

# EE 492: Weekly Report #3

*February 11<sup>th</sup> – February 17<sup>th</sup>*

sdmay19-24:

Power System Reliability in MISO for High Wind/Solar Levels

Team:

Zaran Claes, Shelby Pickering, Matt Huebsch, Shannon Foley,  
David Ticknor, Ian Rostkowski

Advisor:

Dr. James McCalley

Client:

Midcontinent Independent System Operator (MISO)

## Accomplishments this week

Task:	Group members who contributed:	How they contributed:
Review calculation examples given to the team from MISO	All Members	All members were told to review slides given by MISO and practice some calculations. The team spent time to make sure they thoroughly understood the problems.
Complete updating the current generation levels and adding new generation to the PLEXOS model to create the base model	Shannon Foley Matt Huebsch Zaran Claes	All – removed NREL generators as well as any other renewables in the model. Scaled load and generation to 2017 levels.
Follow instructions given by MISO to build and run an initial PASA model	Ian Rostkowski Shelby Pickering	Operated in PLEXOS in order to complete the give task, often switching lead positions based on who was available and relying on each other to notice inconsistencies.
MISO workshop:	All Members	The team assembled alongside their MISO contacts and Dr. McCalley. Over a 6-hour span, the team worked to discuss future plans and goals for the project, discussed and reviewed the given practice problems (see task 1), and worked in PLEXOS alongside the MISO team in order to complete the base simulation model.

## Pending Issues

The team's PLEXOS licenses have since expired from when the licenses first initialized this last fall. While the team was able to renew a single license on the teams VM in time to participate in the MISO workshop, it would be beneficial for all members to have their individual licenses up and working again. This will require further cooperation with the teams contact at Energy Exemplar.

## Plans for next week

In addition to renewing PLEXOS licenses, each team member now has a better understanding of PLEXOS and its operation and use for this project. With the base model nearly complete, the team will be looking to finish this and continue towards creating the more complicated models this study seeks to focus on.