

EE 491 Weekly Report **MAY 15-08** Week 7 (10/4/14-10/12/14)

Advisors: Dr. McCalley **Client:** US DOE/National Renewable Energy Laboratory

Members (roles):

Alex Tillema - Team Leader

Kyle Kraus- Team Webmaster

Nick Jones- Team Communication

Jared Ward- Key Concept

Josh Martinson- Key Concept

Mohammed Aldaheri- Research

Project Title: Hydropower Vision

Weekly Summary

The goal of last week was to continue researching areas for hydro potential in the MISO region.

Meeting notes:

10/3 Conference Call

Duration:

0.5 hour

Members Present:

Alex Tillema- Team Leader

Kyle Kraus- Team Webmaster

Nick Jones - Team Communication

Jared Ward- Key Concept

Josh Matinson-Key Concept

Mohammed Aldaheri- Research

Purpose and Goals:

The purpose of this meeting was to discuss hydro power in the Manitoba region and it's integration in the MISO region.

Achievements:

Manitoba region is looking to expand their hydro potential by 2,230 MW over the next 15 years. The group as a whole debated whether it would be more beneficial to build in Missouri or in Manitoba because of the same generating capacity. Clearly, Manitoba has the willingness to build the hydro but the construction of a long transmission line may be troublesome. However, hydro in Missouri could be easier to integrate in MISO, but the willingness to build may not be there. The debate is still up in the air and will be decided in the next meeting.

Pending issues

What model of the United States will be using when the team models the hydro facility in PLEXUS? This issue will be decided upon at the next meeting with Dr. McCalley. Should the hydro model be built in Manitoba or in Missouri.

Plans for next week

Alex Tillema-Will continue training of PLEXUS

Kyle Kraus- Will finish building the website

Nick Jones-Will continue researching construction cost of hydro plants for entrance into competitive energy market

Jared Ward-Will continue training of PLEXUS

Josh Martinson-Will continue training of PLEXUS

Mohammed Aldaheri-Will continue research on system models of MISO and PJM markets

Individual Contributions (this week)

Alex Tillema-Attended meeting, started training on PLEXUS (1.5hr)

Kyle Kraus- Attended meeting, worked on website (1.5 hr)

Nick Jones-Attended meeting, continued research on construction cost, wrote weekly report (1.5hr)

Jared Ward- Attended meeting, started training on PLEXUS (1.5hr)

Josh Matinson- Attended meeting, started training on PLEXUS (1.5hr)

Mohammed Aldaheri-Attended meeting, performed research on Manitoba Hydro Wind Synergy that was ran from June 2011 until June 2013 (3hr)

Total contributions for the project

Alex Tillema (18 hr)

Kyle Kraus (14.5 hr)

Nick Jones (16.5 hr)

Jared Ward (17.25 hr)

Mohammed Aldaheri (16.25 hr)

Josh Martinson (16.5 hr)