

Lesson Learned

Failover Configuration Leads to Loss of EMS

Primary Interest Groups

Reliability Coordinators (RCs)
Transmission Operators (TOPs)
Balancing Authorities (BAs)

Problem Statement

Configuration settings of an entity's EMS applications and tasks caused unintended automatic failovers to backup EMS servers multiple times in a row. This set up a failover loop, hindering recovery efforts.

Details

When a failover was initiated from EMS-C server (the entity's primary EMS server) to EMS-D server (the entity's designated EMS backup server), the AGC application aborted twice within a minute during EMS-D's initialization/startup. As designed, this then caused an automatic failover to the next backup EMS server in line (EMS-A). The same condition was experienced by EMS-A, which initiated another automatic failover to the next backup EMS server in line (EMS-B). When the system reached the final available server (EMS-B), all systems were in a DISABLED state.

Corrective Actions

In this particular event, the entity removed the scheme that initiated an automatic failover after two consecutive AGC failures (within a minute) from the EMS process manager model. The entity also reviewed all other schemes to ensure that the triggering of an automatic failover is properly defined.

Lesson Learned

Entities should review all failover configuration settings in the EMS that could initiate an automatic failover of the EMS to determine the value of the scheme.

Entities should remove schemes that are not necessary or could lead to a cascading failover scenario and they should evaluate whether to allow these applications to fail in lieu of automatic failovers.

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