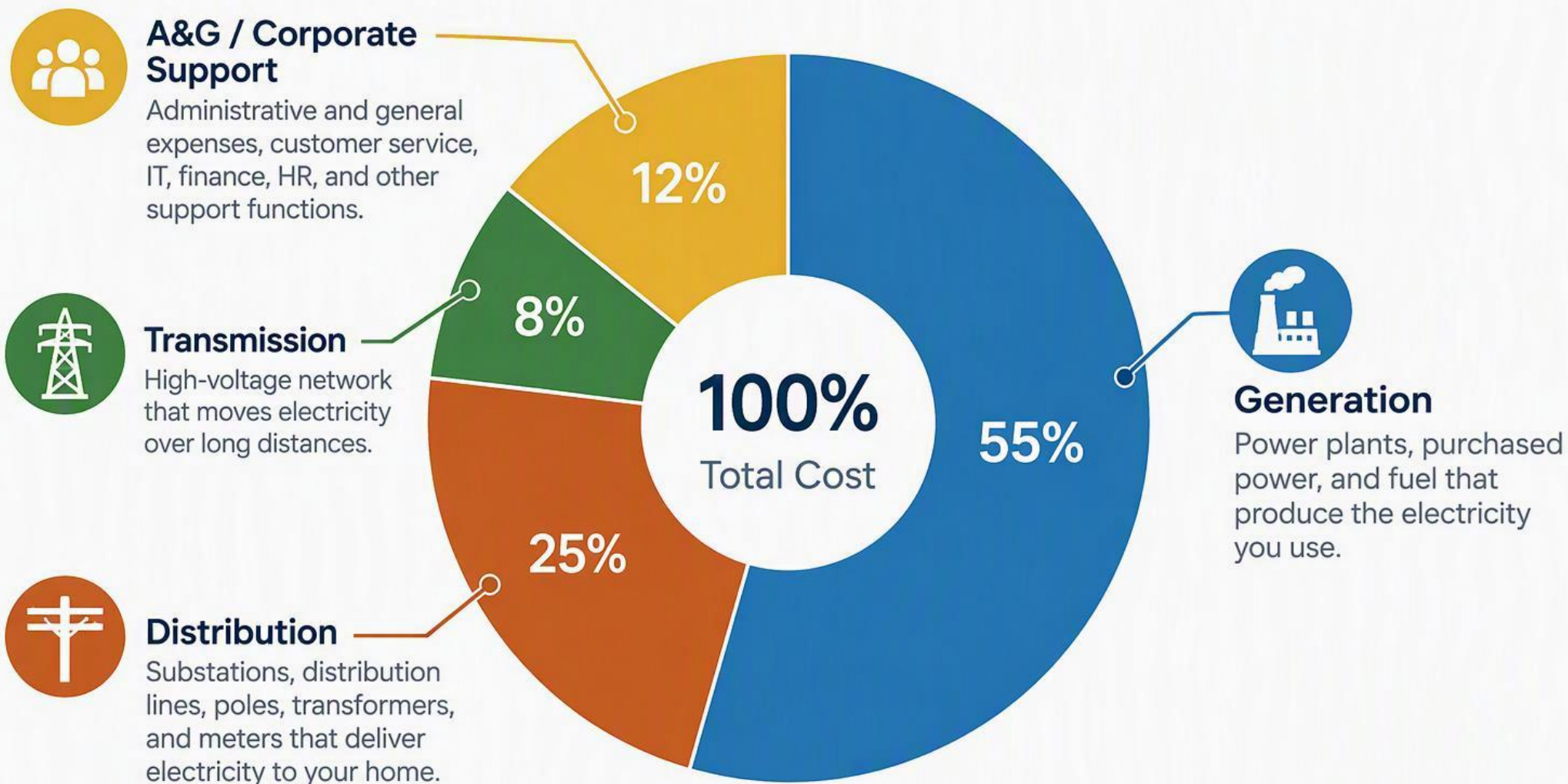
5. Ongoing Regulatory Oversight

- Rates and methodologies remain subject to ongoing IPUC authority.
- Large-load cost responsibility is reviewed again in general rate cases.
- The IPUC may prospectively adjust rates, charges, or recovery mechanisms if needed.

The process includes independent Commission review before service and ongoing oversight thereafter.

Where Your Residential Electric Bill Goes

Typical allocation of costs for a residential customer



Note: Percentages are approximate and may vary based on the specific time period and cost of service study.

Questions?