



OFFICE OF THE EXECUTIVE VICE PRESIDENT FOR  
BUSINESS AND FINANCE, TREASURER

September 13, 2013

The Honorable Michael R. Pence  
Governor of the State of Indiana  
State House  
Indianapolis, IN 46204

Dear Governor Pence:

At its meeting on September 12, 2013, the Purdue University Board of Trustees approved the, "IPFW Qualified Energy Savings" project on the Indiana University-Purdue University Fort Wayne Campus.

Proposals from qualified companies will be assessed under the State's Qualified Energy Savings statute to evaluate renovations not to exceed \$5 million to improve energy efficiency at the IPFW campus. The goal of these renovations are to update and install new equipment and controls for HVAC, lighting, and lesser sub-components throughout the campus in order to improve the efficiency of these facilities. Concentration will be on creating more precise control of the existing HVAC system in assorted buildings in order to materialize long-term energy savings. These projects may also include items such as lighting replacements; boiler upgrades and replacement; and localized package heat recovery chillers to optimize off peak cooling potentials.

The estimated cost of this project is \$5,000,000, to be funded from Qualified Energy Savings Bonds. The University intends to utilize its existing tax-exempt commercial paper program to fund these expenditures on an interim or permanent basis.

Subject to review by the Commission for Higher Education and recommendation by the State Budget Committee and the Budget Agency, we request your approval to proceed with this project. Attached are the completed forms which the Commission has prescribed for its review of such projects. We will be happy to answer any questions you or your staff may have or to provide any additional information you may wish.

Sincerely,

A handwritten signature in black ink, appearing to read "A. V. Diaz".

A. V. Diaz  
Executive Vice President for  
Business and Finance, Treasurer

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Attachments

c: Matt Hawkins, Associate Commissioner and Chief Financial Officer  
Brian Bailey, State Budget Director  
Mary Catherine Gaisbauer, Comptroller  
Kevin Green, Assistant Director of Capital Planning

**PROJECT SUMMARY AND DESCRIPTION**  
**IPFW Qualified Energy Savings**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-14-2-08
<b>Campus:</b>	Fort Wayne	<b>Institutional Priority:</b>	N/A
<b>Previously approved by General Assembly:</b>	No	<b>Previously recommended by CHE:</b>	No
<b>Part of the Institution's Long-term Capital Plan:</b>	Yes		

**Project Summary Description:**

This Energy Management Performance Contract will conserve energy and reduce energy costs by upgrading and replacing the building environmental control systems in seventeen (17) of the buildings on campus. The project will use updated controls to more efficiently monitor and control the environmental conditions in these buildings. The project will also address some lighting upgrades including occupancy sensors in public areas such as classrooms and laboratories. The project has a projected simple payback of less than 10 years. Savings will be guaranteed through measurement and verification.

**Summary of the impact on the educational attainment of students at the institution:**

Many of the spaces within the buildings covered under the project are student contact spaces which are difficult to control heating and cooling conditions because of obsolete regulating devices and control systems. The project will allow a better control of these spaces thereby creating more comfort and an enhanced learning environment for students. The project will also address some of the Indoor Air Quality issues currently being faced by the University.

<b>Project Size:</b>	1,190,000 GSF	1,023,400 ASF	0.86 ASF/GSF
<b>Net change in overall campus space:</b>	0 GSF	0 ASF	

<b>Total cost of the project (1):</b>	\$ 5,000,000	<b>Cost per ASF/GSF:</b>	\$ 4.20 GSF
			\$ 4.89 ASF

**Funding Source(s) for project (2):** \$ 5,000,000 - Qualified Energy Savings Bonding Authority

**Estimated annual debt payment (4):** \$500,000

**Are all funds for the project secured:** No

**Estimated annual change in cost of building operations based on the project:** \$ (500,000)

**Estimated annual repair and rehabilitation investment (3):** N/A

- (1) Projects should include all costs associated with the project (structure, A&E, infrastructure, consulting, FF&E, etc.)
  - (2) Be consistent in the naming of funds to be used for projects. If bonding, note Bonding Authority Year (1965, 1929, 1927, etc.)
  - (3) Estimate the amount of funding the institution would need to set aside annually to address R&R needs for the project. CHE suggests 1.5% of total construction cost
  - (4) If issuing debt, determine annual payment based on 20 years at 5.75% interest rate
- If project is a lease-purchase or lease, adjust accordingly. Note the total cost of the lease in the project cost, and annual payments in project description

**PROJECT DETAILED DESCRIPTION - ADDITIONAL INFORMATION**  
**IPFW Qualified Energy Savings**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-14-2-08
<b>Campus:</b>	IPFW	<b>Institutional Priority:</b>	N/A

**Description of Project**

This Energy Management Performance Contract will conserve energy and reduce energy costs by upgrading and replacing the building environmental control systems in seventeen (17) of the buildings on campus. Among the buildings included are the Gates Athletic Center, Ginsberg Hall, Liberal Arts, Music Building, Medical Education Center, Williams Theatre, and Walb Student Union. The project will use updated controls to more efficiently monitor and control the environmental conditions in these buildings. An overall control system monitor will allow instantaneous monitoring and adjustment of building conditions. The project also will address the overall efficiency of the campus-wide chilled water system by maximizing cooling flow and minimizing chiller usage and some lighting upgrades including occupancy sensors in public areas such as classrooms and laboratories. The project has a projected simple payback of less than 10 years. Savings are to be guaranteed using verification and measurement protocol for the payback period.

**Need and Purpose of the Program**

This project will contribute to the long-term mission of the IPFW campus to reduce energy usage and to become more energy efficient. The project will assist the University to become more sustainable by reducing the costs of heating and cooling campus buildings and therefore creating a better learning environment for the student population. The potential savings of \$500,000 per year in energy costs is expected to be realized. If the project is not approved, this omission of savings would directly impact cost of attendance for students.

**Space Utilization**

This project does not change or affect space utilization on campus.

**Comparable Projects**

The University has completed a previous project that was similar in function to the proposed project but smaller in scope. A project completed with Honeywell in 2010 used \$2,454,136 in QES bonding authority to retro-commission and update controls in four buildings on campus. This project affected 553,000 GSF of building space for a similar cost of \$4.43/GSF.

**Background Materials**

**CAPITAL PROJECT REQUEST FORM**  
**INDIANA PUBLIC POSTSECONDARY EDUCATION**  
**INSTITUTION CAMPUS SPACE DETAILS FOR IPFW Qualified Energy Savings**

IPFW Qualified Energy Savings B-1-14-2-08	Current Space in Use	Space Under Construction (1)	Space Planned and Funded (1)	Subtotal Current and Future Space	Space to be Terminated (1)	New Space in Capital Request (2)	Net Future Space
<b>A. OVERALL SPACE IN ASF</b>							
Classroom (110 & 115)	66,035	-	-	66,035	-	-	66,035
Class Lab (210,215,220,225,230,235)	131,947	-	-	131,947	-	-	131,947
Non-class Lab (250 & 255)	41,313	-	-	41,313	-	-	41,313
Office Facilities (300)	195,299	-	-	195,299	-	-	195,299
Study Facilities (400)	75,875	-	-	75,875	-	-	75,875
Special Use Facilities (500)	71,753	-	-	71,753	-	-	71,753
General Use Facilities (600)	107,908	-	-	107,908	-	-	107,908
Support Facilities (700)	577,599	-	-	577,599	-	-	577,599
Health Care Facilities (800)	3,139	-	-	3,139	-	-	3,139
Resident Facilities (900)	188,144	-	-	188,144	-	-	188,144
Unclassified (000)	4,770	-	-	4,770	-	-	4,770
<b>B. OTHER FACILITIES</b> (Please list major categories)							
<b>TOTAL SPACE</b>	<b>1,463,782</b>	<b>-</b>	<b>-</b>	<b>1,463,782</b>	<b>-</b>	<b>-</b>	<b>1,463,782</b>

**Notes:**

- (1) Identify in a footnote the specific facilities that are included in the data in these columns. Do not include pending approval, non-submitted projects or non-funded projects
- (2) Should include capital projects requested by the institution based on 2013-15 Capital Request Summary

- Space/Room codes based on Postsecondary Ed Facilities Inventory and Classification Manual (2006)

Space under construction includes:

Space planned and funded includes:

Space to be terminated includes:

**CAPITAL PROJECT COST DETAILS**  
**IPFW Qualified Energy Savings**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-14-2-08
<b>Campus:</b>	IPFW	<b>Institutional Priority:</b>	N/A

**ANTICIPATED CONSTRUCTION SCHEDULE**

	<u>Month</u>	<u>Year</u>
<b>Bid Date</b>	N/A	N/A
<b>Start Construction</b>	April	2014
<b>Occupancy (End Date)</b>	Mar	2015

**ESTIMATED CONSTRUCTION COST FOR PROJECT**

	<u>Cost Basis</u> (1)	<u>Estimated Escalation</u> Factors (2)	<u>Project Cost</u>
<b><u>Planning Costs</u></b>			
a. Engineering			\$ -
b. Architectural			\$ -
c. Consulting			\$ -
<b><u>Construction</u></b>			
a. Structure	\$ 247,000		\$ 247,000
b. Mechanical (HVAC, plumbing, etc.)	\$ 1,680,000		\$ 1,680,000
c. Electrical	\$ 2,608,000		\$ 2,608,000
<b><u>Movable Equipment</u></b>			\$ -
<b><u>Fixed Equipment</u></b>			\$ -
<b><u>Site Development/Land Acquisition</u></b>			\$ -
<b><u>Other PM/CM, Inspection, contingency fees)</u></b>	\$ 465,000		\$ 465,000
<b>TOTAL ESTIMATED PROJECT COST</b>	<b>\$ 5,000,000</b>	<b>\$ -</b>	<b>\$ 5,000,000</b>

(1) Cost Basis is based on current cost prevailing as of: (INSERT MONTH AND YEAR)

(2) Explain in the Description of Project Section of the "Cap Proj Details" schedule the reasoning for estimated escalation factors

**CAPITAL PROJECT OPERATING COST DETAILS**  
**IPFW Qualified Energy Savings**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-14-2-08
<b>Campus:</b>	IPFW	<b>Institutional Priority:</b>	N/A

**GSF OF AREA AFFECTED BY PROJECT** 1,023,400

**ANNUAL OPERATING COST/SAVINGS (1)**

	Cost per GSF	Total Operating Cost	Personnel Services	Supplies and Expenses
1. Operations	\$1.57	\$1,605,884	\$1,497,922	\$107,962
2. Maintenance	\$0.86	\$881,120	\$770,982	\$110,138
3. Fuel	\$0.61	\$626,272		\$626,272
4. Utilities	\$1.79	\$1,834,572		\$1,834,572
5. Other	\$0.00	\$0		
<b>TOTAL ESTIMATED OPERATIONAL COST/SAVINGS</b>	<b>\$4.83</b>	<b>\$4,947,848</b>	<b>\$ 2,268,904</b>	<b>\$2,678,944</b>

**Description of any unusual factors affecting operating and maintenance costs/savings.**

The operating costs above reflect the current costs for the buildings that will be affected by this project. A \$500,000 annual savings is expected.

(1) Based on figures from "Individual Cap Proj Desc" schedule