Instructions

1. Generate scenarios (.csv files) using PGscen: <https://github.com/PrincetonUniversity/PGscen>. We have provided a sample data generated applying PGscen. Please navigate to the subfolder: CSV\_files\_PGscen. PGscen uses data collected by NREL.
2. Run the code: Mapping\_NY\_NREL\_1. This creates Wind\_Mapping\_NY\_NREL2030all.csv and Solar\_Mapping\_NY\_NREL2030all.csv. Each wind and solar generator of NY (our system) is mapped with wind and solar generators of NREL based on the concept of great circle. If we have multiple generators with the same name and location in the NY system, we need to separate them by adding serial number at the end (subscript).
3. Run the code: Scenarios\_NY\_NREL\_code\_2. This creates desired scenarios for our system in a subfolder in CSV\_files\_PGscen/date.
4. Run the code: . This creates m-files from .csv files (load, wind\_NY, solar\_NY) -- which are executable using MATLAB commands. These m-files can be found in: Profiles\_2030\_March.

Note: The serial numbers at the end of the code names (subscripted) identify the sequence of execution of the codes.