McMicken Battery Investigation

August 7, 2019 Update

Background

Around 5 p.m. on April 19, there were reports of smoke from the building housing the energy storage system at APS's McMicken site in Surprise, Ariz. Hazardous Material units and first responders arrived on scene to secure the area. For reasons still unknown, approximately three hours after the reports of smoke and shortly after the door was opened, the site experienced a catastrophic failure. Injured first responders were transported to area hospitals. An investigation led by APS, with first-responder representatives, the system integrator, manufacturers and third-party engineering and safety experts, is underway to determine the cause of the incident.

The investigation is following a methodical and thorough process to determine exactly what happened. The pace of activity and timing for completing the investigation are secondary to safely conducting quality work. Periodic updates will be posted to report on the investigative process and progress being made. Until the investigation is completed, the parties involved cannot speculate about the cause of the incident. While the recovery of the first responders injured on scene during the incident remains top of mind for all involved with the investigation, their progress and status will not be included in these updates.

APS and the investigation team intend to share what they can of the ultimate findings, especially to the extent they are helpful to the industry and response agencies.

Investigation Update

- The first phase of the investigation is now completed, and all major equipment including the 378 battery modules from the installation have been removed from the energy storage system building. All but one of these modules was discharged safely on site; the remaining one will be discharged next week.
- The second phase of the investigation is now underway. This stage includes a comprehensive forensic analysis of key components from the storage system and recreating the event timeline to identify and model all factors that may have contributed to the ultimate equipment failure.
- A set of components has been removed from the system and sent to a lab in Scottsdale, Ariz. These components are from the one rack where the failure in the facility is believed to have originated. They now need to be X-rayed and carefully separated from each other for further examination. After that, they will be sent to a forensics lab in Michigan that specializes in battery systems.
- Results from both the forensic analysis and the work to model factors that led to the failure are expected in September.