

Texas Commission on Environmental Quality  
New Technology Implementation Grant (NTIG) Program  
Operation Phase Annual/Final Status Report

Contract Number:	582-19-96631-0402
Grantee:	University of Texas at Arlington
Report for the Annual Period:	September 2022 - August 2023 Resubmitted: Feb 22, 2024

### Section I. Accomplishments

*Provide a bulleted list of operations of the facility during the past year. Include exact numbers and/or estimates.*

- The TEP (Thermal Energy Plant) Boilers 1 and 2 have been running in normal operation all year with no operational issues.
- Boiler 1 has a run time of 1967 hours Boiler 2 has a run time of 2329 hours on natural gas
- Estimated NOx saving is 60% over retrofitted burner system.

### Section II. Key Events and Issues

*Report any key events that occurred during this reporting period. Please include any major project updates that impacted operations.*

- Staff operators were provided annual training from the burner controls manufacturer.

*Report any anticipated or unanticipated problem(s).*

- Starting and running the boilers on the diesel fuel was difficult due to the incomplete atomization of the diesel fuel going into the boiler. The boiler took a long time to startup and would shutdown periodically during diesel operations. The diesel fuel is a backup fuel and only used if we have natural gas curtailment. We do run each boiler on diesel fuel each year to ensure proper operation.

*Proposed Solution(s): Report any possible solution(s) to the anticipated or unanticipated problem(s).*

- Consult with the burner manufacturer or and consulting engineer to redesign the diesel delivery system.

*Action(s) Conducted and Results: Describe the action(s) taken to resolve the anticipated or unanticipated problem(s). Were the actions successful in resolving the problem?*

- The burner manufacturer helped make design changes to the existing system and components were changed to make the system more reliable.
- An upgraded compressed air system and oil train components were installed to make it easier to run the boiler on the emergency diesel fuel.
- These actions allowed easier startup on the diesel system and were successful.

**Section III. Provide a summary of the overall state of the facility and grant funded equipment.**

- The TEP has been running in normal operation and the newly installed burner controls have been operational and in excellent condition.
- Periodic preventative maintenance is performed on the burner control systems and recorded per manufacturers recommendations.

**Section IV. Goals and Issues for Upcoming Period**

*Provide a brief description of the project goal(s) you hope to realize during the next reporting period.*

- Continue to run these boilers as recommended so our emission footprint in minimized.
- Continue to look at new technology that will make sense for UTA to reduce emissions further.
- Maintain yearly training and preventative maintenance to ensure proper operation in the future.

<i><b>Authorized Official/Project Representative's Name and Signature:</b> Robb Chock</i>	Date:	2/22/2024
Robb Chock, P.E.		
Director of Mechanical Operations - UTA		

This form may be submitted via e-mail to your Grant Manager or a paper copy may be sent to the following address:

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