



JOB DESCRIPTION

Position Title:	Reliability Engineer	Facility:	All
Department:	Engineering	Location:	Charlotte
Reports to:	Principal CT Engineer, Engineering	Date:	November 30, 2020

Position Summary: Provide technical and project management support for the operation, maintenance, betterment, development, design, construction and testing of power generating facilities and ancillary components. Provide due diligence evaluations for prospective facility acquisitions including major equipment condition, capacity and heat rate evaluation, identification of potential capacity and heat rate improvement opportunities, and provide performance and cost estimations for identified improvements.

Principal Job Duties and Responsibilities:

1. Provide engineering assistance for equipment replacement, modifications, upgrades and modernization.
2. Troubleshoot operational, maintenance and performance issues for major plant equipment including steam turbines, steam generators, combustion turbines and emissions controls and provide resolution of those problems as part of a team or individually as skill supports.
3. Assist plants with identifying, understanding and correcting the causes of equipment component defects.
4. Maintain an awareness of industry best practices and technologies, and recommend application of those as appropriate.
5. Assist plants in administering the Major Maintenance Tracking Tool and Risk Registry as well as assist and support with condition based maintenance practices and planning.
6. Support plant staff as requested in development of long range outage plans and assist with outage execution where possible
7. Support and assist with evaluation of equipment failures and resolution of equipment casualty claims when required.
8. Evaluate equipment upgrades available from manufacturers and aftermarket providers for major plant equipment and controls. Perform cost/benefit analysis and recommend upgrades.
9. Develop performance monitoring tools for major plant equipment based on plant operating data retrieved from PI.
10. For merger and acquisition candidates, participate in due diligence activities including:
 - Assess equipment condition for all major plant equipment.
 - Establish plant parameters for market studies including capacity, heat rate, start cost and VOM costs.
 - Produce written reports on the assets being assessed.
 - Work with other team members within the organization and outside to ensure completeness of evaluations.
 - Project major maintenance and capex costs for financial model inputs.

- Identify and evaluate facility upgrade options that will improve capacity, heat rate and/or operability.
11. Perform plant betterment studies identifying opportunities to improve plant efficiency, capacity, reliability and regulatory compliance. Develop conceptual design, construction cost estimates and schedules.
 12. Assist facilities with procurement of goods and services best suited to meet the plants needs as well as achieve corporate goals. Review equipment quotes for compliance with specifications.

Desired Job-Related Qualifications:

1. Bachelor of Science Degree in Engineering.
2. Minimum of 1-2 years of experience in the energy industry.
3. Proficiency in OSI PI Historian tools and Thermoflow is a plus.
4. Active Professional Engineering License preferred or on path for completion within 1 year.

PHYSICAL REQUIREMENTS

1. Ability to travel up to 30%.
2. Able to pass a background security check, such as required for Transport Worker Identification Credentials, or as may become required by relevant government agencies.
3. Possess a valid driver's license.

Qualified candidates should send their resumes to Careers@cogentrix.com.