

Third official meeting

10-5-2017

Start: 4:00pm

End: 5:15pm

### **Attendance**

Everyone was in attendance

### **Announcements and Client meeting discussion**

Scope- approached by SolarThermiX (Phoenix) a couple years ago and develop solar air heater technology. Some heaters on campus. Try to convince that technology can be good for Navajo because work off grid. A box that absorbs solar energy during the day and then has a fan that heats the house. Practicality is that the solar power heater was not a good fit and need ideas to store the energy during the day for later use during sundown. Infinite R phase change material and idea to pair two technologies. Students figure out how to combine two technologies to help meet the unique need for the Navajo. Decide how much phase change material would be needed and how to combine the two systems practically. Variety of structures and some grid connected. Most burn coal in the home which is dangerous. Trailers to Hogans to other structures. Modeling a Hogan is challenging because hard to model and different. Propose how to combine and prototype to test. Give one air heater and materials and dictate the scale.

### **Future Work and Action items**

1. Contact Solarthermics - William Senseman and Wyatt Bain
2. Research Solarthermics solar thermal panel- William Senseman & Carl Aaker
3. Research CAD programs- Alonzo Bizahaloni, Brandon Dunn, Tatum Begay
4. Familiarize with Energy Plus- Tatum Begay, Brandon Dunn, & Taylor McCormack
5. Research common Navajo insulation- Ahmad Abuouf, Brandon Dunn, Alonzo Bizahaloni
6. Research phase change materials- Taylor McCormack, Ahmad Abuouf,
7. Look for sunlight/ Climate data on or near Navajo nation- Brandon Dunn and Wyatt Bain
8. Contact Kyle from Salt River Project- William Senseman, Taylor McCormack
9. Investigate wooden Hogan on campus near the Forestry building- Ahmad Abuouf, Alonzo Bizahaloni
10. Research average home size for houses and Hogans on the Navajo nations that are off-grid- Alonzo Bizahaloni, Carl Aaker
11. Website creation and maintaining- Tatum Begay, Wyatt Bain

12. Budget analysis- Alonzo Bizahaloni, William Senseman
13. Gathering supplies with Mr. Yamamoto- William Senseman, Taylor McCormack
14. Research Air Heater- Carl Aaker, Wyatt Bain

**Team Discussion**

Set action items and deliverables for our client. Discussed about upcoming meetings and assignments.

**New Promises**

Each member will take care of action items and start on next homework assignments.