

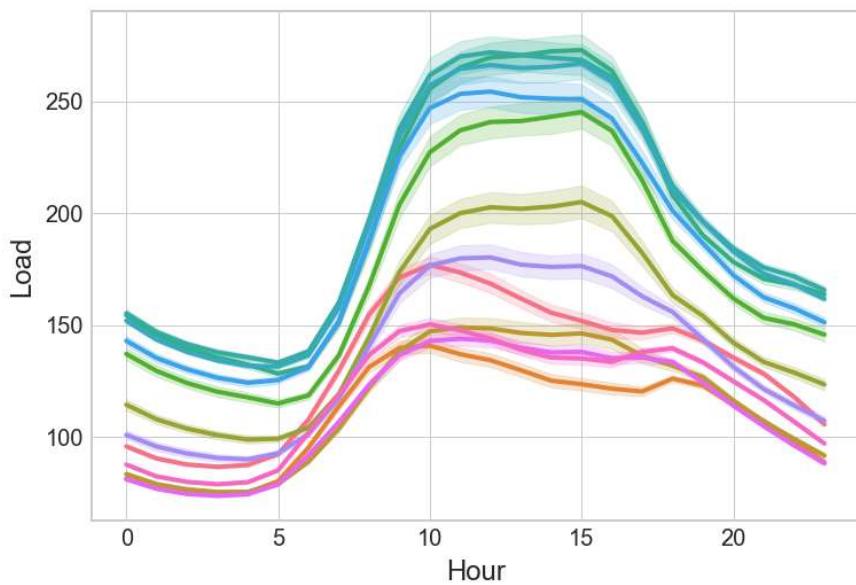


Solar-Wind-BESS Hybrid RE Power for NDMC

- Solar Energy Corporation of India Ltd

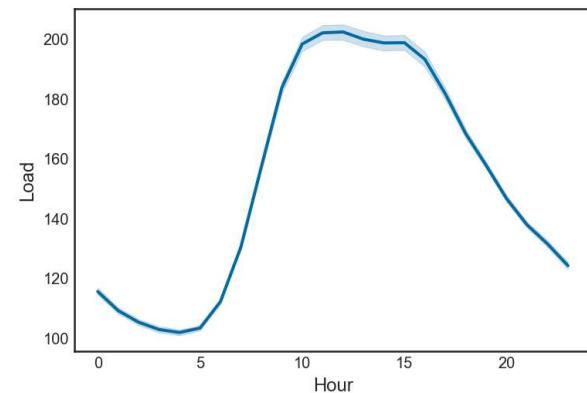
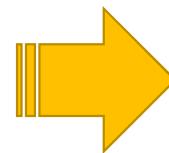
03 Feb 2025

NDMC Power Scenario

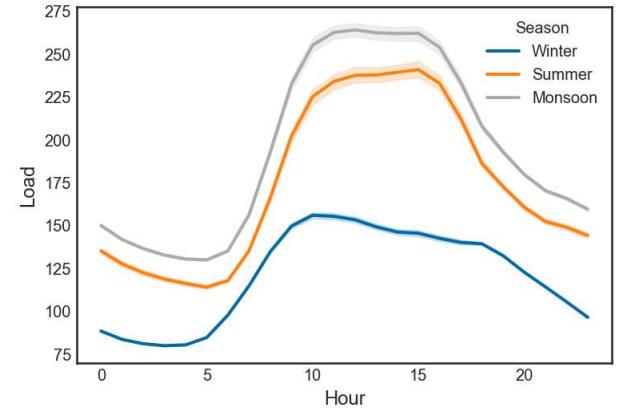


Monthly Demand Curves (Average Data for Yr 2022 & 2023)

- 01-Jan
- 02-Feb
- 03-Mar
- 04-Apr
- 05-May
- 06-Jun
- 07-Jul
- 08-Aug
- 09-Sep
- 10-Oct
- 11-Nov
- 12-Dec



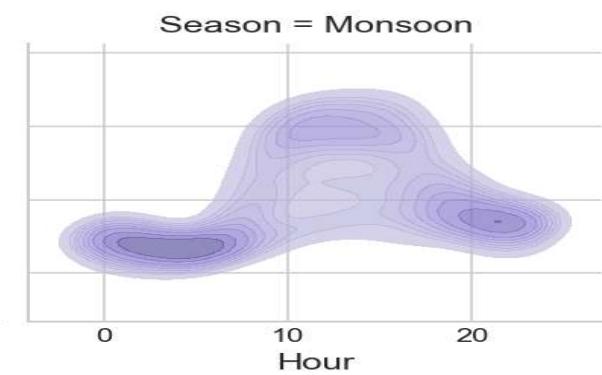
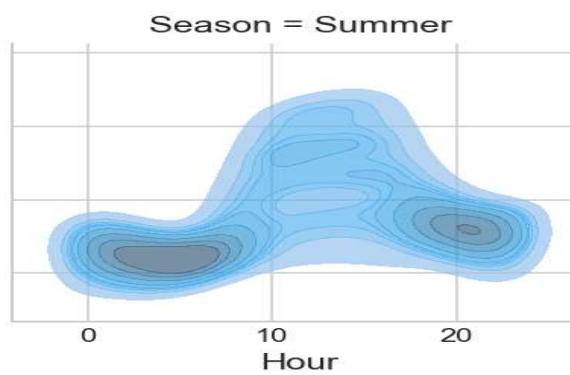
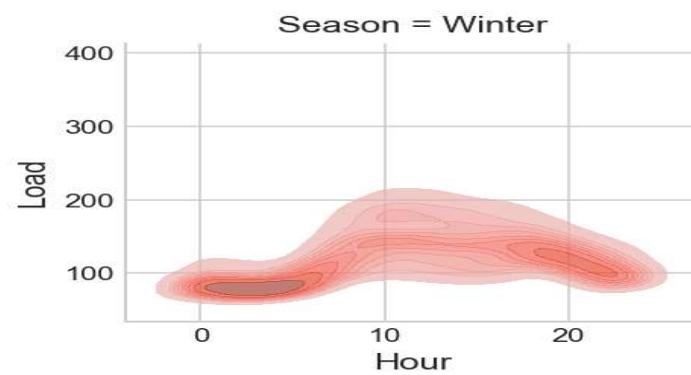
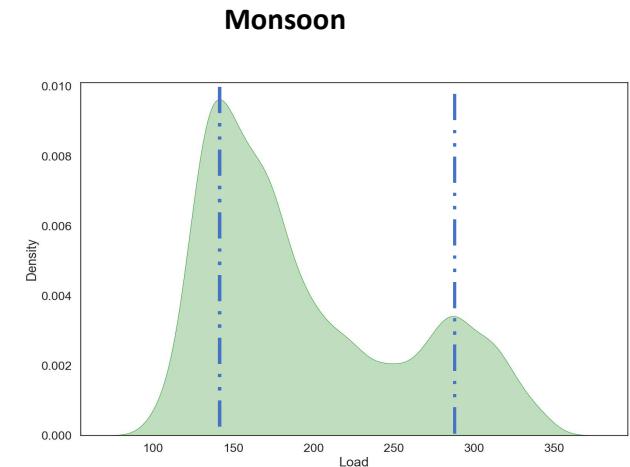
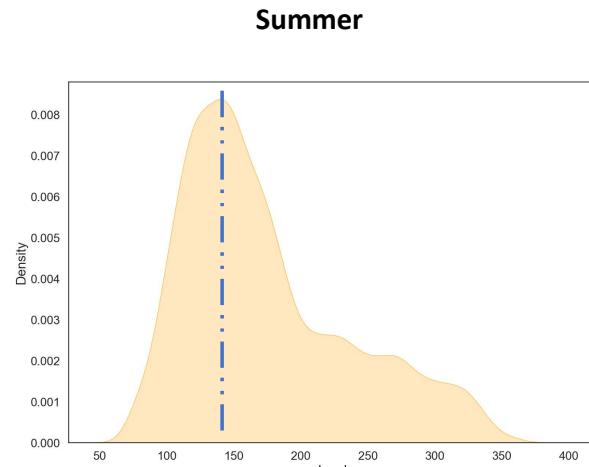
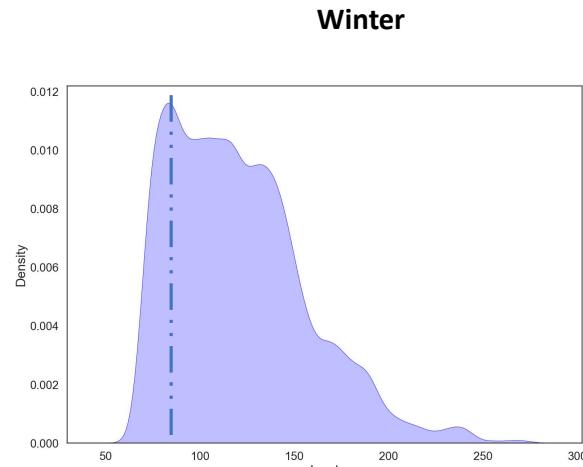
Annual Average Demand



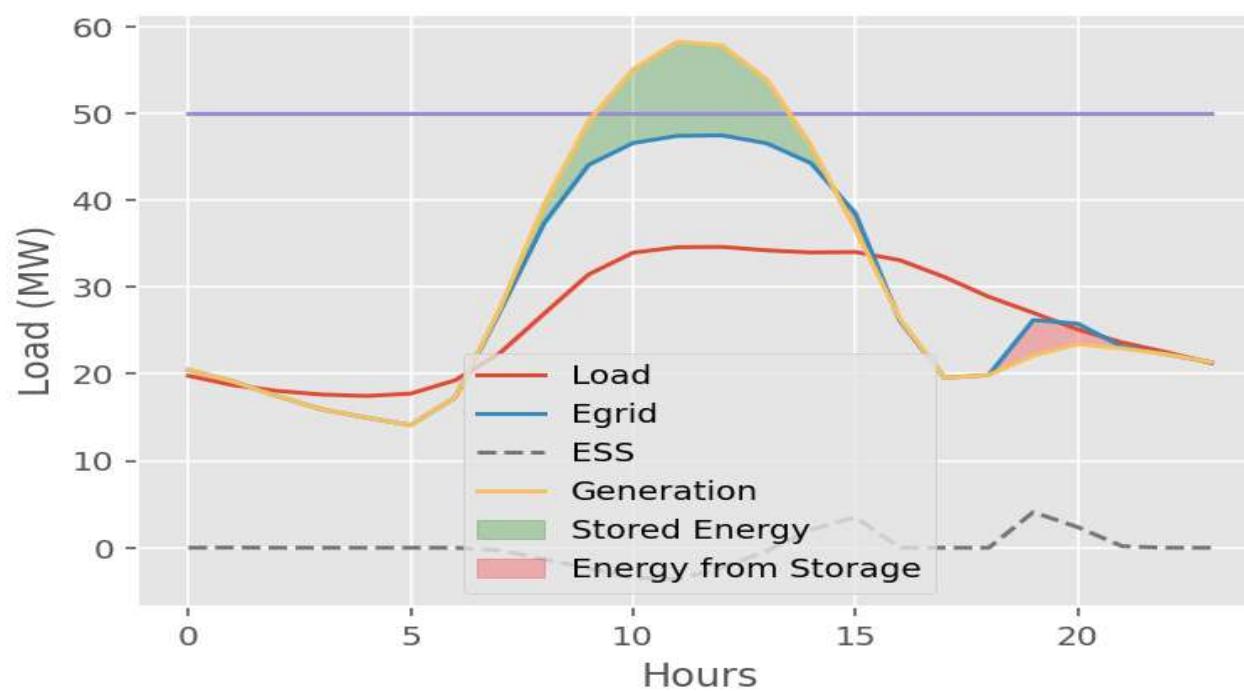
Seasonal Demand Variation

Load Pattern Features - Seasonal Variation in Demand Levels , Change in Peak Demand Times

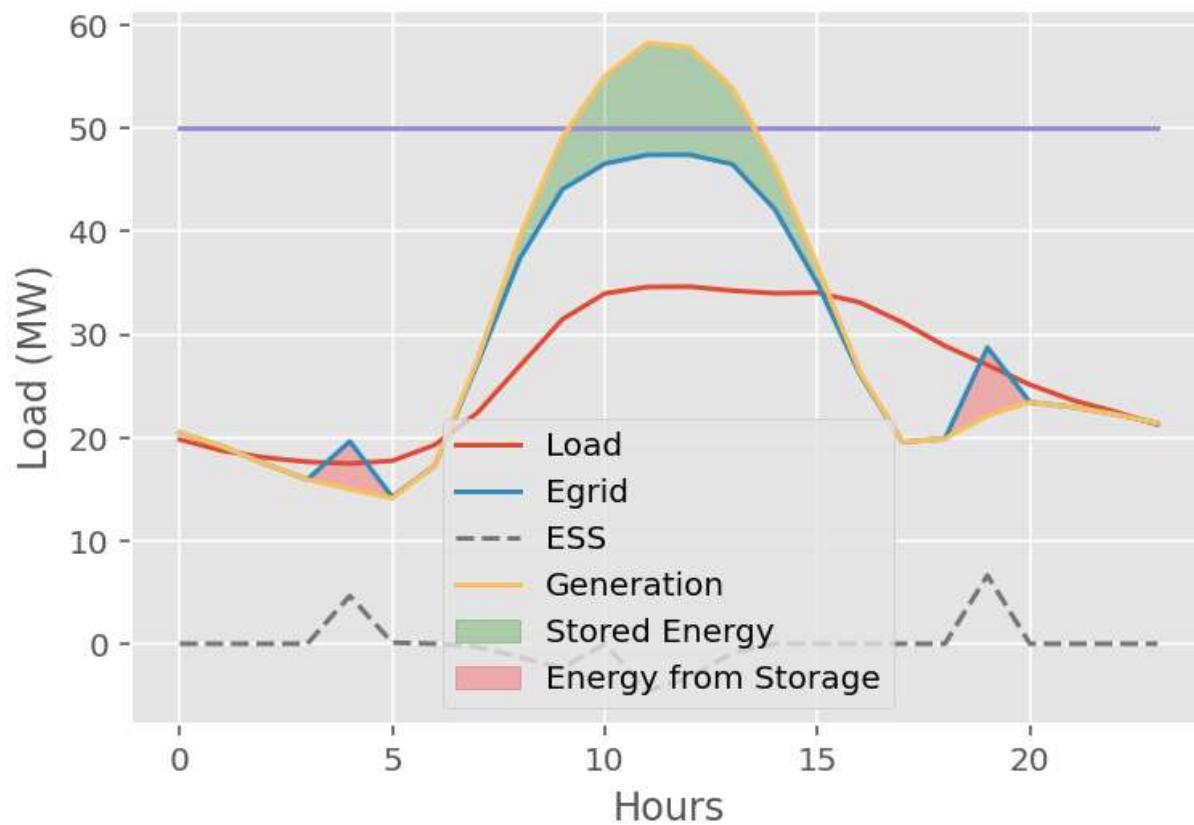
Load Pattern–Distribution: Demand Levels, When?



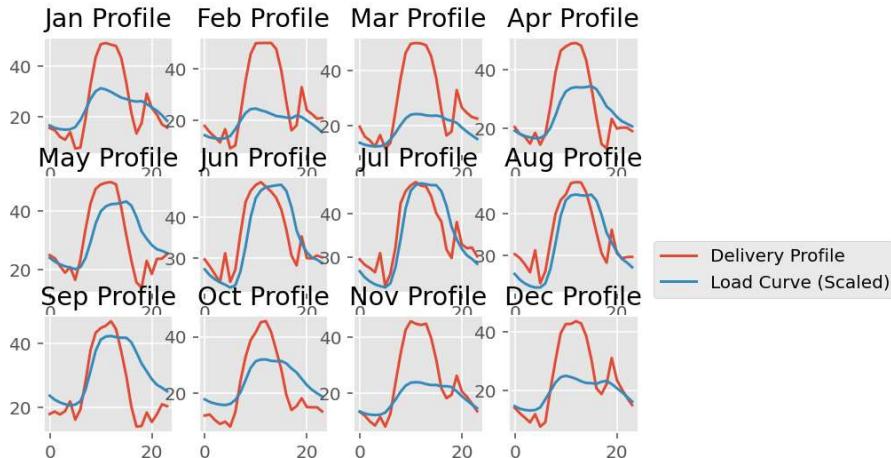
Average Annual Delivery Profile (Against Annual Average Demand)



Variable BESS Discharge – to meet Morning and Evening Peak Hours



Generation Distribution



Delivery Profile from SECI 50 MW Hybrid against the NDMC Demand Profile

Project Components:

1. Solar – 60 MW
2. Wind – 50* MW
3. BESS – 10 MW/20 MWh

Observations:

- Energy Profile from SECI's proposed Hybrid Project closely matches NDMC's demand profile. (**Note: NDMC's total demand scaled for comparison purposes**)
- NDMC's winter demand levels are significantly reduced (half of that of Summer/ Monsoon)
- **With offtake of all power, CUF ~ 56% (50 MW Contract Capacity)**

THANK YOU

