Motion to Approve Operating Parameter Definitions

I move to approve the operating parameter definitions as proposed by PJM subject to the following amendments:

1. Modify the Problem Statement and Issue Charge for this work develop an end-state solution which un-nests parameters. That end-state solution is to be implemented on 6/1/2017.

2. Amend the definition of Cold/Warm/Hot Start-up time that will become effective on 6/1/16 to read as follows:

> The time interval, measured in hours, from the beginning of the start sequence to the point after generator breaker closure which is typically indicated by telemetered or aggregated state estimator MWs greater than zero for a generating unit in its cold/warm/hot temperature state. For a Combined Cycle unit, it is the time interval from the beginning of the start sequence to the calculated steam turbine generator breaker closure, which is calculated during operation from the time of the first gas turbine breaker closure, which is to be indicated by telemetered or aggregated state estimator MWs greater than zero, plus the duration of the offered Start-up Time minus 30 minutes. Start sequence may include steps such as any valve operation, starting feed water pumps, startup of auxiliary equipment, etc.

3. Amend the definition of Minimum Run time that will become effective on 6/1/16 to read as follows:

> The minimum number of hours a unit must run, in real-time operations, from the time after generator breaker closure, which is typically indicated by telemetered or aggregated state estimator MWs greater than zero to the time of generator breaker opening, as measured by PJM's state estimator. For Combined Cycle units, this is the time period after the steam turbine generator breaker closure, as that steam turbine breaker closure is determined in the definition of Start-up Time, to the last generator breaker opening, as measured by PJM's state estimator.

4. Amend the definition of Cold/Warm/Hot Soak Time that will become effective on 6/1/16 to read as follows:

> The minimum number of hours a unit must run, in real-time operations, from the time after generator breaker closure, which is typically indicated by telemetered or aggregated state estimator MWs greater than zero, to the time the unit is dispatchable. For Combined Cycle units, this is the minimum number of hours from the time just after

the steam turbine generator breaker closure, as that steam turbine breaker closure is determined in the definition of Start-up Time, to the time the unit is dispatch-able.

5. Revise the language proposed in the proposed Section 2.3.10 of Manual 11 to include examples of the types of activities included in Notification Time and Start-up Time.