Clean Energy Transition

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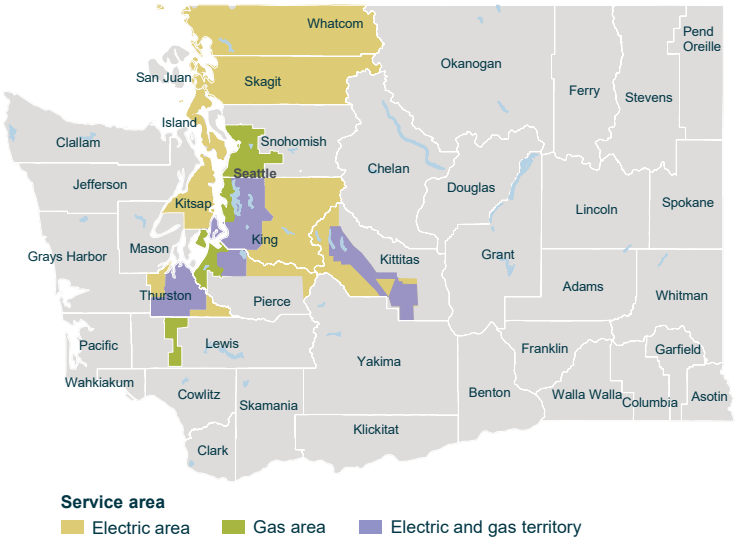
Puget Sound Energy

Service area overview	
Headquarters	Bellevue, Washington
Service area	6,000 square miles 10 counties Population of approx. 4 million 14 operating base facilities
Customers	~1,200,000 electric customers ~900,000 natural gas customers Predominantly residential customers Over 400,000 customers are dual fuel



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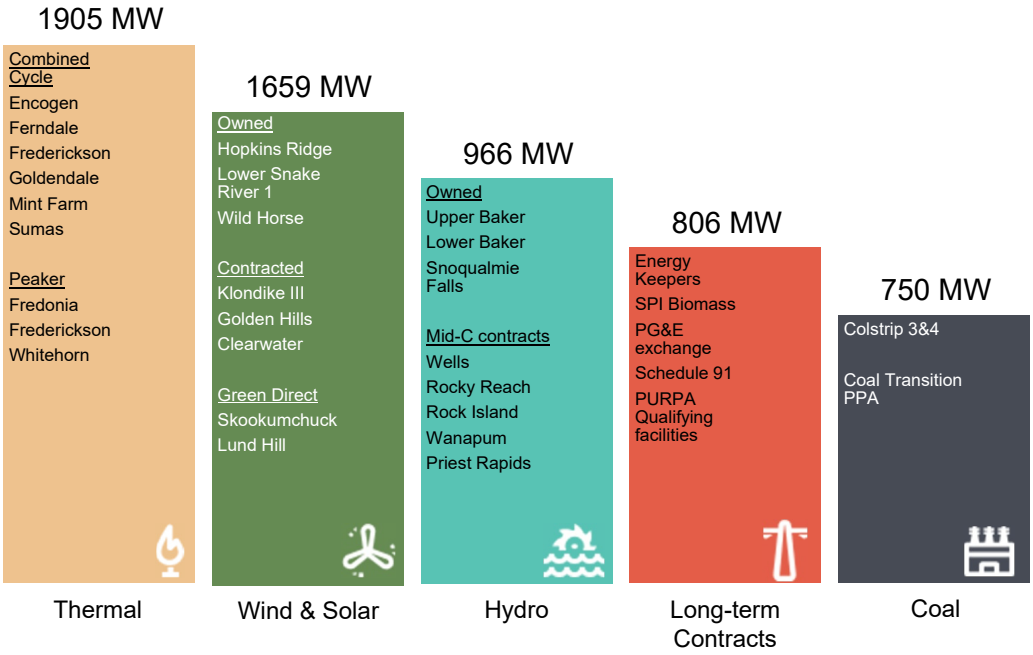
PSE's Current Nameplate Electric Generating Resources



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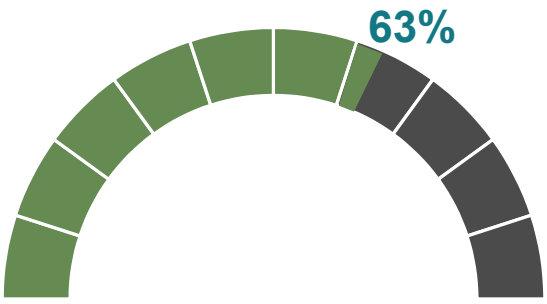
Targets to achieve our clean energy goals in 2025

Interim target



PSE clean electricity portfolio forecast by **end of 2025***

**measured as a % of net retail load*

Specific targets

Energy efficiency: 1,073,434 MWh
- For 2022-2025
- Equivalent to electricity used by more than 138,000 homes in one year

Demand response: 23.7 MW
New programs incentivizing shifting energy use during peak periods

Renewable energy: 63% of retail sales in 2025
- Large-scale generation, like wind and solar
- 2x as much local solar and battery programs than today

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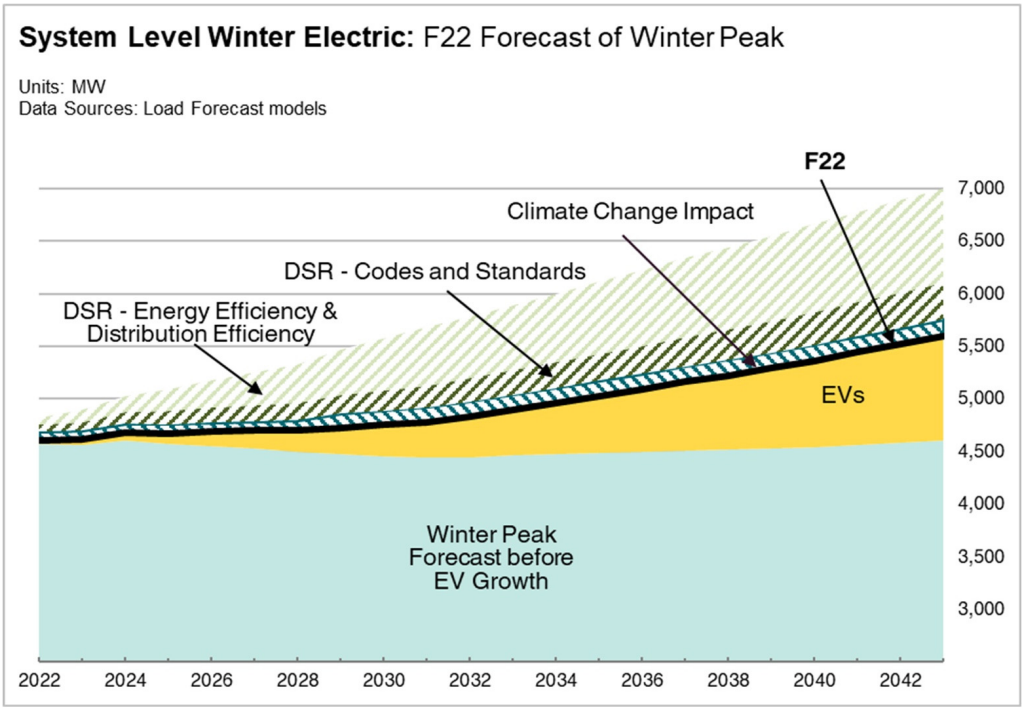
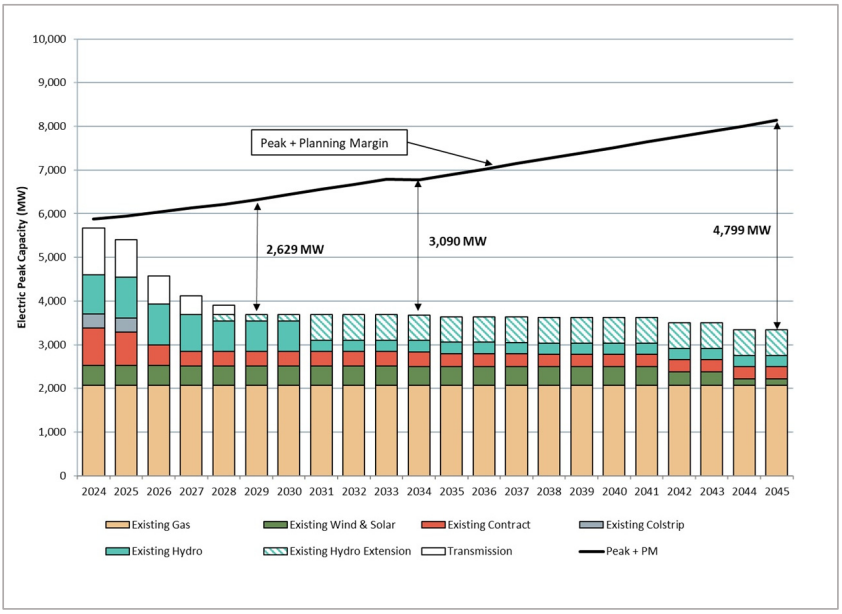
Long-term Electric Peak Forecast



- Winter peaking loads
- Peak forecast growing by roughly 1,000 MW (20%) in 20 years
- EV's and policy change will further increase electric loads

Winter Peak Driving Resource Capacity Additions

- Winter peak > summer peak through 2045
- Renewable and energy storage peak capacity contribution is larger in the summer
- New renewable and non-emitting resources will meet summer but not winter peaks
- New peaking capacity resources are needed



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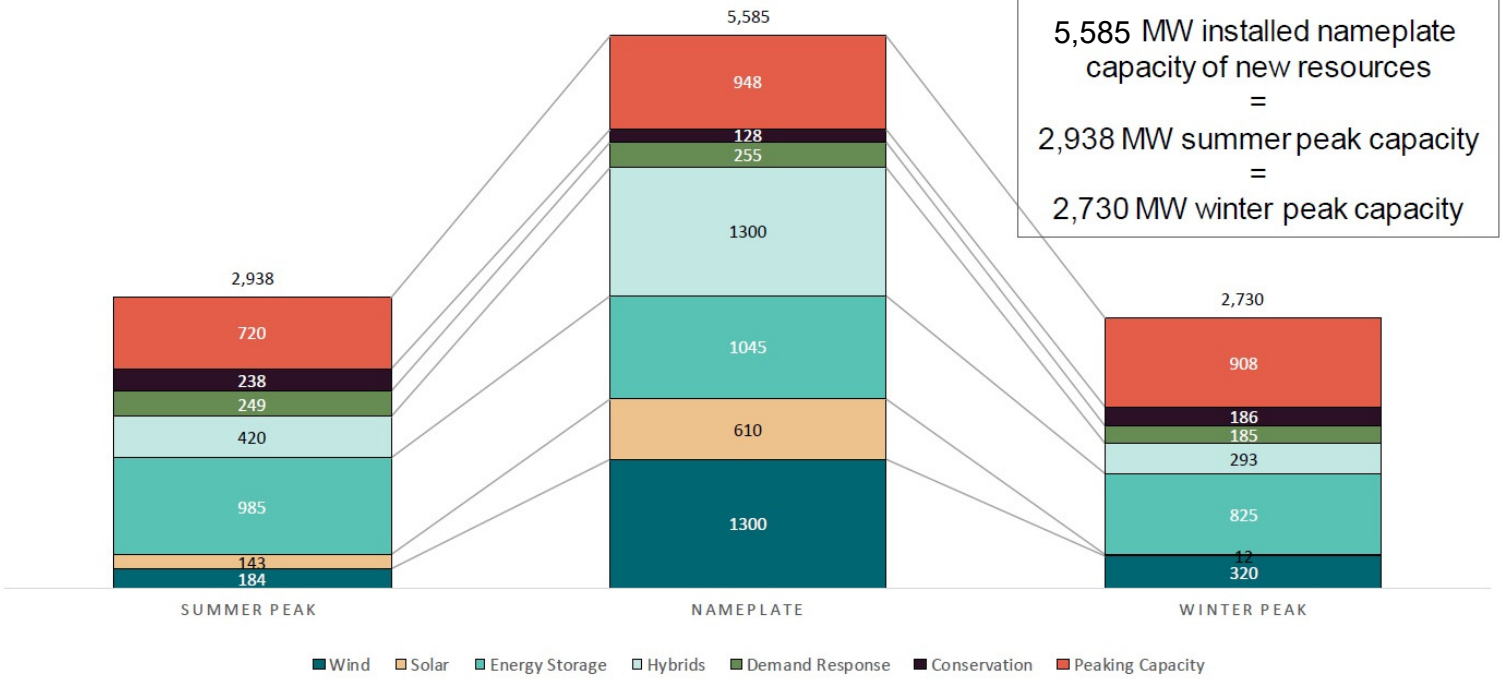
Nameplate Vs. Peak Capacity for 2029

After adjusting for peak capacity contribution

5,585 MW installed nameplate capacity of new resources
=
2,938 MW summer peak capacity
=
2,730 MW winter peak capacity



Clean Energy Resources: Wind and Solar Additions

Wind additions:

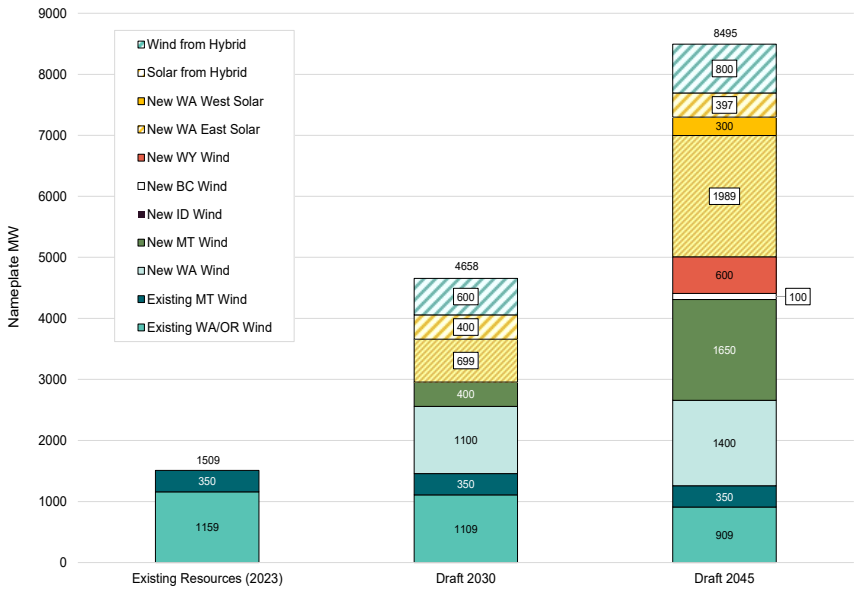
- 2,100 MW additional by 2030
- 4,550 MW additional by 2045

Solar additions:

- 1,100 MW additional by 2030
- 2,700 MW additional by 2045

➢ Restricted transmission through 2030

➢ Assume new transmission available after 2035



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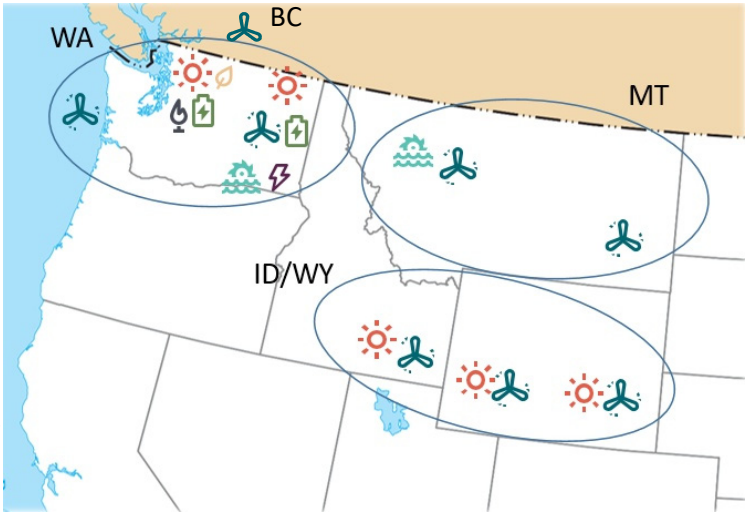
Transmission Constraint Assumptions

Increasing transmission capacity modeling horizon →

Resource Group Region	Tier 1 (by 2025)	Tier 2 (by 2030)	Tier 3 (by 2035)	Tier 4 (by 2040)
PSE territory (a)	(b)	(b)	(b)	(b)
Eastern Washington	1,230	4,920	5,750	Unconstrained
Western Washington	0	100	635	Unconstrained
British Columbia	200	200	200	Unconstrained
Montana	0	400	400	Unconstrained
Idaho and Wyoming	0	400	600	Unconstrained
TOTAL	**1,490**	**5,950**	**7,515**	**Unconstrained**

Notes:
(a) Not including the PSE IP Line (Cross Cascades) or Kittitas area transmission which is fully subscribed
(b) Not constrained in resource model, assumes adequate PSE transmission capacity to serve future load.



- Transmission capacity constraints are organized into regions
- Tiers represent the amount of transmission available or attainable between PSE and a region for a given time period
- Transmission capacity increases over the modeling horizon and by 2040 all transmission constraints are relaxed

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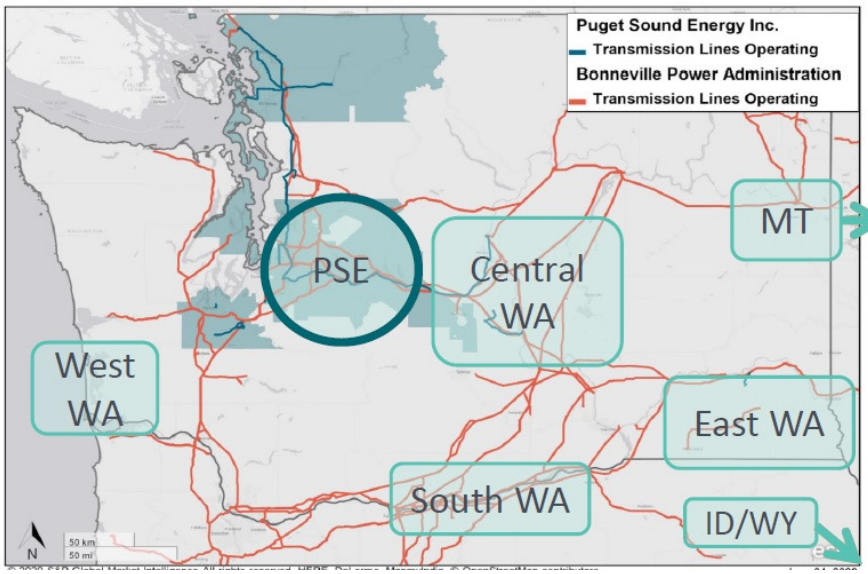
PSE evaluating which renewable energy zones are most impactful and the associated necessary transmission investment



PSE has identified 7 resource groups that align with existing transmission infrastructure

PSE estimates that roughly **2,150 MWs** of need by 2030 could be met with:
- Repurposed transmission
- Additional BPA transmission
- Co-located projects

By 2045 PSE estimates a need of roughly **3,250 MWs** of incremental long haul transmission will be necessary

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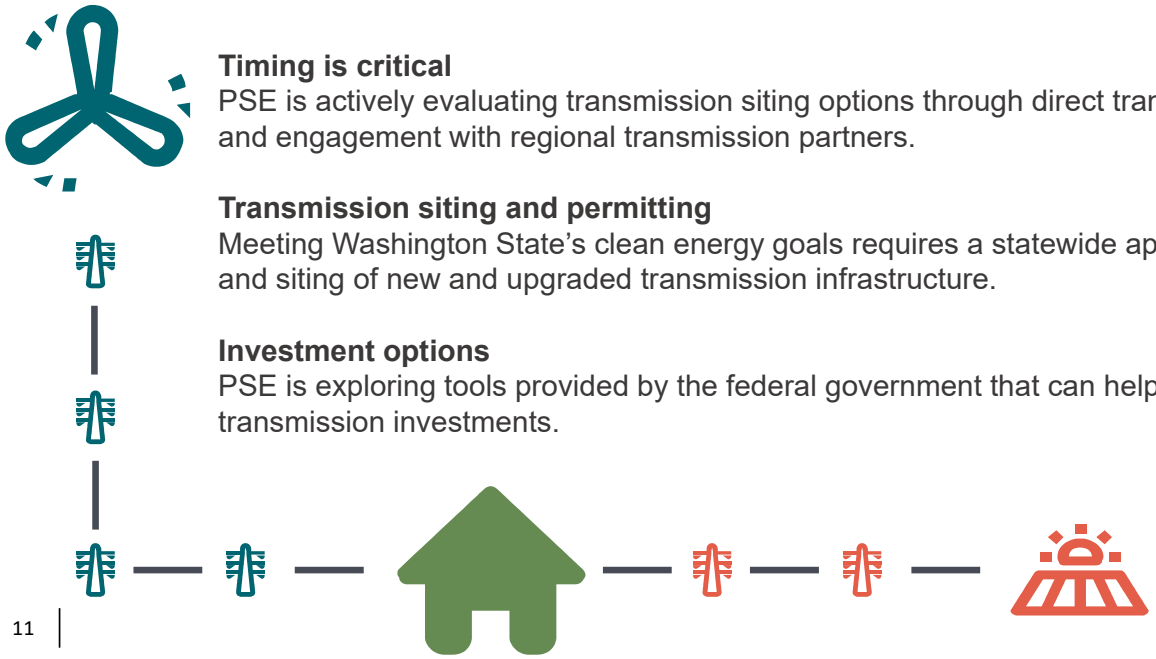
Meeting clean energy targets will require new transmission infrastructure and upgrades to existing facilities

Timing is critical
PSE is actively evaluating transmission siting options through direct transmission investments and engagement with regional transmission partners.

Transmission siting and permitting
Meeting Washington State's clean energy goals requires a statewide approach to permitting and siting of new and upgraded transmission infrastructure.

Investment options
PSE is exploring tools provided by the federal government that can help finance these transmission investments.



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