

## Conceptual Draft for ELCC-related changes in Manual 20

### Section 5: PJM Effective Load Carrying Capability Analysis

#### 5.1 Overview

Describes what portions of the ELCC process are described in this Manual: Load Model, Resource Performance Model, Loss of Load Expectation Calculation, ELCC Calculation for Portfolio and Individual Classes

#### 5.2 Load Model

5.2.1 Hourly Load Shapes: provides details of the historical period considered to develop load shapes, how the load shapes are derived, and the process to assign a weight to each of the load shapes

5.2.2 Load Uncertainty: provides details of the methodology to derive load scenarios for each load shape to capture load uncertainty

#### 5.3 Resource Performance Model

5.3.1 Unlimited Resources: provides details of the Monte Carlo modeling of forced outages and the deterministic scheduling of planned outages

5.3.2 Variable Resources: provides details of how the variable resources' hourly output shapes are used in the model

5.3.3 Limited Duration, Combination Resources, and Demand Resources: provides details about how the simulated dispatch of Limited Duration, Combination Resources and Demand Resources is derived

**5.4 Loss of Load Expectation Calculation:** provides details of the procedure whereby all of the above model parameters are combined to calculate Loss of Load Expectation (LOLE) and meet the LOLE target

**5.5 ELCC Calculation for Portfolio and Individual Classes:** provides details on the multiple runs that are necessary to first calculate the Portfolio ELCC and then allocate it to the various ELCC Classes