

BOARD OF REGENTS
EASTERN MICHIGAN UNIVERSITY

SECTION: 24
DATE: June 21, 2016

RECOMMENDATION

CAPITAL PROJECT EXPENDITURE

ACTION REQUESTED

It is recommended that the Board of Regents approve the following supplemental FY 2017 capital project expenditures:

- Demolition of current and installation of a new Co-Generation unit, to include a 7.8MW turbine within the existing structure of the Heating Plant. The estimated cost of the project is \$19,600,000.
- Replacement of the Loop 1 electrical distribution grid. The estimated cost of the project is \$7,500,000.
- Phase 2 of the Energy Conservation Measures (ECM) project. The estimated cost of Phase 2 is \$3,400,000.

Total supplemental capital projects - \$30,500,000.

STAFF SUMMARY

The capital projects noted above either provide the University the opportunity to obtain utility savings and/or address a key infrastructure risk at the University. The Co-Generation Unit and ECM projects both provide utility savings to the University – approximately \$2.6 million annually, while the Co-Generation unit and Loop 1 address significant operational & financial risks to the University’s infrastructure by replacing aged and at risk equipment.

- The Co-Gen Project provides for the equipment, facility construction and remediation, and fees associated with the replacement of the University’s existing Co-Generation unit which ceased operation in April 2016. Co-Generation is a combined heat and power system that simultaneously produces electricity and steam heat for the Campus, using natural gas. Upon completion, the new Co-Generation system is expected to generate 98% of Campus heat and 93% of electricity needs. The project is estimated to have a total construction time of 18 months. Upon completion, the University is expected to realize annual net savings in utility expense in excess of \$2,400,000. Funding will be provided, all or in part, by bond proceeds or other short term financing sources.
- The continuation of the ECM project allows Eastern Michigan University to continue to upgrade its outdated energy related technologies to modern technologies, providing the University financial savings on the installation of more energy efficient systems. Phase 2 of the ECM project provides upgrades for the plumbing, building controls, select lighting and

other systems over 33 buildings across campus. Phase 2 of the Energy Conversation Measures project is expected to be completed by the end of the 2017 Fiscal Year. Once completed, the University is expected to receive annual energy savings of over \$195,000. Funding will be provided, all or in part, by bond proceeds or other short term financing sources. This project was previously included in the three year capital plan within FY 18 and as such will be pulled ahead in FY 17.

- The Loop 1 project replaces the current 4,800v primary electrical service with a 13,200v primary electrical service to 15 campus buildings. Significant operational risk to the University exists due to the current equipment being over 30 years old and ultimately unreliable going forward. The completion of the Loop 1 replacement will conclude the University's on-going efforts with replacing this type of equipment as Loops 2, 3 and 4 have been previously replaced. Funding for this project will come from University resources. This project was previously included in the three year capital plan within FY 19 and as such will be pulled ahead in FY 17.

FISCAL IMPLICATIONS

Approval of the capital projects will establish the authorization for spending in excess of the Capital Budget approved on February 5, 2016 for 2016-2017 capital spending. As the ECM and Loop 1 projects were previously included in the three year capital plan within FY 18 & FY 19, the University anticipates a direct reduction of these amounts from the corresponding fiscal years capital plans.

ADMINISTRATIVE RECOMMENDATION

The proposed Board action has been reviewed and is recommended for Board approval.

University Executive Officer

Date

**Eastern Michigan University Capital Expenditure Budget Fiscal Year
2016-2017**

Attachment A

<i>(In thousands)</i>	Approved 2016-2017 Budget
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<u>Academic Facility Enhancements</u>	
Sill Programming (COT)	\$ 250
COB Chiller and Tower	\$ 600
Strong Hall	\$ 9,900
Warner Programming	\$ 250
Total Academic Facilities	<hr/> \$ 11,000
 <u>Housing, Dining, Student Programming</u>	
Wise Renovation	\$ 6,400
Total Housing, Dining, Student Programming	<hr/> \$ 6,400
 <u>Technology</u>	
Classroom Technology	\$ 870
Networks & Servers	\$ 998
Campus Wireless (Phase 4)	\$ 280
VOIP	\$ 40
Total Technology	<hr/> \$ 2,188
 <u>Safety and Security</u>	
Safety Enhancements (AED, Cameras, ADA)	\$ 1,535
Total Safety and Security	<hr/> \$ 1,535
 <u>Other Campus Capital Investment</u>	
Energy Conservation Measures	\$ 6,350
Parking Allowance	\$ 1,200
Rynearson Stadium - Painting & Aesthetics	\$ 100
FYC Refresh	\$ 150
Rynearson Stadium - Concrete Repair Allowance	\$ 250
Contingency	\$ 1,000
	<hr/> \$ 9,050

Total 2016-2017 Capital Plan (Approved Feb 2016)

\$

30,173

**Eastern Michigan University Capital
Expenditure Budget - Amended Fiscal
Year 2016-2017**

(In thousands)

Total 2016-2017 Capital Plan - <u>Originally Approved</u>	\$	30,173
<u>Separately Approved Capital Projects</u>		
Co-Generation Replacement	\$	19,600
Loop 1 Replacement	\$	7,500
Energy Conservation Measures - Phase II	\$	<u>3,400</u>
Total 2016-2017 Capital Plan - <u>Amended</u>	\$	60,673