

# EE 491 Weekly Report MAY1603 4/4/2016-4/11/2016

Project title: Evaluation of distributed generation potential within an existing municipal electric infrastructure

Advisors: Anne Kimber & Zhaoyu Wang

Client: City of Bloomfield

Members: Joey Dugan - Team Leader

Adam Gigstad - Team Co-Communication Leader

Marissa Koehn - Team Co-Communication Leader

Connie Maluwelmeng - Team Webmaster

Denis Kinganga - Key Concept Holder

Sid Taha - Key Concept Holder

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## Weekly Summary

This week we prepared and presented our presentation to Dr. Amariuca. The feedback we got from him was overall good and showed that we are on the right track to finishing our project. Also, we did an economic analysis of a few of the different options of how to connect the solar array to the system. The way we decided was the best way to connect the solar power to the system is to run the power back to the substation to better take advantage of the load of the the system. The better the produced power is used by the Bloomfield load the more money Bloomfield saves because they buy power at at much higher rate than they can sell it back for. We also had to model this situation so we can be sure that the voltage and current are still in the allowable ranges.

## Goals For Upcoming Week

- Create poster
- Finish economic analysis scenarios
- Start final paper

## Pending Issues

- Determine a quality estimate for the cost of the solar array

## Contributions

Team Member	This week's contributions	This week's hours (total hours)
Joey Dugan	<ul style="list-style-type: none"> <li>• Team meeting</li> <li>• Economic analysis</li> <li>• Call with Tom Wind to gain more information</li> <li>• Presentation</li> </ul>	5 hours (53)
Adam Gigstad	<ul style="list-style-type: none"> <li>• Team meeting</li> <li>• Economic analysis</li> <li>• Weekly report</li> <li>• Presentation</li> </ul>	5 hours (55.5)
Marissa Koehn	<ul style="list-style-type: none"> <li>• Team Meeting</li> <li>• Presentation</li> <li>• Economic analysis</li> <li>• Research on diesel prices and wind power</li> </ul>	2 hours (45.75)
Connie Maluwelmeng	<ul style="list-style-type: none"> <li>• Team meeting</li> <li>• Ran more solar simulations</li> <li>• Organized and compared results to previous ones</li> <li>• Presentation</li> </ul>	3 hours (57)
Denis Kinganga	<ul style="list-style-type: none"> <li>• Team meeting</li> <li>• Presentation</li> </ul>	2 hours (52)
Sid Taha	<ul style="list-style-type: none"> <li>• Team meeting</li> <li>• Presentation</li> <li>• Worked on presentation</li> </ul>	3 hours (51.5)