



EMT Modeling

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MOD-032 Designee Responsibility

- Data for Power System Modeling and Analysis
- R4: Each PC shall make available models for its planning area ... to the ERO or its designee to support creation of the Interconnection-wide case(s)
- WECC = MOD-032 designee for the Western Interconnection

MOD-032 Designee Responsibility

- NERC or Regional Entities may designate additional specialized cases, including:
 - Collection of EMT zones as designated by NERC, as needed
 - EMT cases, with at least 60 days advanced notice – should a Designated Entity require additional time, the relevant ERO Enterprise parties shall collaborate to determine the appropriate timeline
- Standard Drafting Team working on updates to MOD-032 – likely posted for comment around April

Uses of EMT

- Sub-synchronous oscillations
- Protection system analysis
- Grid forming inverters
- IEEE 2800 conformity
- Blackstart studies
- Weak grid stability assessment
- Controller instability

EMT Considerations

- Models are much more detailed than positive sequence → more difficult to create, maintain
- Generic models, e.g. genqec, not currently viable – need models that are specific to the plant
- Collecting/creating EMT models after units are in service is difficult
- Data sharing

WECC's EMT Strategy

- WECC's initial questions:
 - What are EMT zones?
 - What is an EMT case?
 - What should WECC's role be in the West?
- Action: working with Elevate Energy Consulting to develop WECC's EMT Strategy
 - Broken out into different levels of involvement
 - Not finalized

Discussion Points

- WECC would like to host an EMT workshop – what would you like to see at such a workshop?
- Thoughts on potential roles for WECC in EMT space



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