All Agency Project Request

2013 - 2015 Biennium

Agency	Institution	Building No.	Building Name
University of Wisconsin	River Falls	285-0J-9930	Utility - Site Electrical (above ground)

Project No. 14I2X **Project Title** Multi-Bldg Emer Gen Upgr

Project Intent

This project replaces four obsolete building emergency generators to provide emergency power required for life safety purposes, to protect on-going research and to protect building contents.

Project Description

The transfer switch in each building will be replaced and an additional transfer switch will be installed. Emergency loads and optional standby loads will be segregated, and new emergency distribution panels will be installed. Standby building loads may include steam condensate pumps, heating pumps, sump pumps, sewage ejection pumps, air compressors, telecom equipment, and building automation control panels. Natural gas service lines will be extended from nearest gas mains to the new generator locations. Project work specific to each building is outlined below.

AGRICULTURAL SCIENCE (285-0J-0015): The project replaces the 15kW, 208V natural gas water cooled generator located on the first floor level with a new approximate 185kW natural gas air cooled unit located on a pad outside the building and provides appropriate visual screening. A new 2000A, 208V switchboard will replace existing switchboard.

CENTENNIAL SCIENCE (285-0J-0010): The project replaces the 115kW, 480V natural gas water cooled emergency generator located on the basement level with a new approximate 150kW natural gas air cooled unit located on a pad outside the building and provides appropriate visual screening.

KLEINPELL FINE ARTS (285-0J-0007): This project replaces the 30kW, 208V natural gas water cooled emergency generator located on the basement level with a new approximate 100kW natural gas air cooled unit located on a pad outside the building and provides appropriate visual screening. A new 2,500A, 208V switchboard will replace existing switchboard.

NORTH HALL (285-0J-0001): This project replaces the 15kW, 208V diesel water cooled emergency generator located on the basement level with an approximate 100kW natural gas unit located on a pad outside the building and provides appropriate visual screening.

Project Justification

The generators in Agricultural Science, Centennial Science, Kleinpell Fine Arts and North Hall were installed between 1966 and 1977. They require increased maintenance and are difficult to repair since replacement parts are no longer available. All generators are beyond their useful lives and they do not have capacity to serve emergency and optional standby loads. The emergency power distribution systems do not meet current code since all critical loads are fed from one panel. The current code requires separate emergency and optional standby distribution systems. The generator room in North Hall contains a 40 gallon diesel fuel tank without required spill containment. The generators in the science buildings do not have adequate capacity to serve critical building systems and critical research equipment. Operation of these generators is essential to maintain life-safety, critical building systems and critical research support systems during a power outage.

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A/E Consultant Requirements

☑ A/E Selection Required?

Consultants should have specific expertise and experience in the design and coordination of electrical power distribution systems, including the installation of emergency generation, as part of a design team. Work includes site surveys, acquiring field data, and verifying as-built conditions to assure accurate development of design and bidding documents, and production of necessary design and bidding documents. Consultants should indicate specific projects from past experience (including size, cost, and completion date) in their letter of interest and when known, include proposed consulting partners and specialty consultants.

Commissioning

☑ Level 1

☐ Level 2

Project Budget

Construction Cost:		$1,523,300
Haz Mats:		$15,000
Construction Total:		$1,538,300
Contingency:	15%	$226,600
A/E Design Fees:	9%	$146,100
DFD Mgmt Fees:	4%	$70,600
Other:		$0
		$1,981,600

Funding Source(s)

	Total
GFSB - Facilities Maintenance & Renovation [Z060]	$1,981,600
PRSB - []	$0
Agency/Institution Cash []	$0
Gifts	$0
Grants	$0
Building Trust Funds [BTF]	$0
Other Funding Source	$0
	$1,981,600

Project Schedule

SBC Approval:	01/2015
A/E Selection:	02/2015
Bid Opening:	12/2015
Construction Start:	02/2016
Substantial Completion:	09/2016
Project Close Out:	12/2016

Project Contact

Contact Name: Alan Symicek

Email: <alan.symicek@uwrf.edu>

Telephone: (715) 425-3827 x

Project Scope Consideration Checklist

	Y	N
1. Will the building or area impacted by the project be occupied during construction? If yes, explain how the occupants will be accommodated during construction.	☐	☐
All project work will be coordinated through campus physical plant staff to minimize disruptions to daily operations and activities.		
2. Is the project an extension of another authorized project? If so, provide the project #...	☐	☐
3. Are hazardous materials involved? If yes, what materials are involved and how will they be handled?	☐	☐
Required hazardous materials abatement has been included in the estimated project schedule and project budget. Comprehensive building survey inventory data is not available on Wisconsin's Asbestos & Lead Management System (WALMS) <http://walms.doa.state.wi.us/>.		
4. Will the project impact the utility systems in the building and cause disruptions? If yes, to what extent?	☑	☐
All project work will be coordinated through campus physical plant staff to minimize disruptions to daily operations and activities.		

5. Will the project impact the heating plant, primary electrical system, or utility capacities supplying the building? If yes, to what extent? ☐ ☑

6. Are other projects or work occurring within this project's work area? If yes, provide the project # and/or description of the other work in the project scope. ☐ ☑

7. Have you identified the WEPA designation of the project...Type I, Type II, or Type III? ☑ ☐

   Type III.

8. Is the facility listed on a historic register (federal or state), or is the facility listed by the Wisconsin Historical Society as a building of potential historic significance? If yes, describe here. ☑ ☐

   North Hall and surrounding site is on the Wisconsin Historical Register. New generator location and screening must be sensitive to building architecture and site.

9. Are there any other issues affecting the cost or status of this project? ☐ ☑

10. Will the construction work be limited to a particular season or window of opportunity? If yes, explain the limitations and provide proposed solution. ☐ ☑

11. Will the project improve, decrease, or increase the function and costs of facilities operational and maintenance budget and the work load? If yes, to what extent? ☑ ☐

    Completion of this project will decrease operational maintenance costs.

12. Are there known code or health and safety concerns? If yes, identify and indicate if the correction or compliance measure was included in the budget estimate, or indicate plans for correcting the issue(s). ☐ ☑

13. Are there potential energy or water usages reduction grants, rebates, or incentives for which the project may qualify (i.e. Focus on Energy <http://www.focusonenergy.com> or the local utility provider)? If yes, describe here. ☐ ☑

14. If this is an energy project, indicate and describe the simple payback on state funding sources in years and the expected energy reduction here. ☐ ☑