**Subject:**    Modeling Changes and Project–Muskogee Load

**Date:**  11/16/2017

**Message:**  Southwest Power Pool (SPP) currently have two aux loads which reflects around 20W each which is giving us a 23 SE mismatch. COLI:  Changed COLI\_5 to R: 0.12 X: -2.83 and COLI\_5H to R: 0.12 X: 12.59 per MDWG model. SIOUXFL:  Changed KV5A1 impedance to match KV3A1 per MDWG model. DAWSONC:  Changed KU5A2 impedance from X: -5.10 to X: -0.508 per MDWG (off by one decimal place). we are missing two aux transformers on that bus and one of them is flowing about 12 MW (the other is normally open on the low side) which gives us a total bus mismatch of 27 MW in SCADA.  State estimator is keeping it right below 10 MW so it might not be showing up on Heartbeat but the problem remains so please follow up this week. Wednesday, November 16, 2016 8:46 AM Muskogee 161-kV bus flows 13.8 and 13.1 to 69-kV. 18.9 to MUSKTAP. 0 to HANCK (on outage). 28 to ROSS2. 117 from MSKPTAP5.  Sunday, February 14, 2016 5:04PM:  Muskogee 161-kV bus flows 12.0 and 11.3 to 69-kV. 2.7 to MUSKTAP. 39 from HANCK. 18 to ROSS2. 32 from MSKPTAP5.