

**BP Simulated Wind Turbine
and Wind Farm Generation –
Control and Optimization**

Project Status Report

To: Glenn Gesoff, BP; Ian Alleyne, BP

From: Bert Yan, Penn State University;
David Rohrbaugh, Penn State University;
Marissa Stecko, Penn State University;
Neloe Anonyuo, Penn State University;
Scott Carroll, Penn State University;
Seyilayo Olagbami, Penn State University;
Shuaipeng Dong, Penn State University

cc: Al Verbanec, Penn State University

Date: 9/25/2022

Re: Status report, week #5

Quick status

Number of tasks scheduled this week:	4
Number of tasks completed this week:	4
Hours spent this week:	17.75
Hours spent this semester:	96.25
Project hours spent this semester (remove classwork hours):	17

Remaining number of tasks:	30
Remaining estimated hours:	>60 hours
Remaining estimated project hours:	Hard to determine

Narrative

In week 5 our team focused on completing research on the inputs and outputs that each program found in the literature review requires. The group has also discussed with the sponsor the idea of involving computational fluid dynamics (CFD) with our simulations. After discussions with other teams in bp, high level CFD may not work with the idea we have now, but maybe a simpler model might.

Tasks completed

List the tasks from the previous week's status report that were *completed*, along with a brief description of any issues or problems that were encountered. Include who did the work and how long it took that person / those people in actual hours spent. (Obviously this is blank the first time.)

Task completed	Code ¹	Who did the work and actual hours spent
Status Report Week 5 (9/25)	C/ Wk 5	Marissa (1 hour), Bert (1 hour), Scott (.5 hour) Nelloe (1 hour) Seyi (1 hour) Shuaipeng(2.5 hours) David(0.5 hour)
Week 5 BP Meeting	I/ Wk 5	All (1.25 hours)
CFD Meeting	I/ Wk 5	Scott (1 hour)
Tabulate programs inputs and outputs	O/Wk 5	David(1 hour)
Additional Program Research	O/ Wk 5	Marissa (2 hours)

Tasks *not* completed that were scheduled for completion

List the tasks from the previous week's status report that were *not* completed, along with an explanation of why the task is not completed. (Obviously this is blank the first time.) Include an explanation of why the task was not completed.

**** all tasks were completed this week**

Task	Code	Explanation of why the task was not completed	Who did the work and actual hours spent
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¹ The Code is one of these: (A)administrative task (e.g., meetings, paperwork for LF), (C)lasswork, (I)nteraction with client, (D)esign work, (P)rogramming, (O)ther

Total time spent | Show the totals of time by code for the week and for the project so far.

Code	This week	Entire project
Administrative	0	13.75
Classwork	7.5	51.5
Interaction with client	7.25	23
Design work	0	0
Programming	0	0
Other	3	8
Totals:	17.75	96.25
Estimated time:	N/A	N/A

Code	Time spent this week	Time spent entire project
N/A	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
Totals:	N/A	N/A

Tasks for next week

List the tasks that will be completed next week. Include a brief explanation of each and who is responsible for doing those tasks. *Include those tasks from the prior week that were not completed.*

Task	Code	Description	Who is assigned + estimated total hours
Design Specification Report (10/9)	C/ Wk 5	Details on canvas	(15-20 hours)
Status Report Week 6 (10/2)	C/ Wk 5	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)
Week 6 BP Meeting	I/ Wk 5	Teams meeting with BP, all attendees	All (1 hour)

Tabulate program inputs/outputs (9/27)	O/ Wk 6	Present info that compares and contrasts different programs we are investigating	Bert, Shuaipeng, Seyilayo, David, Nelloe (~1 hour each)
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Upcoming tasks

This list should be everything that is in your work breakdown structure but that is not scheduled for this week and also not yet completed. Include the code and the expected week of completion. Essentially, this list should get shorter every week as you proceed toward the completion of the project.

Task	Code/ Week	Description	Estimated total hours
Tabulate program inputs/outputs (9/27)	O/ Wk 6	Present info that compares and contrasts different programs we are investigating	Bert, Shuaipeng, Seyilayo, David, Nelloe (~1 hour each)
Project Presentation video (10/2)	C / Wk 6	Project scope summary to be presented to classmates	All (6 hours)
Status Report Week 6 (10/2)	C/ Wk 6	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)
Week 6 BP Meeting	I/ Wk 6	Teams meeting with BP. All attendees	All (1 hour)
Status Report Week 7 (10/9)	C/ Wk 7	Complete the weekly status report and enter your personal hours logged	
Design Specification Report (10/9)	C/ Wk 7	Details on canvas	(15-20 hours)
Week 7 BP Meeting	I/ Wk 7	Teams meeting with BP. All attendees	All (1 hour)
Status Report Week 8 (10/23)	C/ Wk 8	Complete the weekly status report and enter your personal hours logged	
Week 8 BP Meeting	I/ Wk 8	Teams meeting with BP. All attendees	All (1 hour)
Status Report Week 9 (10/30)	C/ Wk 9	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)
Week 9 BP Meeting	I/ Wk 9	Teams meeting with BP. All attendees	All (1 hour)
Status Report Week 10 (11/6)	C/Wk 10	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)
Week 10 BP Meeting	I/ Wk 10	Teams meeting with BP. All attendees	All (1 hour)

Status Report Week 11 (11/13)	C/Wk 11	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)
Week 11 BP Meeting	I/Wk 11	Teams meeting with BP. All attendees	All (1 hour)
Status Report Week 12 (11/20)	C/Wk 12	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)
Week 12 BP Meeting	I/Wk 12	Teams meeting with BP. All attendees	All (1 hour)
Status Report Week 13 (11/27)	C/Wk 13	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)
Week 13 BP Meeting	I/Wk 13	Teams meeting with BP. All attendees	All (1 hour)
Executive Summary (12/4)	C/Wk 14		
Poster (12/4)	C/Wk 14		
Project Video (12/4)	C/Wk 14		
Week 14 BP Meeting	I/Wk 14	Teams meeting with BP. All attendees	All (1 hour)
Status Report Week 14 (12/4)	C/Wk 14	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)
Final work product (12/11)	C/Wk 15		
Final Report (12/11)	C/Wk 15		
Week 15 BP Meeting	I/Wk 15	Teams meeting with BP. All attendees	All (1 hour)
Status Report Week 15 (12/11)	C/Wk 15	Complete the weekly status report and enter your personal hours logged	All (1.5 hours)

Sign off

Each group member must sign off on the status report. Electronic signatures are okay, but they must be approved by the group member (not just automatically included w/o review). Note that if someone submits this report without all group members' actual approval, this is a violation of protocol.

<u>Bert Yan</u>	<u>9/25/2022</u>	<u>David Rohrbaugh</u>	<u>9/25/2022</u>
Bert Yan	date	David Rohrbaugh	date

Scott Carroll 9/25/2022
Scott Carroll date

Marissa Stecko 9/25/2022
Marissa Stecko date

Nelloe Anonyuo 9/25/2022
Nelloe Anonyuo
9/25/2022

Shuaipeng Dong 9/25/2022
Shuaipeng Dong date

Seyilayo Olagbami 9/25/2022
Seyilayo Olagbami
9/25/2022