ENTERGY LOUISIANA, LLC
LOUISIANA PUBLIC SERVICE COMMISSION
UNDOCKETED WINTER STORM EVENT

Response of: Entergy Louisiana, LLC
to the First Set of Data Requests
of Requesting Party: Louisiana Public Service Commission

Question No.: LPSC 1-12 Part No.: Addendum:

Question:

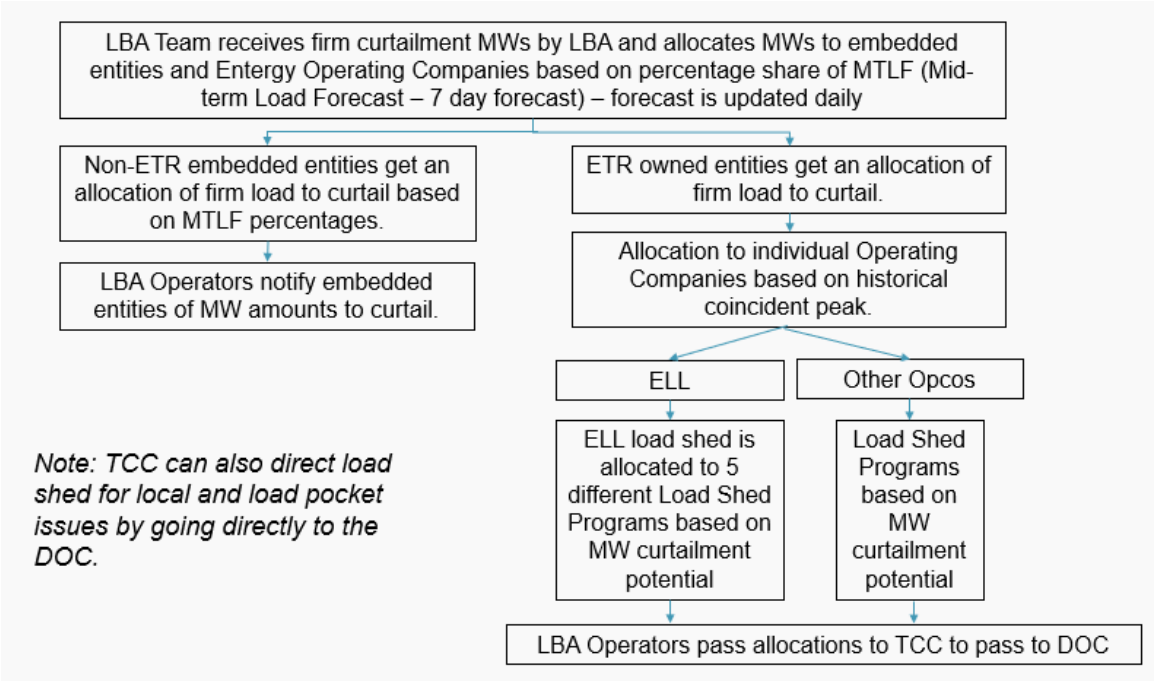
Please describe the procedures used by the RTOs and by you to determine which load should be shed and for what duration.

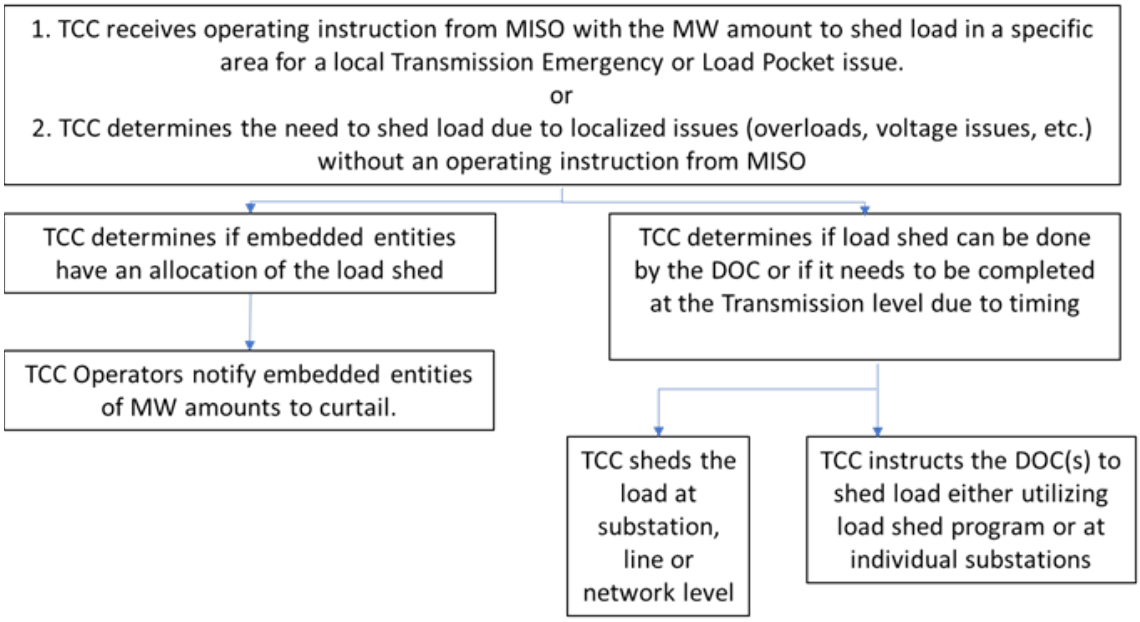
Response:

There are three types of load shed events. They are system-wide, load pocket, and local load sheds. It is important to understand that load shed events happen only under extreme circumstances and are undertaken to avoid widespread, cascading outages on the bulk electric system. Load sheds must be implemented as quickly as possible and generally within 30 minutes of receiving the initial directive to shed load.

System-wide: In the event of a system-wide maximum generation event, the Midcontinent Independent System Operator, Inc. ("MISO") notifies all of the Load Balancing Authorities ("LBAs") that are affected of the needed load shed amount. ELL is part of the EES LBA that is coordinated by the Entergy System Planning & Operations ("SPO") department. The LBA team allocates the MISO-directed load shed to all embedded entities, including the Entergy Operating Companies, municipalities, electric cooperatives based on their upcoming 7-day load forecasts. Additionally, all Entergy Operating Companies receive their final allocations based on historical coincident peak load data. The LBA Operators provide the allocations to their respective transmission organizations who, in turn, pass the information to their distribution organization to implement the load shed across feeders within the load shed area. In the case of the Entergy Operating Companies, there are pre-programmed load shed "packages" that seek to implement load shed in a manner that preserves service to critical customers, e.g., hospitals, police, and fire stations. In some instances, if time does not permit the distribution organization to direct load shed at the feeder level, it will be necessary for the transmission organization to implement load by opening breakers at substations. Because it is executed at the substation level, a transmission-level load shed is more likely to impact critical customers

Below is a process map that the Entergy LBA follows when it receives an Operating Instruction to shed firm load during a MISO Maximum Generation Event Step 5, which is used by MISO for Capacity Emergencies.



Load pocket & Local load sheds: When shedding load at the load pocket or local level, MISO can directly notify the Company's transmission organization of the need to shed load, or the transmission organization can make that determination on its own. After determining that load shed is necessary, the transmission organization will determine whether the area being shed includes embedded entities such a municipalities that self-provide electric service. These entities will be allocated a portion of the load shed if time allows. Next, the Company's transmission organization will determine if there is time to complete the load shed at the distribution level or if it must be done at the transmission level. Because it is executed at the substation level, a transmission-level load shed is more likely to impact critical customers. Time permitting, the transmission group will direct the load shed amounts to the distribution operations center so that load shed can be executed at the feeder level and, thus, seek to preserve service to critical customers. A depiction of this process is below.

Question No.: LPSC 1-12