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CAPITAL PROJECTS DETAIL

485 Workforce Safety and Insurance

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Capital Project

Building Back-up Generator

	Request/Optional	Recommendation
Total Project Cost	646,250	466,250
General Fund	0	0
Federal Funds	0	0
Special Funds	646,250	466,250
Bonding	0	0

Is this a multibiennium project? No **No of Biens:** 1 **Est. Costs** 646,250

Future Increased Costs Associated with Project Approval

	2011-2013	2013-2015	2015-2017
Salaries and Wages	0	0	0
Operating Expenses	0	0	0
Equipment > $5,000	0	0	0
IT Equipment > $5,000	0	0	0
Special Lines	0	0	0
Total	**0**	**0**	**0**

	2011-2013	2013-2015	2015-2017
FTE	0.00	0.00	0.00
General Fund	0	0	0
Federal Funds	0	0	0
Special Funds	0	0	0
Total	**0**	**0**	**0**

Project Specifics and Justification

WSI is planning on installing a full building back up electrical generator system to provide essential power for all areas of the building including geothermal heating and cooling systems, computer systems and life safety systems. In past years we have experienced power outages during the course of the year. Each time there is a power outage approximately 350 – 375 state employees are kept from continuing their daily work until electricity is restored and the computers are powered up. Depending on the length of time that the power is out of service, the employees could be off work from 15 minutes to approximately 60 minutes, which was the longest power outage on record for our location.

The other concern with fluctuating power outages is not just the number of times that power is lost to the building each year, but the damage caused to electronic equipment. This occurs when there are sequential power bumps to the building caused by a power failure and an instantaneous return to power, only to have it drop again. In some cases these short term power fluctuations have burned out PC power supplies and energy management system controllers. With a full building backup generator in place, the power would still drop once but the generator would immediately start and not allow any further power disruption to the building until consistent line power was restored. With the geothermal heating and cooling system we have no alternate source for heating or cooling the building. The full backup electrical generator would provide that reliable power supply during inclement weather conditions.

The last benefit of installing a full building backup electrical generation system is that there is the possibility of taking advantage of a year round electrical rate reduction if an interruptible service agreement could be established at some point in the future. A reduction of two cents per kilowatt hour would save approximately $30,000 per year in electrical costs. It is still unknown at this time what the rate reduction would be if an interruptible service agreement could be obtained with the utility provider.