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 1-11 Part No.: Addendum:

Question:

Please provide a narrative explanation of the "winterization" procedures and protocols utilized by the utility for each of its generating facilities and verification that those procedures and protocols were followed.

a. Please indicate whether there are any winterization procedures that were not performed on any of the utility's generating units for this winter season and why such procedures were not performed.

Response:

Each power plant has a site-specific winter weather readiness procedure that is activated annually the first week of September. Once all plant preparations are completed, plant managers complete attestation forms and send these attestation forms to the regional vice president to provide notification of completion of the procedures. These plant manager attestations all were completed prior to the Winter Storms. Steps taken pursuant to the winter readiness procedures include the following activities:

- Additional safety briefings are added to ensure the safety of employees and contractors on site.
- Site specific checklists are utilized to perform cold weather checks of the units. These checklists include, but are not limited to, the following tasks:
    - Check each heat trace panel to verify that each breaker is in the on position and supplied with power.
    - Confirm that temperatures inside condenser level transmitter enclosure boxes are above 40 degrees Fahrenheit.
    - Ensure air compressor enclosure doors remain closed and heaters are on.
    - Drain any circulating water pump upper bearing cooling water circuits on pumps that are not running.
    - Verify all instrument air low point drains are working.
    - Ensure all tank heaters are on and in the auto position.
    - Install enclosures and heat lamps or heat buckets in specified locations.

  - Ensure Heat Recovery Steam Generator chemical pump enclosure doors remain closed and heaters are on.
  - Hourly, raise and lower drum level setpoints during operation to allow movement of drum level regulators.
  - Alternate deep wells every two hours. Change to hourly when temperature falls below 20 degrees Fahrenheit.
- Top off stock levels for winter weather supplies (i.e., personal protective equipment, salt, fuel for heaters, spare bulbs etc.).
- Add operations and maintenance staff around the clock to check and maintain heat tracing, insulation, fueling heaters, address coal yard issues and making additional rounds.
- Augment plant staff with additional contract personal (instrumentation, electrical, scaffolding and insulation) as needed.
- Shelters/barricades/wind walls are constructed, inspected, and maintained throughout the event. Additional enclosures are added as needed during freezing weather events.
- Heat lamps and salamander heaters are staged and utilized around critical equipment and frequent rounds performed to verify operation of heaters.
- Heat trace circuits and enclosure temperatures are checked continuously during the event (every 1-2 hours).
- Offline equipment is temporarily run and cycled to maintain temperatures and help prevent freezing.
- Activation/sequestration of core plant personnel if forecast calls for impacts to travel to and from the plant.

In addition to the procedures described above, once a winter freeze condition is identified, additional steps are put in place to verify inventories, perform final set up of freeze protection equipment and actively monitor the condition of the freeze protection circuits.