

# EE 492: Weekly Report 9

*April 1<sup>st</sup> – April 7<sup>th</sup>*

sdmay19-24:

Power System Reliability in MISO for High Wind/Solar Levels

Team:

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Advisor:

Dr. James McCalley

Client:

Midcontinent Independent System Operator (MISO)

## Accomplishments this week

Task:	Group members who contributed:	How they contributed:
Put in 75/25 scenarios	Shannon, Shelby	Created a separate PLEXOS model so that there are now two- a 50/50 mix model and a 75/25 mix model. Necessary data and connections were then established so that LOLE simulations at 10, 30, 50 and 100% can be run just like the 50/50 model mentioned in previous reports.
Create generation profiles for the solar and wind	Zar	MISO helped the team discover that they did not edit the generation profiles like they were supposed to ~ so using NREL data the team created the profiles.
Progress on NAPS paper	Team	Continuing to make progress on the outline and content of the final paper.
Automation progress	David	Worked with Armando from MISO to query each year individually for our PLEXOS script.

## Pending Issues

Discovered in our weekly meeting with MISO that our model is still not running correctly, meaning we will need to re-do the 50/50 LOLEs and ELCCs again

The issue was that our wind and solar profiles need fixed because they are not properly reflecting the weather patterns that they should.

The generation data the team currently has in the PLEXOS model is incorrect. Additionally, PLEXOS is still not referencing one of the data files that is needed to properly simulate the model.

## Plans for next week

The team will reconfigure the generation data and connections in the models so that all data is correct and properly used throughout all simulations. The first few derived values will be emailed to the team's MISO contacts so that they can gauge progress. This will ensure the team does not conduct another full study with improper data and/or connections present in the model.