

All Agency Project Request

2009 - 2011 Biennium

<u>Agency</u>	<u>Institution</u>	<u>Building No.</u>	<u>Building Name</u>
University of Wisconsin	Milwaukee	285-0B-1915	HEATING PLANT - CENTRAL
<u>Project No.</u>	10J1D	<u>Project Title</u>	Htg Plnt CW Sys Turbine Renv

Project Intent

This project rebuilds, repairs, and replaces components of the steam turbines on Chiller No. 1 and Chiller No. 2.

Project Description

Project work includes renovating the Coppus Murray 2,065 HP steam turbines, including thorough inspection of all internal components, replacing normal wear parts, replacing nozzles in the steam chests, and repairing the governor controlled steam trip and throttle valves.

Project Justification

The central Heating and Cooling Plant provides cooling to campus buildings through two 2,750-ton steam driven York chillers and one 3,000-ton Carrier chiller. These steam turbines are used to drive each of the two York chillers. The steam turbines were last renovated in 1994 and 1995, and both are past due for an internal inspection and overhaul needed to assure their continued service. Nozzles will be replaced in the steam chests to maintain turbine horsepower and performance. The governor controlled steam trip and throttle valves leak steam when the units are not in operation, causing corrosion of turbine internals and need to be repaired.

A/E Consultant Requirements

Consultants should have specific expertise and experience in the design and coordination of steam turbine repairs and renovations 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.

A/E Selection Required?

Commissioning

- Level 1
- Level 2

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Project Budget

Construction Cost:		\$860,000	
Haz Mats:		\$0	
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Construction Total:		\$860,000	
Contingency: 15%		\$129,000	
A/E Design Fees: 8%		\$68,800	
DFD Mgmt Fees: 4%		\$39,600	
Equipment/Other:		\$0	
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		\$1,097,400	

Funding Source

GFSB - Utilities Repair & Renovation [Z080]	\$921,800
PRSB - []	\$0
Agency/Institution Cash [AGF0]	\$175,600
Gifts	\$0
Grants	\$0
Building Trust Funds [BTF]	\$0
Other Funding Source	\$0
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	\$1,097,400

Project Schedule

SBC Approval: 12/2010
 A/E Selection: 01/2011
 Bid Opening: 08/2011
 Construction Start: 11/2011
 Substantial Completion: 03/2012
 Project Close Out: 06/2012

Project Contact

Contact Name: Andrew C. Nelson
 Email: <acnelson@uwm.edu>
 Telephone No.: (414) 229-4013 x

Project Scope Consideration Checklist

- | | <u>Y</u> | <u>N</u> |
|---|-------------------------------------|-------------------------------------|
| 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 and heating plant staff to minimize disruptions to daily operations and activities. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the project an extension of another authorized project? If so, provide the project #... | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Are hazardous materials involved? If yes, what materials are involved and how will they be handled?

Hazardous materials abatement is not anticipated on this project. Comprehensive building survey inventory data is available on Wisconsin's Asbestos & Lead Management System (WALMS) < http://walms.doa.state.wi.us/ >. | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Will the project impact the utility systems in the building and cause disruptions? If yes, to what extent? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Will the project impact on the utility capacities supplying the building? If yes, to what extent? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Will the project impact the heating plant or the primary electrical system supplying the campus or institution? If yes, to what extent?

All project work will be coordinated through campus physical plant and heating plant staff to minimize disruptions to daily operations and activities. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Have you identified the WEPA designation of the project...Type I, Type II, or Type III?
Type III. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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8. Is the project affected by historic status?
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.

Project work is seasonal. Preferred project work schedule should be limited to late fall, winter, and early spring months if possible.