

Slough Heat & Power

Client: SSE

Location: Slough

Start Date: June 2021

Outline Scope:

- Boiler 17 Outage & Inspection Works



Client Overview

In August 2018, decommissioning and demolition works began to facilitate the development of a new ~50MW energy-from-waste facility, known as Slough Multifuel at the Slough Heat & Power site. Part of the existing Plant remains operational (Boiler 17) and continues to supply energy, water and heat to local customers. This current outage is the last planned major outage at this site as it is due to close when the new plant is operational in 2024.

Project Scope

To carry out Boiler Pressure part preparations for Inspections in accordance with the Pressure Systems Safety Regulations 2000 (PSSR). This Regulation covers the safe design and use of pressure systems. The aim of PSSR is to prevent serious injury from the hazard of stored energy (pressure) as a result of the failure of a pressure system or one of its component parts.

PJD are to report any finding to the client & boiler inspectors and carry out any repairs driven by the inspections.

Our Results

PJD carried out all inspection works including Replication of Turbine HP & LP steam chests & Main Steam pipework, Remote visual inspection (RVI) of boiler distribution & main steam pipe-work systems & also Non Destructive Testing (NDT) & thickness checks of areas to a template supplied by SSE.

It was discovered that a number of areas inspected were within the failure range, mainly the super heater & bottom grate Header bends. In the super heater the affected areas were replaced with Inconel overlay clad pipework circa 60 inserts were changed during this outage. The bottom grate header bends were also changed for a slightly heavier wall 16M03 material.

Key Performance Indicators

PJD Successfully completed all planned & emergent works before the scheduled completion date, the works carried out had a major impact on the performance & efficiency of the boiler where there has been historic problems with air ingress & blocked Super heaters that are now resolved. All works carried out was to a very high quality standard with a zero repair rate. PJD also completed the project with a perfect health & Safety record with no recorded accidents or incidents during the entire shutdown.

