

# Integrated Power System Effects of Demand-Response Initiatives

## Poster Abstract

Power system studies generally focus either on the upstream operations of a wholesale power market over a high-voltage transmission grid or on the downstream operations of a retail power market over a lower-voltage distribution grid. For the former studies, distribution system load is typically assumed to be constant; and, for the latter studies, voltage and real power at the transmission level are typically assumed to be constant. However, with the advent of smart grid demand-response (DR) initiatives encouraging increased demand-side participation, it becomes essential to consider the dynamic feedback effects between these two subsystems. This poster will present preliminary findings regarding these dynamic feedback effects.