UNIVERSITY OF MINNESOTA

Minnesota Technical Assistance Program
200 Oak Street, Suite 350-1 · Minneapolis, MN 55455-2008
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Strengthening Minnesota businesses by maximizing efficiency and lowering costs through energy, water and waste reduction

Internship: Lead a water conservation and energy efficiency project at a steam and chilled water plant

Company: Clearway Energy - Minneapolis, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on water conservation and energy efficiency with Clearway Energy in Minneapolis, MN. The intern will work with MnTAP and Clearway staff to develop water and energy balances for the facility. These water and energy balances will help prioritize facility processes with opportunities for water conservation or reuse and energy efficiency. The intern will quantify these opportunities and develop suggestions to increase efficiency, as well as outline plans for implementation.

JOB DUTIES:

As part of this project, you will be asked to complete the following tasks:

1. Identify and quantify water and energy uses throughout the facility.
2. Analyze water used for single-pass cooling and testing. Determine where water use can be minimized or where water can be reused.
3. Make recommendations for specific improvements based on research and testing that will result in water use reduction, reuse, treatment, or recycling opportunities. Consider energy savings that result from changes.
4. Estimate water reduction and/or reuse potential from implementation of provided recommendations, then prioritize suggested changes using simple payback methods for financial justification.
5. Experimentally determine potential energy savings from cleaning chiller tubes.
6. As time allows, investigate other energy savings projects like replacing 480V motors with 4160V motors and installing VFDs on fans.
7. As appropriate, initiate implementation of approved process changes or develop plans for future implementation.
8. Summarize findings in a detailed report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
9. Present findings to the company and at MnTAP-hosted public presentation events.

As an intern, you will work at the company and report back to MnTAP. The position is full time, 40 hours per week, for three months to start after the conclusion of spring semester or quarter. Pay is $16/hour, with a lump sum stipend of $1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to $18.00/hour when averaged over the project. Candidates must pass a background check.

QUALIFICATIONS:

- Cumulative GPA of at least 3.0
- Previous internship experience strongly preferred
- Good oral & written communication skills
- A technical academic background
- Troubleshooting skills
- Self-motivated
- Excel and other software skills
- Appropriate majors: *Mechanical engineering, chemical/materials engineering, physics, etc.*

TO APPLY:

Apply online at:
www.mntap.umn.edu/intern/student_apply.htm
Remember to submit your application form, cover letter, resume, and unofficial transcript.
Applications can be addressed to:
Matt Domski, Intern Program Manager
200 Oak Street SE, Suite 350-1
Minneapolis, MN 55455 • mdomski@umn.edu

MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY

MnTAP is located at the University of Minnesota School of Public Health, Division of Environmental Health Sciences, and funded in part by a grant from the state of Minnesota