



Legislative Fiscal Bureau

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September 29, 2009

TO: Members
Joint Committee on Finance

FROM: Bob Lang, Director

SUBJECT: Administration: Governor's Section 13.10 Requests for the Use of Federal Economic Stimulus Funding for Energy Assurance and Smart Grid Plan -- Agenda Item III

REQUEST

The Governor has submitted a request dated September 23, 2009, for the approval of the use of federal stimulus funding for Energy Assurance and Smart Grid Resiliency Plan. The Governor has asked for approval of \$716,400 FED in 2009-10 under the FED-continuing federal aid appropriation [s. 20.505(1)(mb) of the statutes].

ANALYSIS

In August, 2009, the Office of Energy Independence (OEI) requested and the federal Department of Energy approved \$716,400 for development of a state energy assurance plan for a project period of August 14, 2009 through August 14, 2012. A total of \$39.5 million is being made available nationwide, with Wisconsin eligible for \$716,400, calculated on a base amount of \$200,000 plus an additional \$516,400 based on state population.

The goals of the federal program are to: (a) strengthen and expand state and local government energy assurance planning and resiliency efforts by incorporating response actions for new energy portfolios and Smart Grid applications; (b) create jobs; and (c) build in-house state and local government energy assurance expertise.

Smart Grid technologies are an effort to reduce energy productions and costs by maximizing production capabilities and improving reliability and efficiency of electric production and transmission. One method used for Smart Grid is advanced metering infrastructure which attempts to provide consumers with the ability to decide whether to use certain equipment based on near

real-time energy cost, such as providing information directly to water heaters or washing machines through sensors that could be used to operate the machines during low use times, when prices are lower. This infrastructure would also allow utilities to detect problems on their systems and operate them more efficiently. Other Smart Grid technologies include phasor measurement units, which would allow for more grid electricity transmission measurements, and could be used to reduce congestion.

The federal grant specifies that the state must perform the following duties:

- Create a project management plan that will document the three-year plan and project budget for completing the tasks.
- Develop in-house expertise on energy assurance planning with an emphasis on Smart Grid applications and vulnerabilities, the interdependency of critical infrastructure, cyber security, energy supply systems, energy data analysis, and communications.
- Develop a new, or substantially refine its existing energy assurance plan to incorporate actions for new energy portfolios, including Smart Grid technologies. The plan must address Smart Grid applications and vulnerabilities, the interdependency of critical infrastructure, cyber security, energy supply systems, energy data analysis, and communications.
- Initiate a process for tracking the duration, response, restoration and recovery time of energy supply disruption events.
- Create two exercises to test the Energy Assurance Plan, simulating energy disruptions on both a state and a multi-state scale.

Under the proposal, OEI would divide responsibilities and funding among three state agencies: (a) \$315,900 would be provided to OEI for overall program management and energy assistance plan revisions; (b) \$330,500 would be provided to the Public Service Commission (PSC) for smart grid assessments; and (c) \$50,000 would be provided to Wisconsin Emergency Management (WEM) for coordination and reporting on exercises. The Office anticipates creating two federal project positions for this program. One would work in PSC and one in OEI.

The Office would also provide \$20,000 to the National Association of State Energy Offices (NASEO) for providing assistance on the regional elements of the Energy Plan Assessment and assistance in amending the Energy Assurance Plan. NASEO is a non-profit organization whose membership includes the governor-designated energy officials from each state and territory.

The Office intends to make the following revisions in the current Energy Assurance Plan: (a) gather complete information about Wisconsin biofuels and renewable energy resources; (b) include information on existing and potential smart grid investments in the state and the effect of those investments in strengthening the resiliency and reliability of the state's electricity grid; (c) in

coordination with PSC, improve its mechanism for tracking the duration of responses, restoration and recovery time of energy supply disruption events; (d) in coordination with WEM, and the Wisconsin Department of Health Services (DHS), address the effects of sabotage/terrorism, flooding, ice storms, earthquakes, wildfires, civil disturbance, infrastructure failure, pandemic influenza, and operating energy delivery systems with high failure rates; and (e) in coordination with the Department of Military Affairs, the PSC, and the Wisconsin Department of Administration (DOA), the updated plan will integrate the state's emergency preparedness plans.

It appears that this funding would serve as funding for the state to study and develop plans for emergency planning relating to the transmission of electricity and access to transportation fuels as well as consideration of Smart Grid capabilities in potentially reducing peak energy demand and more efficiently routing electricity. According to OEI, the state is already required to maintain and periodically update its energy assurance plan. The Office also indicates that acceptance of the funding does not commit the state to any future actions or expenditures beyond updating the plan and performing the exercises.

ALTERNATIVES

1. Approve \$716,400 FED in 2009-10 under the FED-continuing federal aid appropriation [s. 20.505(1)(mb) of the statutes] for Energy Assurance and Smart Grid Resiliency Planning.
2. Deny the request.

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