



# WECC Tools and Data MAC Class 4 and 5 Meeting

September 8, 2021

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# Reliability Planning

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Reliability  
Assessment  
Datasets

Reliability Risk  
Priorities

What's on the  
Horizon

1- to 20-Year  
Time Frame

RAC Activities

Industry Partners  
(National Labs,  
etc.)

# Major Work Products

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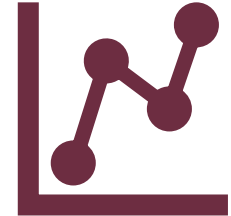
Base Cases



Production  
Cost Model  
(ADS)



Reliability  
Analysis



Planning Data  
Management  
(under way)

# WECC Base Cases

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Used in reliability assessments

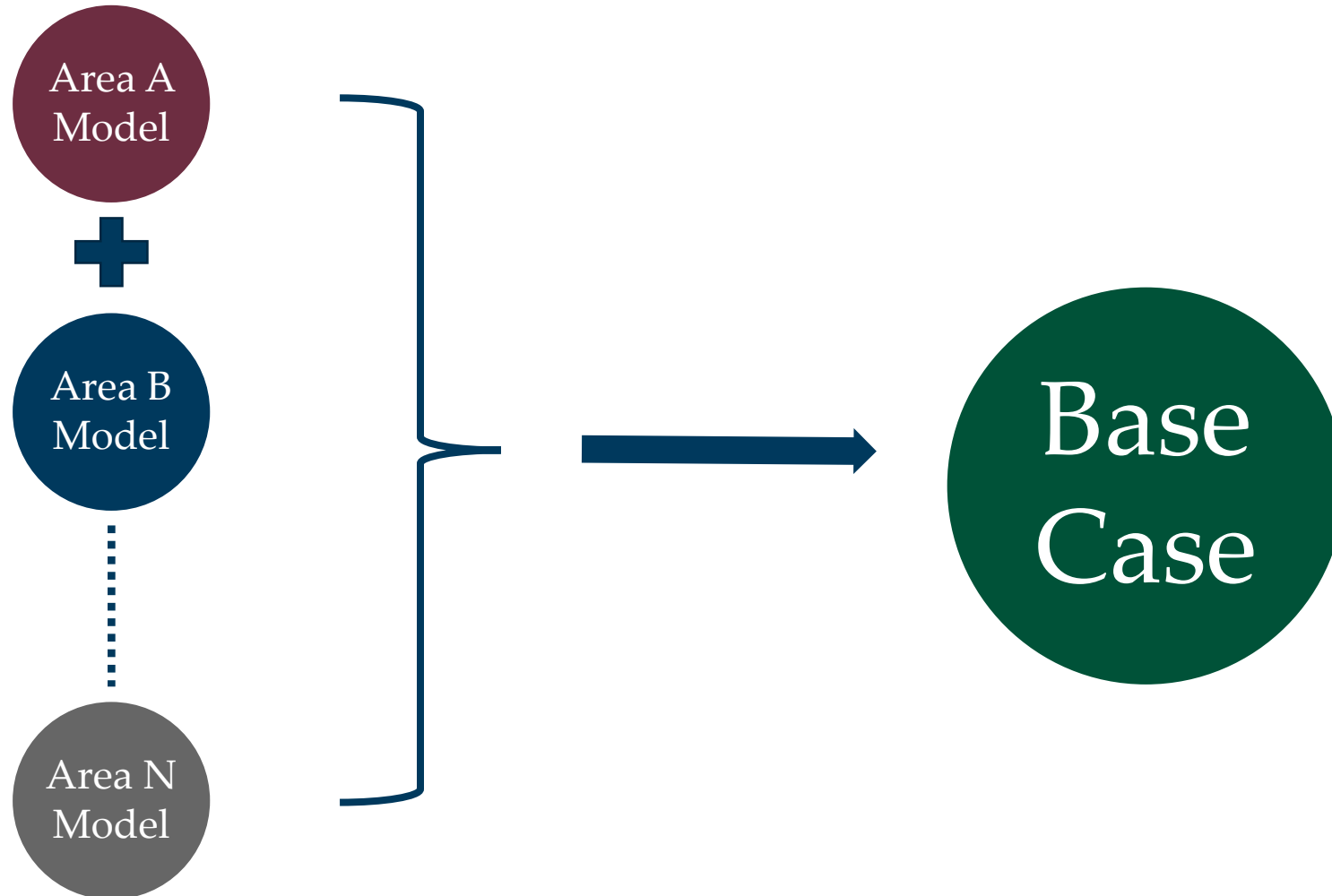
Produce 10 to 12 cases every year (1- to 10-year)

Used by operating/planning entities

Schedule (System Review Subcommittee)

Reflect varying system conditions 1–10 year(s) out

# Base Case Creation



# Production Cost Model (ADS)

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Study various dispatch levels

Transmission congestion

Hourly dispatch

Export power flow

# Reliability Assessments

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**Reliability Risk Priorities**  
**Reliability Assessments**



**Current Study Program**

System Inertia

Variability of Loads and Resources

Impact of DERs on Bulk Electric  
System

Extreme Natural Event

Year 20 Scenario (reduced carbon)

# Challenges and Opportunities

## Base Case

- Inverter-based resource (solar/wind) models
- Case quality metrics

## Production Cost Model

- Resource assumptions
- Other assumptions

## Reliability Analyses

- Tools and applications
- Datasets





**WECC**

Electric Reliability and Security for the West

## Contact:

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