NIKITA AGGARWAL
nikita.aggarwal1@ucalgary.ca
(403) 827-2574

871 Carrington Blvd NW
Calgary, AB T3P 1L7

December 23rd , 2020

Dear Hiring Committee:

I am excited to learn more about the 'Facilities Reliability & Integrity' position at TC Energy, and would greatly appreciate your consideration of me as a possible addition to the team. I've closely reviewed the needs and requirements for this role and believe that having completed coursework in dynamics, statics, material chemistry for engineers, thermodynamics, Matlab coding, Solidworks, deformations of solids and fluid mechanics will enable me to perform required engineering operations and be a successful effective intern candidate. My experiences through engineering projects have allowed me to gain experience in cost management, technical writing, working independently and in teams to perform tasks when dealing with a time constraint, commitment to public safety and demonstrate concise communication skills. In addition, I greatly value independent learning and engaging in challenging tasks. I am seeking to work at the Calgary location, starting May 1st 2021 for minimum of 16 consecutive months.

I have a strong passion for engineering. At first, my love for engineering was sparked due to being fascinated by how things fit together and it further grew as I enjoyed courses involving calculus and physics in high school. I love solving problems, finding creative solutions and working with others. I chose mechanical engineering as it is the most diverse form and would allow me to experiment and learn about a variety of work and industries.

During my first year of engineering, I took a class, called Engineering Design and Communication. The coursework concluded of three major projects where the final project was building a robot that functions on any sensory device and was required to meet the given tasks. The assignment taught me engineering applications such as leadership and project management concepts by following a design method, using force and work equations to calculate if the robot would be able to pick up the block of wood, constructing and testing prototypes and adjusting the design based on analysis in a team environment.

In second year of thermodynamics class, we were required to build and present a turbine steam engine which converts heat to electrical energy. The engine was to be constructed using only the limited supplies provided, a budget of $20 maximum and had to produce a required voltage of power. During the design process, it taught me how difficult it is to meet expectations when dealing with scarce resources and the challenge encountered when using thermodynamic laws, to minimize heat loss as energy forms changed. The use of Solidworks software allowed me to design and test the prototypes as this did not use any actual resources. I understand that safety procedures and compliance is extremely vital in order for a company to continue thriving and developing.

I am eager to learn and work in more project based learning, working in teams, building strong relationships with colleagues and clients, while also gaining hands-on experience, as it establishes practical problem-solving skills. With a focus on fostering creativity and innovation, I would love to gain this opportunity to learn about the 'Facilities Reliability & Integrity' position at TC Energy. I hope to discuss this position and my abilities with you in further detail. Thank you for your consideration of my application.

Sincerely,

Nikita Aggarwal

Nikita Aggarwal