THE UNIVERSITY OF TEXAS
AT ARLINGTON

Celebrating 130 Years

UTA Energy Management Outlook to Align w/Energy Transition Master Plan

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UTA University Advancement

UTA Energy Management Mission Statement

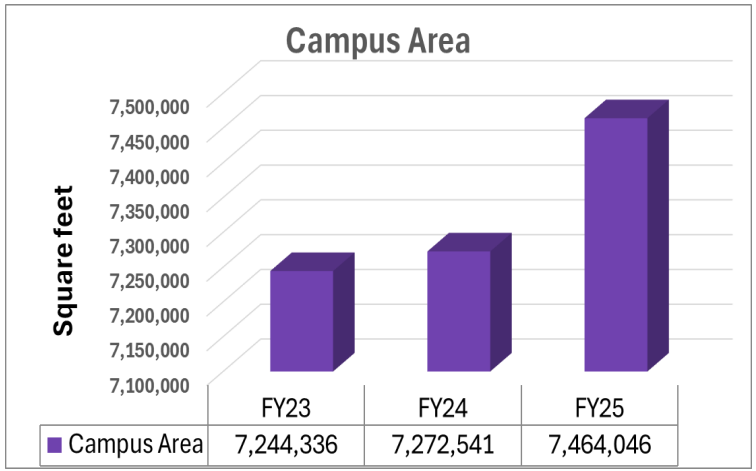
University of Texas Arlington (UTA) is committed to an energy-conscious environment through energy efficient building operation, and behavioral strategies. We believe that public education should encourage all members of the community to become engaged citizens through energy efficient knowledge and actions

We believe all staff, faculty and students should learn and practice ways to reduce energy consumption daily by instilling lifelong habits for energy conservation; therefore, everyone is encouraged to conserve energy

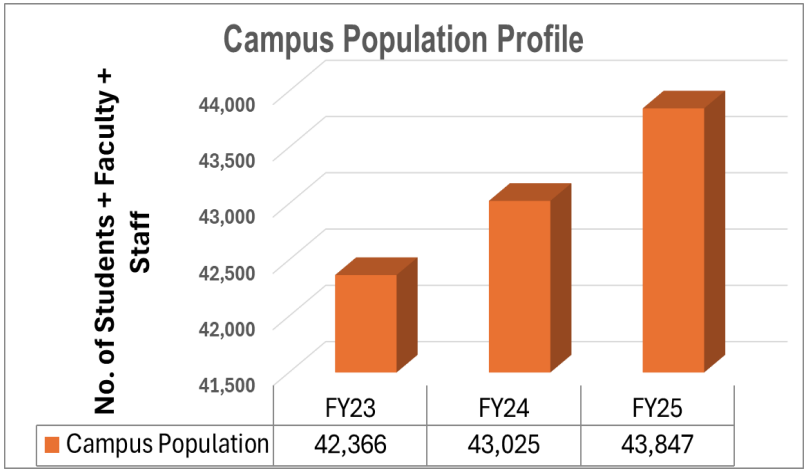
UTA Map

- 420 Acres
- 129 Buildings
- Gross SF:
  7.5 Million SF

Campus Portfolio Trends
Baseline: FY23 Current: FY25

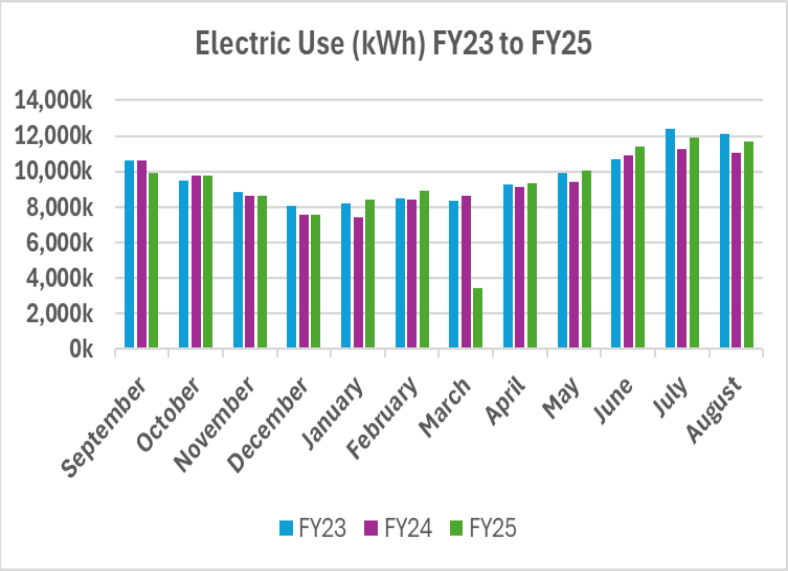


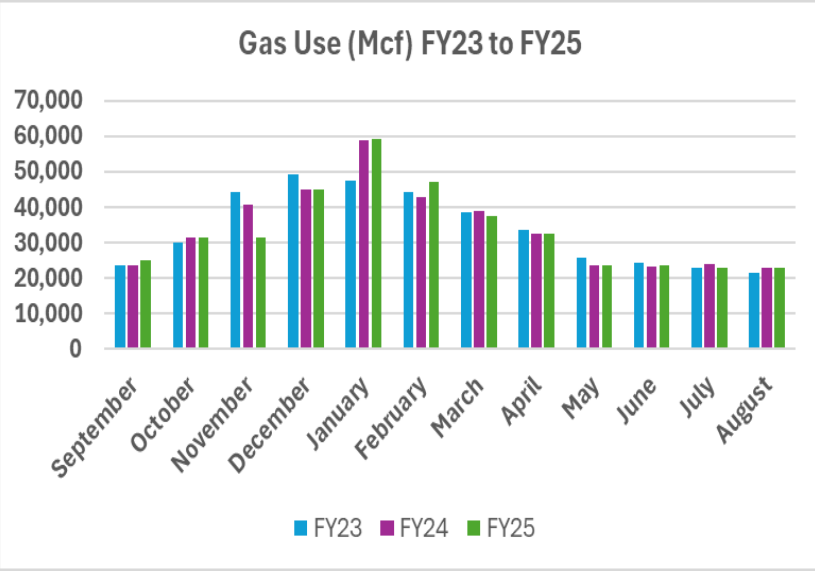
Campus Buildings Area increased: 3%



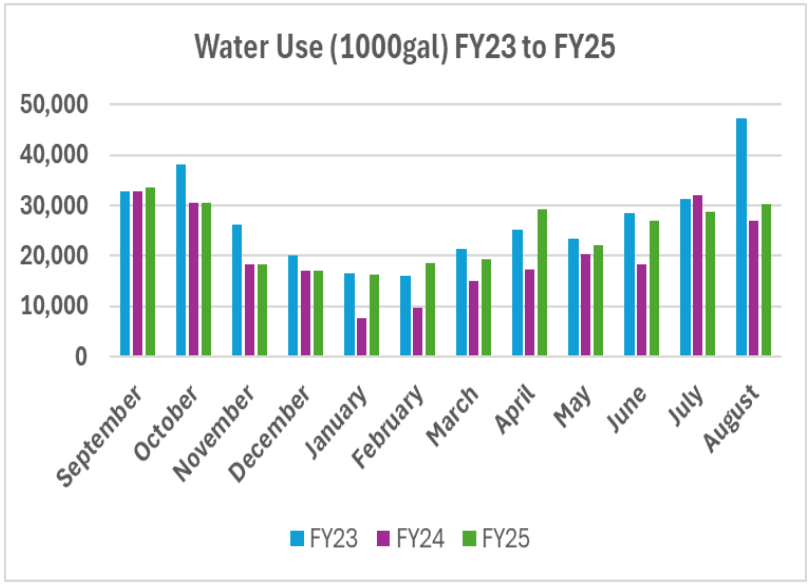
Campus Population Increased: 3%
Projection: Population Trends down in next 10 years

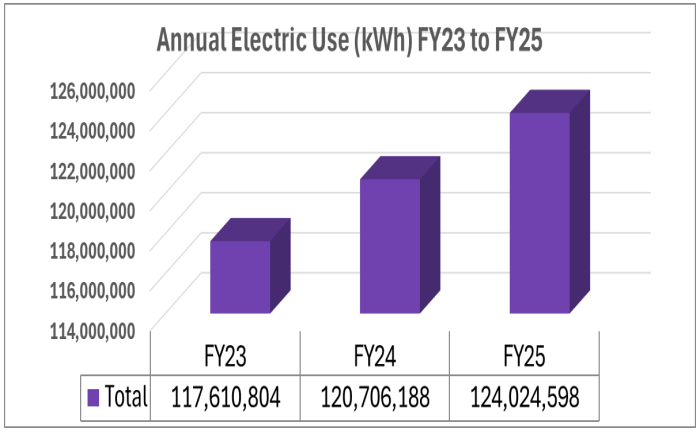
Campus Utility Consumption Trends
Baseline: FY23 Current: FY25





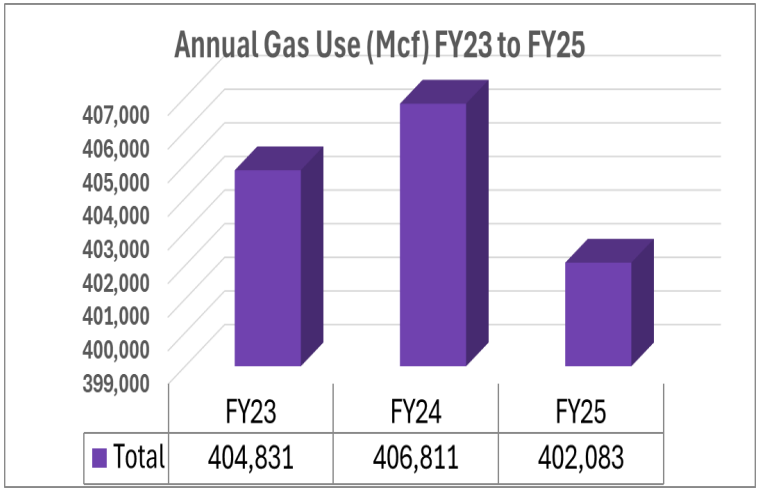
Campus Utility Consumption Trends
Baseline: FY23 Current: FY25



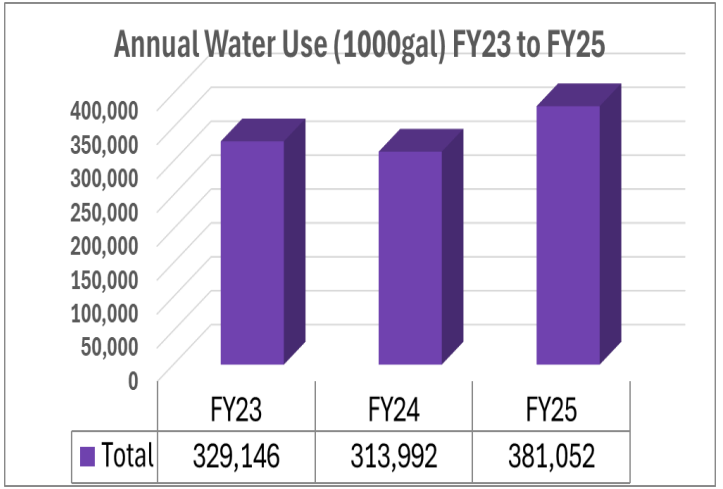


Campus Electric Use Increased: 5%

Campus Utility Consumption Trends
Baseline: FY23 Current: FY25

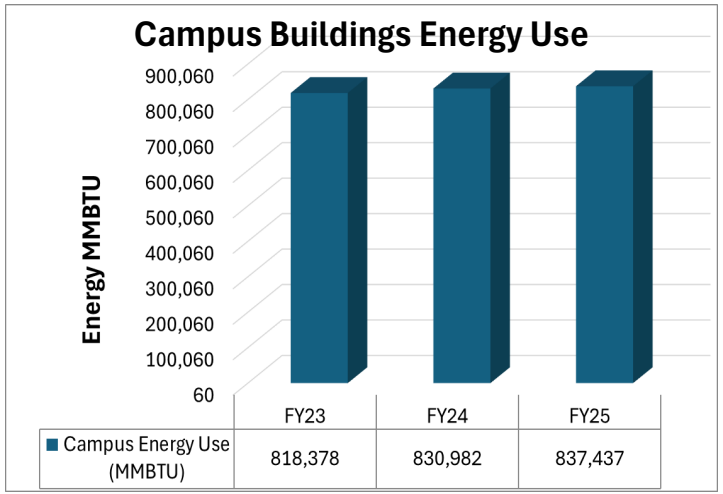


Campus Natural Gas Use Decreased: 1%

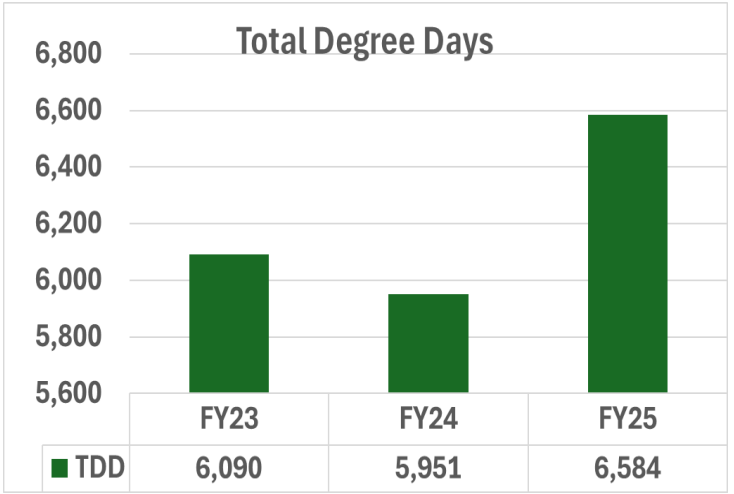


Campus Water Use Increased: 16%

Campus Energy Trends
Baseline: FY23 Current: FY25

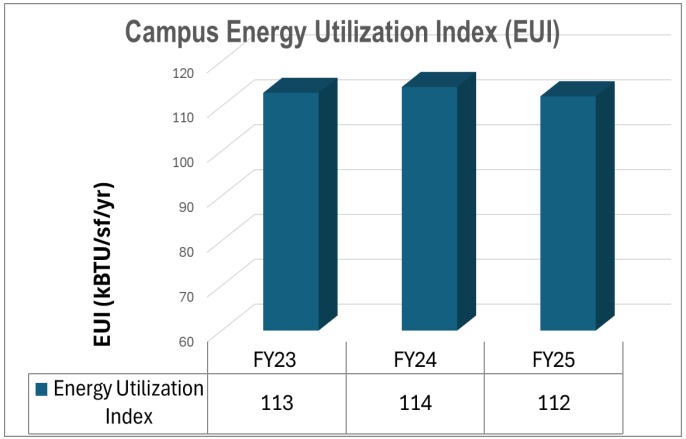


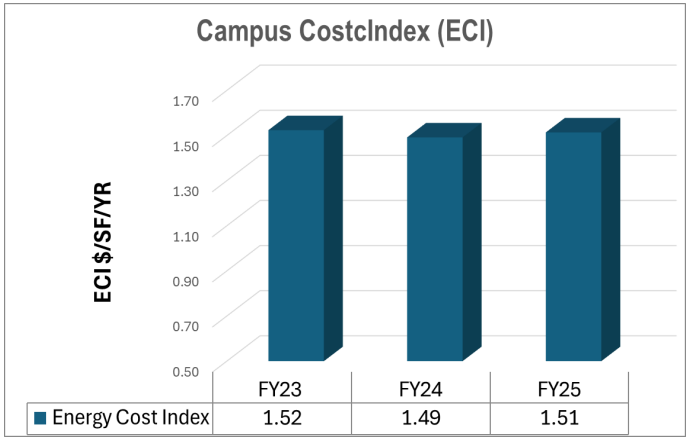
Campus Energy Use Increased: 2%



Total (Heating + Cooling) Degree Days increased: 5%

Campus Energy Trends
Baseline: FY23 Current: FY25





Campus EUI Decreased: ~1%

Campus ECI Decreased: ~1%

Campus Energy Trends
Energy Contract Renewal

- 15 University of Texas System (UT System) Institutions are included w/the Energy Aggregation
- Current Energy Contract expires on 12/31/2027
- Energy Consultant is coordinating RFP process
- UTA prefers:
  - Electric Power Produced from verifiable 100% renewable source
  - Flexibility with the Renewable Energy Credit (REC)
  - Electricity Usage swings ±
  - Net Metering Allowable
- Forecast: Energy Rate Increase by 40% - 60%
- Energy Contract Term: 10 years

Campus Energy Trends
Baseline: FY23 Current: FY25

Roll-Up Summary:

Campus Area, Population & Weather Conditions contribute to the campus energy use pattern

Energy Utilization Index: Average UT System EUI for the similar campus as UTA is about 113 kBTU/SF/FY. UTA EUI is about 112 kBTU/SF/FY

Opportunity to save energy consumption by implementing Energy Conservation Measures

Utility Cost Reduction Measures (UCRM) Initiative & Savings Opportunities

Proposed Initiatives	Proposed Initiatives
• Adopt an Energy Conservation Plan (ECP)	• Form an Energy Committee
• Smart Energy Management Strategies – Energy Management System Retro- Commissioning	• Develop Demand Side Management (DSM) Program – Peak Demand (KW) Controls
• Continue to seek Energy Rebates and Incentives	• Promote distributed energy on campus
• Energy Management System – Universal Platform	• Seek Financial Resource: Capital Investment; Public Private Partnership (PPP), Performance Contracting, SECO LoanStar, Grants, etc.

UTILITY COST REDUCTION MESURES (UCRM)

Description	Expected Savings	Status
Campus-wide Parking lot Lighting upgrade (LED) – 303 Matel Halide Lamps replaced w/LED	780,000 kWh/yr	SECO Loans - Implemented
SAGE Steam Trap Proactive maintenance Program – 670 Traps Campus-wide	$32,000/month	Grant - Implemented
Parking Garage Solar PV – 385 KW System w/1,650 solar panels	500,000 kWh/yr	Grant - Implemented
Solar PV System – 50 KW – 250 KW Roof top at 5 buildings	2,400,000 kWh/yr	Preliminary Analysis Report, ESCO. Pending approval

UTILITY COST REDUCTION MESURES (UCRM)

Description	Expected Savings	Status
Thermal Energy Plant (TEP) Upgrade: Replace 2,000-ton chiller, Cooling Tower Controls w/new weather station (Wet-Bulb Temp.)	6,400,000 kWh/yr	SECO Loans – In development
Central Library: Duct Leakage Sealing w/Aeroseal Technology	233,356 kWh/yr	SECO Loans – In development
Lighting upgrade w/LED: 1,500 fixtures at 3 buildings	2,014,000 kWh/yr	SECO Loans – In development
Rooftop 115 KW Solar PV at Nano Fab Bldg.	174,000 kWh/yr	SECO Loans – In development

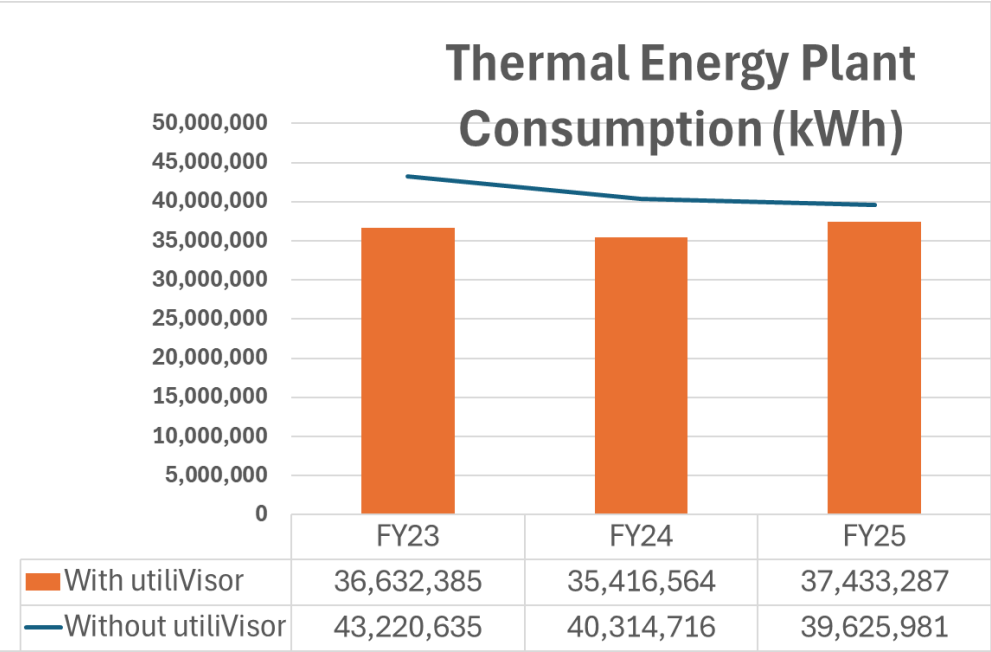
UTILITY COST REDUCTION MESURES (UCRM)

Description	Expected Savings	Status
Water Control Management at TEP – 230 GPM Water Well that will supplement colling tower make-up water	51,515 Mgal (326,000 kWh) – Excess pumping energy	SECO Loans – In development

UTA Partners – Energy Services
UtiliVisor

- Starting in 2012, utiliVisor is a provider of continuous (24/7) real-time energy monitoring for UTA
- Beginning in 2024 UTA utility cost allocation submetering services are also being provided by utiliVisor
- utiliVisor receives interval data from the site automation systems and recommend changes based on observations by UtiliVisor staff Operations Center located at NY Headquarters
- Data services are also leveraged to help UTA better analyze feasibility of site improvements ranging from small control changes to capital projects

UTA Partners – Energy Services
UtiliVisor



	FY23	FY24	FY25
With utiliVisor	36,632,385	35,416,564	37,433,287
Without utiliVisor	43,220,635	40,314,716	39,625,981

- FY25: 2,192,693 kWh Saved
- CO2e: 1,253 Metric Ton of CO2e Avoided
- Assist UTA w/the campus-wide Utility Sub-metering upgrade program, including web-based data tracking & monitoring

UTA Partners – Energy Services
Willow

- Willow (for building optimization) is an AI-driven operational intelligence platform that helps organizations integrate, analyze, and act on data from across their built environments to improve efficiency, cut energy use, reduce costs, and enhance sustainability
- It will read building sensor data, spatial information, and historical data, enabling real-time insights (real-time continuous Cx, fault detection diagnostic), predictive analytics, automated workflows, and dynamic control of systems like HVAC, lighting, and energy loads
- UTA recently started a six-building (about 1 MM SF) pilot program to see how Willow can help UTA save energy and emissions
- Up to 15% savings expected based on Willow's prior implementations

UTA Partners – Energy Services
Leidos

- Take A Load Off, Texas® is provided by Oncor Electric Delivery Company LLC (Oncor) as part of its commitment to reduce energy consumption and demand
- Leidos implements the Energy Concierge Program as an independent contractor
- In May 2025, UTA signed-up w/Oncor Concierge Program to identifying and implementing custom projects and maximize incentive
- Incentives:
  - $0.02 - $0.04/kWh Energy Savings from operational changes
  - $0.1/kWh for Custom Capital Improvement

UTA Partners – Energy Services
Leidos

- Up to date following UCRMs identified
  - Block off un-necessary Fresh air intakes – Library
  - RCx Selected Campus Buildings: Ransom Hall & Library
  - Area setpoint reset: 5 buildings AHU schedule reset from 24/7 to save over annual 14,000 hours of operation
  - Estimated energy Savings: 3,691,304 kWh; Oncor Incentives: $147,000 & ROI: <3 years

UCRM in Development & Planning
Back-up Generator Monitoring System

- UT Arlington (UTA) has a network of 46 generators across the campus that require onsite monitoring by facility maintenance personnel. This arrangement is cumbersome and when power outage occurs presents major hurdles to ensure all generators are functioning properly
- UTA is looking for viable solution to monitor all generators remotely and from any location through cloud-based access
- Blue Pillar Onsite Power monitoring software
- Advantage: Software centric, works w/any manufacturer regardless of age, make or model , users friendly, asset management, reporting, remote testing & mobil first, better control and communication with the campus emergency generator system.

UCRM in Development & Planning
Building HVAC Controls System Modernization

- Transitioning from a proprietary, segmented platform to a single open system
- Convert existing Siemens building controls system to the Niagara platform using PurpleSwift technology
- This solution provides a streamlined, low-risk path to modernizing building automation without a full system rip-and-replace
- PurpleSwift enables existing Siemens proprietary protocols to be translated into open BACnet, allowing seamless integration with the Niagara Framework managed through one unified interface
- This approach preserves much of the existing field hardware while unlocking vendor-neutral control, enhanced analytics, improved interoperability, and centralized management across multiple systems.

UCRM in Development & Planning
5KW Solar Tower

Janta Tower Specs-
Land/Space Required: 8 ft x 14 ft Spacing
Between Towers: 25-30ft
Tower Weight: 1825lbs
Panel Weight: 50lbs (12)

Janta Tower Output-
Max Monthly Energy Output: 2202kWh
Avg Monthly Energy Output: 1050kWh

UCRM in Development & Planning
New Thermal Energy Plant

- UTA's chilled water systems are currently operating at maximum capacity across the two existing chiller plants (18,000-ton cooling capacity)
- With plans to add new buildings and renovate existing facilities - both of which will introduce higher cooling loads and additional capacity is required
- It is essential to maintain system redundancy for chillers, pumps, and cooling towers to ensure reliability
- To address these needs, we are planning for an initial chiller plant consisting of two 2,000-ton magnetic-bearing chillers, with supporting infrastructure designed to accommodate two additional 2,000-ton chillers in the future
- This phased approach aligns with and supports the master plan issued in 2025

UCRM in Development & Planning
Deferred Maintenance Program

- UTA's deferred maintenance program has recently received a $127 million investment focused on improving and sustaining campus facilities
- Approximately $40 million dedicated specifically to mechanical systems and equipment replacement
- Major projects: Replace/redesign lab exhaust system, custom and packaged air-handling units, utility sub-meters, multiple boiler and modernize existing HVAC Controls System
- These upgrades will significantly improve system reliability while delivering measurable energy savings and O&M avoided cost savings
- Opportunities to receive Oncor Incentives

Questions?

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