



**JCSP 2008**  
**Economic Transmission Development Work-to-Date**

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## Joint Planning Initiatives

### Joint Coordinated System Plan (JCSP 2008)

- Midwest ISO
- SPP
- PJM
- TVA
- MAPP
- NYISO
- ISO-NE
- Other Interested parties

### Performed in Coordination with DOE Eastern Wind Integration Transmission Study

- 20% wind requirement
- 30% wind requirement (On Hold)

Using process developed by the Midwest ISO for MTEP 2008

JCSP work will be used to supplement eastern interconnect information for the Midwest ISO Transmission Expansion Plan (MTEP 2009); and, anticipate other regions will do so as well



## Joint Planning Initiatives

Models for 2018 and 2024 are being developed for the JCSP work. SPP is taking the lead on the model development.

Performing a reliability assessment on the multi-RTO area – 2018 is the study year. PJM staff is taking the lead on the reliability analysis.

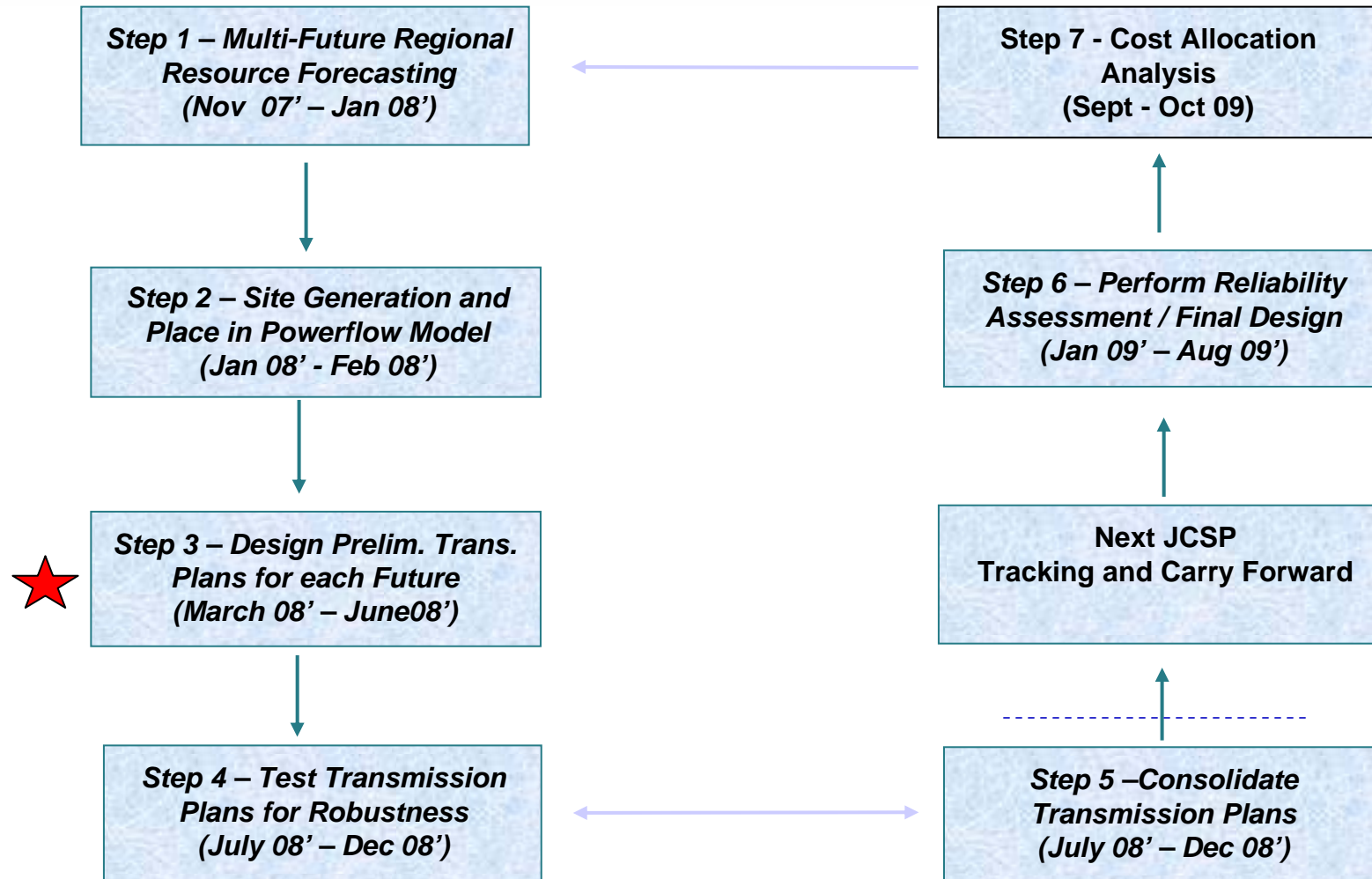
Economic study is being performed for 2024.

JCSP work is also forming a significant component for several RRO's in meeting the new Scenario requirements for the NERC's 2009 Long Term Reliability Assessment

JCSP process has potential to meet the needs of the DOE's corridor study.



# JCSP Economic Planning Process



## Future Scenarios

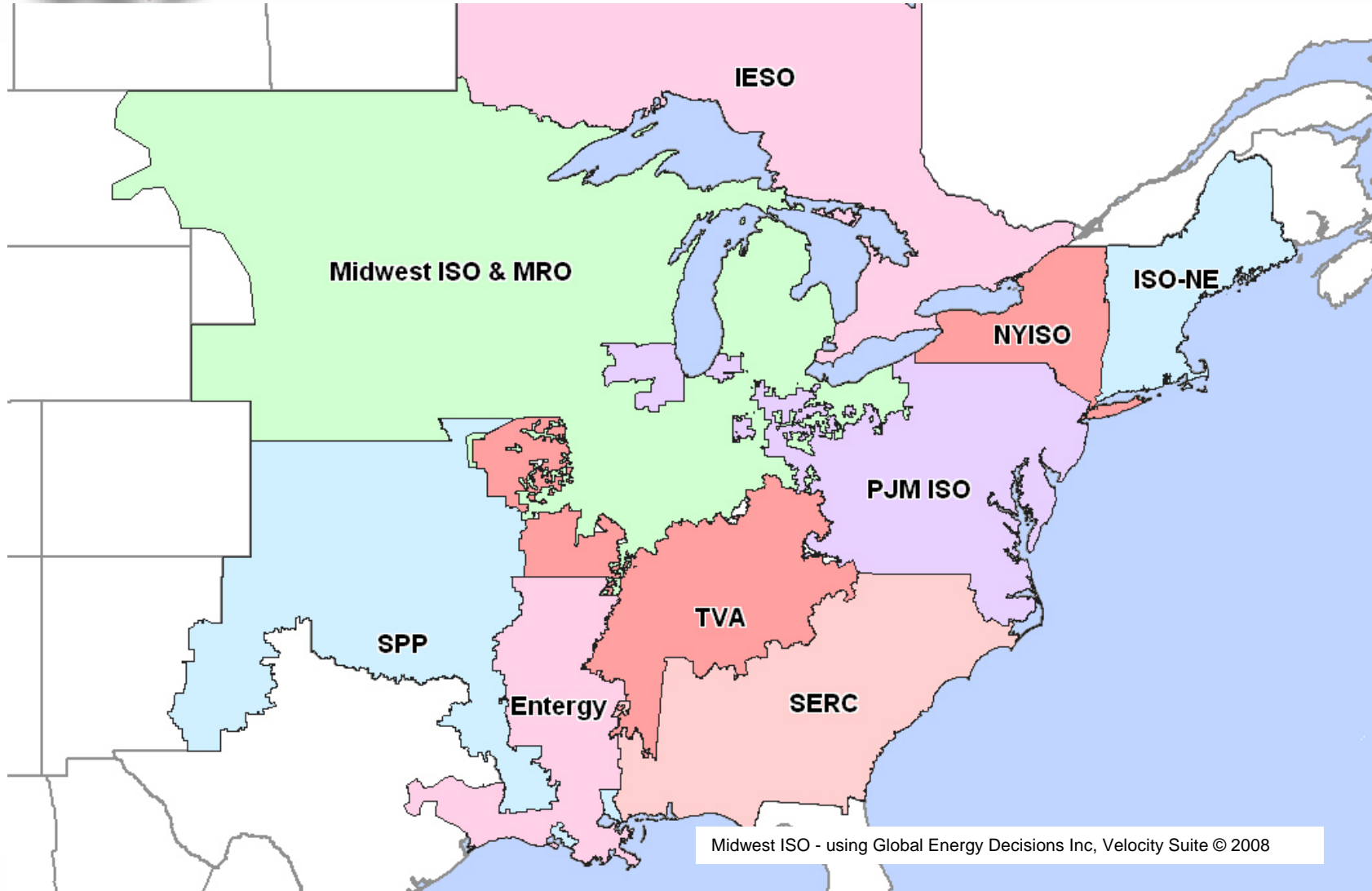
### Reference Future

- Models the Status Quo. This future models the power system as it exists today with reference values and trends based on recent historical data while preserving existing standards for resource adequacy, existing renewable mandates and environmental legislation.

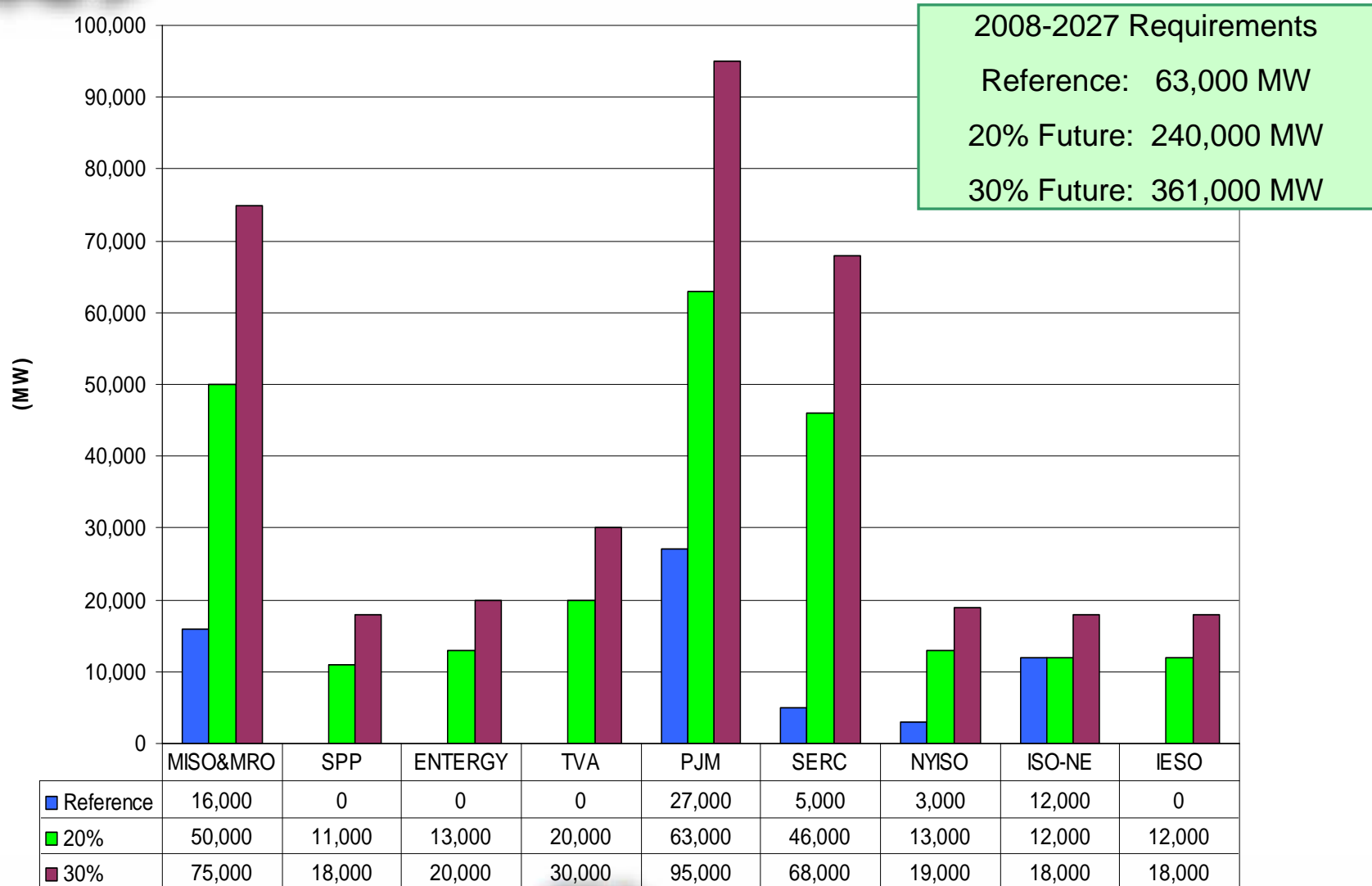
### 20% Wind Mandate Future

- Requires 20% of the energy consumption come from wind by 2024. Regional Capacity Factors of new units applied toward mandate, and 15% of Maximum Capacity counted toward Reserve Margin Calculations. Existing Wind mandates accounted for in Reference Future are applied to all futures.

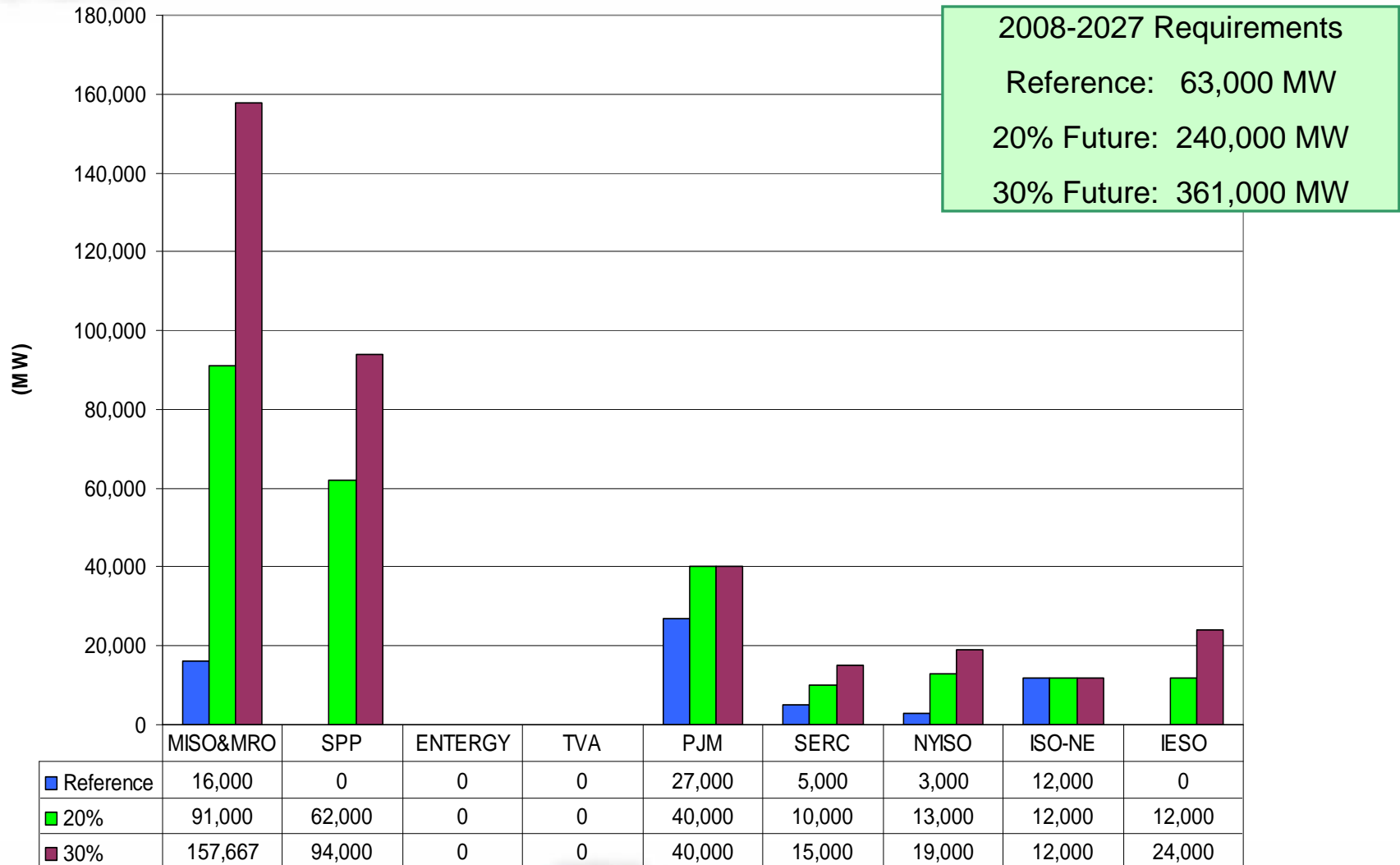
# Region Definition



# 2008-2027 (Study Period) Incremental Regional Wind Requirements

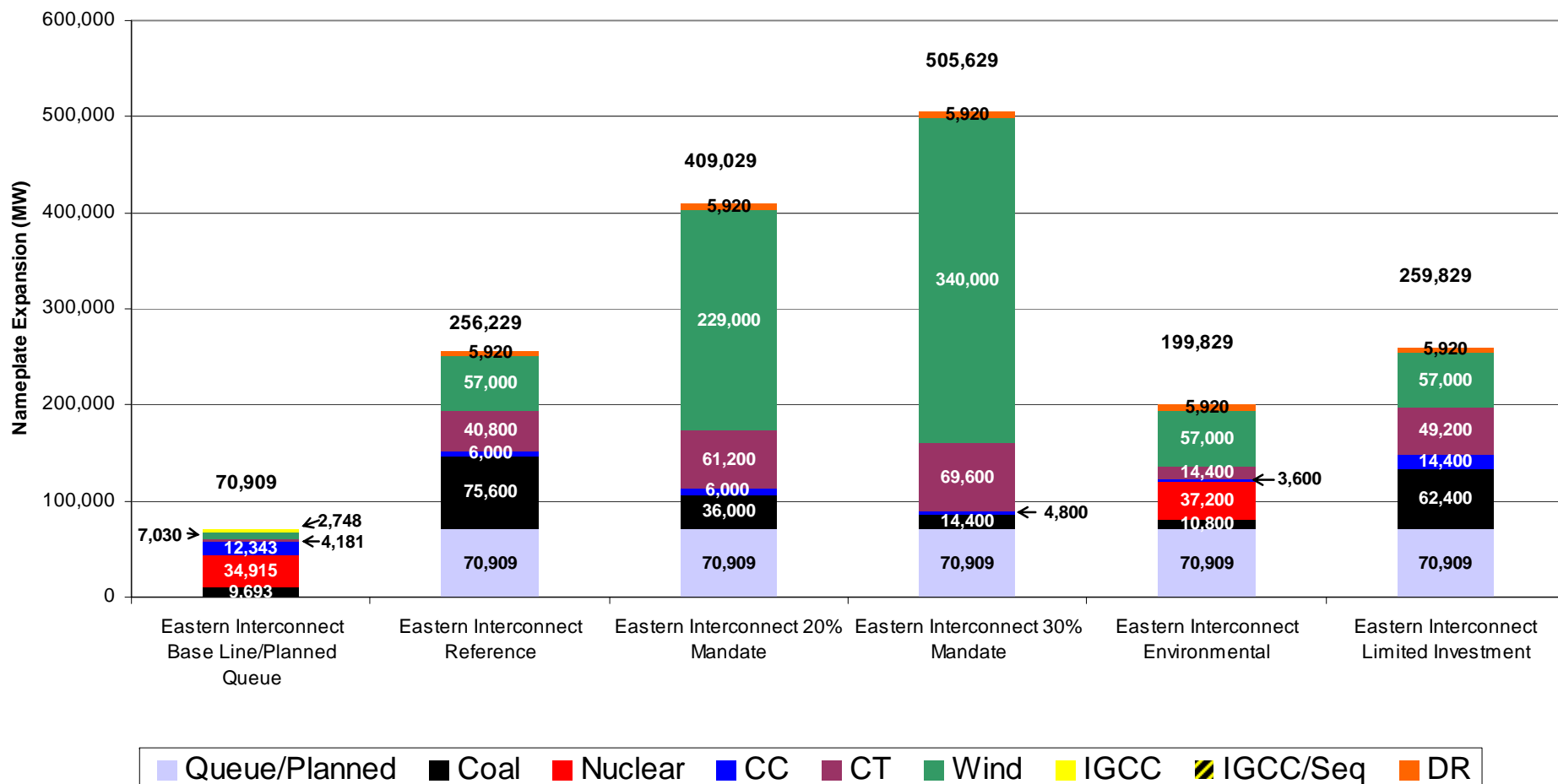


## Redistribution of Incremental Wind Requirements Based On Wind Quality/Availability

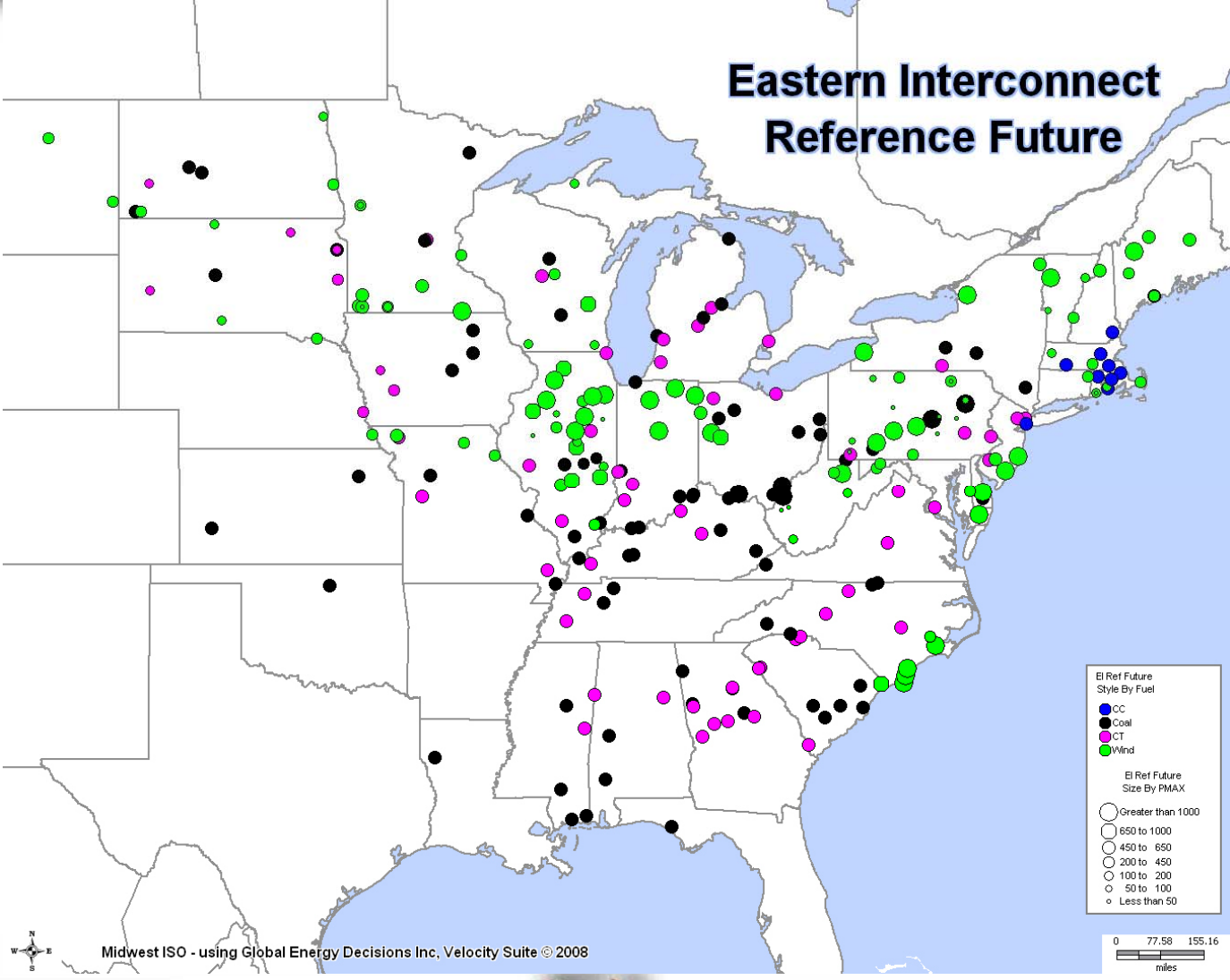


# Eastern Interconnect Expansion

Generation Nameplate Expansion 2008-2024



# Reference Future Siting



# Renewable Future Siting (20% Wind Mandate)

