Capacity Testing Requirements

Problem / Opportunity Statement

The addition of winter capability testing requirements for generation resources, coupled with increased transmission construction and tighter reserve margins, is complicating the ability of generation resource owners to coordinate outages and required capability tests during the prescribed time periods. The current environment can create inefficiencies and lead to higher generation costs. Contractors performing planned maintenance work are shared across the industry. Rescheduling planned outages can lead to scheduled contractor crews becoming unavailable due to scheduled work on other resources. Rescheduling planned outages can also shorten the ideal window for a generation resource to perform its seasonal capability test, leading to a suboptimal test that may not reflect the true capacity value of the resource, causing less capacity to offer into the capacity auction and increasing capacity clearing prices. Some generating facilities, including intermittent hydro and pumped storage hydro resources, require extended outages that can span an entire seasonal capacity testing window. This can force resource owners to choose between completing critical maintenance needed for long-term reliability or utilizing the remaining capability of the resource to perform a capacity test, even when the outage is necessary for reliable operation.

These conditions will continue for the next several years with significant ongoing transmission construction and tight operating reserve margins. There is an opportunity to reexamine current capacity testing rules of intermittent hydro and pumped storage hydro to determine whether additional flexibility is needed under the current environment. Specific opportunities for education include:

- PJM outage planning and scheduling requirements, ~~including recent rescheduling/logistical changes and their potential cost impacts~~ to the extent to which generation resource owners can prioritize the scheduling of planned outages with PJM and minimize the potential for rescheduling of specific resources.
- Rules limiting planned outages during the summer period.
- Capacity testing requirements for intermittent hydro and pumped storage hydro and identification of key factors that impact performance for each resource type, including timing and duration of tests.
- Options available to address failed capacity tests or the inability to perform a capacity test during the prescribed time period.
- Long duration outages required for long term maintenance and reliability of intermittent hydro and pumped storage hydro resources.
- Review other options for resources with longer duration outages including Must Offer Exception, Seasonal Capacity Resource, etc. and the challenges of each option. Interplay between long duration outages and seasonal testing.