

Meeting Minutes 10/16

Present

- Emily
- Ray
- Jake
- Dr. Rezaie

General

- Ray will be in Brazil until the 18th of November
 - We will need to do a design presentation by Nov. 16 <- We can use Zoom for distance
- Paul Kimmell – Latah County Commissioner, talk to him about project, because he might be interested (works with avista and has stated desire to not harm mining towns)

Heat Transfer Medium

- Jake will do thermal analysis for common heat transfer mediums
 - Paper Emily sent has properties for common solar concentrator fluids

Pumps

- Ray needs information for quote on pumps
 - Single digit (m^3/min) pumping rate
 - Low pressure (near ambient)
 - Air ($T \sim 200\text{-}300^\circ\text{C}$)
 - 30 A, single-phase, 220 V or 110V
- Emily will find pump

Idaho Pitch

- Oct 17th from 5-7
- Emily will sign up for it
- Re- Make sure to talk in language to make sure they understand
- Ra- describe what you're doing and the benefits:
 - Jobs created
 - CO₂ out of the atmosphere
 - Benefits

Design Details

- We will officially be using a heat exchanger
- The dual air compressor/thermal storage idea is in back pocket for later
- Other idea in back pocket: Using heat from steam/power plants
 - Re- too many details to commercialize
- We do not need to worry about the ground freezing

- Ra- we can build in a room on Ray's property to make aboveground prototype

To do in very near future:

Call companies about:

- Heat exchanger
- Piping
- Pumps
- Valves
- Heat transfer medium