



Dynamic Model Improvement Update

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Transmission Planning

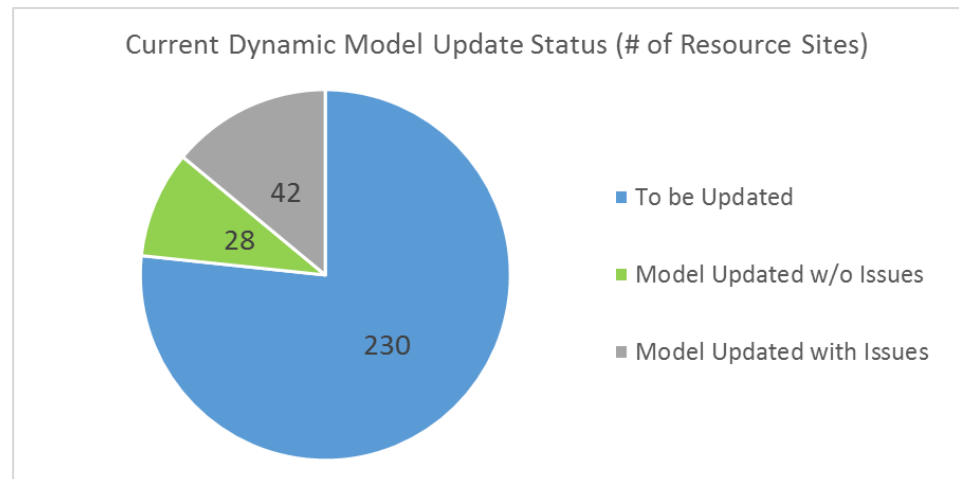
ROS
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Recent Dynamic Model Improvement Efforts

- Dynamic Model Task Force (April 2017 – June 2018)
 - Process for submitting, reviewing, and maintaining dynamic models
 - Acceptable/Obsolete model list development
 - Specialized dynamic models - EMTP (PSCAD) model
 - The requirement and limitation of User-Defined dynamic models
- Dynamic Model Template Adoption (2018-current)
- Dynamic Model Update and Quality Review (2019-current)

Dynamic Models in ERCOT

- Total of 300 resource sites (more than 700 generators)
- January to June 2019, ERCOT:
 - reviewed dynamic models for all 300 resource sites
 - pre-populated the model templates based on the existing model data
 - vetted the model quality
 - provided the review results, including model template and model issues if any, to the REs



Observations

- Increasing use of generic models to replace the previously provided user defined models (UDMs)
 - May need to request the comparison between UDMs and generic models?
- It typically took several weeks and multiple iterations between REs and ERCOT to address the model issues.

Next Steps

- Continue to work with REs to address model issues and update models
 - Expect to complete the model update by 4Q, 2019. (subject to the responses from the REs)
- Follow up with the IBR workshop recommendation, ERCOT plans to submit a PGRR on dynamic model quality test requirement to help REs address model issues as early as possible.

Questions

Comments are welcome

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