The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on water conservation at the Xcel Energy Riverside power generation plant, which is natural gas fired, in the Twin Cities. The intern will review the current water balance diagrams and evaluate the potential for water use reduction or reuse in multiple processes used at the plant.

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

1. Analyze the building steam heat boiler condensate recovery system by finding the source of contamination in the condensate recovery system, determining the feasibility of revamping and restarting current system, and evaluating alternative systems of condensate recovery.
2. Optimize the new Reverse Osmosis (RO) water treatment system setup. Evaluate the installation of a flow control valve, monitor and calculate the actual water savings as a result of the equipment modification based on the previous and revised equipment operating flows.
3. Determine best way(s) to recover the water treatment sample water without adversely affecting equipment operation and pure water quality.
4. Optimize water use in the plant combustion turbine evaporative cooler. After implementation of recommended changes, monitor system operation, flows, and water quality to verify the continued proper operation of the equipment as well as the resultant ground water savings.
5. Investigate and implement automation of the manual open and close valve for the city water supply to the site’s main storage tank.
6. Search for opportunities nearby the RO system to reuse the reject stream in another beneficial application prior to discharge to drain.
7. As time allows, and other water conservation priorities and objectives are met, review the plant’s process water discharge system and make recommendations to plant management on the option of discharging to the sanitary sewer verses addition of the process water to the other plant cooling water discharge stream.
8. Summarize findings in a detailed report.
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 for three months to start after the conclusion of spring semester or quarter. Pay is $13/hour, with a lump sum stipend of $1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to $15.00/hour when averaged over the project.

**QUALIFICATIONS:**
- Cumulative GPA of at least 3.0
- Good oral & written communication skills
- Strong technical academic background
- Troubleshooting skills
- Self-motivated and high energy
- Good working with hands
- Appropriate majors: Engineering – Mechanical, Chemical, or Civil

**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:
Linda Maleitzke, Intern Coordinator
200 Oak Street SE, Suite 350
Minneapolis, MN 55455 • lmaleitz@umn.edu

MnTAP is the hiring body: DO NOT CONTACT THE COMPANY.

MnTAP is funded primarily by the Minnesota Pollution Control Agency’s Prevention and Assistance Division and is located at the University of Minnesota in the School of Public Health, Division of Environmental Health Sciences. The University’s mission, carried out on multiple campuses and throughout the state, is threefold: research and discovery, teaching and learning, and outreach and public service.

The University of Minnesota shall provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.