WECC

SWG Long-Term Scenarios Modeling—Lessons Learned

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SWG History

- Formerly a Scenario Development Subcommittee (SDS).
- Composed of volunteers, one WECC engineer, two consultants; consultants now in limbo
- Prior reports addressed system shifts but included climate change (initial treatment across WECC studies) and rate of technology change; last year targeted a 100% clean energy scenario
- Produced extensive modeling detail and reference information catalogue
- Extensive work scope in last two study cycles; last cycle only produced a sensitivities segment of work proposal (80/90/100 clean energy)
- Last report of interest to broadest audience to date

Key Points by Category

- Role of scenarios (compile projection of the future)
- Data needs (sources, detail, assumptions)
- Understanding complexity of multiple factors (how to reference)
- Policy considerations (material to study structure)
- Risk metrics (treatment in assumptions)
- SME resources (when to reference, balance opinions, understand assumptions)

Key SWG Study Efforts and Findings

Conclusions

- Long-term scenarios planning important for identifying potentialities
- Margins of error manageable with use of reasonable assumptions and tracking those into the results and conclusions
- Modeling results can uncover underemphasized aspects of the system, including influences not otherwise referenced or called out
- Studies will refer to system integration performance
- Studies only capture the inputs used
- Regular revisits are critical to keeping pace with system changes

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Electric Reliability and Security for the West

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