

# State and Federal Policy and Wholesale Market Design

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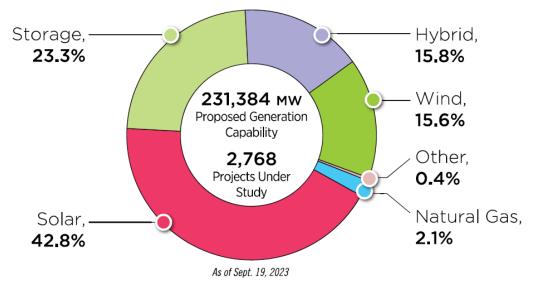
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### Start With a Reliability Focus





What are the kinds of things the system operator or planner might experience differently?

- More renewables
  - Increasing uncertainty
  - Increasing common mode unavailability
- Less resources able to follow dispatch
- Shrinking unforced capacity reserve margin
- Shifting risk patterns
  - Summer to winter
  - Daytime to nighttime

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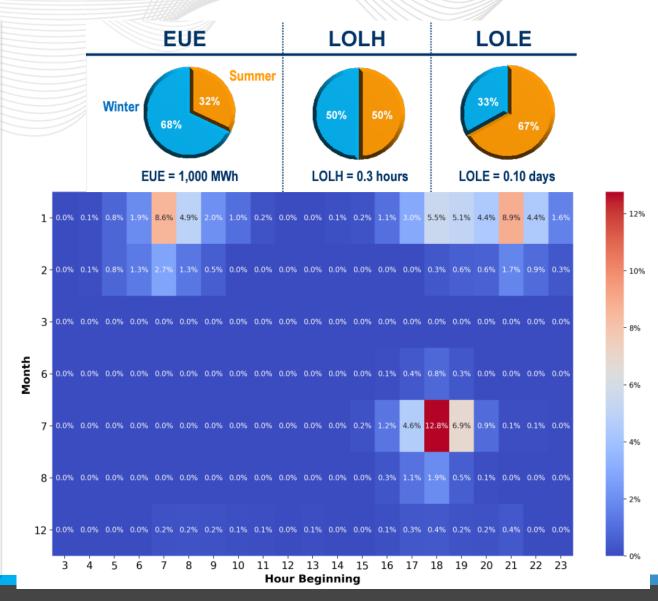
### Implications for the Capacity Markets

## PJM filed Capacity Market changes on Oct. 13, 2023.

- Enhancements to risk analysis and accreditation (correlated outages)
- Align compensation with expected performance during risk periods

#### Future work may consider:

- Movement towards sub-annual designs markets
- Investigation of shorter forward periods



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### ISO/RTOs are Focusing on Reserve Markets

CAISO, MISO and SPP have products.

**MISO** is also <u>reevaluating</u> scarcity pricing levels.

**ERCOT** implemented two new longer-term

Reserve products.

**SPP** is also implementing an <u>Uncertainty Reserve</u> <u>Product</u>.

**NYISO** opened a stakeholder process to discuss

<u>Balancing Intermittency</u> and is considering an additional reserve product.

CAISO is also implementing a 30-minute Imbalance Reserve Product.

**ISONE** filed a <u>set of reforms</u> this fall to make targeted enhancements to their day-ahead reserve markets. One of their goals is to address fuel procurement incentives.

Some ISO/RTOs have implemented and are further investigating ramping products. Investigation of multi-period dispatch, pricing and settlement processes are also being researched.

Two common trends:

- Scheduling and pricing for all flexibility needs.
- Integration of out-of-market activities into market outcomes.