

APPROPRIATIONS REQUEST FORM OREGON HOUSE DELEGATION FISCAL YEAR 2010

DEADLINE FOR SUBMISSION: FEBRUARY 13, 2009

PLEASE NOTE: As required by the House Appropriations Committee, all requests will be made public on the requesting Member's website.

1. Project Title:

Geothermal Power Generation Plant

2. Organization Name and address:

Oregon Institute of Technology
3201 Campus Drive
Klamath Falls, Oregon 97601

3. Primary Contact name, phone number, mobile phone number, fax number and email:

Contact: Chris Maples, OIT President
Phone: 541.885.1112
Fax: 541.885.1101
Email: Chris.Maples@oit.edu

DC Contact: Joel Rubin, Conkling Fiskum and McCormick
Phone: 202.347.9171
Fax: 202.824.8667
Email: joelr@cfmdc.com

4. Project Location Address (if different from Organization):

Same as above

5. Please describe the requesting organization's main activities, and whether it is a public, private non-profit, or private for-profit entity:6. Briefly describe the activity or project for which funding is requested (please keep to 500 words or less.)

Oregon Institute of Technology, the only public polytechnic university in the Pacific Northwest, provides degree programs in engineering and health technologies, management, communications and applied sciences that prepare

students to be effective participants in their professional, public and international communities.

6. Briefly describe the activity or project for which funding is requested (please keep to 500 words or less.)

Federal funds would help OIT construct a high-temperature geothermal power plant on the Oregon Institute of Technology campus. When the Geothermal Power Generation Project is complete, OIT will be the only campus in the world to satisfy all of its electricity needs from a geothermal energy source. The power plant would use high-temperature geothermal water/steam from a proposed 5,000 to 6,000 feet deep geothermal well to generate approximately three megawatts (MW) of electricity. The plant would provide 100% of the electricity demand on campus and would be the first flash steam geothermal power plant in Oregon. Technical support for construction and operations would be provided by OIT's Geo-Heat Center.

The site would serve as a demonstration and educational training facility for OIT students and faculty. The students, mainly electrical, computer and mechanical engineering majors, but to a lesser extent business students, would be involved in instrumenting and monitoring the plant. These data would be used to calculate efficiencies, operational costs and investment return. Material on the plant operations would be included in appropriate courses, especially those in the new Renewable Energy Engineering program. Research projects would be funded from the savings and income generated from the plant. This would make OIT students more competitive in the business world and especially in the renewable energy market.

7. Has this project received federal appropriations funding in past fiscal years?

Yes

7a. If yes, please provide fiscal year, Department, Account, and funding amount of any previous funding.

Previous funds were secured in the FY08 Energy and Water Appropriations, Energy Efficiency and Renewable Energy -\$982,500

\$1.6 million is pending in the Senate Energy and Water Appropriations bill in the EERE account and \$1.3 million is pending in the FY09 House Energy and Water Appropriations bill in the EERE account.

8. Federal agency and account from which funds are requested (Please be specific –e.g. Department of Housing and Urban Development, Economic Development Initiatives account):

Department of Energy – Energy Efficiency and Renewable Energy Resources

9. What is the purpose of the project? Why is it a valuable use of taxpayer funds? How will the project support efforts to improve the economy and create jobs in Oregon?

The power plant, along with its companion low-temperature (approximately 200 kW) binary plant would become a demonstration site and pilot project for potential users or developers throughout the region and the country. This one-of-a-kind project could contribute to distributed energy, especially in rural areas where transmission lines are lacking or undersized to provide energy from larger and remote power plants. The Geo-Heat Center staff would provide the tours, information, training and technical assistance necessary to promote the use of geothermal electric power in the region and across the country.

A realistic laboratory will be available for engineering students, public officials, technicians and engineers to study, gather data and report their findings, and the Geo Heat Center will also make all data available to other potential users. This information would be disseminated through a Quarterly Bulletin and website located at: <http://geoheat.oit.edu>. In keeping with the purpose of the Geo Heat Center, we want to encourage the transfer of knowledge and similar equipment elsewhere in the State and the country.

**10. Have you requested funding for this project from other Members of Congress?
If so, who?**

Yes. We submitted appropriations requests to the following offices:

Senator Wyden
Senator Merkley
Representative Schrader
Representative Walden
Representative Wu
Representative DeFazio

11. Funding Details:

a. Total project cost (all funding sources and all years):

\$9.30 million

b. Amount being requested for this project in Fiscal Year 2010:

\$3.65 million

c. What other funding sources (local, regional, state) are contributing to this project or activity? (Please provide specific dollar amount or percentage.)

\$3,000,000 Loan from the Oregon University System
\$2,000,000 Governor Kulongoski's Current State Budget (tentative)

d. Do you expect to request federal funding in future years for this project?

No

e. Breakdown/budget of the amount you are requesting for this project in FY 2010.

(e.g. salary \$40,000; computer \$3,000):

Construction of 3MW Power Generation Facility - \$3.75 million

If OIT receives an earmark in the pending FY09 Omnibus, the \$3.65 million request will be reduced accordingly. Thus if we receive the full \$1.6 million, our request for FY 2010 would be reduced to \$2.05 million.

f. Please list public or private organizations that have supported/endorsed this project:

Klamath County Economic Development Association
Trey Senn, Director
541.882.9600

Renewable Energy Division, Oregon Department of Energy
Dr. Carel DeWinkel, Senior Policy Analyst
503.378.6099

Washington State University Energy Program
Dr. R. Gordon Bloomquist, Senior Scientist
360.956.2016

g. Is this project scalable? (i.e. if partial funding is awarded, will the organization be able to use the funds in FY 2010?):

Yes

Please return this form no later than February 13, 2009 (via email) to: appropriations.blumenauer@mail.house.gov