

Central Boiler Facility and Electrical Updates, HPWRP

Project Number	19-542-3MR
Service Area	North
Location	Hanover Park WRP
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$15,000,000
Contract Award Date	December 2021
Substantial Completion Date	September 2024



Project Description	This project will remove two natural gas boilers from the Pump and Blower Building and provide five new boilers (two natural gas and three digester gas/natural gas) boilers in a new Central Boiler Facility. Five digester gas/natural gas boilers will be removed from the Digester Complex. All associated mechanical piping, electrical, control, civil and structural work needed to provide hot water for process and building heating demands will be completed. Replace digester gas piping and remove and replace all electrical equipment, such as motor control center, motors, conduit, gas alarm system, fire alarm system, lighting, etc., with explosion proof equipment in the classified areas to meet National Fire Protection Association (NFPA) 820 requirements.
Project Justification	The boilers in the Digester Complex are 10 to 20 years old and do not perform properly, as the control systems are not reliable (due to hydrogen sulfide gas related corrosion) and need to be removed to comply with NFPA 820 requirements. Centralized boiler operation will maximize the use of available digester gas. Existing electrical equipment in the Digester Complex does not meet the NFPA 820 requirement and needs to be replaced with explosion-proof rated equipment or relocated to unclassified location. The natural gas boilers in the Pump and Blower Building are more than 35 years old, parts are no longer supported by the original equipment manufacturer and procuring the replacement parts has been increasingly difficult and costly. Also, the State of Illinois Boiler Inspector recommended the boilers be operated in low fire only due to their poor conditions.
Project Status	Design