

EE 492 Bi-WEEKLY REPORT 02

1/27/24 – 2/10/24

Group number: sdmay24-30

Project title: New Nuclear

Client &/Advisor: Dr. McCalley

Team Members/Role: Dana Boor (Team Lead), Damien Henry (Team Organizer), Zachary Hainline (Research and Design), Jeremy Yost (Research and Design), Mason Richards (Research and Design), Muhammad Syukri Bin Ahmad Zainal Akmar (Research and Design).

- **Bi-Weekly summary:**

This week, our team's efforts were centered on visualizing the big-picture tasks for this semester and generating a project schedule. The schedule we have created emphasizes our team having our end deliverables completed on time for the end of the semester, while providing some buffer during the more time-intensive portions of the project as a concession for the difficulty of those tasks. Once our schedule was completed, we sat down with our advisor and discussed it in detail with him, addressing any questions and concerns that he had. We also discussed having a presentation next week to get our team up to speed on each individual team member's research into each recommended reactor design.

- **Past weeks accomplishments:**

-Generated tentative semester schedule (everyone): As a group, we discussed the major milestones of our project for this semester and developed a schedule to allow our team to have all end-of-project deliverables ready on time. (see next page for schedule)

-Planned for upcoming team presentation on status of research (everyone): As a team, we are preparing to present on the status of our research efforts into our recommended reactor design. Our presentation will include the components of each reactor that we would like to include in our final design and our ideas for benefit/cost estimation for each reactor.

	22- Jan	29- Jan	5- Feb	12- Feb	19- Feb	26- Feb	11- Mar	18- Mar	25- Mar	8- Apr	15- Apr	22- Apr	29- Apr
Kickoff Meeting													
Develop Team Schedule													
Create Individual Design Presentations													
Present Individual Design Presentations													
Discuss Final Values for Benefit-Cost Calculation													
Calculate Benefit-Cost Ratio for Each Design													
Spring Break													
Run CEP Simulations for Each Design / Share Results													
Prepare Final Report and Presentation													
Prepare Industry Panel Materials													
Present/Submit Final Presentations and Reports													

- **Pending issues**

-Dana: finalize template for upcoming presentation and ensure that all team members are caught up on the expectations and requirements for the presentation.

- **Individual contributions**

<u>Name</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>Hours Cumulative</u>
Dana Boor	Assisted with creating semester schedule, planned meetings for this semester, reserved conference rooms for team meetings, and assisted in creating presentation template for upcoming design overview presentation.	8	16
Jeremy Yost	Assisted with tentative semester schedule during team meeting,	6	14

	assisted in creation of presentation template for upcoming design presentation, and completed preliminary compilation of data on design.		
Mason Richards	Provided input into the creation of the schedule for the semester, as well as visualized the schedule into a chart that will be easy to use throughout the semester.	6	14
Syukri Zainal	Collecting information related to the team's final nuclear design and summarizing the information for design presentation. Contribute to the creation of this semester's schedule.	6	14
Zach Hainline	Aided in input for the tentative semester schedule during team meetings. Assisted in the creation of our upcoming design presentation for our client on a reactor specific reactor design.	6	14
Damien Henry	Created template for upcoming design presentation on nuclear reactor designs, attended team meetings, researched nuclear reactor design	6	12

- **Plans for the upcoming week**

- (Everyone) Deliver an internal design presentation to our team's advisor, Professor McCalley and to each team member.

- (Dana) Team planning on the time allocation each week to work on the CEP software simulation (make a weekly or bi-weekly meeting with Ali).

- (Everyone) Conduct individual research to gather essential data on the Final Values required for Benefit-Cost Calculation.

- **Summary of weekly advisor meeting**

During our weekly advisor meeting, our team presented our advisor with our recommended schedule for this semester. Dr. McCalley suggested that we allocate more time for running and testing our Co-optimized Expansion Planning software, a suggestion that our team agreed with

and incorporated into our plans for the upcoming week. Dr. McCalley also shared his thoughts on how our team should prepare to share the results of our project at the end of the semester, mainly through our presentation and posterboard. Our team discussed our thoughts on how to best convey the findings of our project to the public using diagrams of our recommended design, graphs of our benefit to cost calculation results, and visual representations of CEP software data.