

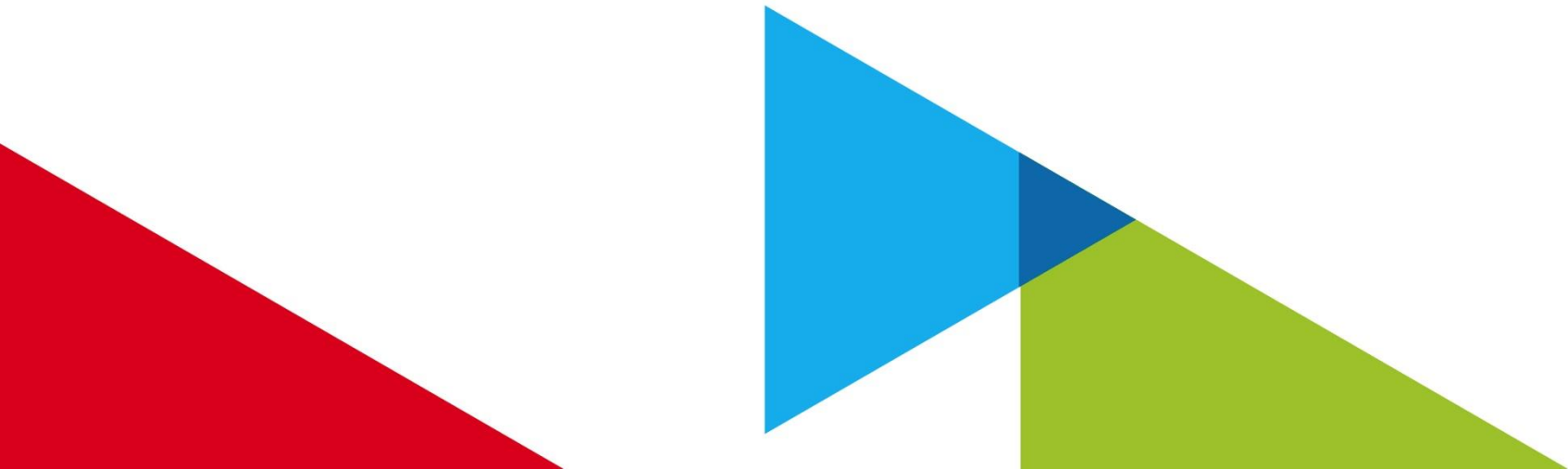




Southern Company Generation

Station Service Transformer Fire

March 7, 2017





575v Station Service Transformer Fire

March 7, 2017

- 2152 hours – current transformer (CT) above 575v station service transformer (SST) fails, burning through the feet that mount the CT to the structure
- CT falls into the 575v SST bushings below
- Cracked bushing allows it to track to ground and fault the SST
- From video, arcing was active for about 40 seconds
- Visible fireball after about 40 seconds of arcing
- Plant does not have a Structural Fire Brigade



575v Station Service Transformer Fire



Current transformer above
SST on adjacent Unit

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575v Station Service Transformer Fire



Failed current transformer (CT)



575v Station Service Transformer Fire



Bushing on top of SST



575v Station Service Transformer Fire



Roughly 8' separates SST and
GSU



575v Station Service Transformer Fire



Damage to SST



575v Station Service Transformer Fire



Damage to SST

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575v Station Service Transformer Fire

[SST Video](#)



575v Station Service Transformer Fire



900 Gallon F-500 Encapsulator Agent Concentrate Bladder Tank

F-500 EA is proportioned into the water @ 3% for Class B 3D Fires



575v Station Service Transformer Fire



Automatic valve opens upon activation of sprinkler system, pulling product into riser



575v Station Service Transformer Fire

- Automatic deluge sprinkler system activates within seconds
 - Sprinkler system protects SST and GSU
 - Sprinkler system is connected to a 900 Gallon F-500 EA Bladder Tank providing a 3% F-500 EA Solution
- Fire is extinguished in 3 minutes, 10 seconds
 - Video evidence
 - Personnel on the ground
- Burn damage is limited to the 575v SST
- Addition of F-500 EA @ 3% to sprinkler system not only contained the fire, but extinguished it in just over 3 minutes
- Local volunteer fire department did not have to put personnel in harms way to fight the fire
- Clean up was minimal due to less water being needed to extinguish the fire
 - Level inside the containment never got high enough to breach
- Fire damage limited to 575v SST only

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Questions?

