Model Metrics for Capstone 3 Project:  
Solar Energy Storage Project

**Introduction**

This document provides a summary of the features, parameters, hyperparameters, and performance metrics of the model selected.

**Model Information**

- Model Name: Neural Network with Keras package

**Model Features**

The model uses the following features:

- All Sky Surface Shortwave Downward Irradiance (GHI)

- Wind Speed at 2 Meters

- Temperature at 2 Meters

- Dew/Frost Point at 2 Meters

- Relative Humidity at 2 Meters

- Precipitation

- Surface Pressure

- Wind Speed at 10 Meters

- Wind Speed at 50 Meters

**Model Parameters**

The following default parameters were used:

- random\_state: 42

**Hyperparameters**

No hypermeters used

**Performance Metrics**

The model's performance was assessed using the following metrics:

- Mean Squared Error (MSE)

- R-squared (R2) score

- Root Mean Squared Error (RMSE)

**Performance Results –** **New Mexico**

**2 layers:**

- MSE: 30197.81

- RMSE: 173.78

- R-squared (R2): 0.71