Welcome

NEEA Board Meeting – Day 1
Thursday, March 12, 2026

Introductions

Thank you, Jamae!

Introductions

NEEA's mission:
NEEA catalyzes the most efficient use of energy for a thriving Northwest.

NEEA's purpose:
An alliance of utilities and partners that pools resources and shares risks to transform the market for energy efficiency to the benefit of all consumers in the Northwest.

Group Norms

Communicate with…

- Compassion for others and ourselves
- Positive intentions and honesty
- Thoughtful feedback for others (and invite it for ourselves)
- Curiosity rather than judgement
- A growth mindset
- Humility and limited influence from ego
- Patience for ourselves, each other, and the processes we work through together

Reflect on…

- How and why this experience may be healthily uncomfortable
- Our roles in systems and institutions

Commit to…

- Engaging in this work, however engagement may look for you
- Being accountable for both our intentions and impacts
- Being both a teacher and a learner
- Facilitate everyone's participation in discussions
- Engaging in conflict and disagreement with respect for each other

ED Update

2026 Q1 ED Update

Becca Yates

Executive Director, NEEA

March 13, 2026

Today's Topics

Performance, Savings and Affordability

Strategic Direction

Electric Portfolio

- Expedite market interventions where possible to unlock energy savings sooner
- Advance the long-term pipeline of opportunities with focus on peak load reduction value
- Learn where our work can support the distribution of benefits to all Northwest customers

Strategic Direction

Dual-Fuel + Natural Gas Portfolio

- Develop gas technology market transformation opportunities for the commercial market
- Develop dual-fuel system opportunities with a focus on the total end-use efficiency
- Look for areas and approaches that can become fuel-neutral to garner increased market attention
- Pursue opportunities in building codes and federal and state product standards

Unlocking Savings through Performance Standards: Advanced Heat Pumps

- Focusing on ‘out-of-the-box’ performance that delivers greater efficiency
- Led new research on low-load efficiency that shows improved energy savings, comfort without increasing costs to the customer
- Identified low-load efficiency as a key performance differentiator for both industry and consumers
- Informed specification to federal test procedure so that heat pumps ratings represent real-world performance

Proving Performance + Affordability of Dual-Fuel Systems: Advanced Commercial Water Heating

- Conducting field demonstrations to validate how advanced commercial water heating technologies perform, including gas heat pumps and dual-fuel systems.
- Based on modeling, dual-fuel systems have the potential to save up to 22% when fully optimized.

Proving Performance + Affordability of Dual-Fuel Systems:
River Haven Multifamily Demonstration

Dual-fuel system of electric heat pump + gas water heaters maximizes overall system efficiency by using the two heat sources in tandem, to capitalize on each

Increasing Customer Choice and Affordability: Northwest Marketplace Eco Financing

- Northwest Marketplace currently available across the region at nw.enervee.com
- Six utilities will brand/customize experience for their customers: **Clark PUD, Energy Trust, Idaho Power, NW Natural, Pacific Power and Tacoma Power**
- New lending partnership between Enervee and **US Bank**

Locking in Performance and Long-Term Savings: Codes + Standards

- **Performance:** Sets minimum levels of efficiency and performance for products and buildings, so that they perform well and save energy
- **Savings:** Locks in savings by lowering both monthly and long-term energy costs for homes, businesses through reduced energy waste
- **Affordability**: Expands customer access to high-performing products and practices; giving customers more control over their energy costs

Additional 2026 Outlook

- Exploring **emerging opportunities** across multiple product groups
- Engaging with **manufacturers on voluntary specifications** to drive product innovation and advance efficient options for Northwest consumers
- Publishing the **2025 Commercial Building Stock Assessment**
- Recruiting for the first **Motor System Stock Assessment** since 1999
- Conducting research on **factors affecting affordability and market adoption** across different parts of our region
- Advancing **specially funded projects**: Whole Building, End-Use Load Flexibility, and End-Use Load Research

Efficiency Exchange 2026 (EFX26): Register Now!

EFX26 In-person conference:

May 5-6 in Boise, ID

Preconference tours and networking: **May 4**

Opening keynote:
Lisa Grow, CEO, Idaho Power

neea.org/efx

Thank You!

Governance

Finance

2026 NEEA Audit

SERVICES PROVIDED

01

Audit of the financial statements

02

Uniform Guidance (UG) compliance audit

03

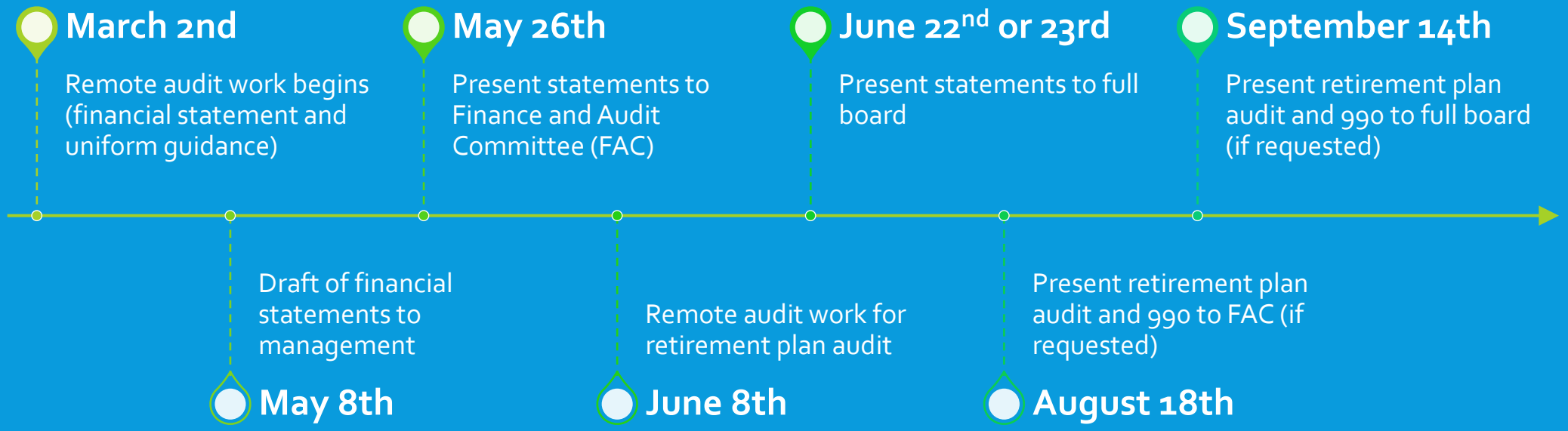
Audit of NEEA 403(b) retirement plan

04

Filing of 990 informational return

Aprio

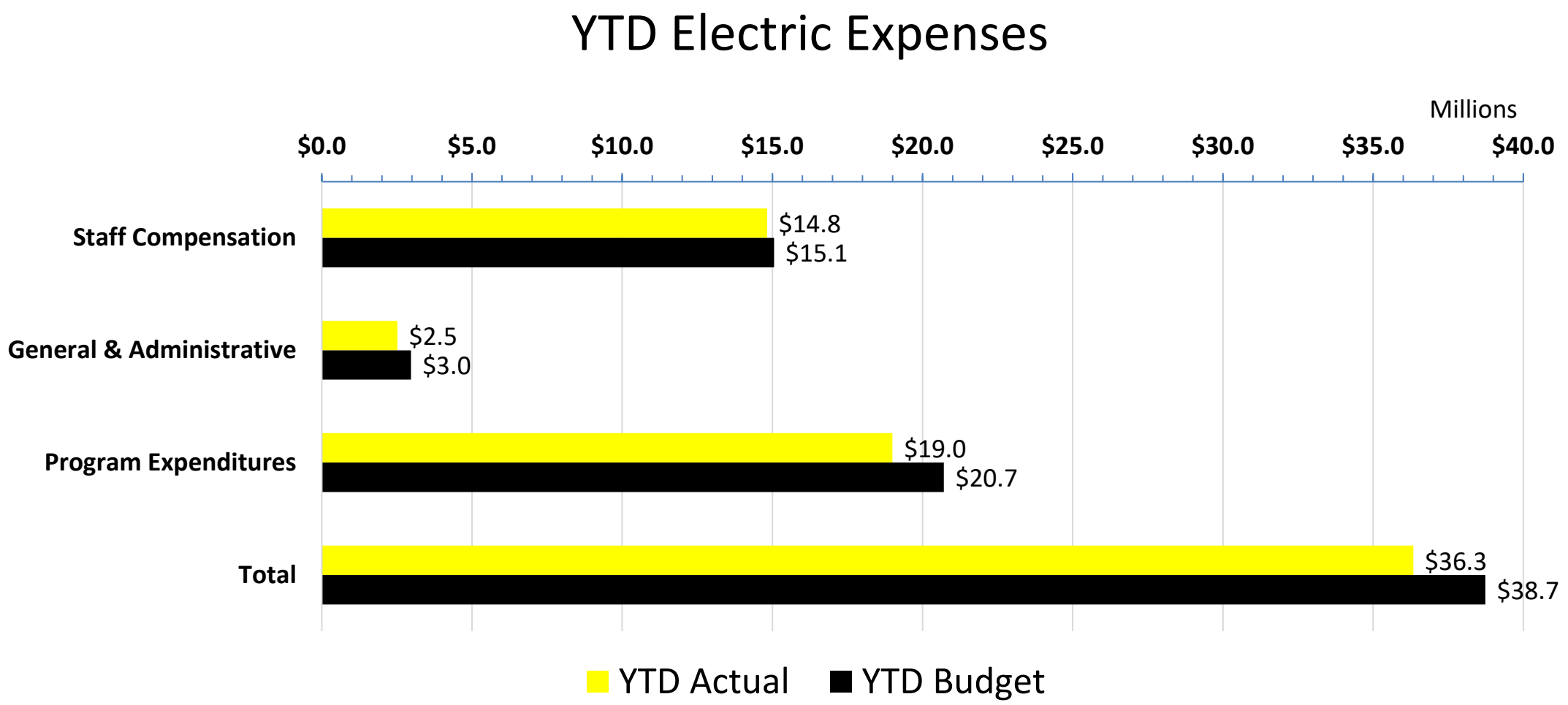
TIMELINE



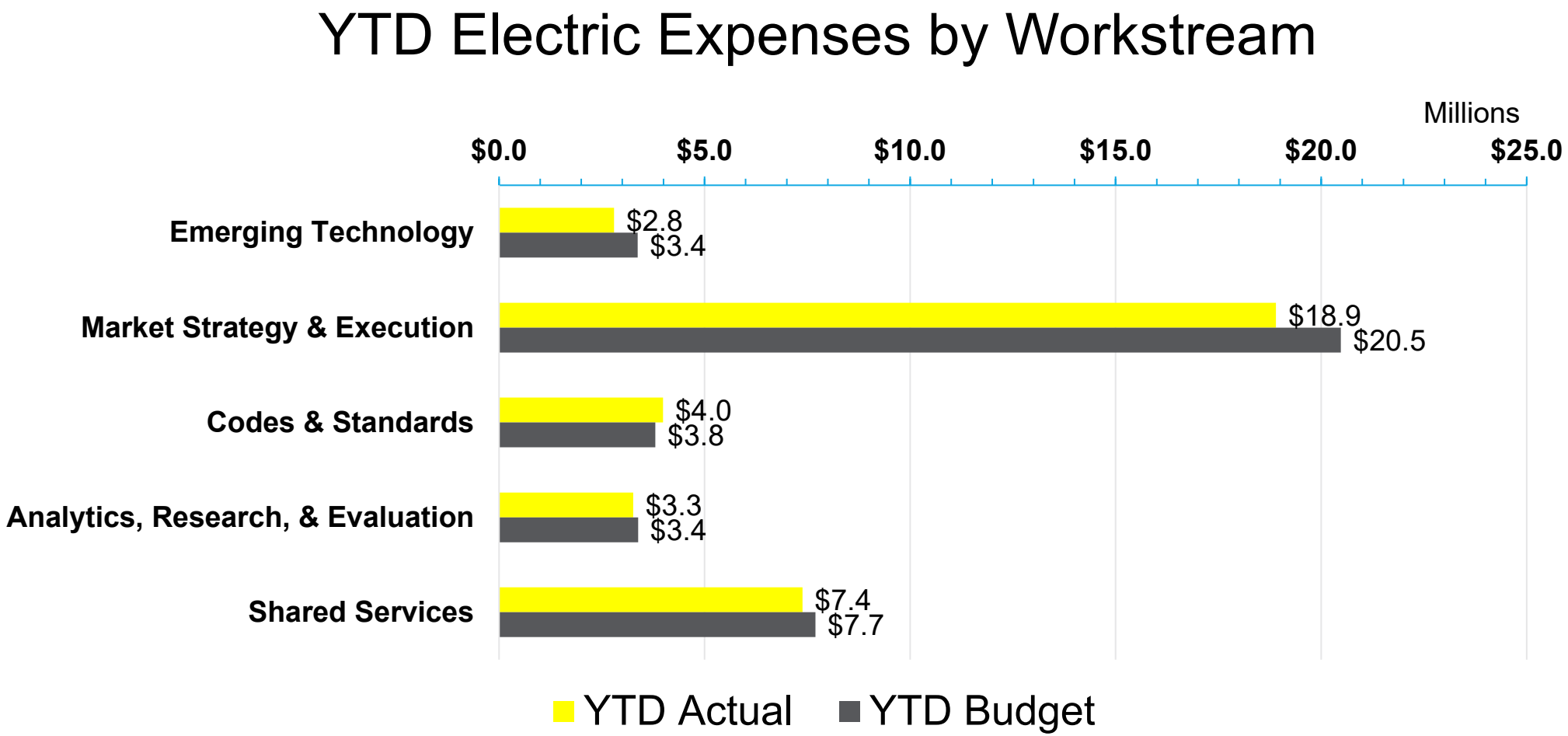
Aprio

Quarterly Financials

Electric Expenses YTD through Q4 2025



Q4 2025 YTD Electric Expenses by Workstream



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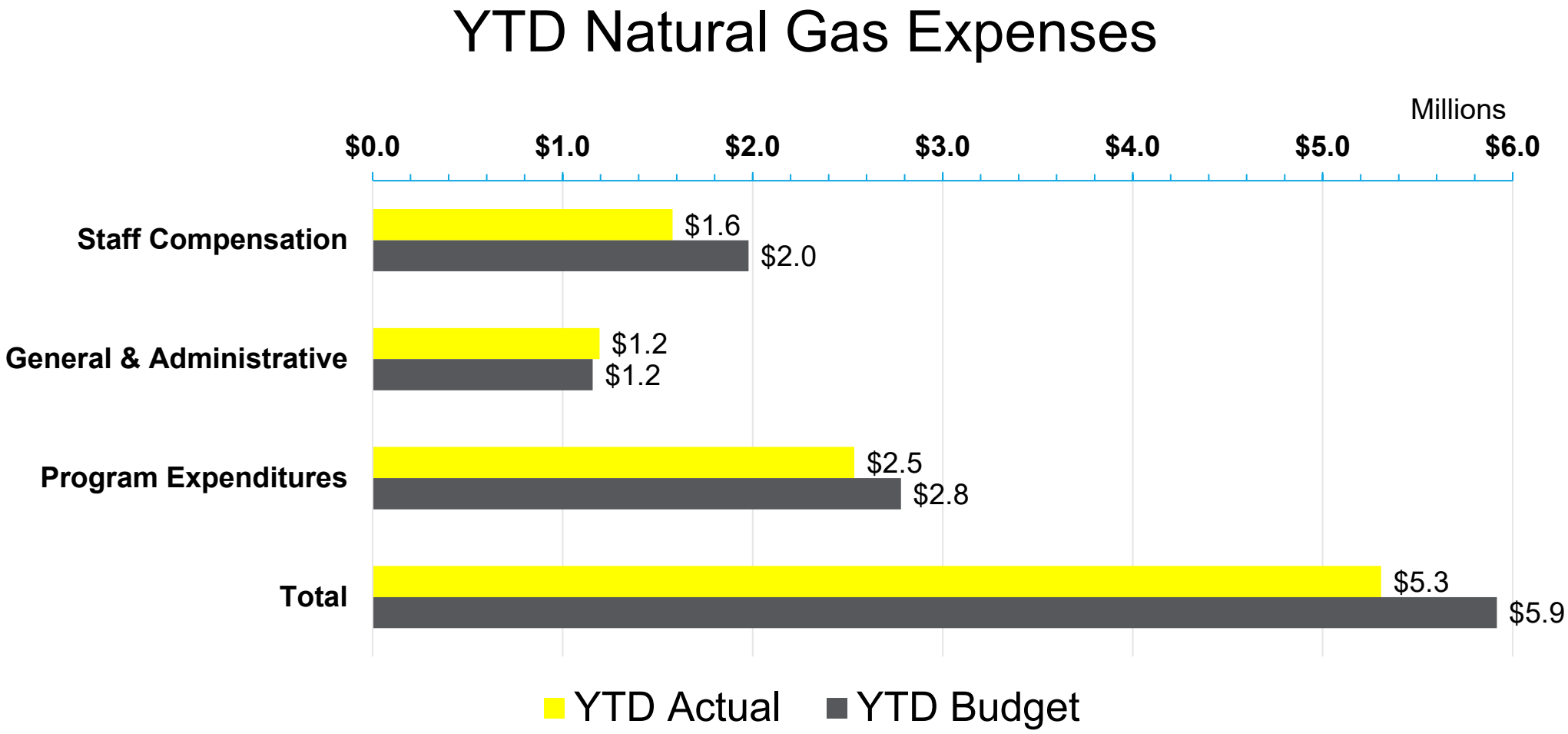
Natural Gas Expenses YTD through Q4 2025



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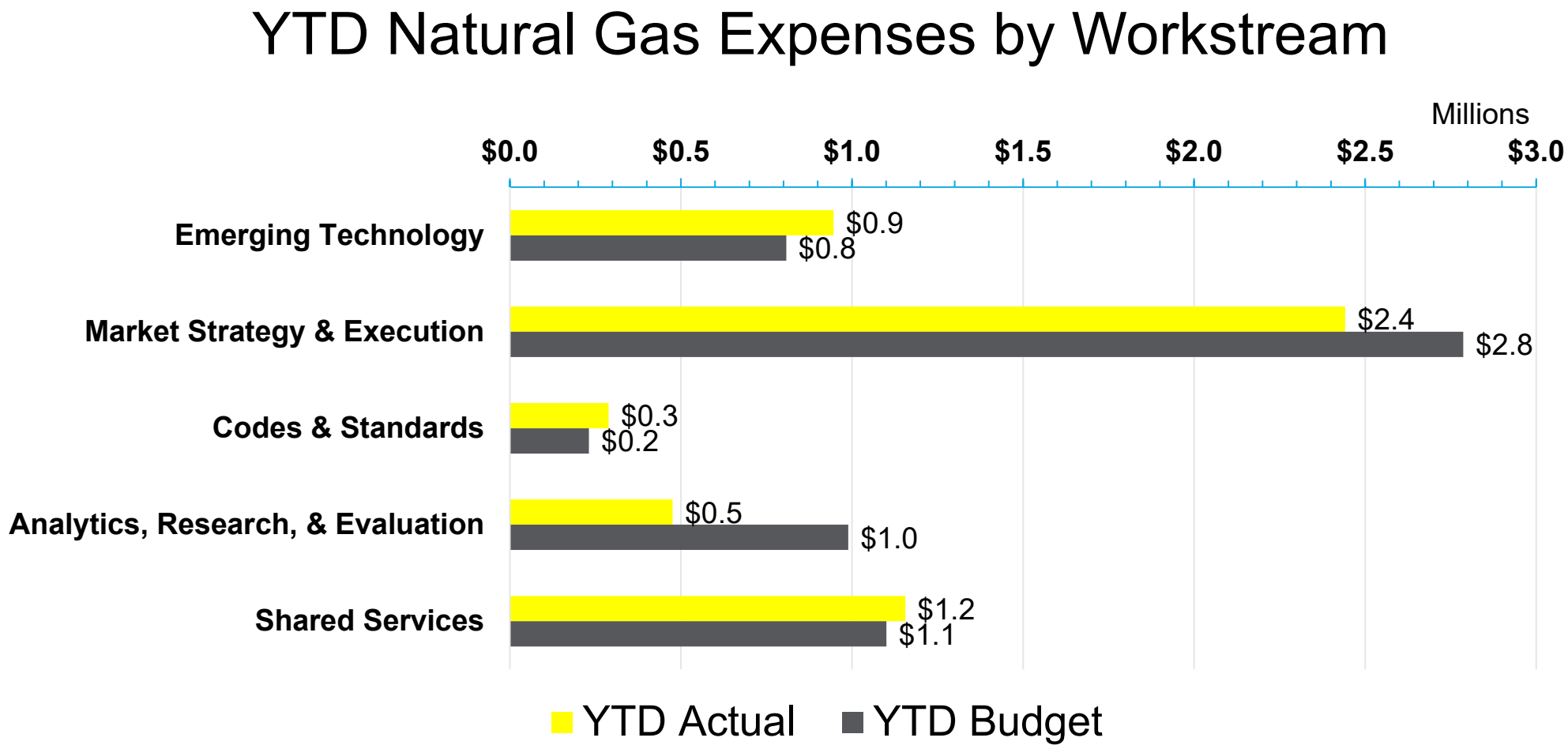
Q4 2025 YTD Natural Gas Expenses by Workstream



Balance Sheet summarized (unaudited) Q4 2025

	Current Qtr End (December 2025)	Previous Qtr End (September 2025)	Last Fiscal Year (December 2024)
ASSETS			
Current Assets			
Cash and Cash Equivalents	$ 16,916,012	$ 18,062,915	$ 14,473,898
Accounts Receivable	71,865	9,778,653	204,764
Other Current Asset	965,473	998,306	965,171
Total Current Assets	$ 17,953,350	$ 28,839,873	$ 15,643,833
Fixed Assets	1,536,802	1,646,261	1,618,572
Right of Use Asset : Lloyd Lease	2,920,299	3,059,522	3,474,889
Total ASSETS	$ 22,410,451	$ 33,545,655	$ 20,737,294
LIABILITIES & EQUITY			
Current Liabilities	4,633,530	3,931,026	5,686,580
Advances From Funders	10,199,371	22,114,135	7,583,430
Total Current Liabilities	$ 14,832,901	$ 26,045,161	$ 13,270,010
Total Long Term Liabilities	$ 3,722,299	$ 3,887,680	$ 4,379,832
Net Assets			
Equity			
Without Donor Restriction	$ 3,855,251	$ 3,612,815	$ 3,051,657
With Donor Restriction	-	-	35,796
Total Net Assets	$ 3,855,251	$ 3,612,815	$ 3,087,452
Total LIABILITIES & EQUITY	$ 22,410,451	$ 33,545,655	$ 20,737,294

Net Assets Without Donor Restriction Detail	
Property and Equipment, net of Right to Use Asset and associated Liability	734,802
Net Reserved for End-Use Load Research (NREL Funding)	310,929
Net Financial Reserve	2,809,520
Total Net Assets Without Donor Restriction	3,855,251

Q2 and Q3 Board Meetings

Motion: Q2 and Q3 Board Meetings

Approve moving the Q2 Board Meeting to Tuesday, June 23 – Wednesday, June 24 and the Q3 Board Meeting to Thursday, September 17 – Friday, September 18

Public Board Meeting Adjourns

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Welcome

NEEA Board Meeting – Day 2
Friday, March 12, 2026

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Consent Agenda

Motion: Consent Agenda

Approve the Q4 2025 Board Meeting Minutes

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Strategic Discussion
Data Centers

Agenda

30 minutes	Data Center Overview: NW Landscape, Efficiency & Load Flexibility Opportunities	Jeff Harris, NEEA
30 minutes	Case Study: Chelan & Microsoft	Dan Koch, Chelan & Charles VonReis, Chelan
15 minutes	Stretch Break	
30 minutes	Round Robin Discussion: Regional impact and concerns	Board Members
30 minutes	Facilitated Discussion: Role for NEEA and Impacts to Cycle 8 Planning	Tom Beierle, Ross Strategic & Board Members

Goals for Today

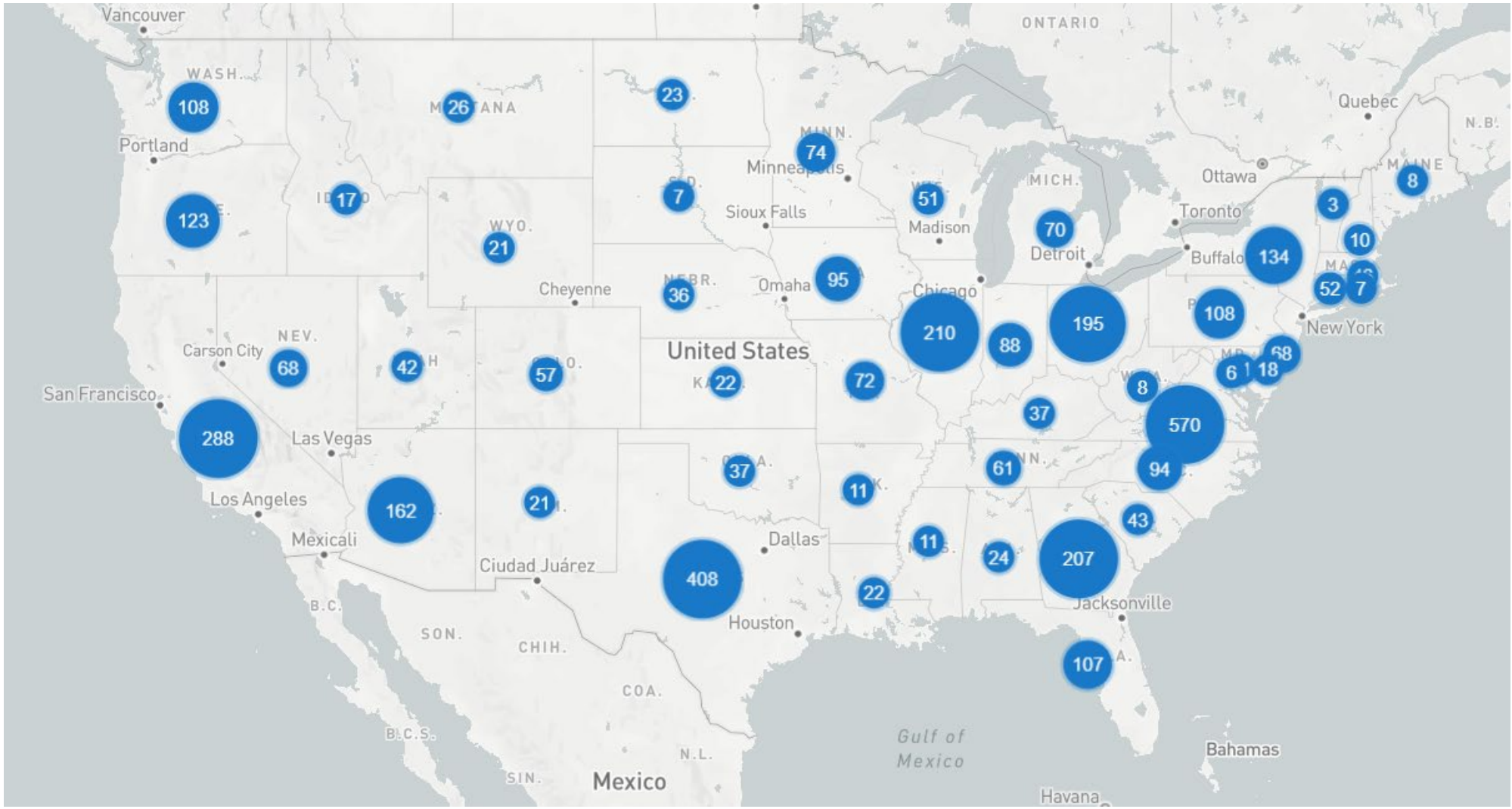
- Establish shared knowledge base to build upon
- Discuss potential roles for the alliance/ NEEA going forward
- Begin to identify implications for C8 business planning

Context for Discussion

- Data Centers are essentially large industrial users of electricity.
- EE programs decrease energy intensity per unit produced, consistent with Regional Power Act definition of conservation.
- Energy efficiency programs in the industrial sector do not necessarily result in *load reduction.*
- Industrial customers may choose to convert reduced energy intensity to cost-savings, or *increase production* and use the same or more energy than before.
- Increased production is assumed to be an economic benefit to society.

"A key question for the future is how much of the efficiency improvement will go to energy savings versus how much will enable increased computing? The vast majority is likely to go to increased computing due to rebound." – ACEEE, 2025

U.S. Data Center Distribution



Source: https://datacentermap.com

Very Large Data Centers Now Majority of Server Load

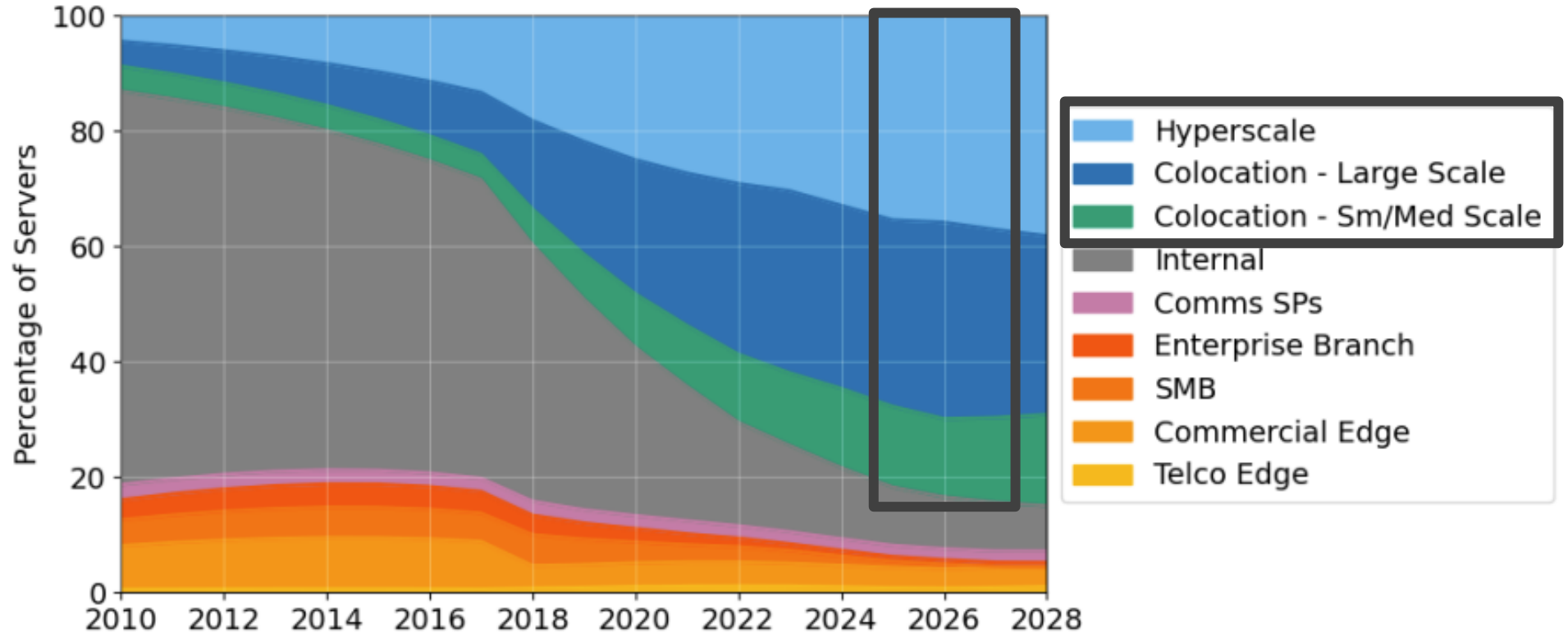
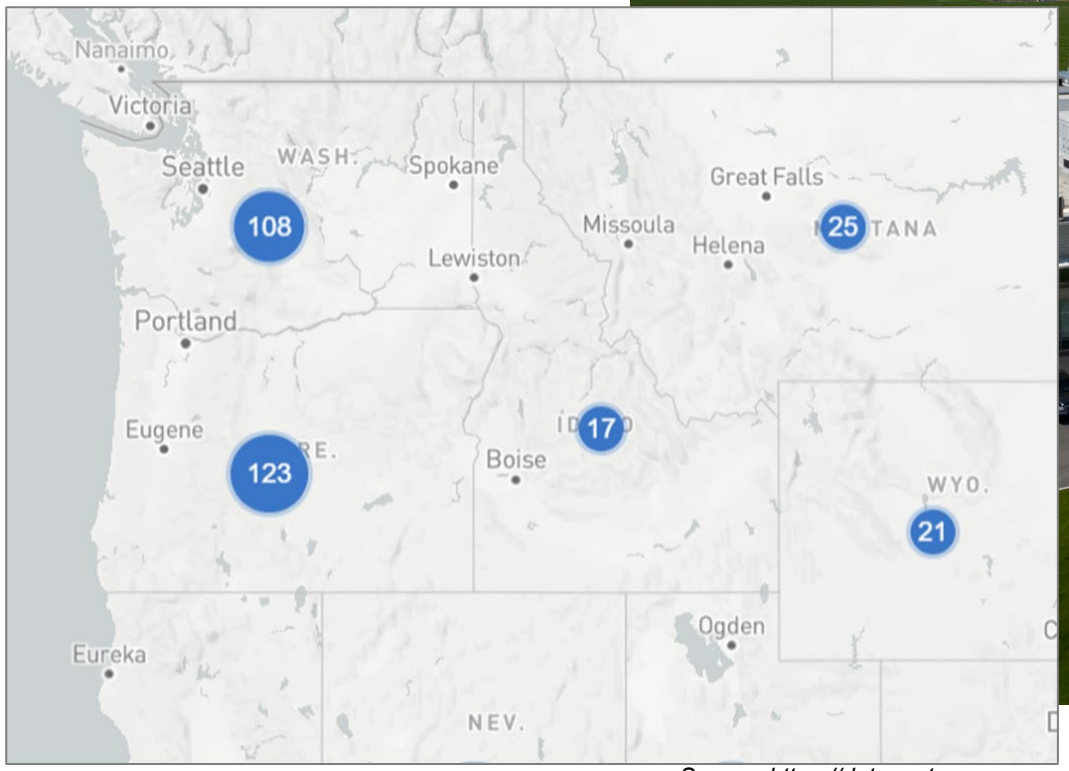


Figure 4.1. Distribution of servers by data center type.

Source: 2024 United States Data Center Energy Use Report, LBNL, Shababi et al

Data Centers in the Northwest

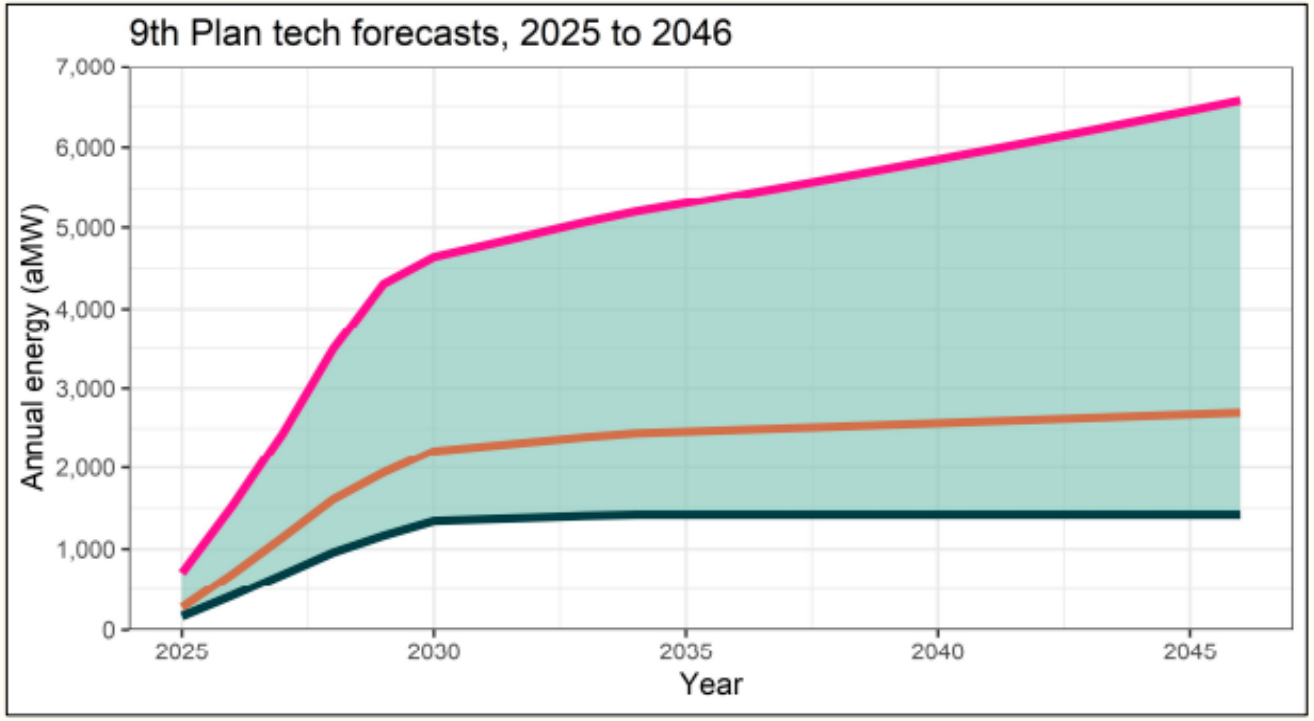


Source: https://datacentermap.com

Oregon and Washington rank 9th and 11th in the country for data centers; 7% of U.S. data centers are located in the Northwest.

NWPCC Load Forecast for Data Centers

Data Center Load Forecast in Ninth Plan



The **high forecast** through 2030 reflects utility and BPA growth expectations

The **mid forecast** through 2030 is a continuation of recent trends

The **low forecast** through 2030 has a slowing of recent trends

Post 2030 growth at a fixed rate depending on forecast

Source: 1/13/26 Council Panel on Data Centers Efficiency and Flexibility Opportunities

Inside the Region: Northwest Policy Context

- ‘Growth must pay for growth’ becoming dominant principle
  - Cost recovery, tariffs and long-term power commitments becoming starting point for large data center development
- Shift toward structured, statewide frameworks vs. individual agreements
- Transparency and reporting expectations growing
- States are diverging on incentives, aligning on guardrails

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Industry Response

Microsoft responds to AI data center revolt, vowing to cover full power costs and reject local tax breaks

BY TODD BISHOP on Jan 13, 2026 at 5:31 am

Sol Systems and Google Expand Commitment to Solar Energy Projects, Community Support

Meta Invests $600 Billion to Build Sustainable AI Data Centers and Strengthen U.S. Communities

by ESG News • November 10, 2025 Share:

Efficiency and flexibility top recommendations for rapid data center expansion

"Implementing data center energy efficiency and peak power reductions would provide some of the most significant energy savings available to the region."
– PAE, 2025

"Achieving higher levels of energy efficiency in data centers is critical for preventing power outages and constraining rising power costs."
– ACEEE, 2025

"Improving data center operational efficiency and flexibility are essential strategies to supporting rapid data center expansion."
– EPRI, 2024

Data Center Energy Demand: IT Assets ~60-90%, Remainder for Cooling, Electrical Equipment, Lighting

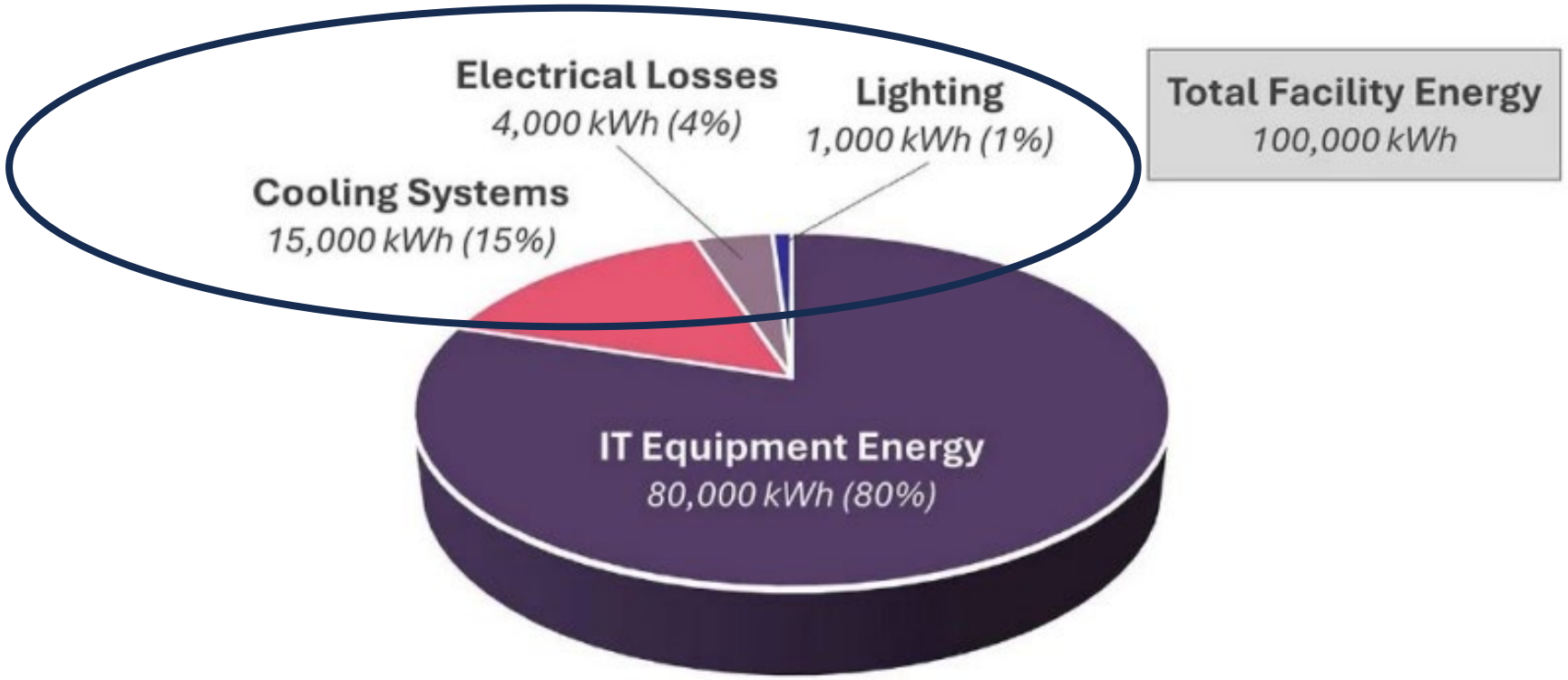


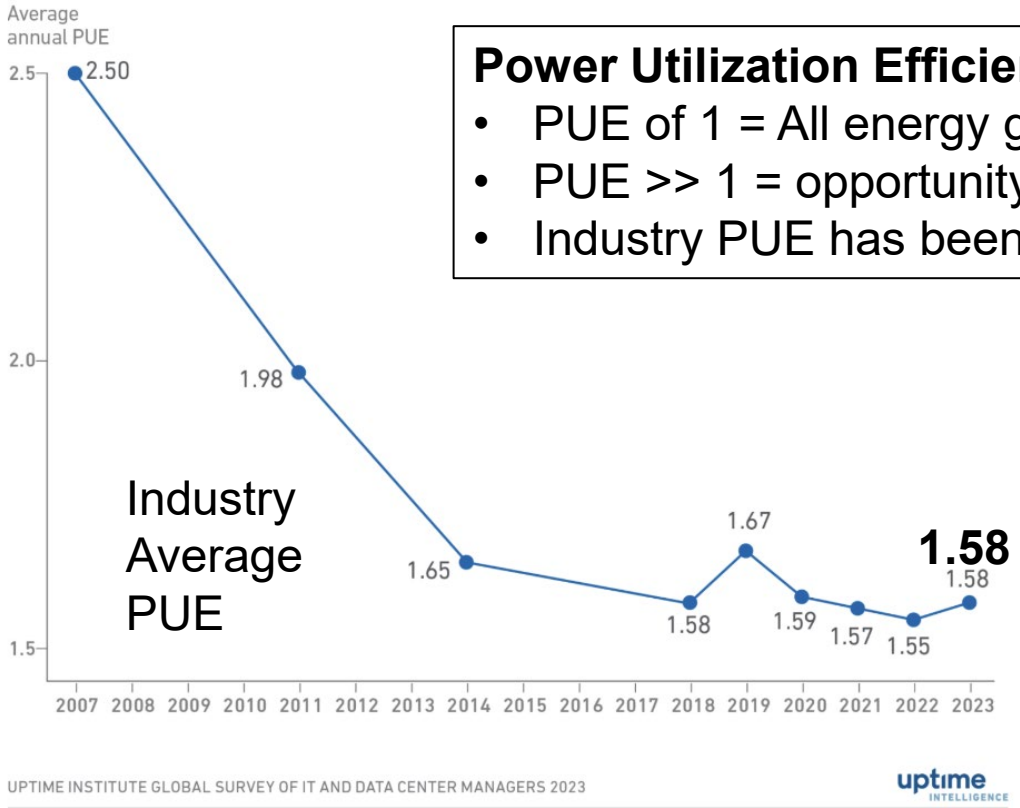
Figure 3. Distribution of data center energy consumption by component. This example is illustrative and assumes a PUE (defined later in this paper) of 1.25, a typical value for a very large data center. Source: Zhang 2024.

Source: ACEEE Opportunities to Use Energy Efficiency and Demand Flexibility to Reduce Data Center Energy Use and Peak Demand, 2025

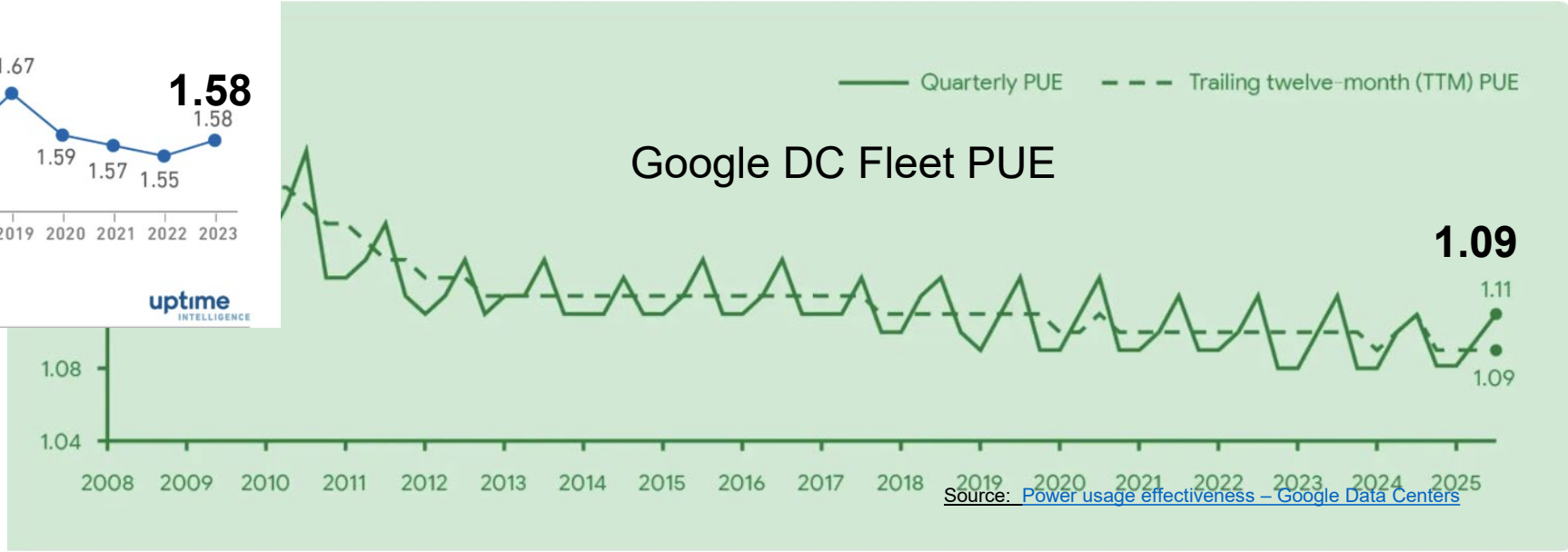
Average Data Center Efficiency Potential vs. Google's Best in Class ~ 30-40% efficiency potential

Power Utilization Efficiency (PUE) = Total Site Power / IT Equipment Power

- PUE of 1 = All energy goes to server/IT loads
- PUE >> 1 = opportunity for efficiency improvement in non-IT loads
- Industry PUE has been improving over time



Source: Global PUEs — are they going anywhere? - Uptime Institute Blog Survey of IT and Data Center Managers 2023 n=567



Source: Power usage effectiveness – Google Data Centers

Data Centers and Load Flexibility: Industry and Utility Initiatives Targeting Innovation

"Shifting the data center-grid relationship from the current "passive load" model to a collaborative "shared energy economy"— with grid resources powering data centers and data center backup resources contributing to grid reliability and flexibility—could not only help electric companies contend with the explosive growth of AI but also contribute to affordability and reliability for all consumers."
– EPRI, 2024

Source: 1/13/26 Council Panel on Data Centers Efficiency and Flexibility Opportunities

Opportunities & Barriers for EE and Load Flexibility

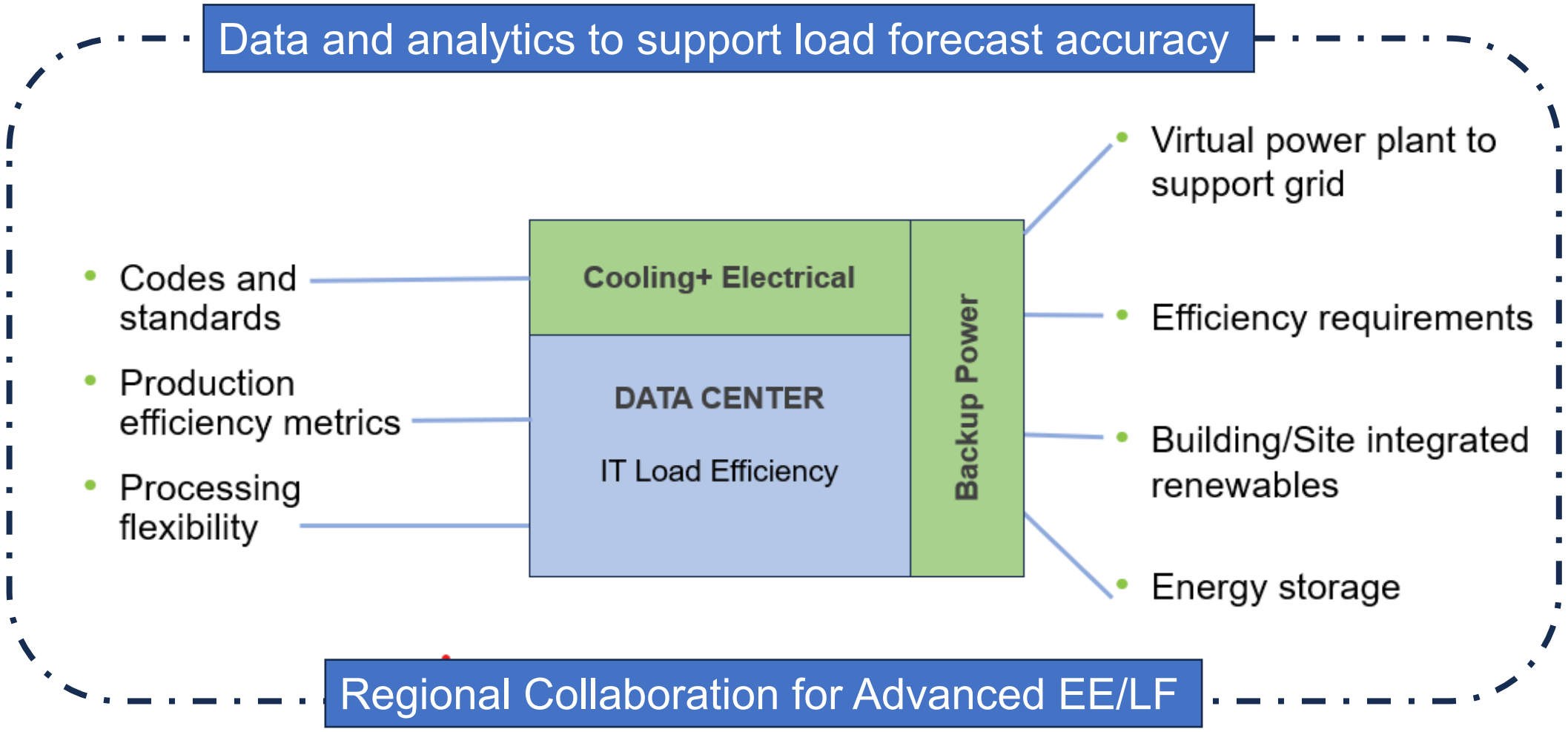
Opportunities:

- Significant economic value for operators and communities
- Policy mechanisms, corporate ESG goals
- High energy savings, load flex potential
- Leverage best practices already underway
- Bring your own capacity creates opportunity for grid assets

Barriers:

- Competitive, secretive, concentrated industry
- Fast moving market, well-capitalized players
- EE and load flex are not high priorities compared to speed to market
- Very limited opportunities once build-out is complete
- Few programs designed for data centers
- Lack of incentive for local investment

Potential Intervention Points and Strategies



And…Opportunities for Community Partnership

- Large corporations are investing in energy affordability, efficiency and grid infrastructure to help minimize impacts to local communities.
  - Google's Energy Impact Fund in Texas – $30M committed to support energy affordability, weatherization for homes and schools, and energy efficiency workforce development.
  - Microsoft's Community-First AI Infrastructure – Commitments to be a good neighbor; responsible use of water & energy, create jobs, support tax base, invest in AI training

Questions?

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Case Study: Chelan & Microsoft

Presenters:

***Dan Koch**, Chief Operating Officer*
***Charles VonReis**, Interim Chief Energy Resources Officer*

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Chelan County PUD

The Data Center Dilemma

March 13, 2026

Dan Koch, COO

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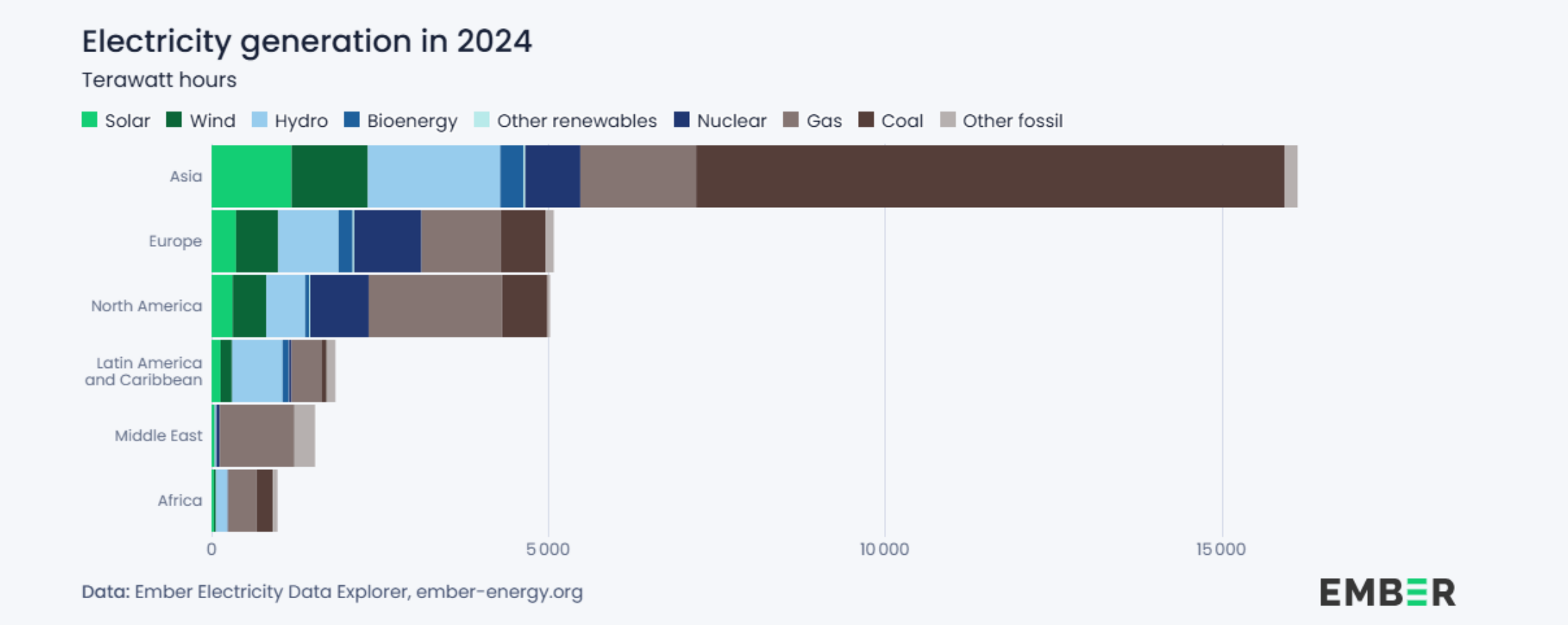
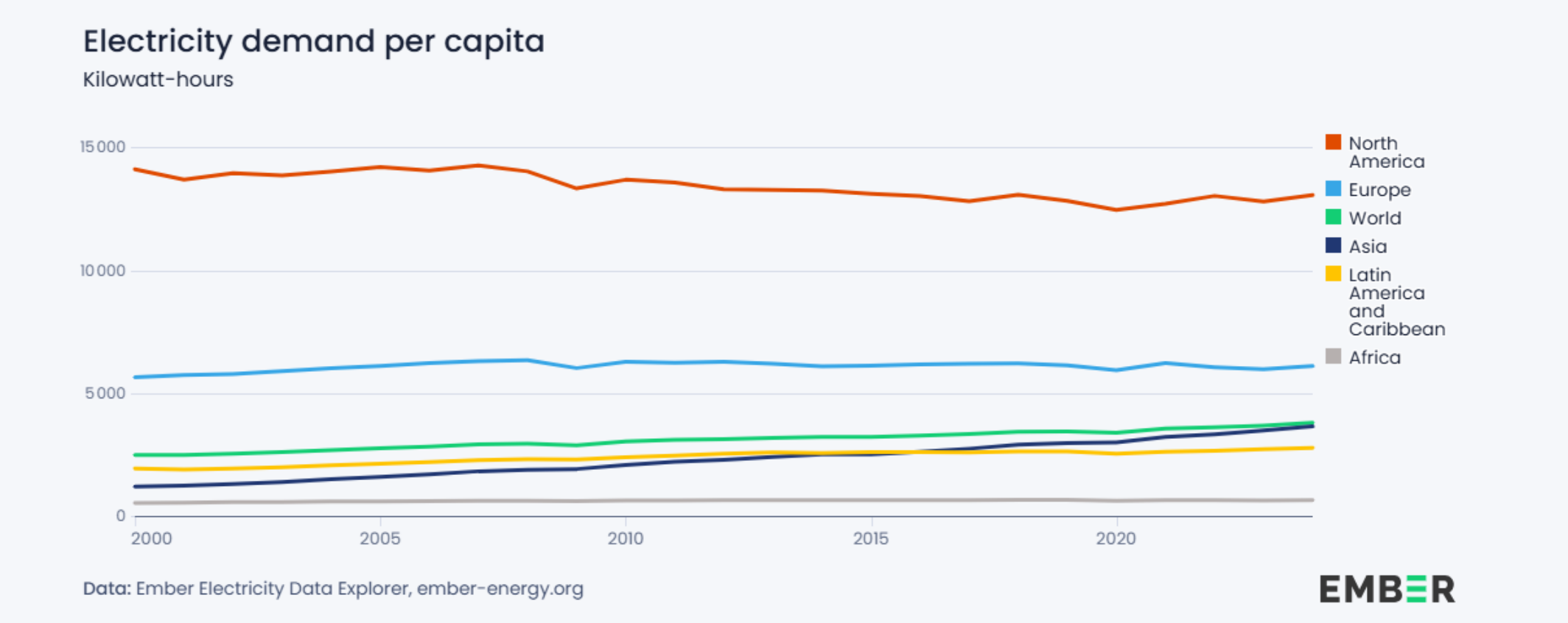
Global Generation Supply

Total Electricity Generation Dominated by Asia



North America Dominates on Per Capita Usage



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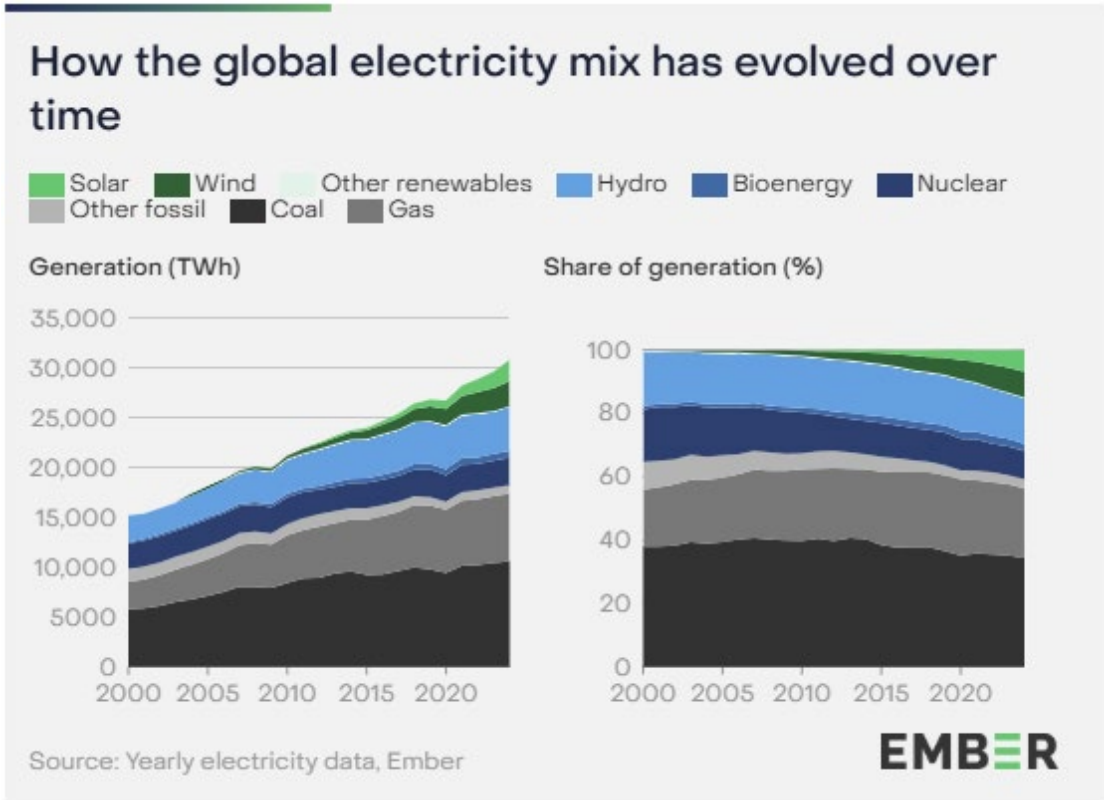
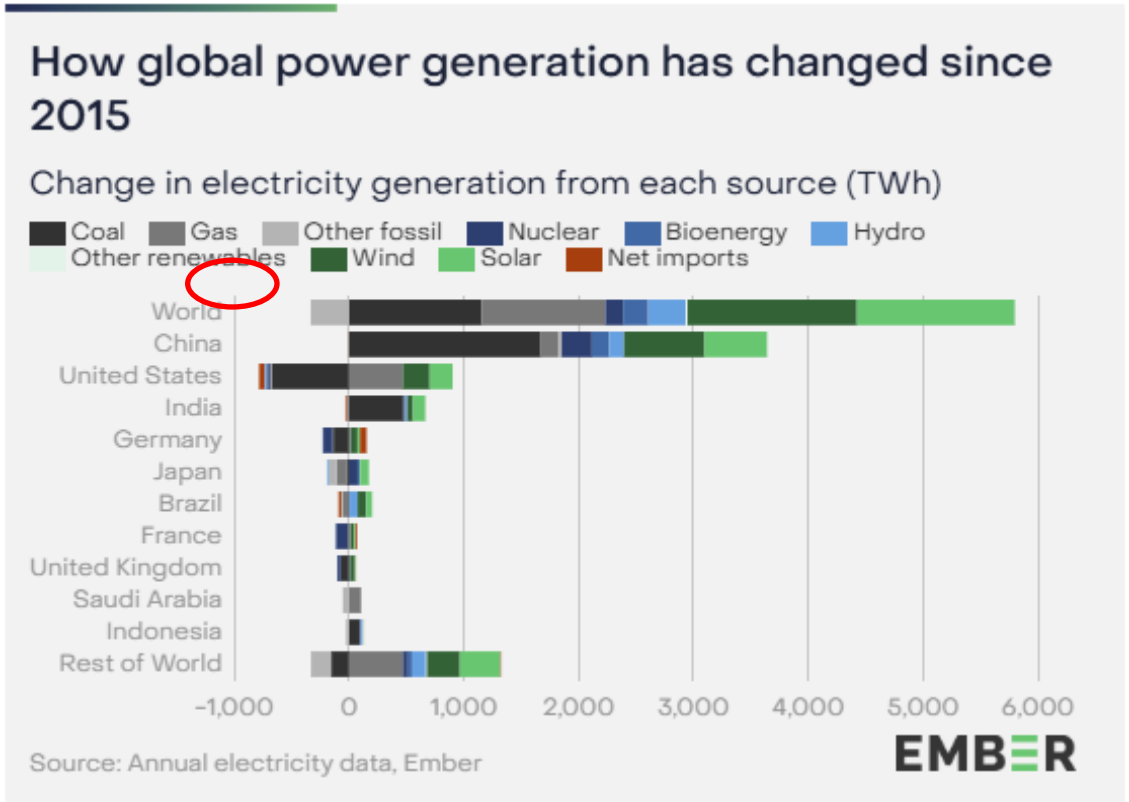
Global Electricity Mix





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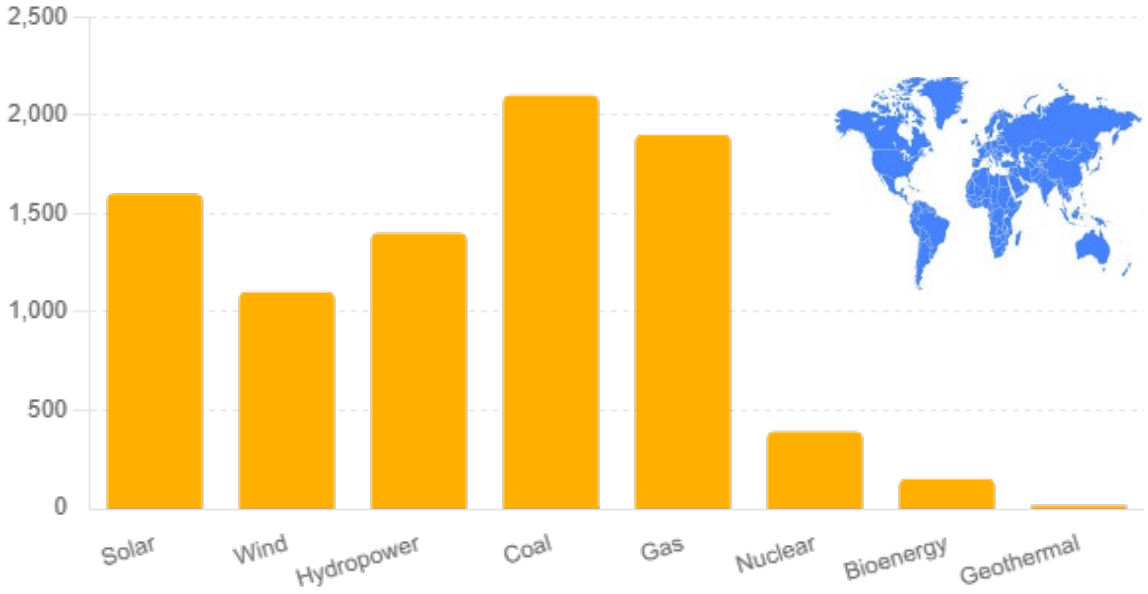
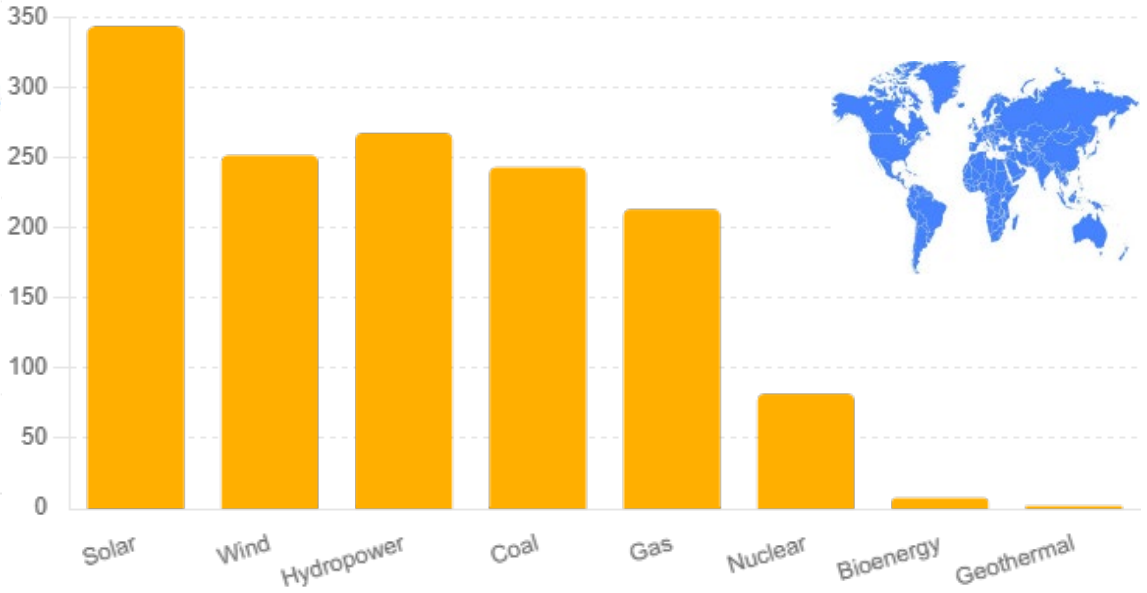
Global Nameplate Capacity

Operating Nameplate (GW)



Under Construction (GW)



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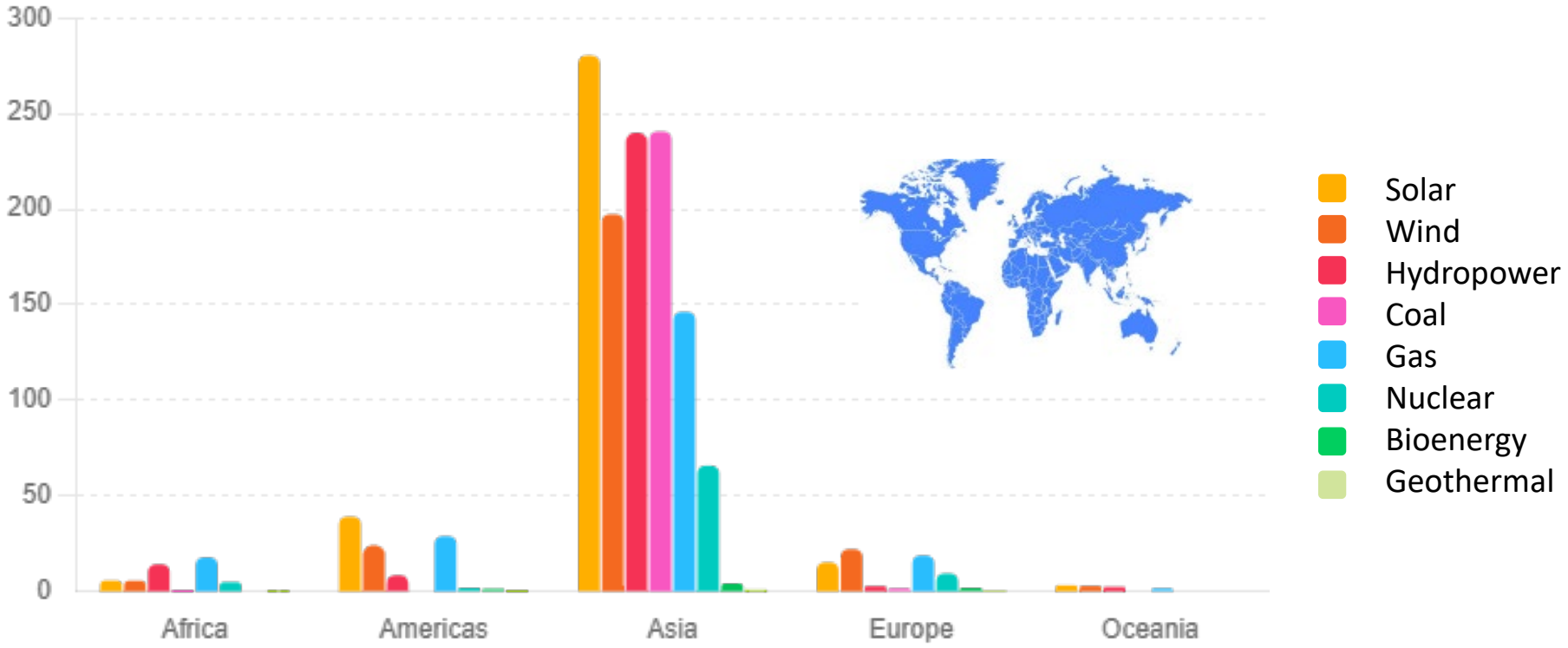
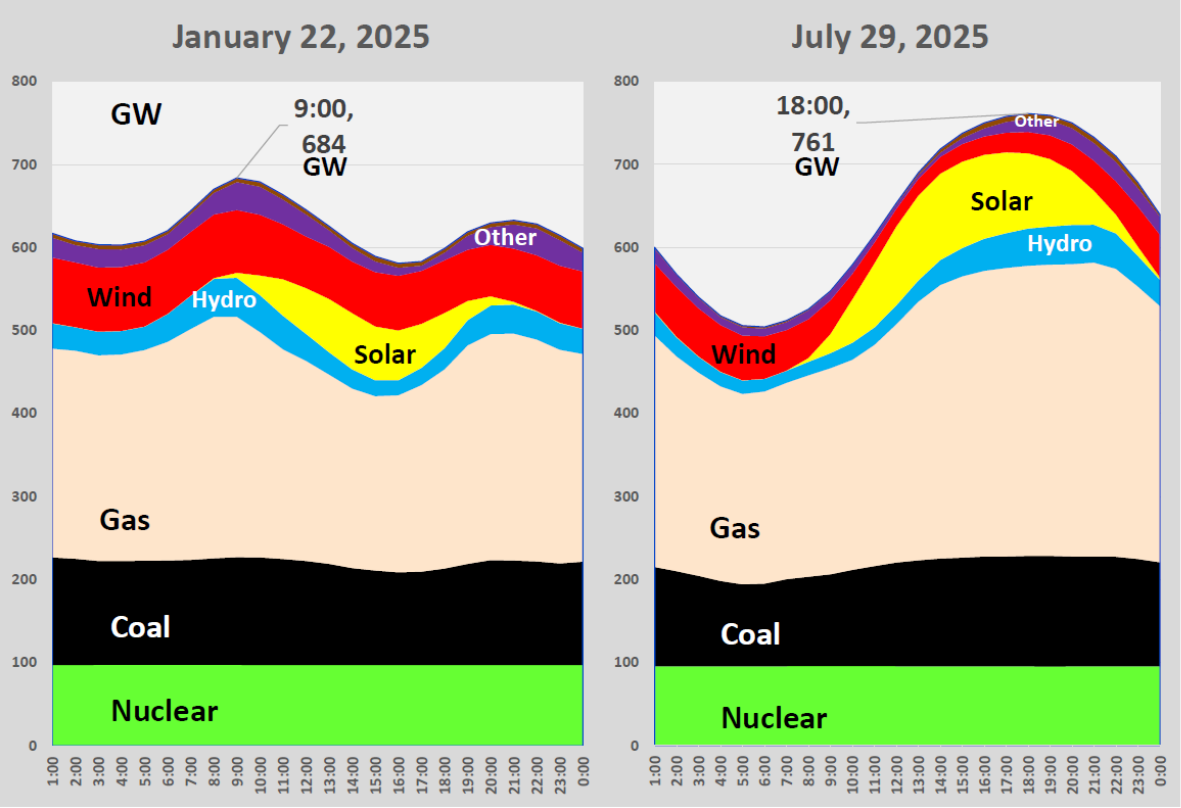
Global Capacity Under Construction



U.S. Dependence on Natural Gas

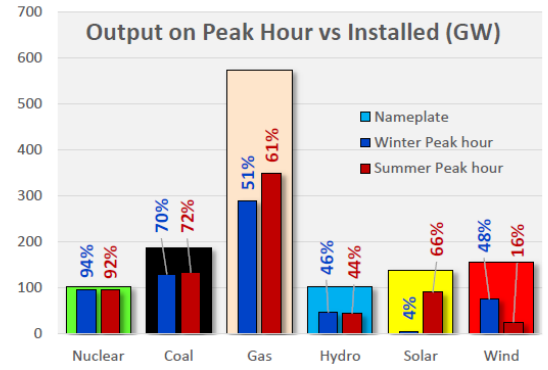
Seasonal Peaks

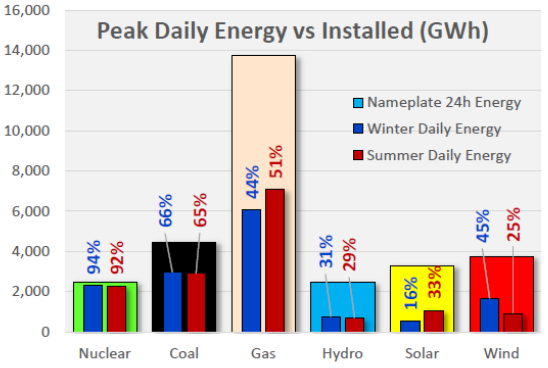
Winter and Summer (Peak Hourly Days)



Different Resources

Peak Hour and Daily Energy vs Installed





Source: EPRI

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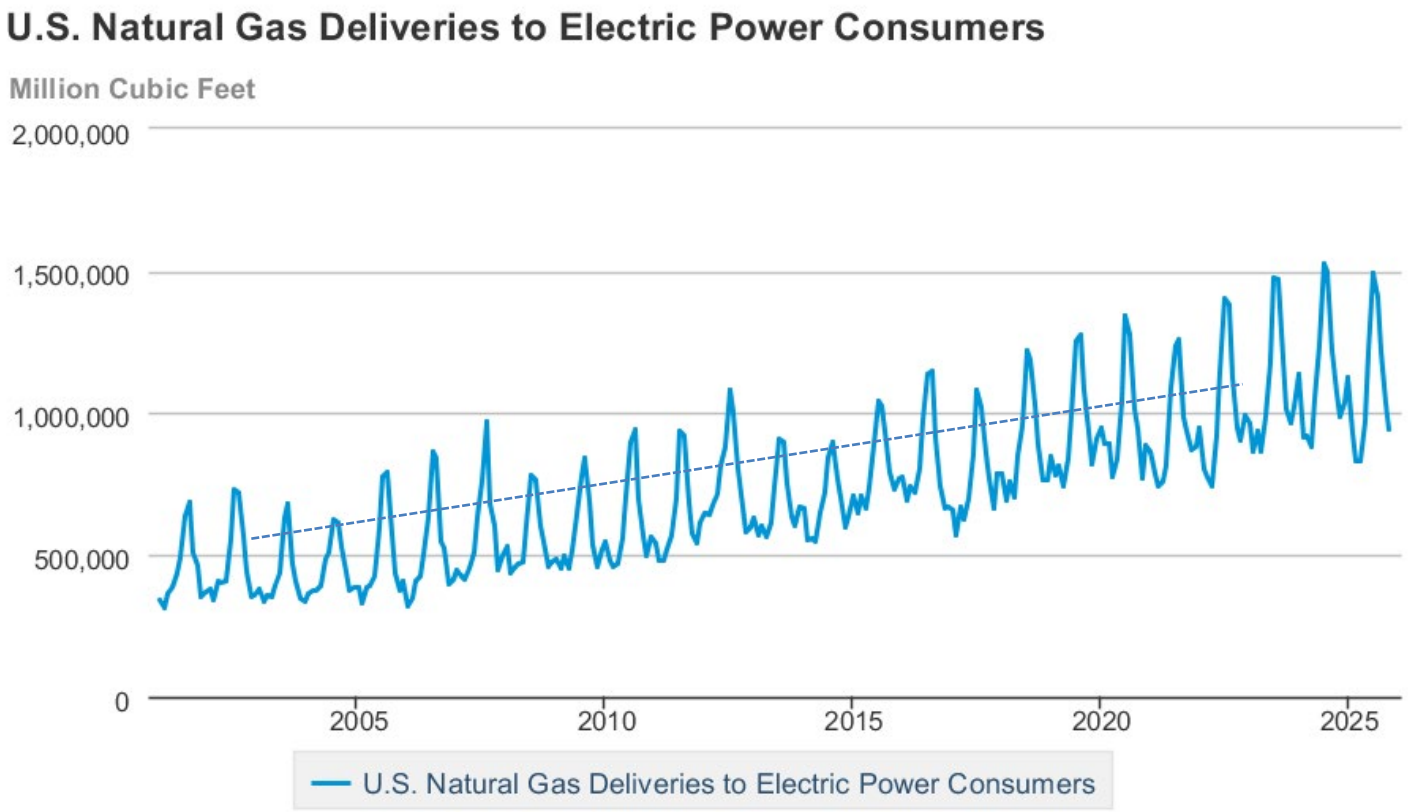
Natural Gas for Electricity is Increasing



eia Data source: U.S. Energy Information Administration

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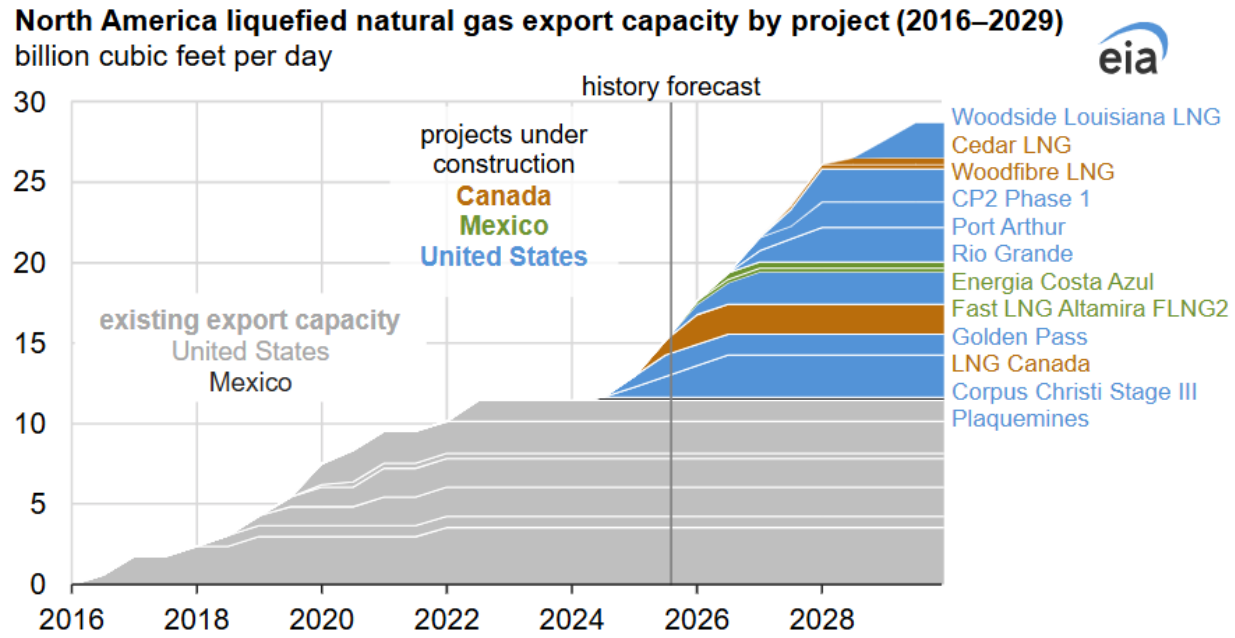
Natural Gas Generation Cost impacted by LNG Export Capacity

OCTOBER 16, 2025

North America's LNG export capacity could more than double by 2029



Data source: U.S. Energy Information Administration, *Liquefaction Capacity File*, and trade press
Note: Export capacity shown is project's baseload capacity. Online dates of LNG export projects under construction are estimates based on trade press and do not reflect expectations for projects ramping to full production following initial shipment. LNG=liquefied natural gas; FLNG=floating liquefied natural gas

Source: U.S. Energy Information Administration

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Pacific Northwest Landscape

PNW Energy Landscape

- Guidehouse analyzed 19 studies published by gas and electric organizations to identify common themes and risks associated with rising energy demand and the increasing frequency of extreme weather events in the Pacific Northwest and the broader Western U.S.

#	Title	Author	Year
1	2024 Pacific Northwest Loads and Resources Study	BPA	2024
2	Winter Conditions Report for January 2024	CAISO	2024
3	Net-Zero NW: Energy Pathways Technical Report	Clean Energy Transition Institute	2023
4	Northwest Regional Forecast of Power Loads and Resources	PNUCC	2024
5	Pacific Northwest Gas Market Outlook	NWGA	2023
6	Pacific Northwest Pathways to 2050	E3	2018
7	Pacific Northwest Power Supply Adequacy Assessment for 2029	NPCC	2024
8	Analysis of the January 2024 Winter Weather Event	Powerex	2024
9	Assessment of January 2024 Cold Weather Event	WPP	2024
10	2024 Summer Reliability Assessment	NERC	2024

#	Title	Author	Year
11	2023 Long-Term Reliability Assessment	NERC	2023
12	2023 Western Assessment of Resource Adequacy *(Note: Weblink Archived)*	WECC	2023
13	Resource Adequacy in the Pacific Northwest	E3	2019
14	National Gas Reliability: Issues for Congress	Congressional Research Service	2024
15	2023-2024 Winter Reliability Assessment	NERC	2024
16	Year 10 Extreme Cold Weather Event Report	WECC	2023
17	EPRI AI Powering Intelligence	EPRI	2024
18	Kelowna Electrification Case Study	Fortis BC	2023
19	PNW Electric Utilities IRP Comparison Table	Fortis BC	2020

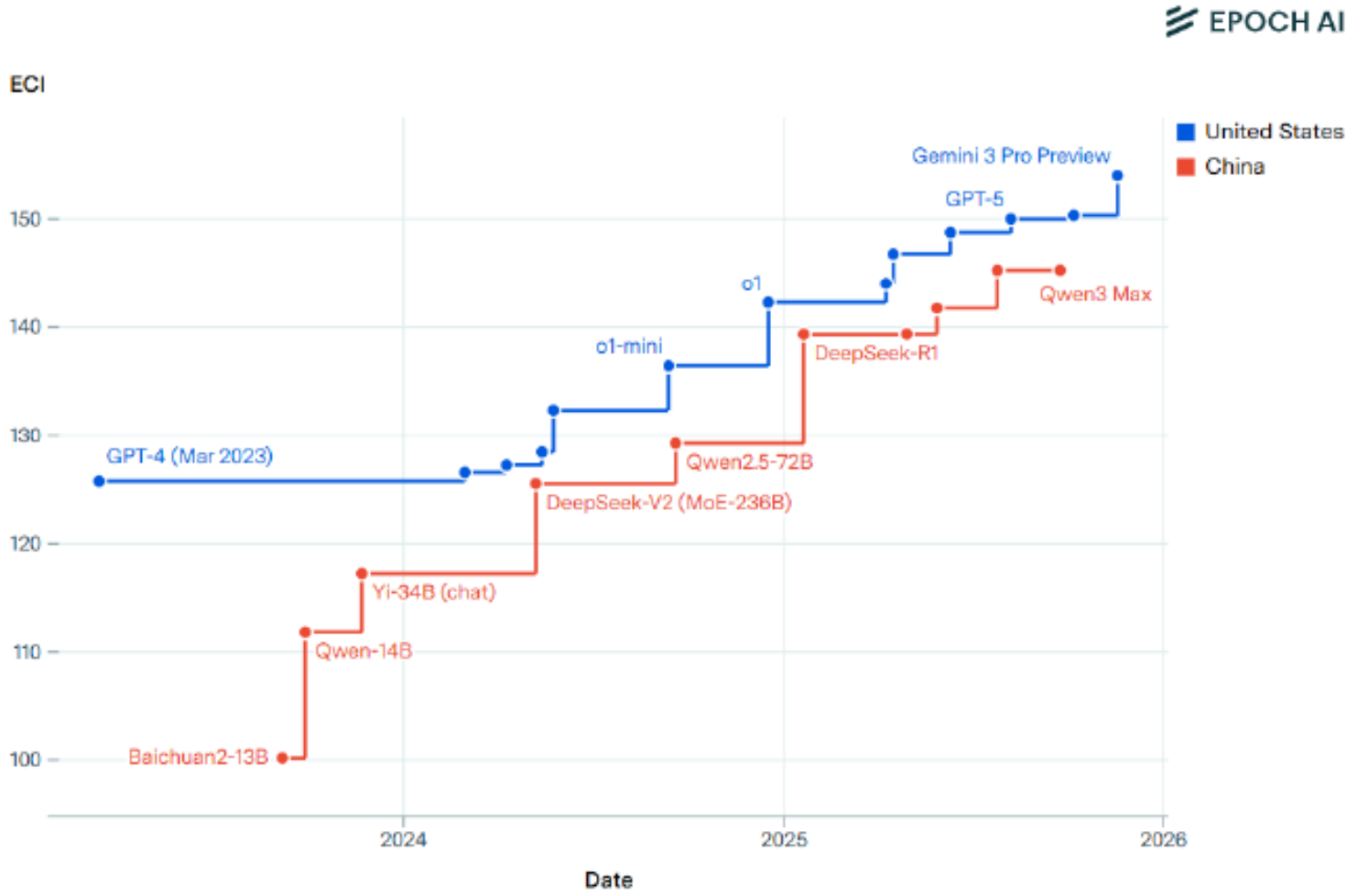
Source: Guidehouse

What Was Common?

- **Rapid load growth** driven by electrification and data centers
- **Resource adequacy** concerns across all reports
- Growing challenges with **system resilience and flexibility** underscore the need for more infrastructure
- Recognition of **increasing interdependence** of natural gas and electric systems
- Shared call for **better coordination** between gas and electric systems

Data Center Demand

AI Model Comparisons – EPOCH AI



Epoch AI "Chinese AI models have lagged the US frontier by 7 months on average since 2023“

Luke Emberson (2026), "Chinese AI models have lagged the US frontier by 7 months on average since 2023" https:/ /epoch.ai/data-insights/us-vs-china-eci

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U.S. Data Center Power Demands are Growing

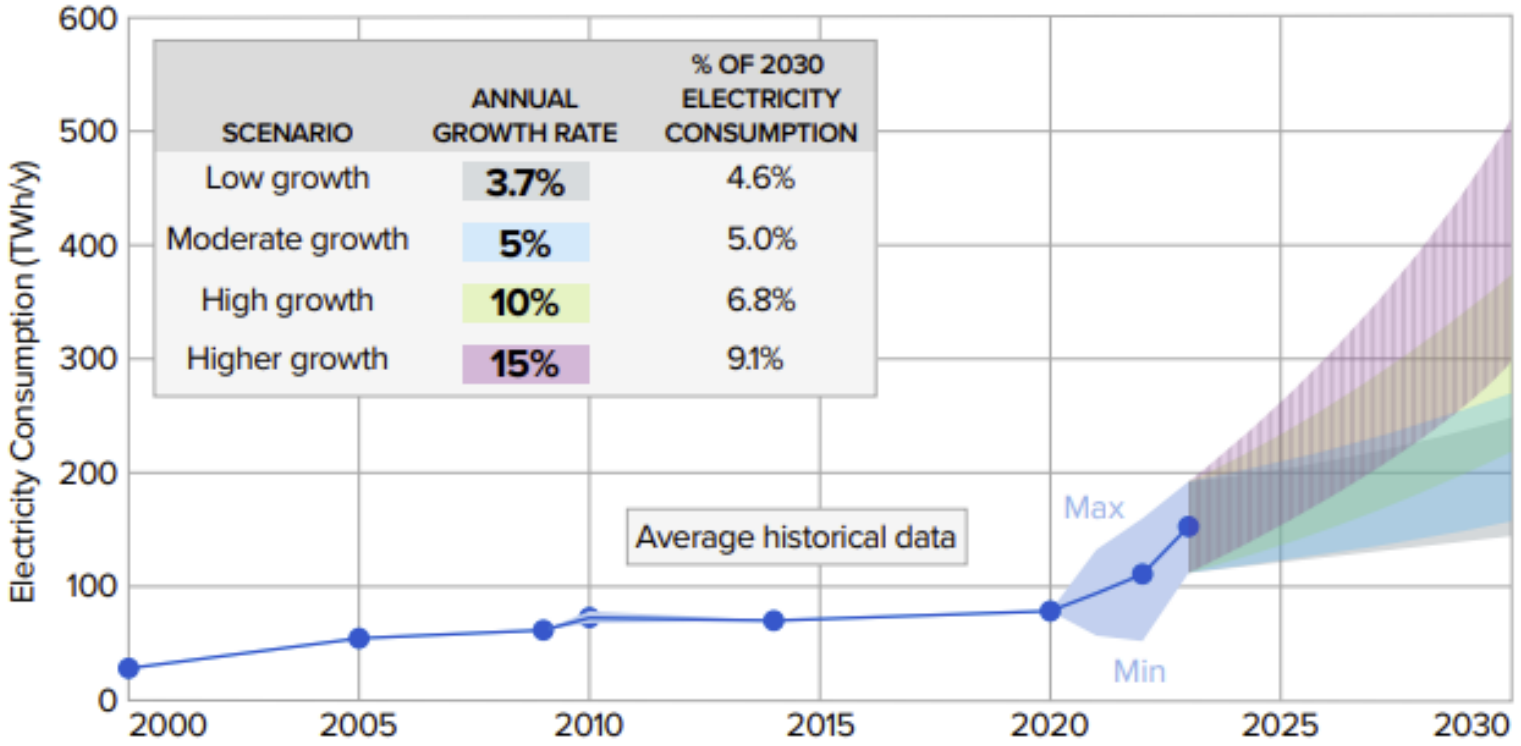

Figure ES-1. *Projections of potential electricity consumption by U.S. data centers: 2023–2030 . % of 2030 electricity consumption projections assume that all other (non-data center) load increases at 1% annually.*

Source: EPRI, Powering Intelligence, May 2024

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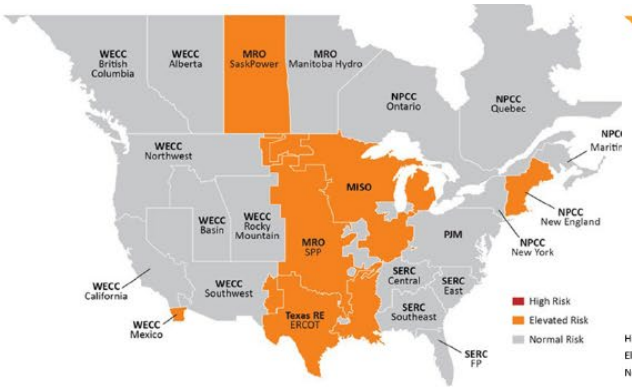
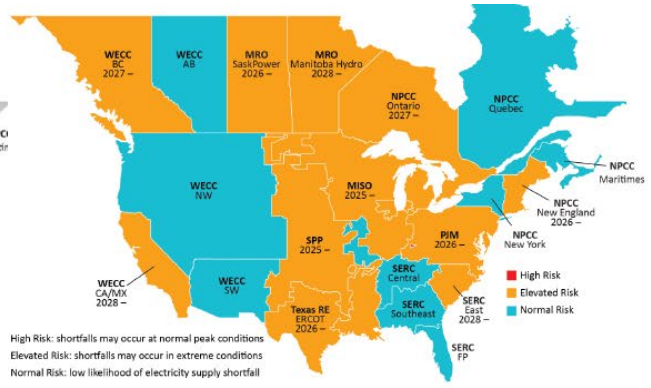
Grid Reliability

NERC Reliability Assessments

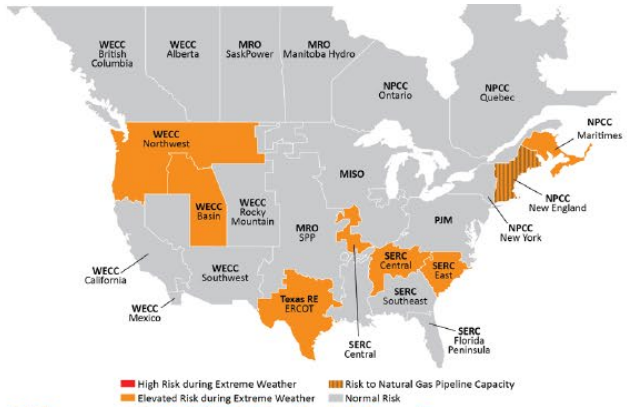
North America
Regional Reliability Concerns



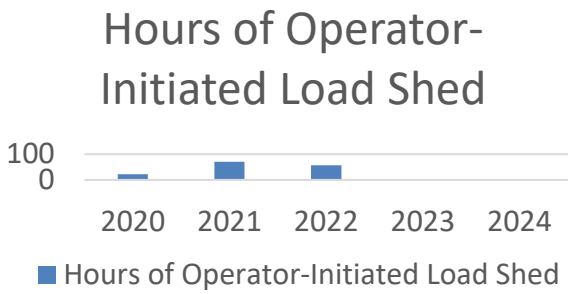
Summer 2025 Reliability Assessment



2024 Long-Term Reliability Assessment



Winter 2025/26 Reliability Assessment



Many Regions at Elevated Risk

Minimal Load Shedding since 2022

Still many Energy Emergency Alerts 3

(21 in 2024 second highest in 5 years)

Source: NERC

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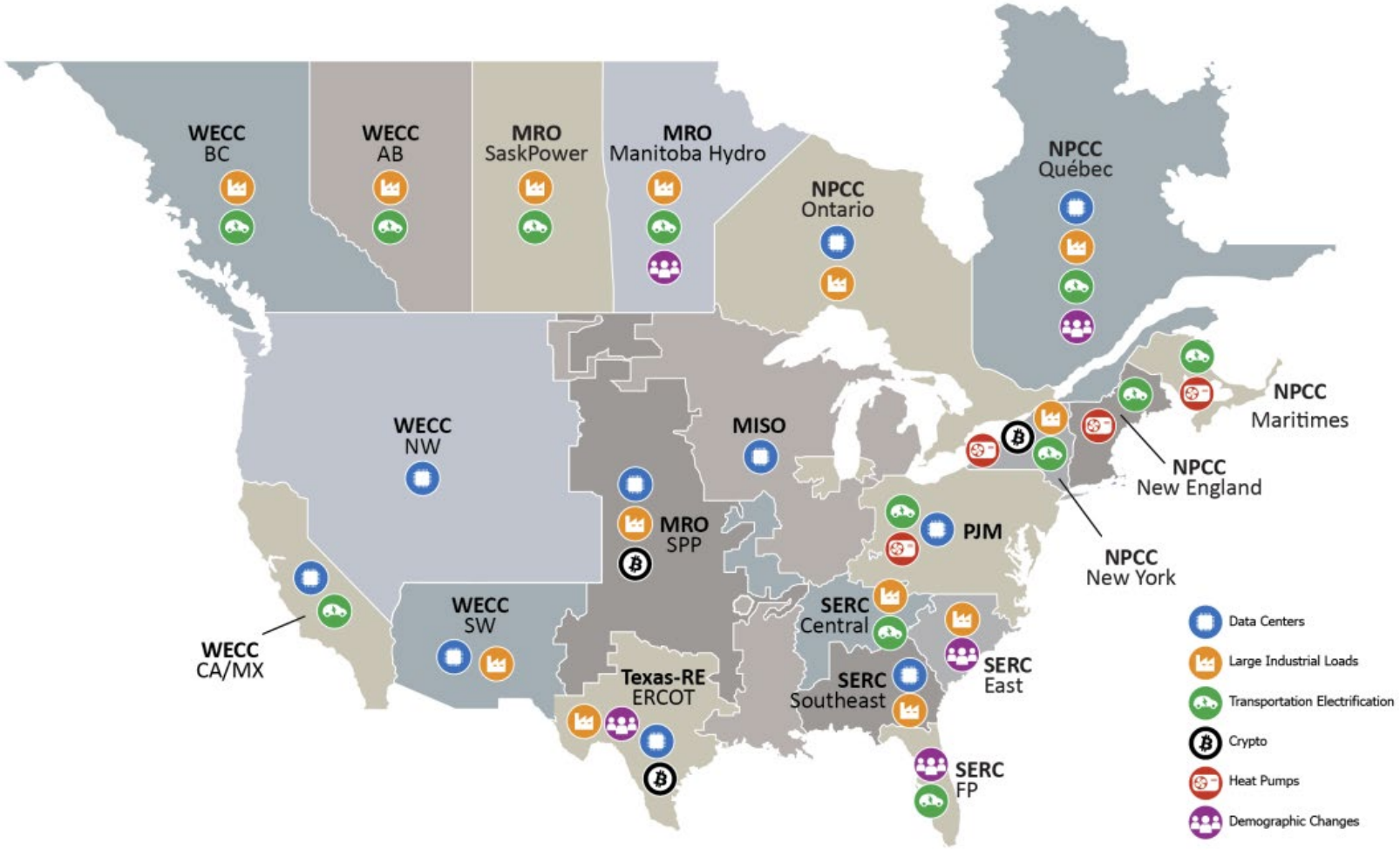
U.S. Electricity Demand Trends



Source: NERC – 2024 Long-term Reliability Assessment

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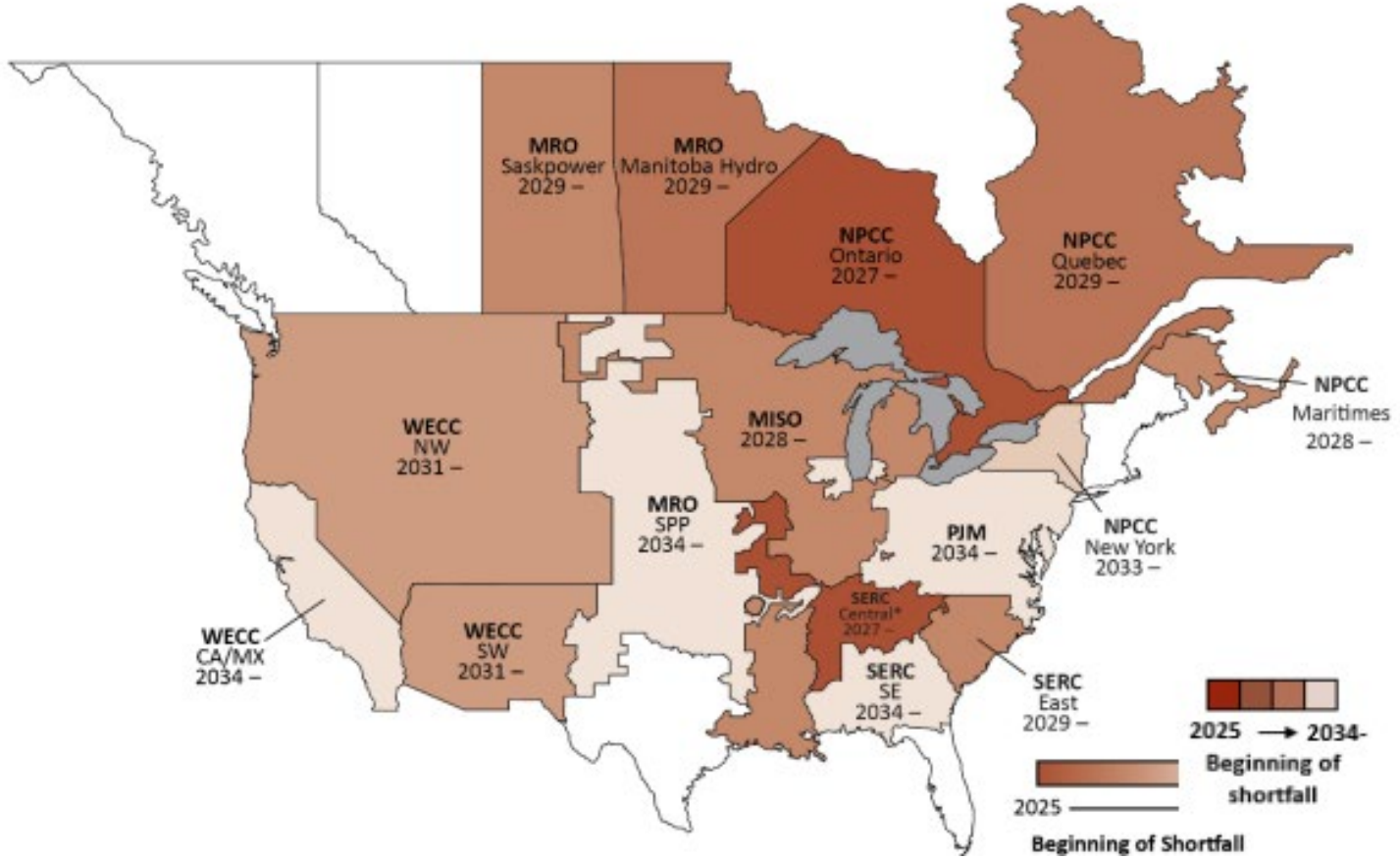
Projected Reserve Margin Shortfall Areas
(with Announced Generator Retirements - July 2025)



Source: NERC – 2024 Long-term Reliability Assessment

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Powering Data Centers

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Key Electrical Considerations

- **Reliability:** Five-nines availability (99.999%, under 6 minutes downtime annually), typically achieved by combining high grid reliability with backup generation.
- **High power quality:** Tight voltage regulation, stable frequency, and low harmonic distortion for sensitive electronics.
- **Flexibility:** While data centers typically have been inflexible in their power demands, examples are emerging where they commit to flexible operation to accelerate speed-to-power.
- **Fast ramp-rate support:** Generation, storage, or devices to handle sudden load changes without voltage dips or frequency excursions.

Power Data Centers – Four Strategies:

Pros
- High Reliability
- Declining Emissions
- Familiar

Cons
- Potential power delays
- More grid buildout

Pros
- Fastest Power
- Path to flexibility
- Grid connection benefits

Cons
- Costs of dual architecture
- Potential emissions

Pros
- Faster power
- Less grid buildout
- Support grid reliability

Cons
- Unfamiliarity
- New tariffs, business models and coordination

Pros
- Direct control
- Avoid grid connection costs
- Faster power

Cons
- Higher DC cost
- Reliability risks
- Emissions lock-in

Source: EPRI

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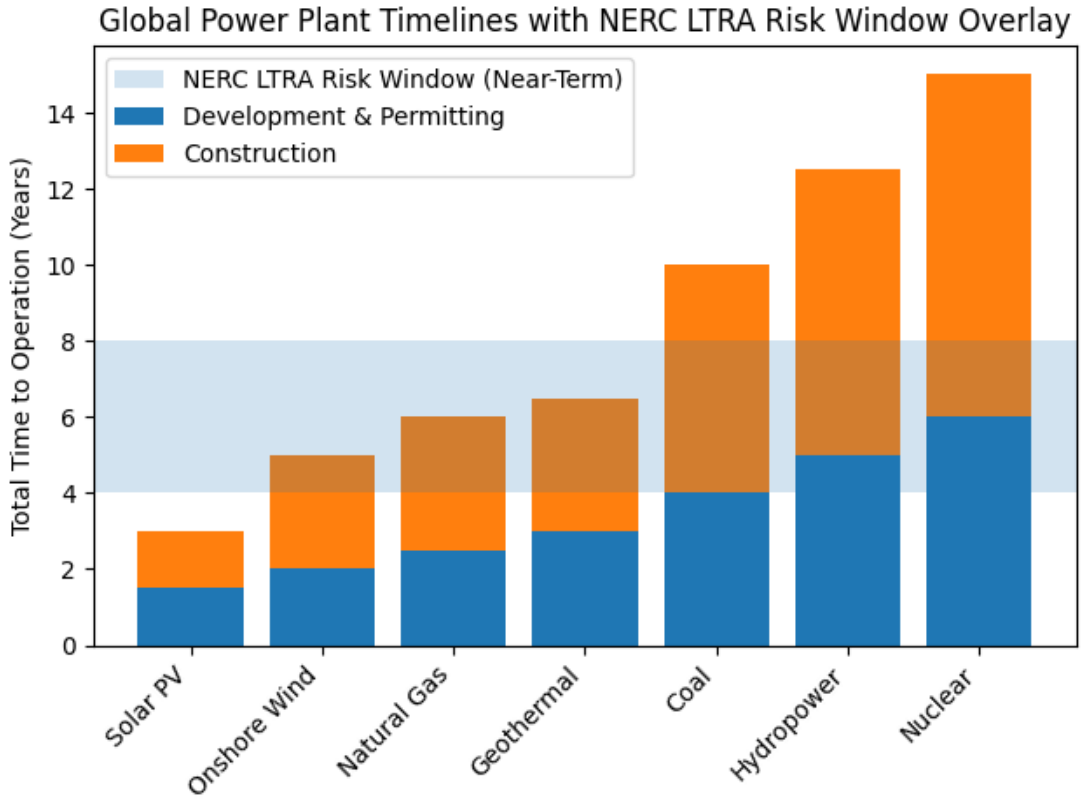
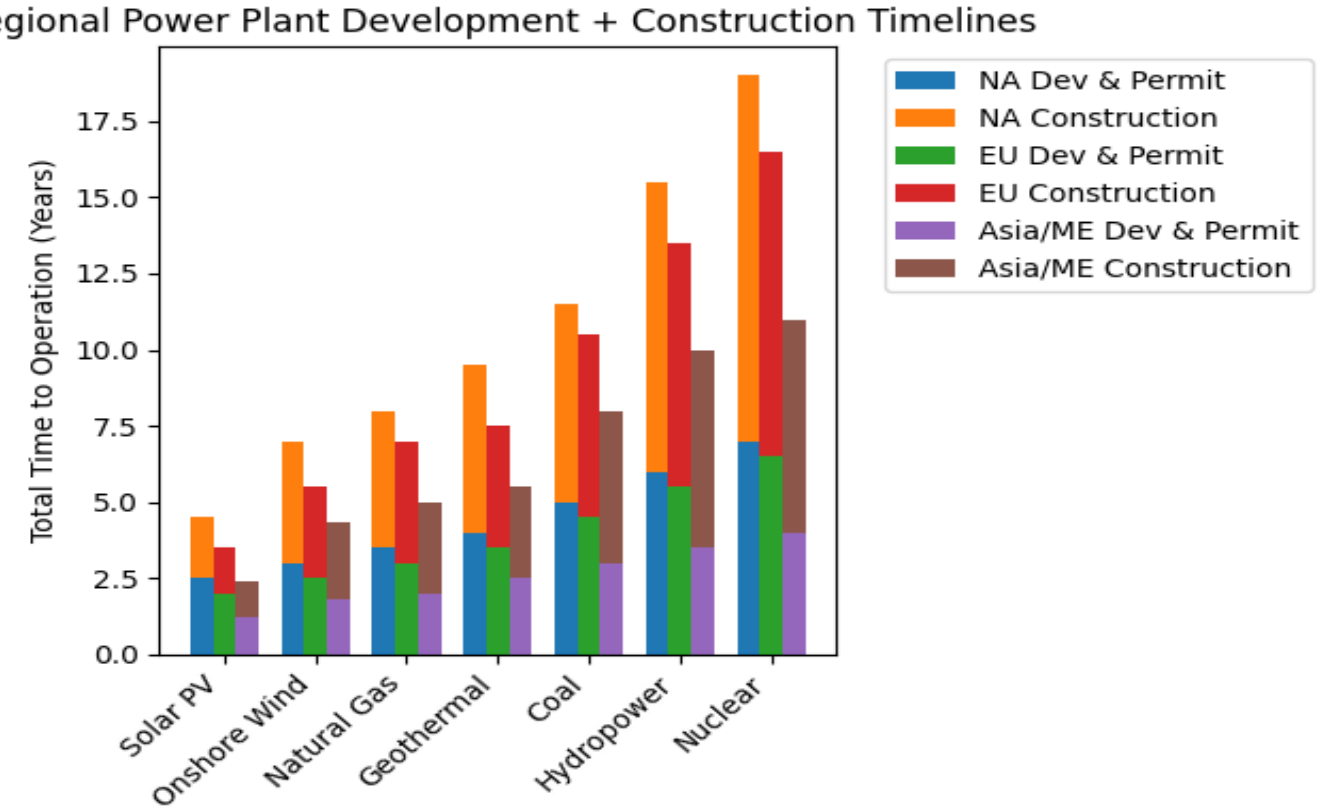
Speed to Power

Takes North America 35-40% longer than Asia





Source: NERC, IEA, EIA, EPA

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WA State Clean Energy Transformation Act (CETA)

CETA's three clean energy Standards:

- 2025: Eliminate coal from retail portfolios
- 2030: Greenhouse gas neutral standard
  - Use electricity from renewable or non-emitting sources in an amount equal to 80% of retail load
  - Alternative compliance options for up to 20%
- 2045: 100% renewable or non-emitting retail electricity supply

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Recent WA Legislative Activity

HB 2515:

- Would have required utilities serving data centers to create special tariffs meant to protect other customers from increased rates.
- Data centers would have been required to pay the full cost of infrastructure and interconnection costs in addition to their power supply
- Would have prohibited Department of Ecology from allocating no-cost carbon allowances under the Carbon Commitment Act (CCA) to utilities for emissions associated with power supplied to data centers after 2028.

HB 2245:

- Would update CETA to explicitly include port districts that distribute electricity, and certain self-generating non-residential electricity users to CETA requirements.

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Bold Enduring Value

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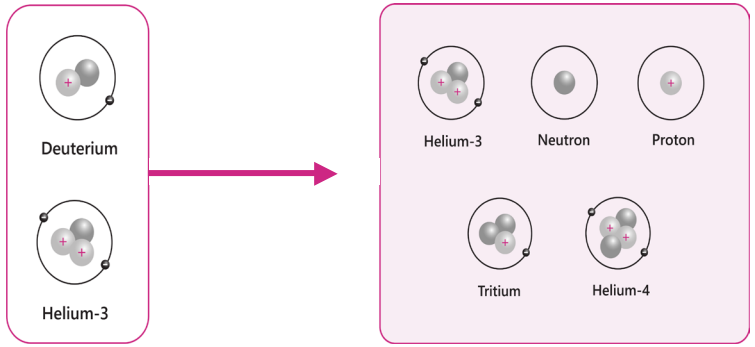
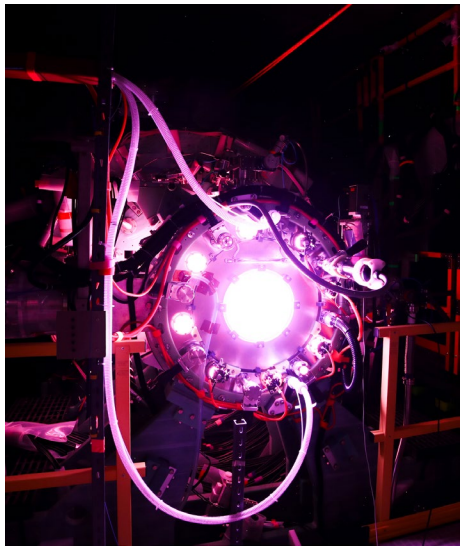
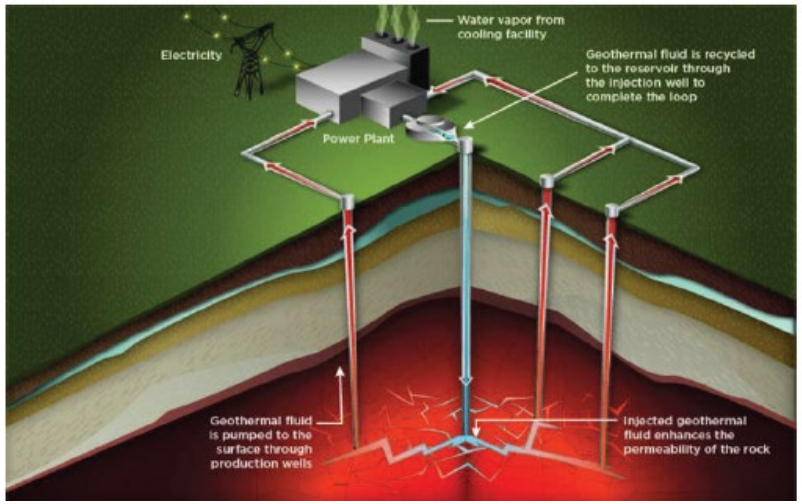
Fusion & Geothermal Potential in Chelan County

Helion Fusion





Enhanced Geothermal Systems



Requires drilling an injection and multiple production wells into sedimentary or basement rock to the desired temperature >200 C

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Large Load & Demand Response

March 13, 2026

NEEA Board Meeting

Charles von Reis, Interim Chief Energy Resources Officer
Chelan County PUD

Today's Topics

1. **Large Load in Chelan County**

2. **Chelan PUD's Framework**: designed to serve large loads without affecting the rates or reliability of other customers

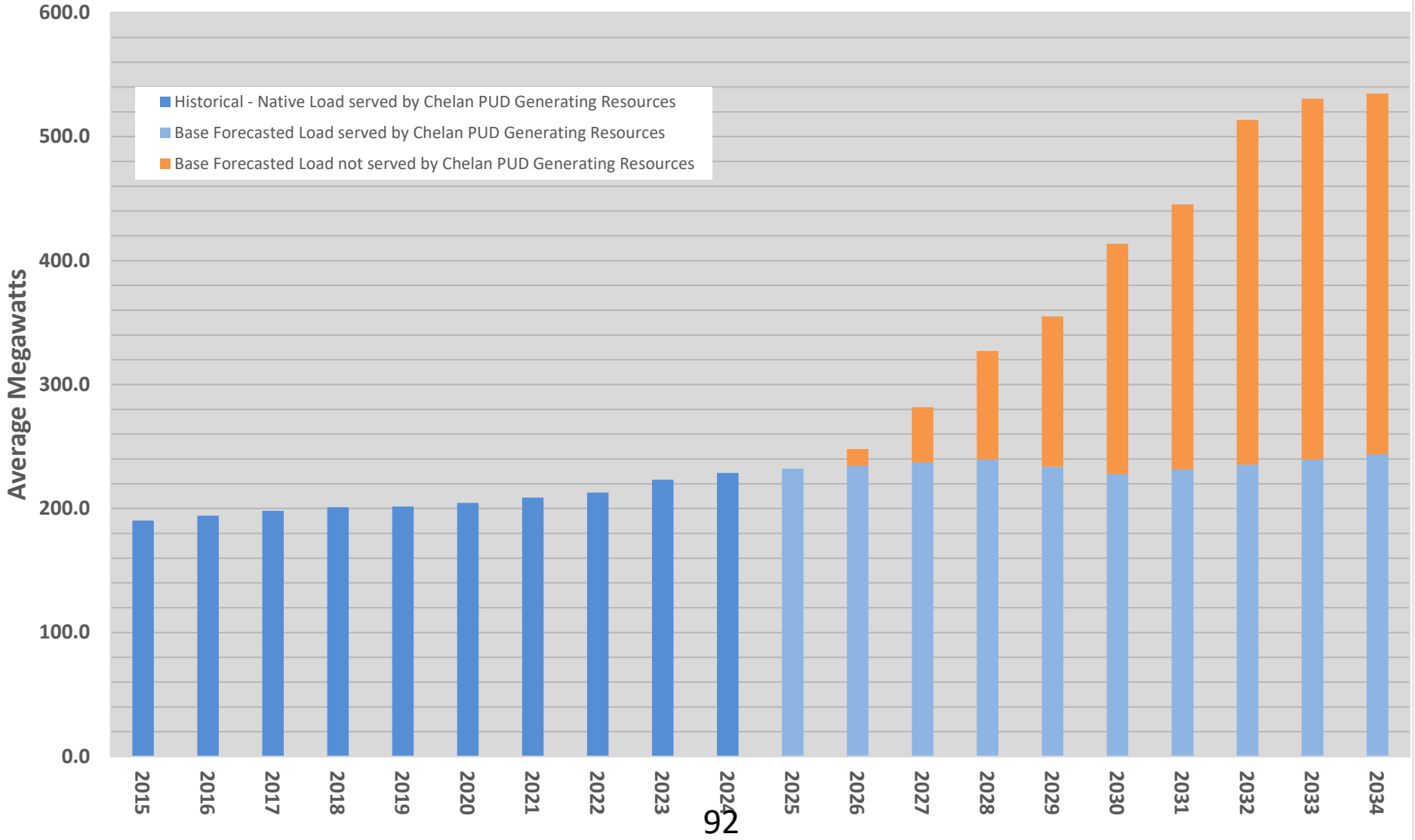
3. **Demand Response Opportunities**

Large Load in Chelan County

- Chelan PUD defines large loads as greater than 5 MW
- No load greater than 30 MW since Alcoa closed
- Datacenter started the interconnection process in 2021
  - online in 2025
- Four more large loads (totaling 940 MW) have applied for service in the last two years

Load Forecast

2025 IRP



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2024-2025: Developing the Large Load Power Supply Framework

- Public meetings at multiple stages
- Check-ins with the Board of Commissioners
- Public outreach on principles and framework – early and often
- Overhaul of Rate Schedule 4 (Large Loads)
- Development of large load service contracts

Large Load Guiding Principles

Neutral-to-positive for other customers

- Maintain reliability (Resource Adequacy)
- Maintain stable and predictable rates
- Protect local hydropower by maintaining wholesale marketing and hedging strategy

Preserve local control

- Rates & Terms
- Retail vs. Wholesale Customer (FERC Jurisdiction)

Comprehensive and durable framework

- Serve all large load customers comparably and consistently

Where will the energy come from?

Possible sources of energy for large loads:

1) Short-term supply (1-5 years): Chelan PUD procures wholesale energy and resells to large load customer.

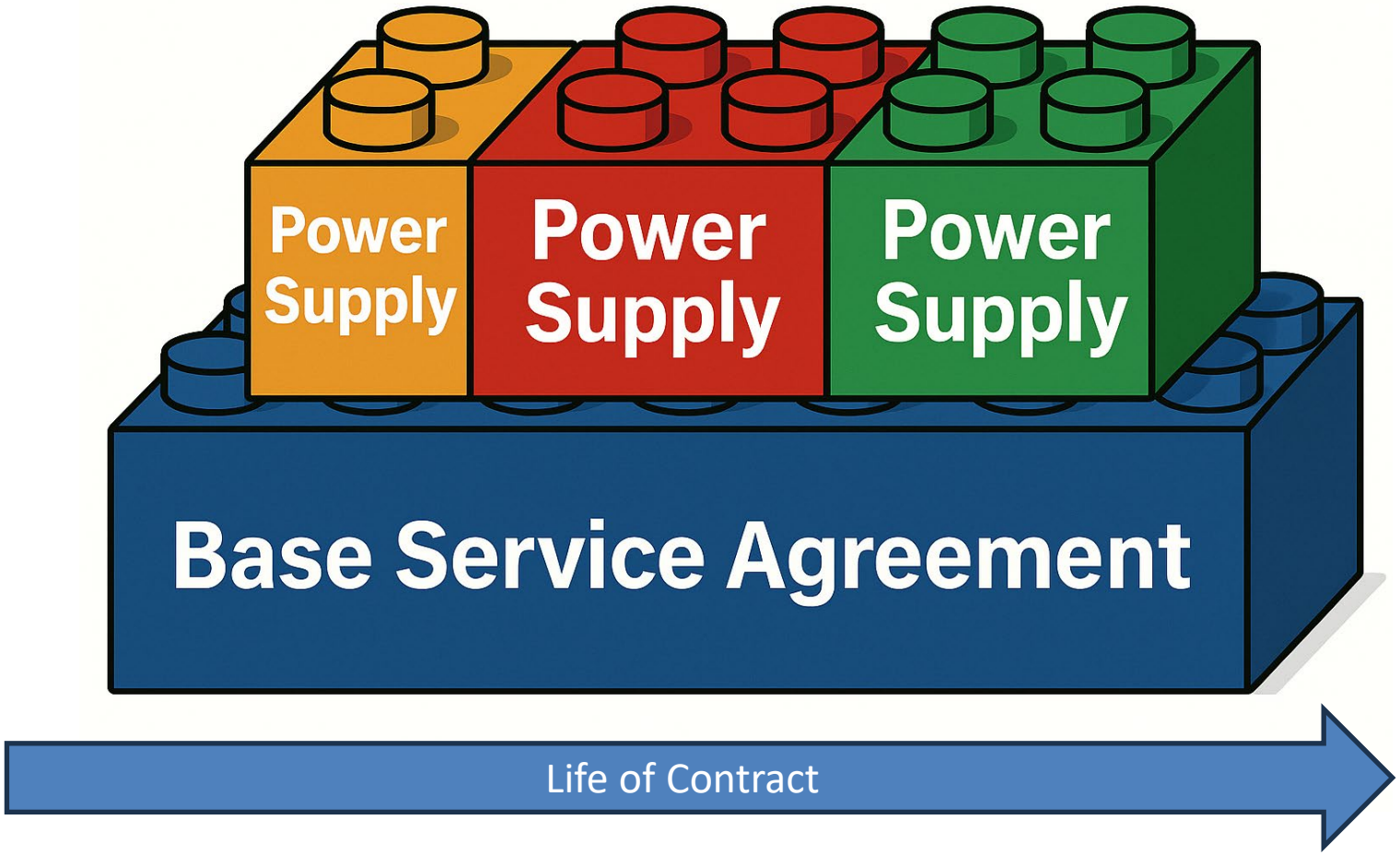
2) Customer choice: Customer procures/identifies wholesale energy, which Chelan PUD purchases. PUD resells to customer.

   **Chelan PUD retains ability to approve or reject sources of energy.*

3) Negotiated contract: At the Board's discretion, a customized agreement can be created, if it is determined to be in the best interest of existing customers and aligned with our energy marketing strategy.

Options 1 and 2 do not include Chelan PUD hydropower. Option 3 may be from Chelan PUD's hydropower if authorized by the Board, and in the best interest of existing customers

Power Supply (in Concept)



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Other Decision Points

- Identifying and securing power supply
  - WRAP
- Interruptability
- Charges for system impacts
- Credit & performance assurance
- Compliance costs (e.g., CETA, CCA)
- Bankruptcy code
- Forecasting load
- Forecast v. actual load
- Termination damages

Demand Response – Observations

- Regional need for capacity is real
- Demand response is an accepted way to deliver capacity
- Price signals matter (e.g., Texas)
- Datacenter reliability demands and configuration matter

Demand Response – Past Experience

- Past Experience:
  - Large datacenters prioritize reliability and continuous service
  - Crypto miners have interest
  - Meaningful price signal has been elusive

Demand Response - Opportunities

- Looking Ahead:
  - Western Resource Adequacy Program (WRAP) capacity requirements create clearer price signal
  - Chelan PUD adopts 2-MW demand response target in CEIP
  - Potential for islanding large datacenters
- Questions:
  - DR aggregation opportunities under WRAP?
  - Will AI increase load flexibility?
  - What price signal is enough
  - How much can onsite backup generation be leveraged?
  - EE Opportunities?

Summary

1. Chelan PUD is seeing significant growth from datacenters (though not as much as some other utilities)
2. Chelan PUD developed a framework for serving large load through a public process in 2024-2025
3. More opportunity for demand response then ever before in the Northwest, but large datacenters may be challenging partners

BREAK

Roundtable Discussion

Discussion Question

How is your organization approaching the anticipated load growth from data centers?

Board Discussion

Discussion Questions

- What would you like to have in your energy efficiency and load flexibility toolkit for data centers?
- Is there a role for Market Transformation and/or a regional approach to support utilities or the grid as these new large loads come online?
- Based on this conversation, what are some of your reflections for Cycle 8? What are some of the things that NEEA staff should be thinking about?

Public Comment

Next Steps
Action Item Review
Meeting Feedback

Public Board Meeting Adjourns

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