Ethan Cronk Orono Maine LD 1014

To the Appropriations & Financial Affairs Committee, thank you for having me and good afternoon. My name is Ethan Cronk and I am a 4th year Physics PhD candidate working at the University of Maine within the Frontier Institute for Research in Sensor Technologies (FIRST) and the Physics department. I am here today to speak in favor of L.D. 1014: An Act to Authorize a General Fund Bond Issue to Develop Maine Talent and Innovation by Improving the Infrastructure of the University of Maine System.

I moved here to Maine from Ohio after finishing my undergraduate degree at the University of Cincinnati. When applying for graduate programs around the country, I applied to the University of Maine specifically for the work done by the now retired Dr. Robert J. Lad and FIRST with their innovative solutions and research into new generation sensors in extreme environments. These sensors would be used to better support how we protect, read information, and improve processes in reactors, aircraft turbines, medical devices, and next generation energy solutions. Once accepted I was eager to begin the same kind of research.

Once I arrived and in turn began my research, the facilities housed in Barrows Hall were plagued by cooling issues during a 4-5 month period in the summer of 2023. What followed were labs and offices reaching temperatures of 90+ degree Fahrenheit with no way to make it better without facility and AC improvements. This halted most progress in research, machines were overheating and failing which cost departments and professors tens of thousands of dollars in broken devices, samples were being compromised, and graduate students were facing unsafe working conditions especially when needing to be in full protective gear when conducting research.

Thankfully the AC was eventually fixed, but we still lost so much. In a time when most research is conducted, many groups fell behind and strained in trying to fix all that went wrong in the coming semesters. And even research experiences for undergraduates (REU) programs had to be halted causing undergraduate summer researchers from institutions all over the country to cancel research at the university of Maine: An experience that leads to many young students to the state of Maine for opportunities and research integral to Maine's success.

I wish this was only a one-off incident, but the summer after in 2024 also had significant heat issues that affected research. For example, another building, Aubert Hall, which houses Chemistry and Marine Sciences workspaces, faced the same problems we did the summer before, and lost just as much. We lose out on research we need to do for our jobs and our degrees, because our workspaces are unusable and unsafe

These are only two incidents of many that highlight the need for improved infrastructure and proactive planning for the university system and graduate workers to thrive. Graduate workers, through our union, the University of Maine Graduate Workers Union UAW, raised this with the university president, the board of trustees, and now I'm here raising it to

you. Fixing the ailing infrastructure of the University of Maine is critical to our institution.

Support from the state will not only improve the working conditions for graduate workers, it will also bring the best minds and ideas to Maine helping improve every facet. Especially when the university of Maine as a R1 institution exemplifies the best of the best when it comes to cutting edge improvements and research for the United States. But unless we aim to improve and support this system and its infrastructure, we are on track to lose much more when the university employs and supports business all throughout Maine.

Thank you