

Byte_Back_minutes_091115

Attendees:

Majed, Hatem, Kayden, Chad

Phone Contact Info for Team Members

Chad Vorse 208-409-9598

Kayden Scott 208-409-9598

Majed Alkeaid 315-706-8871

Hatem Alatawi 608-515-1016

Action Items:

AI:01 -- Majed

Incorporate feedback on the contract into a new draft and send it out for one final review of the team. We will all meet to sign the draft Monday, 9/14 at 1230 in the Think Tank.

AI:02 -- Chad

Send out propose for two meeting times, Friday at 8:30 am and Monday at 3:00 pm. Clarify that Chad will not be able to attend the meeting on Mondays.

AI:03 -- Chad

Email out the manual of the VFD, the email from Dr. Johnson with the past Senior Design Wiki, and the title of chapter 11 from the 421 book Dr. Johnson loaned me. Bring the book in for Kayden to read the chapter.

AI:04 -- All

Read the Wiki, VFD manual, and attachments in the email sent out in preparation for our meeting with the client, Stephanie Hunter.

AI:05 -- Chad

Email Dr. Johnson and inquire about getting a key to the power lab.

AI:06 -- Kayden

Find a solution for document sharing (Google Docs, One Drive, etc.)

AI:07 -- Kayden

Document our current list of possible solutions (as we know them today)

Project overview based upon meetings that Kayden and Chad have had with both SEL and Dr. Johnson.

The high level definition of the project is exactly as stated on the Capstone Design page. The implementation of the solution is where roads start branching. Right now, it appears there are a few things we will definitely be doing:

Bench mark the current system performance. The current system performance is achieved with a generic IEEE model in the VFD. Dr. Fischer of SEL has stated this is not fast enough. Therefore, we want to document the response speed so we know what has to be improved on. Characterize the system to determine critical parameters of the motor and improve the VFD performance as much as possible. This will be done using RTSD (sp?) and will be a major deliverable of the design team.

Determine the intrinsic time constant of the system to document the absolute best case response.

Implement an external feedback system that monitors the output rotational frequency of the generator via the encoder and feedback a signal to the VFD to compensate for frequency changes due to load fluctuations.

Output shaft position and frequency of the generator.

Output slip of the induction motor.

Meeting with the client, Thursday September 17 at 3:00 pm. We will start at the Senior Design Lab in BEL216

We will be meeting Stephanie next Thursday. We need to be read up so we can ask her substantial questions. I think the meeting next Friday should be dedicated to reviewing our meeting with her and documenting everything we can remember. I will also document any questions we have for her and send them on.