

# CSPP Assumptions for 2025 IRP

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# Cogeneration and Small Power Production Forecast

- CSPP includes all renewable generation delivered to Idaho Power under Energy Sales Agreements (ESA) and Power Purchase Agreements (PPA). Total nameplate capacity of signed contracts is just over 1,850 megawatts (MW).
  - Public Utility Regulatory Policies Act (PURPA) Qualifying Facility ESAs: over 1,130 MW under contract
  - Non-PURPA PPAs: Elkhorn Valley, Raft River Geothermal, Neal Hot Springs, Jackpot Solar, Black Mesa Solar, Franklin Solar, Pleasant Valley Solar, PVS2. Approximately 720 MW under contract
- Idaho Power does not control the timing or amount of energy received from CSPP projects. CSPP forecast generation is therefore included in the IRP as “must-take.”

# PURPA vs. Non-PURPA

**PURPA:** Act passed by Congress in 1978 that requires utilities to buy energy from cogeneration or small power production (CSPP) projects that meet the definition of a qualifying facility (QF) and can deliver energy to the utility.

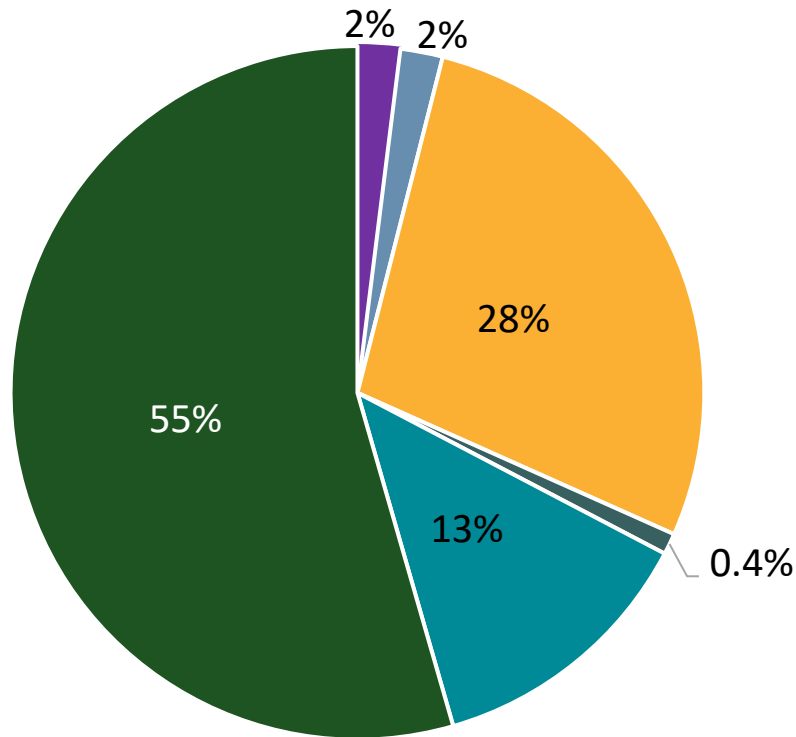
**Congress created the mandate, which is implemented by:**

- The Federal Energy Regulatory Commission (FERC)
  
- State Commissions
  - Idaho Public Utilities Commission
  - Public Utility Commission of Oregon

**Non-PURPA:** Idaho Power has entered into non-PURPA PPAs a result of request for proposal (RFP) solicitations or other bilateral negotiations.

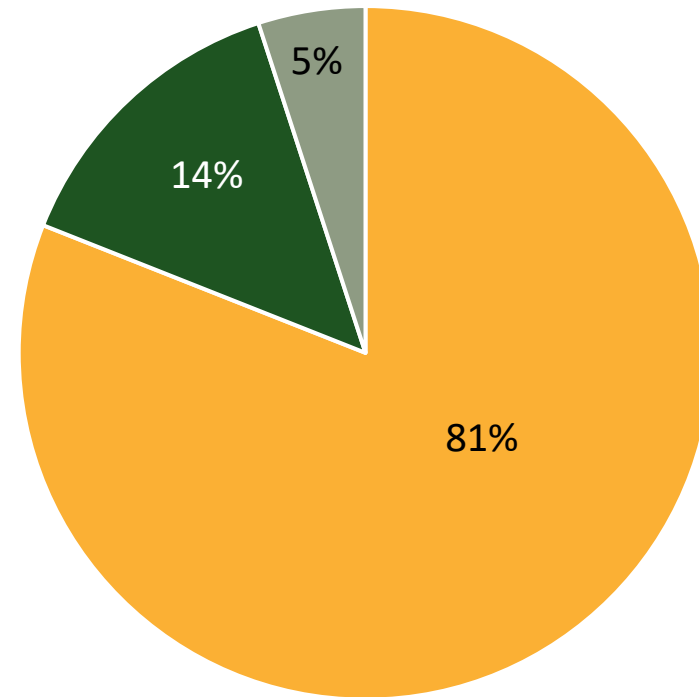
# CSPP Resources on IPC System

### PURPA Nameplate Capacity



■ Biomass ■ CoGen ■ Solar ■ Thermal ■ Hydro ■ Wind

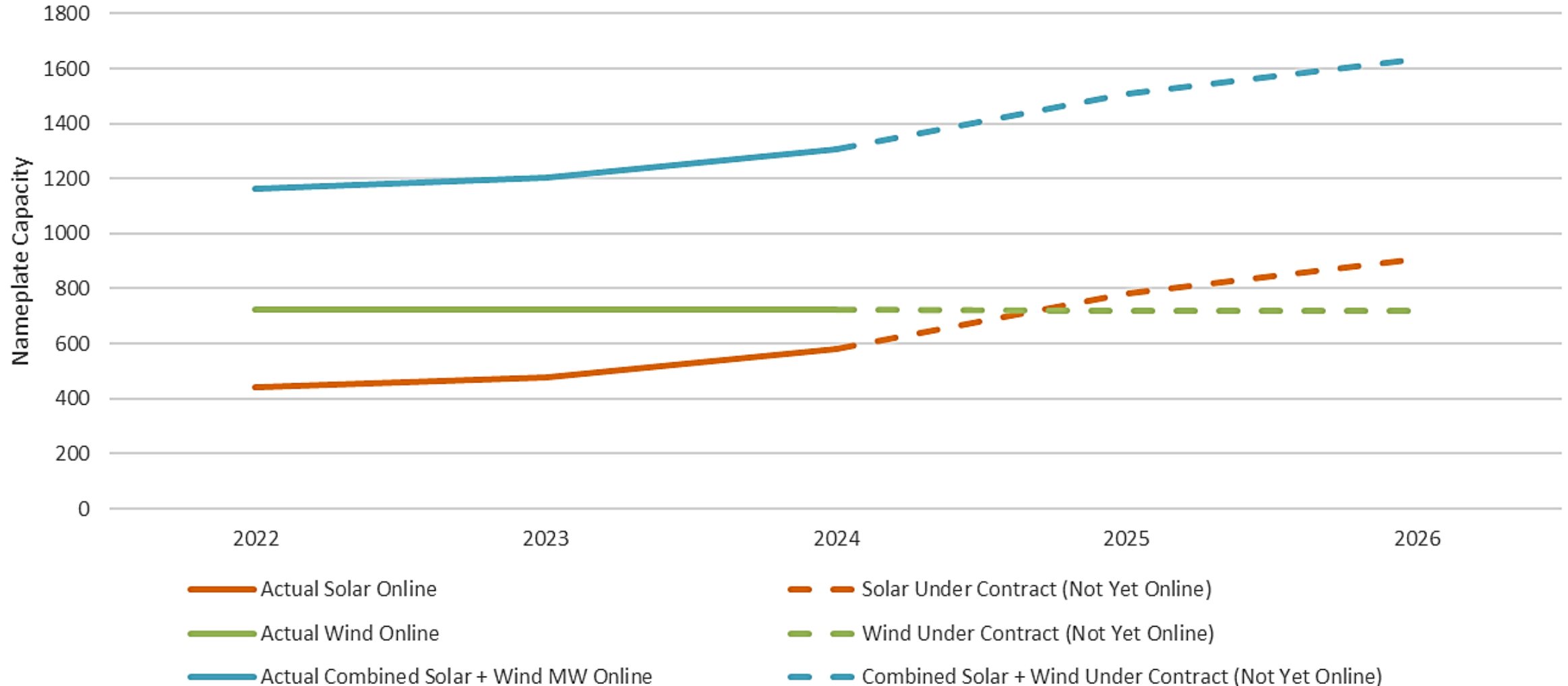
### Non-PURPA Nameplate Capacity



■ Solar ■ Wind ■ Geothermal

# CSPP Resources on IPC System

## Solar and Wind Resources Online and Under Contract



# IRP Assumptions for CSPP

## 2023 IRP

### Base Case:

- All PURPA resource types, except wind, enter into replacement contracts upon termination.
- PURPA wind does not enter into replacement contracts
- No new (future) development of PURPA QFs.
- Non-PURPA resources do not enter into new contracts upon termination.

### Sensitivity Resulting From IRPAC Discussions:

- All PURPA resource types, including wind, negotiate new contracts upon expiration.
- New future PURPA QF development based on 10 years of historical data.

## IRP was acknowledged in Idaho and Oregon!

### OPUC Order for 2025 IRP:

- Replacement contracts:
  - use data-driven assumptions for QF replacement contracts (similar to PacifiCorp methodology)
  - for wind QFs, where we don't yet have data on actual replacements, use assumption of 75%
- New contracts: continue to use data-driven assumptions re new QF development

### IPUC Order for 2025 IRP:

- Perform PURPA trend analysis using most recent data, and apply the results in the base planning conditions in the first year of the planning horizon

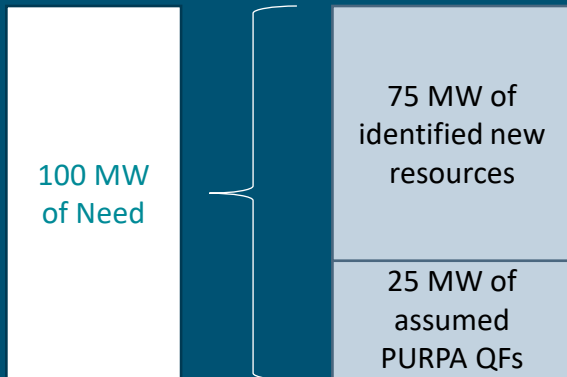
# Impact of IRP Assumptions

## IRP

*20-Year Plan*

Assume some replacement contracts and new QF development

Plan is developed to ensure no deficits

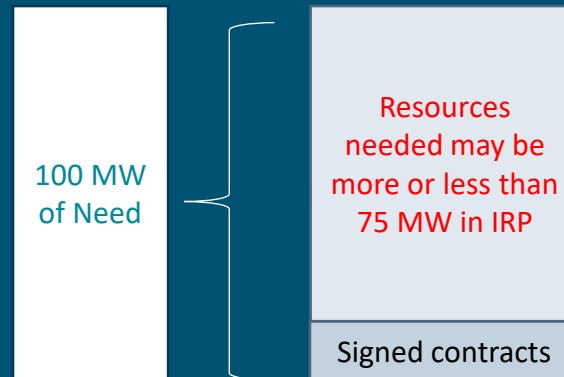


## Request for Proposals

*3-4 years before need*

Assume no replacement contracts or QF development, unless contract is signed

RFP will request resources in quantities to result in no deficits

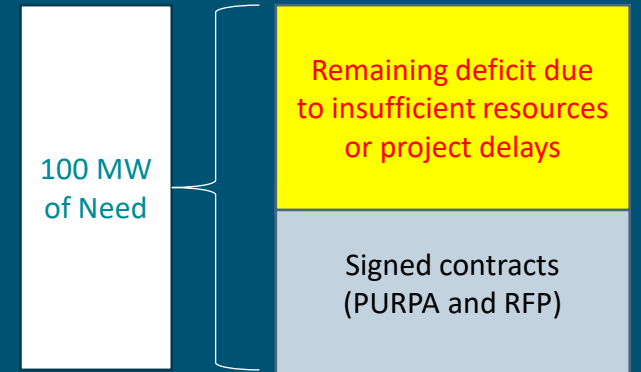


## Short-Term Planning and Operations

*1-2 Years before need, up to operating day*

Assume no replacement contracts or QF development, unless contract is signed

*Risk of continued deficits with little time to procure/build resources*



# Preparing for 2025 IRP

## Analysis regarding new QF development and replacement contracts:

- Five years of data regarding PURPA QF contract terminations, replacement contracts, and new QF development
- For wind and solar, use 75% replacement contract rate
- Plan to run scenario, separate from base case, using 0% replacement contract rate and 0 new development (where contract is not yet signed) for wind and solar



# 2025 IRP CSPP Assumptions

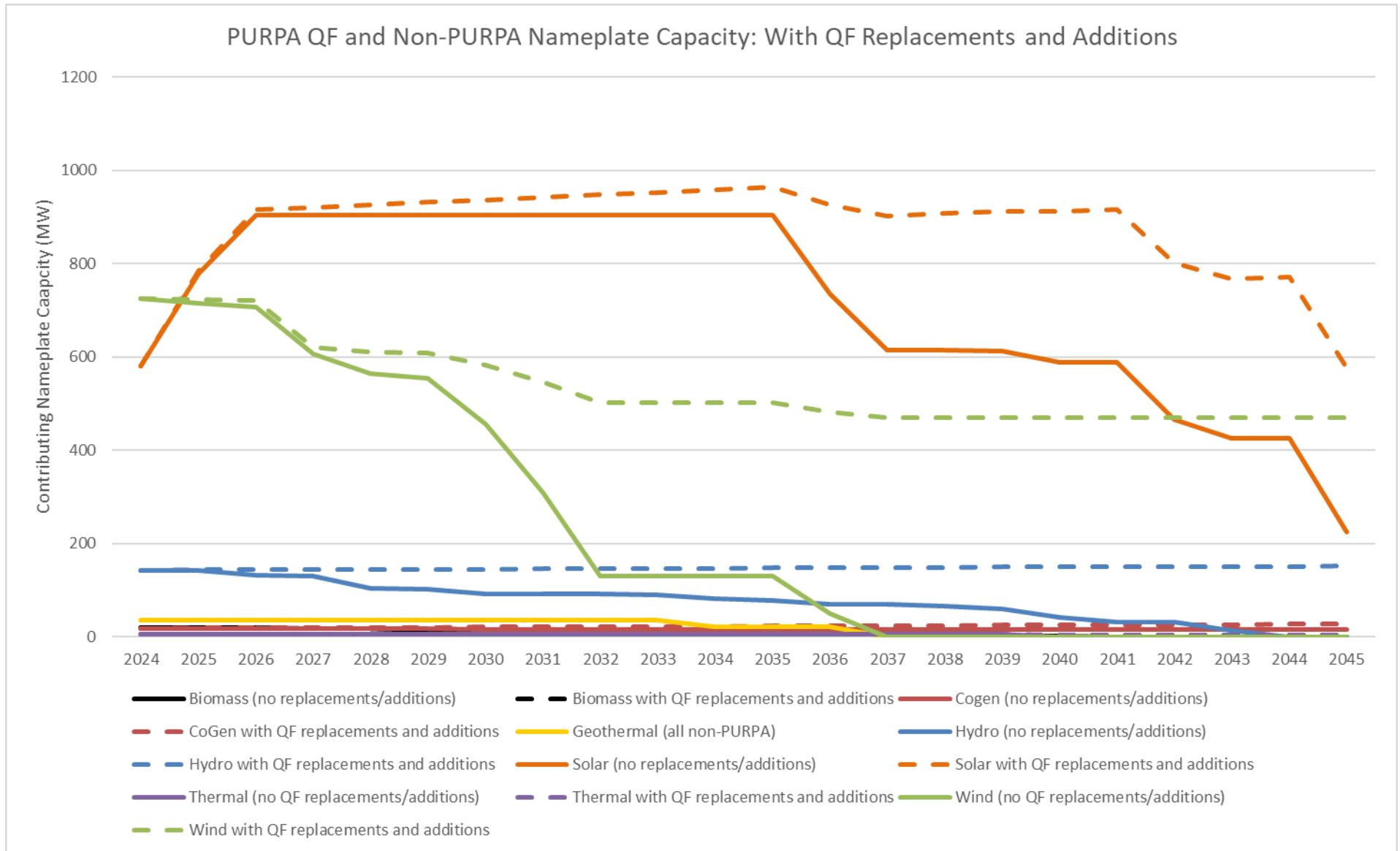


	2023 IRP Assumptions				2025 IRP Base Case Assumptions			2025 IRP Scenario Assumptions: No Wind/Solar QF Replacements or Additions		
	Base: QF Replacement Rate (%)	Base: QF New Development (MW)	Sensitivity: QF Replacement Rate (%)	Sensitivity: QF New Development (MW)	QF Replacement Rate (%)	QF New Development (MW)	Notes	QF Replacement Rate (%)	QF New Development (MW)	Notes
<b>Biomass</b>	100%	0	100%	2	17%	0.00	Analysis of five years of IPC data.	17%	0.00	Analysis of five years of IPC data.
<b>CoGen</b>	100%	0	100%		100%	0.43		100%	0.43	
<b>Hydro</b>	100%	0	100%		97%	0.62		97%	0.62	
<b>Thermal</b>	100%	0	100%		0%	0		0%	0.00	
<b>Solar</b>	100%	0	100%	32	75%	5.35	Replacement contract assumption due to lack of data; new development assumption based on same analysis of five years of IPC data as above.	0%	0	Assumption for solar and wind based on lack of data regarding replacement contracts and new development.
<b>Wind</b>	0%	0	100%	23	75%	0.00		0%	0	

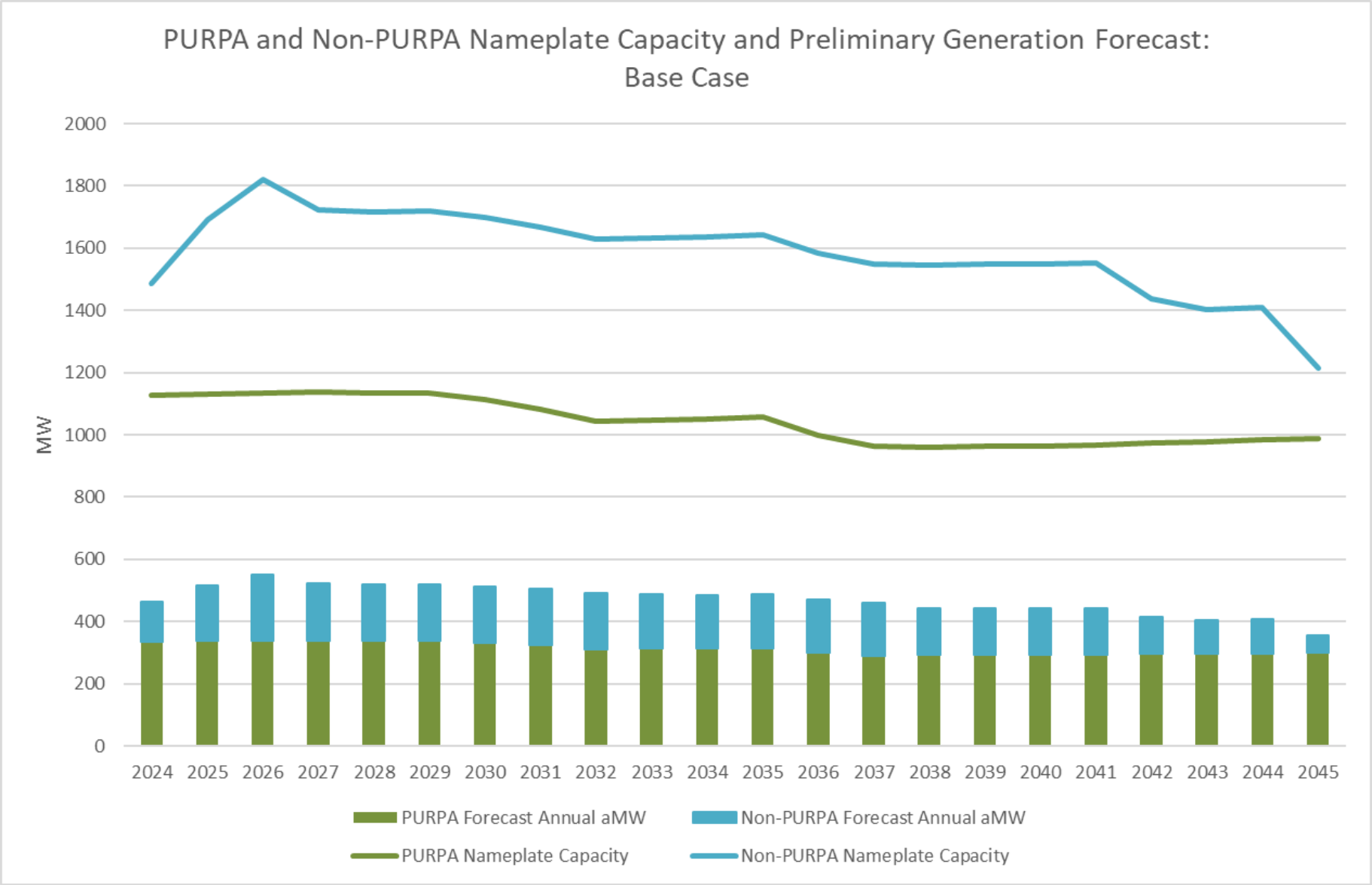
# 2025 IRP CSPP Assumptions

**Without QF  
Replacements  
and Additions**

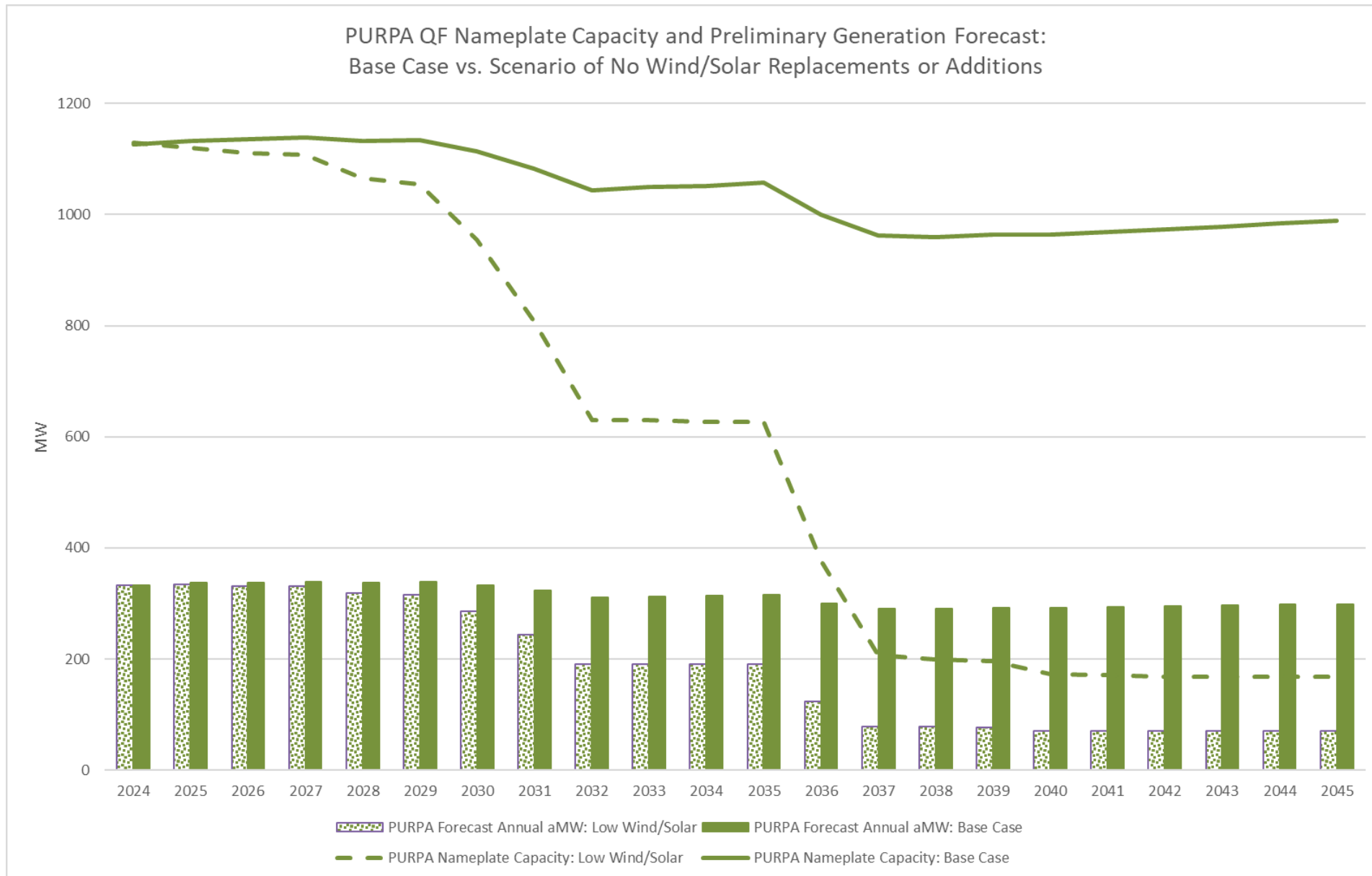
**Then...  
With QF  
Replacements  
and Additions**



# Preliminary CSPP Forecast: Base Case



# PURPA QFs: Base Case vs. Scenario



# Questions

