Modeling of Upgrades in RTEP Cases

Problem / Opportunity Statement
The development of the PJM RTEP requires that PJM establish cases for use in the various sets of analyses. All of these cases are based upon the concepts of building on previous activities in identifying violations and the need for upgrades. The development of the RTEP is centrally driven by the basic topology of the system as a starting point. This means that the various components of the system are modeled in the cases to allow for the appropriate conduct of the studies, representing the existing system as is currently planned.

Stakeholders have raised concerns that PJM should provide additional definition as to the process associated with the addition and removal of system upgrades identified through certain processes. The RTEP involves the development of system upgrades as a result of various processes. It should be recognized that all these processes result in upgrades which may interact in future analyses associated with the RTEP. This therefore requires that a determination be made as to how all upgrades are to be modeled in the cases. Under current and past practices, PJM, along with stakeholder input, has developed assumptions for any subsequent set of studies associated with an RTEP case. These assumptions have normally been presented in the beginning of the calendar year and are presented to the stakeholders during the Transmission Expansion Advisory Committee meetings.

The development of additional guidelines associated with the modeling of system upgrades, documenting the basic assumptions in the manual, will help to provide the stakeholders with information to increase the transparency of the model build and analytical processes. Additionally, recognition of any ad-hoc development of assumptions should also be defined to the extent practical in Manual 14B.