

Project Initialization and Planning Phase

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| Date | 15 March 2024 |
| Team ID | SWUID20240034764 |
| Project Name | Predicting Full Load Electrical Power Output of a Base Load Operated Combined Cycle Power Plant Using Machine Learning |
| Maximum Marks | 3 Marks |

Define Problem Statements (Customer Problem Statement Template):

Current methods lack precision in forecasting full load electrical power output, leading to inefficiencies and potential overproduction. This results in suboptimal utilization of plant resources and increased operational costs. Existing systems do not effectively integrate various operational parameters, hindering comprehensive analysis and prediction capabilities. Inaccurate predictions contribute to higher emission levels due to inefficient fuel usage. Additionally, it affects the scheduling of maintenance, leading to unexpected downtimes and reduced plant availability

| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
|------------------------|---|--------------------------------|----------------------------|---|--|
| PS-1 | I am a power plant operator trying to accurately predict full load electrical power output, | current methods are unreliable | they lack precise modeling | Self-employed with a good credit history. | makes me feel stressed about operational efficiency and costs. |