

View results

Respondent

17 Aman Mehta

07:27

Time to complete

1. Project Name: *

Demonstration of Enerdrape Thermal Energy Exchange System in Steam Tunnel

2. Semester or date of project's original submission. *

May 2023

3. Below please include a brief project summary and your requested changes. *

The UIUC campus would be a demonstration site for a new geothermal energy technology that taps waste heat from underground infrastructure to heat adjacent buildings. This modular, scalable and easy-to-install geothermal heat exchange panel technology developed by Enerdrape (<https://enerdrape.com>) would be evaluated to capture and reuse waste heat from a steam tunnel (at the Abbott Power Plant) that would be an additional source of thermal energy.

The change requested is a timeline change to change the submission. The project will now be completed at the end of Spring 2024.

4. Date of Scope Change Submission *

02/12/2024

5. Type of Scope Change: *

- Project Direction
- Budget
- Timeline
- Project Advisor/Financial contact
- Project Lead

6. Please provide a detailed summary of the requested timeline change. *

The timeline change was needed since this project was going to be a Senior Design Project and getting approval from the department took some more time than anticipated. This meant that the project was started Spring 2024 instead of Fall 2023.

7. Additional comments (Optional) *

However, since it is a senior design project. It is guaranteed that the project will end before the end of this semester and the project will be showcased at the tradeshow that the Capstone project has. Other than the project team, the company Enerdrape will have stake in the project since it is Enerdrape's panels that are going to be installed for a feasibility study. The department of Mechanical Engineering would benefit since the results from this project will be used as a senior design project (ME470). F&S and campus will have a vested interest in the results of this demonstration. If successful, this technology could be used to mitigate the release of waste heat from other steam tunnels across campus. This partnership will allow F&S to leverage performance data being collected by Enerdrape. The students will also aim to submit a feasibility study to F&S to potentially employ this technology all across campus and recover waste heat as this technology plays an important part to achieve the iCAP net zero energy goals.