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**James J. Piro**  
*President and CEO*

April 8, 2015

Senator Michael Dembrow  
District 23 - Portland  
900 Court St. NE, S-407  
Salem, Oregon 97301

Dear Senator Dembrow:

I am currently serving as Chair of the STEM Investment Council and co-chair of the CTE-STEM Employer Coalition. It is in this capacity that I am writing today.

I support the development of a workgroup to flesh out the idea of a reconstituted CTE-STEM Investment council that will address the needs of the CTE-STEM Employer Coalition and other stakeholders, resulting hopefully in a bill to this effect in the next legislative session.

Incorporating applied technical learning with math and science education helps students see the direct connections between their classroom experiences and future jobs. When students have the opportunity to “make,” they become interested in what they are doing and schools have lower dropout rates. Whether they pursue technical fields (becoming welders, assemblers, machinists, construction workers or electricians) or go on to further study in engineering, science and high-tech, everyone wins. Students advance their individual careers, our overall workforce becomes stronger, and our state economy benefits.

CTE-STEM education is a continuum that equips Oregon students with the skills, certificates and degrees necessary to prepare for the living-wage jobs of today and of the future. The result is better opportunity, lower unemployment and lower poverty. In fact, if we succeed in meeting the CTE-STEM Employer Coalition’s goal of doubling the number of students graduating with CTE-STEM degrees and certificates, Oregon will see an increase in annual personal income directly benefiting Oregon high school and college graduates.

Getting there will require teaching and learning that engages and motivates students. We must eliminate the walls between academic and applied learning, between in-school and out-of-school learning, between schools at all levels, and between educators and employers. And we need to ensure that educators and employers are working closely together to create clear career pathways for students.

The discussion of a reconstituted CTE-STEM Investment Council will align career technical and science, technology, engineering, math education so that every student in Oregon has the opportunity to tap into career pathways.

Targeted investment to achieve the goals of CTE and STEM advocates would dramatically benefit Oregonians and the state economy. It would prepare more Oregonians for high-demand, well-paying jobs, expand the personal potential of individuals, keep Oregon's companies and economy more competitive, raise family incomes, strengthen the middle class, promote equity, and reduce poverty.

The creation of a work group to flesh out the idea of a reconstituted CTE-STEM Investment Council will continue the work currently underway to provide consistent and meaningful data and metrics to measure performance and outcomes, and a communications plan to inform our children and parents on the opportunities that exist in CTE-STEM fields.

In Oregon, as well as across the nation, energy companies face shrinking talent pools due to impending retirements of key personnel. To further highlight the economic impact of CTE-STEM educated population, PGE's skilled and apprenticed trade workers - representing the Middle 40- make an average salary of over \$80,000 per year. This same skilled trades workforce is not keeping pace with demand. At PGE we'll see an average 54% retirement eligible workforce, in the next five years, for over 700 trade positions.

This is where a reconstituted CTE-STEM Investment Council will also help to provide clarity on the needs of business for students with competencies along the CTE-STEM continuum.

The STEM Investment Council has been very supportive and engaged in the conversation on the importance of restarting CTE programs in both middle schools and high schools. CTE programs are not just for CTE careers but are also critical in developing STEM graduates. The importance of CTE and its connection to the outcomes we are trying to achieve are paramount because of the developmental importance of hands on learning.

The potential of reconstituting the STEM Investment Council to create a CTE-STEM Investment Council strengthens the connection and alignment of the continuum that is career technical and science, technology, engineering, math education.

Sincerely,

A handwritten signature in black ink that reads "Jim Piro". The signature is written in a cursive, flowing style.

Jim Piro  
President and CEO  
Portland General Electric