



Legislative Fiscal Bureau

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Joint Committee on Finance

Paper #185

Wisconsin Energy Institute (Building Program)

[LFB 2009-11 Budget Summary: Page 711, #2 and Page 715, #8]

CURRENT LAW

Under s. 20.924(1)(a) of the statutes, the Building Commission can authorize the design and construction of any building structure or facility costing in excess of \$500,000 regardless of funding source, only if that project is enumerated as part of the state building program. To enumerate a project, the Legislature lists the project title and budget in a non-statutory provision enacted as part of the biennial budget bill. In addition, the Legislature must authorize any new bonding needed to fund the project.

BUILDING COMMISSION

Enumerate the Wisconsin Energy Institute as part of the 2009-11 state building program at a total cost of \$100 million. Authorize \$50 million in general fund supported bonding to support this project. The remaining \$50 million for the project would come from gifts and grants.

Allocate federal funds to the Wisconsin Energy Institute project if the Building Commission determines that federal funds under the American Recovery and Reinvestment Act of 2009 have been received by Wisconsin to finance the Wisconsin Energy Institute project enumerated as part of the 2009-11 building program. Specify that if such federal moneys are received, then the GPR supported bonding and the gift funding for this project would be reduced by equal amounts to offset the total amount of federal funds received for this purpose.

DISCUSSION POINTS

1. The proposed Wisconsin Energy Institute would house the U.S. Department of Energy Great Lakes Bioenergy Research Center (GLBRC) at UW-Madison. GLBRC is one of three centers funded through the Department of Energy whose purpose is to conduct research in the

development of cellulosic ethanol and other biofuels. GLBRC was established with a five-year \$125 million grant from the Department of Energy that was awarded to a consortium led by UW-Madison in June, 2007. Other consortium partners include: Michigan State University; the Pacific Northwest National Laboratory; the Lucigen Corporation, located in Middleton, Wisconsin; University of Florida; Oak Ridge National Laboratory; Illinois State University; and Iowa State University. It is estimated that UW-Madison will receive approximately \$60 million of the federal grant funding awarded to the consortium with the remaining funding being spent at partner institutions.

2. In support of UW-Madison's grant application, the Governor committed \$104 million to support the GLBRC. According to the Department of Energy, the funding should include \$4 million for new faculty hires related to GLBRC and \$100 million for a new bioenergy building to be located on the UW-Madison campus. A provision of AB 75 would provide \$4 million SEG in each year of the biennium to support the Wisconsin bioenergy initiative. Of this funding, \$2.9 million annually would be used to support nine positions, equipment, and other costs related to GLBRC.

3. At present, there is no facility dedicated to bioenergy research on the Madison campus and faculty and academic staff working in this field are scattered across the campus. According to the space needs assessment prepared for this project, there are currently 90 UW-Madison faculty members working in the area of bioenergy research. These faculty members are located in 24 different buildings across the campus.

4. GLBRC is currently located in the Microbial Sciences building on the UW-Madison main campus. The Microbial Sciences building was completed in 2007 and houses the departments of Bacteriology and Medical Microbiology and Immunology, the Food Research Institute, and the Wisconsin Center for Infectious Disease. The building was built with additional capacity to accommodate anticipated departmental growth and GLBRC is currently occupying a portion of this unprogrammed space. However, as GLBRC continues to grow and add staff, it is anticipated that Microbial Sciences will not be able to accommodate GLBRC in the near future.

5. The proposed Wisconsin Energy Institute would serve as a hub for bioenergy research on the UW-Madison campus. As such, it would include dedicated laboratory space, research support facilities, and administrative, educational, and outreach space. According to Building Commission materials, the proposed Wisconsin Energy Institute would be a 228,000 gross square foot building located on the south side of the 1900 block of Observatory Drive on the UW-Madison main campus. The existing Agricultural Engineering Laboratory would be demolished to accommodate this new construction.

6. Under the proposal, only faculty members employed by GLBRC would move into the Wisconsin Energy Institute. All other existing faculty working in this field would remain in their current office and laboratory space. According to a space needs assessment prepared for the project, the facility would have laboratory and related space for 23 faculty members and their staffs, or approximately 280 permanent research staff positions. This would include space for the current GLBRC staff, the seven faculty positions that would be supported by the Wisconsin bioenergy initiative funding included in AB 75, and future growth. The proposed facility would also include research space for visiting faculty members and their research teams.

7. In addition to this laboratory space, the proposed Wisconsin Energy Institute would also contain support facilities that would provide services and be accessible to all GLBRC staff. These facilities would include a fermentation lab, a genetic screening facility, a greenhouse, biomass sample prep and processing space, and an informatics and information technology facility. GLBRC staff would also have access to existing support services in other locations including the nuclear magnetic resonance (NMR) facility, the genome characterization facility, additional greenhouses, and germplasm storage. These facilities would remain in their current locations due to the cost associated with replicating them within the proposed Wisconsin Energy Institute. In general, the proposed Wisconsin Energy Institute would try to incorporate a full complement of support services required for bioenergy research while minimizing duplication of these services on the campus.

8. Building Commission materials indicate that the Wisconsin Energy Institute would house other programs related to energy research in addition to GLBRC. These programs may include Bringing Advanced Computational Techniques to Energy Research (BACTER), which is also supported by a grant from the U.S. Department of Energy, and the Center for Sustainability and the Global Environment (SAGE). At this point, it is unclear how much space would be provided for these and other related energy research programs. The proposed facility would also include administrative, educational, and outreach space related to the Wisconsin bioenergy initiative and GLBRC. These spaces would include a demonstration lab, a seminar hall, meeting rooms, and a café.

9. Under the federal American Reinvestment and Recovery Act, competitive grant funds have been provided under the Department of Energy to support the construction of certain research facilities. It has been indicated that UW-Madison would apply for these funds, however, it is unknown at this time what level of federal funds might be available for this project or the likelihood that such funding would be provided. The recommendations of the Building Commission, if approved, would provide that these federal funds reduce in equal amounts the amount of GFSB authorized for the project and the amount of gift and grant funds required.

ALTERNATIVES

1. Approve the Building Commission's recommendation to enumerate the Wisconsin Energy Institute at part of the 2009-11 state building program at a total cost of \$100 million. Authorize \$50 million in general fund supported bonding to support this project.

ALT 1	Change to Bill
	Funding
BR	\$50,000,000

2. Maintain current law, which would result in this project not being enumerated as part of the 2009-11 building program.

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