

Integrated Resource and Resilience Planning - IRRP

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Ekaterina Florez
Senior Consultant Energy Markets & Strategy APAC, DNV

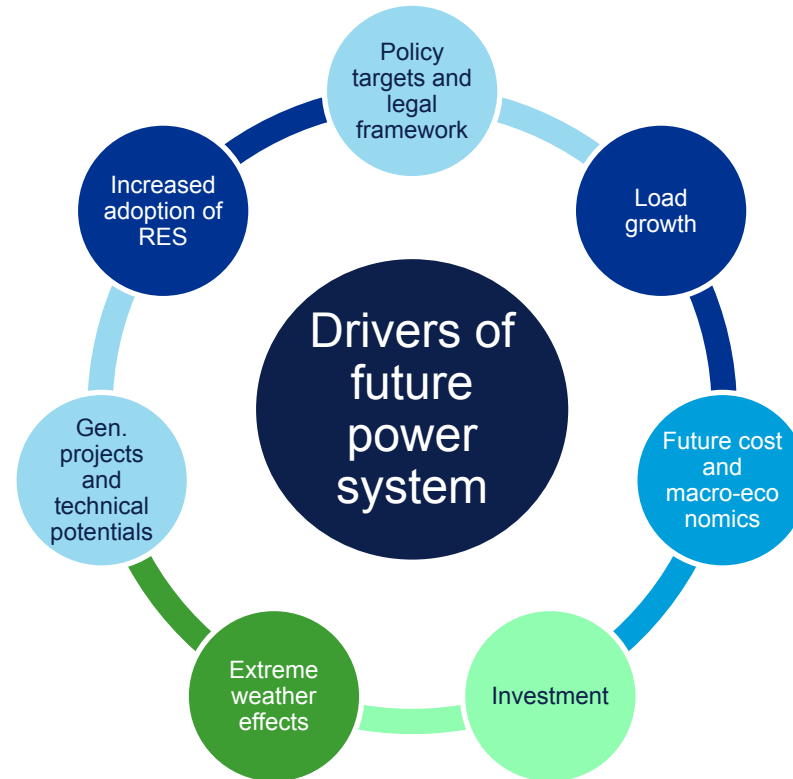
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Setting the scene

Integrated Resource Planning – IRP:

- **Traditional approach:** Primarily focuses on supply-side resources and grid infrastructure to meet projected demand at least cost
- **Limitation:** Often excludes demand-side considerations.
- **Challenges today:** Existing planning tools and strategies are insufficient for modern needs.
- **Future outlook:** Requires more comprehensive and adaptive planning methods.

Today's evolving landscape:



Integrated Resource and Resilience Planning (IRRP)

Resource adequacy & resiliency in IRRP

Resource adequacy

- Aim is to reduce loss of load
- Associated with contingency events that have low impact and high probability of occurring
- Metrics: Deterministic and/or probabilistic approach
- Commonly taken into account in resource planning

Resiliency

- Aim is to prepare for and recover from unexpected events that cannot be avoided
- Associated with extreme events of high impact and low probability of occurring
- More challenging to account for since these events rarely occur but can potentially result in huge economic losses
- Usually not taken into account in resource planning



Key components of IRRP framework



Key benefits of developing Regional IRRP

Comprehensive energy planning

Proactive problem-solving approach

Cost efficiency

Stronger transmission investment cases

Climate resilience

Investment & green financing

Enhanced stability

Thank you

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