

**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: 10/2/2022

Re: Status report, week #6

Quick status

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|---|-------|
| Number of tasks scheduled this week: | 4 |
| Number of tasks completed this week: | 4 |
| Hours spent this week: | 19.75 |
| Hours spent this semester: | 116 |
| Project hours spent this semester (remove classwork hours): | 112 |

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

Narrative

In week 6, our group was able to determine a more specific plan to achieve a desirable goal for both the sponsor and ourselves. From this, the group has been able to start researching more specific parts of PyWake, in order to understand what we can use to create our model. We also started work on a PowerPoint that will be used in a presentation to our fellow students, to explain what is occurring in our project.

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 6 (10/2) | C/ Wk 6 | Marissa (1 hours), Bert (1 hour), Scott (1 hour) Nelloe (1 hour) Seyi (1 hour) Shuaipeng(1 hour) David(0.5 hour) |
| Week 6 BP Meeting | I/ Wk 6 | All (1.25 hours) |
| Additional Program Research on PyWake Models | O/ Wk 6 | Bert (2 hours), David(2 hours), Seyi (2 hours), Nelloe (2 hours) |
| Project Management Formatting | O/ Wk 6 | Bert (.75), David (.75), Shuaipeng (.5), Marissa (2 hours) |
| Additional Interaction w/ Sponsor | I/ Wk 6 | Marissa (1.5 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 |
|------|------|---|---|
| | | | |

¹ The Code is one of these: (A)dmistrative 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 7 | Details on canvas | (15-20 hours) |
| Status Report Week 7 (10/9) | C/ Wk 7 | Complete the weekly status report and enter your personal hours logged | All (1.5 hours) |
| Project Presentation (in class) (10/4) | C/ Wk 7 | Presentation summarizing statement of work in class | All |

| | | | |
|--------------------------------------|---------|--------------------------------------|--------------|
| Week 7 BP Meeting | I/ Wk 7 | Teams meeting with BP, all attendees | All (1 hour) |
| BP Monthly Stakeholder Update (10/6) | I/ Wk 7 | Teams meeting with BP | All (30 min) |

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 |
|------------------------------------|---------------|--|--------------------------|
| 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) |

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|-------------------------------|---------|--|-----------------|
| 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) |
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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.

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|-----------------|------------------|------------------------|------------------|
| <u>Bert Yan</u> | <u>10/2/2022</u> | <u>David Rohrbaugh</u> | <u>10/2/2022</u> |
| Bert Yan | date | David Rohrbaugh | date |

| | | | |
|----------------------|------------------|-----------------------|------------------|
| <u>Scott Carroll</u> | <u>10/2/2022</u> | <u>Marissa Stecko</u> | <u>10/2/2022</u> |
| Scott Carroll | date | Marissa Stecko | date |

| | | | |
|-----------------------|-------------------|-----------------------|------------------|
| <u>Nelloe Anonyuo</u> | <u>10/02/2022</u> | <u>Shuaipeng Dong</u> | <u>10/2/2022</u> |
| Nelloe Anonyuo | 10/022022 | Shuaipeng Dong | date |

Seyilayo Olagbami
10/02/2022

Seyilayo Olagbami
10/02/2022