

AGENDA ITEM BRIEFING

Submitted by: Billy Hamilton, Deputy Chancellor and Chief Financial Officer
The Texas A&M University System

Subject: Approval of the Project Scope and Budget, Appropriation for Construction Services, and Approval for Construction for the CUP Generator Replacement Project, Texas A&M University, College Station, Texas (Project No. 02-3345)

Background and Prior Actions:

The Central Utility Plant (CUP) Generator Replacement Project was included as a proposed project on the FY 2022 – FY 2026 A&M System Capital Plan approved by the Board of Regents at the August 2021 meeting with an FY 2022 start date and a planning amount of \$26,500,000.

Proposed Board Action:

- (1) Approve the project scope and budget.
- (2) Appropriate \$23,850,000 for construction services and related project costs. \$2,650,000 has been previously appropriated to this project.
- (3) Approve construction of the CUP Generator Replacement Project at Texas A&M University (Texas A&M).

Funding/Budget Amount:

<u>Funding Source</u>	<u>Budget Amount</u>	<u>Average Estimated Annual Debt Service</u>	<u>Debt Service Source</u>
Revenue Financing System Debt Proceeds	<u>\$26,500,000</u>	\$1,947,056	Utility Revenue
Total Project Funds	<u>\$26,500,000</u>		

Project Justification:

The CUP on the main campus of Texas A&M uses one gas turbine generator and two steam turbine generators to produce heat and power for the campus. The gas turbine generator and one of the steam turbine generators (STG-2) were installed with the Combined Heat and Power Plant addition in 2010, whereas the other steam turbine generator (STG-4) was installed in the mid-1950s and is at the end of its useful life. Additionally, the original equipment manufacturer no longer supports components, and replacement parts are obsolete. The existing STG-4 is a

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multistage, condensing steam turbine with a 20-psig extraction and a direct drive, 3600-rpm, 5 MW generator. This steam turbine's upper shell and rotor are currently out for repairs and will require significant work to restore them to operable status. Consequently, this project covers the replacement of STG-4 with a new steam turbine generator as well as the replacement of related equipment. The STG-4 replacement will require significant structural adaptations of the building's roof and STG-4 pedestal to install the new STG-4 and surface condenser.

Scope:

This project consists of the replacement of STG-4 along with its auxiliary equipment and the required balance of plant modifications, including cooling tower structural refurbishment and capacity upgrade. All equipment except for the cooling tower and cooling water pumps will be located within the CUP. Major equipment installation will be performed by opening the roof and creating a securable lid for access to remove the old turbine generator and install the new turbine generator.

Construction on this project is scheduled to start in December 2024 with substantial completion scheduled for March 2026. The total project budget is \$26,500,000.

Other Major Fiscal Impacts:

None.

Strategic Plan Imperative(s) this Item Advances:

The CUP Generator Replacement Project supports Strategic Plan Imperative No 6.

Imperative No. 6: The A&M System, in adhering to the high standard of excellence and growth required in this strategic plan, will display prudent financial stewardship and sustainability. Our member institutions will be diligent about their plans for growth, and the A&M System will ensure financially sound decision-making at the aggregate level. We have robust financial management capabilities in place and will continue to manage the A&M System's financial health in a holistic manner.

The CUP Generator Replacement Project proposes to replace existing STG-4, which has served the campus for over 65 years and is beyond its useful life. The new generator is expected to provide additional electrical capacity, providing redundancy in addition to the existing Gas Turbine Generator-1 and STG-2. The structural portion of the project provides a removable roof while the generator replacement is ongoing and repurposes much of the existing STG pedestal for the new machine.

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THE TEXAS A&M UNIVERSITY SYSTEM
FACILITIES PLANNING AND CONSTRUCTION
Office of the Deputy Chancellor and Chief Financial Officer
September 30, 2024

Members, Board of Regents
The Texas A&M University System

Subject: Approval of the Project Scope and Budget, Appropriation for Construction Services, and Approval for Construction for the CUP Generator Replacement Project, Texas A&M University, College Station, Texas (Project No. 02-3345)

I recommend adoption of the following minute order:

“The project scope along with a project budget of \$26,500,000 for the CUP Generator Replacement Project is approved.

The amount of \$23,850,000 is appropriated from Account No. 01-083540, Revenue Financing System Debt Proceeds (Utility Revenue), for construction services and related project costs.

The CUP Generator Replacement Project, Texas A&M University, College Station, Texas, is approved for construction.

The Board of Regents of The Texas A&M University System (Board) reasonably expects to incur debt in one or more obligations for this project, and all or a portion of the proceeds received from the sale of such obligations is reasonably expected to be used to reimburse the account(s) for amounts previously appropriated and/or expended from such account(s).

As required by Section 5(a) of the Master Resolution of the Revenue Financing System, the Board hereby determines that it will have sufficient funds to meet the financial obligations of The Texas A&M University System, including sufficient Pledged Revenues to satisfy the Annual Debt Service Requirements of the Revenue Financing System and to meet all financial obligations of the Board relating to the Revenue Financing System and that

the Participants, on whose behalf the debt is issued, possess the financial capacity to satisfy their Direct Obligations.”

Respectfully submitted,

[ORIGINAL SIGNED BY]

Billy Hamilton
Deputy Chancellor and
Chief Financial Officer

Approval Recommended:

[ORIGINAL SIGNED BY]

John Sharp
Chancellor

Approved for Legal Sufficiency:

[ORIGINAL SIGNED BY]

Ray Bonilla
General Counsel

[ORIGINAL SIGNED BY]

Phillip Ray
Vice Chancellor for Business Affairs

[ORIGINAL SIGNED BY]

Mark A. Welsh III, President
Texas A&M University

CUP GENERATOR REPLACEMENT TEXAS A&M UNIVERSITY PROJECT NO. 02-3345	PROJECT BUDGET
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1.	Construction	\$20,837,500
2.	Project Contingency	1,960,757
3.	Program of Requirements.....	78,000
4.	Pre-Construction Services	2,316,243
5.	Commissioning.....	0
6.	Construction Testing	229,379
7.	Campus Services & Technology	121,000
8.	Furnishings	0
9.	Equipment	0
10.	Other Project Costs.....	273,000
11.	Project Management & Inspection	<u>\$684,121</u>
12.	TOTAL ESTIMATED COST OF PROJECT	<u>\$26,500,000</u>

1. BOR Approval to Include in Capital Plan August 26, 2021
2. Issue A/E RFQ July 10, 2023
3. Receive A/E RFQ Responses August 1, 2023
4. Shortlist A/E Firms August 10, 2023
5. Interview A/E Shortlist August 24, 2023
6. A/E Ranked Order Approved by Chancellor September 6, 2023
7. Execute A/E Agreement November 14, 2023
8. A/E Design Kick-Off December 19, 2023
9. Complete Schematic Design February 19, 2024
10. Complete Design Development May 29, 2024
11. Complete Construction Documents August 28, 2024
12. Advertise for CSP September 17, 2024
13. Receive CSP Response October 15, 2024
14. Submit THECB Application October 15, 2024
15. CSP Ranked Order Approved by Chancellor November 1, 2024
16. BOR Approval for Construction November 7, 2024
17. Begin Construction December 2024
18. Substantial Completion March 2026
19. Owner Occupancy April 2026



CUP Generator Replacement

Texas A&M University

Project No. 02-3345

**TEXAS A&M UNIVERSITY SYSTEM
REVENUE FINANCING SYSTEM
02-3345 CUP Generator Replacement
Utility Revenue**

Dates	Outstanding Principal	Principal Amount	Interest Amount	Annual Total	Coverage 1.15x
BONDS	26,765,000.00				
YEAR 1	26,225,000.00	540,000.00	1,405,162.50	1,945,162.50	2,236,936.88
YEAR 2	25,655,000.00	570,000.00	1,376,812.50	1,946,812.50	2,238,834.38
YEAR 3	25,055,000.00	600,000.00	1,346,887.50	1,946,887.50	2,238,920.63
YEAR 4	24,425,000.00	630,000.00	1,315,387.50	1,945,387.50	2,237,195.63
YEAR 5	23,760,000.00	665,000.00	1,282,312.50	1,947,312.50	2,239,409.38
YEAR 6	23,060,000.00	700,000.00	1,247,400.00	1,947,400.00	2,239,510.00
YEAR 7	22,325,000.00	735,000.00	1,210,650.00	1,945,650.00	2,237,497.50
YEAR 8	21,550,000.00	775,000.00	1,172,062.50	1,947,062.50	2,239,121.88
YEAR 9	20,735,000.00	815,000.00	1,131,375.00	1,946,375.00	2,238,331.25
YEAR 10	19,875,000.00	860,000.00	1,088,587.50	1,948,587.50	2,240,875.63
YEAR 11	18,970,000.00	905,000.00	1,043,437.50	1,948,437.50	2,240,703.13
YEAR 12	18,020,000.00	950,000.00	995,925.00	1,945,925.00	2,237,813.75
YEAR 13	17,020,000.00	1,000,000.00	946,050.00	1,946,050.00	2,237,957.50
YEAR 14	15,965,000.00	1,055,000.00	893,550.00	1,948,550.00	2,240,832.50
YEAR 15	14,855,000.00	1,110,000.00	838,162.50	1,948,162.50	2,240,386.88
YEAR 16	13,690,000.00	1,165,000.00	779,887.50	1,944,887.50	2,236,620.63
YEAR 17	12,460,000.00	1,230,000.00	718,725.00	1,948,725.00	2,241,033.75
YEAR 18	11,165,000.00	1,295,000.00	654,150.00	1,949,150.00	2,241,522.50
YEAR 19	9,805,000.00	1,360,000.00	586,162.50	1,946,162.50	2,238,086.88
YEAR 20	8,375,000.00	1,430,000.00	514,762.50	1,944,762.50	2,236,476.88
YEAR 21	6,865,000.00	1,510,000.00	439,687.50	1,949,687.50	2,242,140.63
YEAR 22	5,280,000.00	1,585,000.00	360,412.50	1,945,412.50	2,237,224.38
YEAR 23	3,610,000.00	1,670,000.00	277,200.00	1,947,200.00	2,239,280.00
YEAR 24	1,850,000.00	1,760,000.00	189,525.00	1,949,525.00	2,241,953.75
YEAR 25	-	1,850,000.00	97,125.00	1,947,125.00	2,239,193.75
		<u>\$ 26,765,000.00</u>	<u>\$ 21,911,400.00</u>	<u>\$ 48,676,400.00</u>	<u>\$ 55,977,860.07</u>

Estimated issuance costs and rounding of \$265,000 are included in this schedule.
Long-term rates are assumed to be 5.25%. Rates are subject to market change.
Prepared by the Office of the Treasurer - Treasury Services 08/29/2024

Rates are subject to market change. Amounts are preliminary estimates that will be revised at the time bonds are issued.