

EE 491 Weekly Report **MAY 15-08** Week 3 (9/8/14-9/14/14)

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 this week was to look at the geographic potential in the United States and Southern Canada for developing new hydropower.

Meeting notes:

9/11 Group Meeting

Duration:

60 min

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 get together and discuss the results of our research. The goal of the meeting was to select the three best options to develop hydropower in the United States.

Achievements:

As a group we decided on three locations where the development of hydropower generation would have the greatest benefits. We found research that suggested Colorado, Missouri, and Pennsylvania have the potential to expand their hydro capacity by 3,802, 2,450, and 2,418 MW's respectively. Colorado and Missouri were chosen because of the benefits they would supply to rapidly growing wind energy in their respective regions of the country. Pennsylvania was selected because of the large demand in the area and the higher market rates in the PJM market.

Pending issues

1. Will smaller hydro plants cause displacement of population like larger dams such as the Three Gorges Dam project in China?

Nick Jones, Communication Leader, will continue researching the effects of small dams on local population and submit report in the next week

Plans for next week

1. The group will be writing a report that shows the preliminary risks and benefits of each state chosen for the expansion of hydro power. The group will then submit this report to the faculty advisor for his review
2. Kyle Kraus, Team Webmaster, is going to begin creating the website

Individual Contributions (this week)

Alex Tillema-Attended meeting, performed research (3 hr)

Kyle Kraus- Attended meeting, performed research (3 hr)

Nick Jones-Attended meeting, performed research, wrote weekly report (3.5 hr)

Jared Ward- Attended meeting, performed research (3 hr)

Josh Matinson- Attended meeting, performed research (3 hr)

Mohammed Aldaheri-Attended the meeting (1 hr)

Total contributions for the project

Alex Tillema (4.5 hr)

Kyle Kraus (4 hr)

Nick Jones (5 hr)

Jared Ward (3.75 hr)

Mohammed Aldaheri (3.75 hr)

Josh Martinson (3 hr)