

McMicken Battery Investigation

July 17, 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 efforts were made to ventilate the building, 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 timeline to complete the investigation is still uncertain, but periodic updates will be posted to report on the process and progress being made. Until the investigation is completed, the parties involved cannot speculate about the root 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 root-cause investigation is in the first phase, removal of the still-energized battery modules. The next phases will include comprehensive analysis of the contents of the energy storage system building and careful recreation of the event timeline to determine all factors that may have contributed to the ultimate failure.
- Progress continues on safely discharging energy that remains stored in the system's 378 battery modules. So far, the project team has removed 90% of the modules one by one, completed the discharge procedure and stored them on-site for possible further inspection.
- The removal and discharge process began in late May and is targeted for completion in mid-to-late July.
- The battery system consists of 27 racks of 14 modules each. The team is removing and discharging up to one rack of modules each day. Each module takes about 90 minutes to discharge.
- Throughout the process, an engineering consultant and a third-party forensic investigator are photographing and documenting each module. The team has developed precautions and contingencies should any modules behave erratically during the discharge procedure or cannot be discharged.
- Once the modules are removed and discharged, the investigation team will inspect components inside the unit that may help determine the root cause of the incident.

For more information and resources on the McMicken battery system, visit aps.com/mcmicken.