EPFSTF Circuit Breaker Survey

The purpose of this survey is to gather feedback on principles to keep in mind and possible approaches to use during the Circuit Breaker design discussion.

General Concepts

1) What is your objective for having a circuit breaker?
   Open Text
2) What should be included in the definition of inactionable? (Choose all that apply)
   a. Load cannot reduce to meet price signals
   b. Generation cannot be dispatched economically to meet price signals
   c. PJM needs to take manual action (i.e. load shed directive, Voltage Reduction Action, etc.)
   d. PJM has exhausted all economic and emergency actions and the high price signals no longer incentivize the market to respond
   e. Prices are inactionable in the near term and are not reasonably expected in investment models
   f. "Inactionable" should be understood as indicating situations where the potential impact on supply and demand of continued high prices may be very small compared to the potential harm of continued high prices; we need not get hung up on a specific definition.

Transparency into Circuit Breaker Triggering Conditions

1) Is it more desirable to have the Circuit Breaker reactively or proactively triggered? (Choose One)
   a. Reactive – based on a predefined set of conditions having already occurred (hours, dollars, etc.)
   b. Proactive – based on forecasted conditions anticipated to persist for some threshold (hours, dollars, etc.)
   c. Both – based on a predefined set of conditions having already occurred (hours, dollars, etc.) and expected to persist for some threshold (hours, dollars, etc.)
   d. Either – the trigger rules may include both either reactive or proactive. This option would establish both reactive triggers and proactive triggers
2) Do market participants want certainty around the Circuit Breaker and its triggering conditions? (Choose One)
   a. Want clearly defined rules that specify when circuit breaker is triggered
   b. Want some flexibility in when a circuit breaker can be triggered (ex/ unforeseen cyber attack, anticipation of degraded system conditions)
3) Do market participants want PJM to be able to subjectively trigger a circuit breaker based on anticipated conditions not expressly defined (i.e. cyber attack, etc.)?
   a. Yes
   b. No

Effect of Circuit Breaker

4) Is there a desire to have a firm cap on prices? I.e. Energy component of LMP cannot exceed $X (Choose One)
    a. Yes, establish firm cap via price cutting, not cutting penalty factors (Harder to implement but more certain results. Cutting method would need discussion.)
    b. No, limit the price via reducing penalty factors. (Easier to implement. Number of transmission constraints creates uncertainty in max price.)
    c. Both, price cutting and cutting penalty factors.
    d. I don't have a preference at this time, it depends on the specific proposal

5) Which of these factors should be considered when determining a price cap? (choose all that apply)
    a. The cost of fuel plus emissions, subject to the current rules (i.e. capping offer at $2,000/MWh)
    b. Scarcity prices in neighboring RTOs
    c. Net CONE
    d. None of the Above

6) If a monetary trigger is desired, do the market participants prefer the circuit breaker protection over: (choose one)
    a. short term events (hours, days) that may lead to payment default risk
    b. Over a longer term accrual (weeks, months, year) similar to ERCOT (3 * Net CONE for the year)
    c. All of the above

Scenarios to which Circuit Breaker Should Apply

7) We would like to develop some example scenarios of circumstances that could occur that should trigger the circuit breaker; these could be used to compare circuit breaker proposals. Please choose which of the below scenarios you believe could potentially become serious enough that a Circuit Breaker should apply: (Choose all that apply)
    a. Locational Shortages
    b. System Wide Shortages
    c. Long Duration Shortages being Forecast
    d. Fuel Security Issues

    e. Other: Please describe a specific scenario that you believe should trigger a circuit breaker: (Open Text)
8) Please describe a specific scenario of system conditions that while perhaps extreme, you believe should not trigger a circuit breaker (and perhaps explain why not) (Open Text)
Open Text

Additional Feedback

Open Text