Project Design Phase-I
Solution Architecture

Date	16 October 2022
Team ID	PNT2022TMID00784
Project Name	PREDICTING THE ENERGY OUTPUT OF WIND TURBINE BASED ON WEATHER CONDITION
Maximum Marks	4 Marks

Solution Architecture:

Our aim is to map weather data to energy production. We wish to show that even data that is publicly available for weather stations close to wind farms can be used to give a good prediction of the energy output. Furthermore, we examine the impact of different weather conditions on the energy output of wind farms. We are building an IBM Watson AutoAI Machine Learning technique to predict the energy output of wind turbine. The model is deployed on IBM cloud to get scoring end point which can be used as API in mobile app or web app building. We are developing a web application which is built using node red service. We make use of the scoring end point to give user input values to the deployed model. The model prediction is then showcased on User Interface to predict the energy output of wind turbine.

Solution Architecture Diagram: