May 26, 2014

Mr. Steve Herling
Vice President - Planning
PJM Interconnection, L.L.C.
955 Jefferson Avenue
Norristown, PA 19403-2497

RE: Alternatives for Eliminating the $80M SVC as an Integral part of the PHI/Exelon 500kV Red Lion – Salem Proposal to Solve the Artificial Island Stability Problem

Dear Steve,

PHI and Exelon greatly appreciate your staff spending time on May 14, 2014 to explain the study findings leading to PJM stating, at the May TEAC meeting, that the PHI/Exelon proposed 500kV Red Lion – Salem (RL-S) line, without a Static Var Compensator (SVC), does not meet all the requirements in the Artificial Island (AI) problem statement. The identified deficiency occurs when the existing 500kV Red Lion – Hope Creek line is out on maintenance and the proposed RL-S line also trips due to a single line to ground fault at the Salem Substation with a delay clearance of the Salem circuit breakers.

While we have verified the PJM finding, we also have identified two relatively simple and inexpensive alternatives that could eliminate the need of the expensive SVC and will result in our proposals, and perhaps, similar 500kV river crossing proposals meeting the AI stability requirements. Specifically, the alternatives are (1) to install a 2% reactor to the neutral to ground windings of the 500kV (wye grounded) side of the two Salem generator-step-up transformers (GSU) or a 1% neutral reactor to the 500kV side of the two Salem and the Hope Creek GSUs and (2) to employ a back-to-back circuit breaker scheme to interconnect the PHI/Exelon proposed 500kv line to the Salem Substation. The underlying principles of the two alternatives are to reduce the magnitude of the fault as in the case of the neutral reactor or to shorten the delay clearing time using a faster circuit breaker. By reducing the impact of the fault on the AI generators, the stability of the AI system can be maintained without a SVC.

Figure 1 presents the stability plots from installing a 2% neutral reactor to the two Salem GSUs for both the proposed Peach Bottom –Salem (PB-S) (in Red) and RL-S (in Green) lines. Figure 2 presents the stability plots from installing a 1% neutral reactor to

the two Salem GSUs and the Hope Creek GSU. As shown in these plots, the AI system with the addition of either the proposed PB-S or RL-S line will maintain stability for the 10.14 cycles delay clearance without the need of the SVC. We are providing the idev files for your staff to verify our results.

Figure 1. Salem Generator Stability Plots for a 2% Neutral Reactor installed at the Salem GSUs

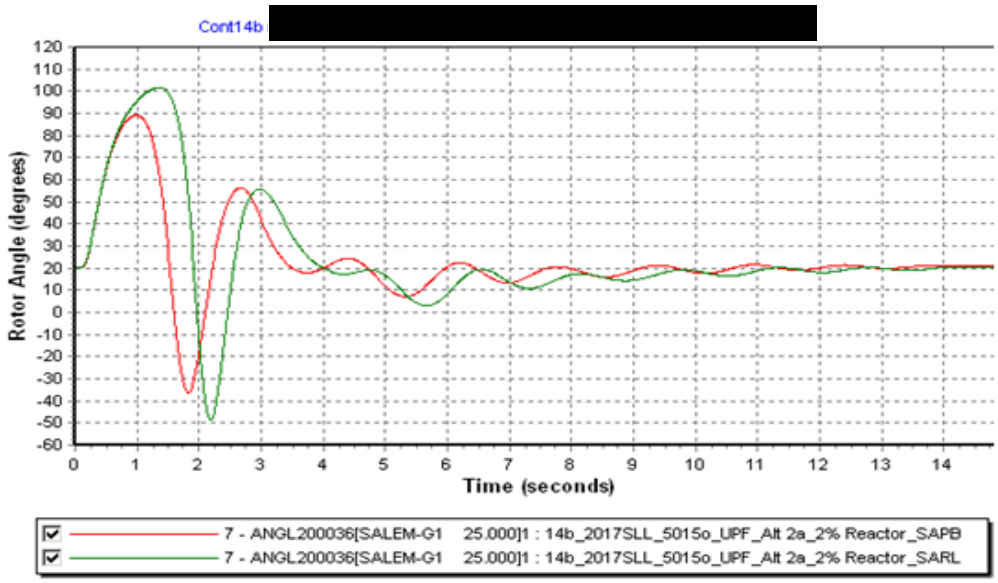
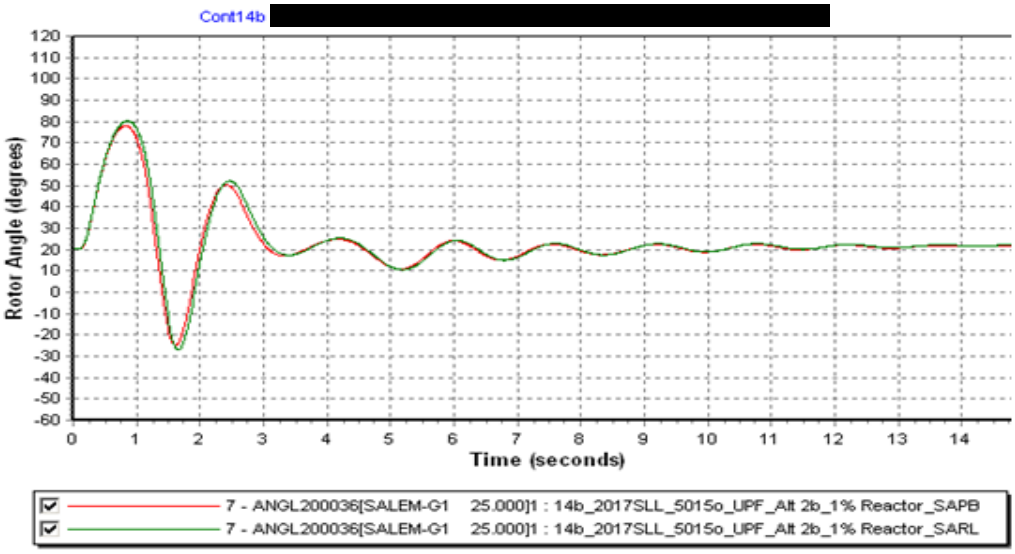


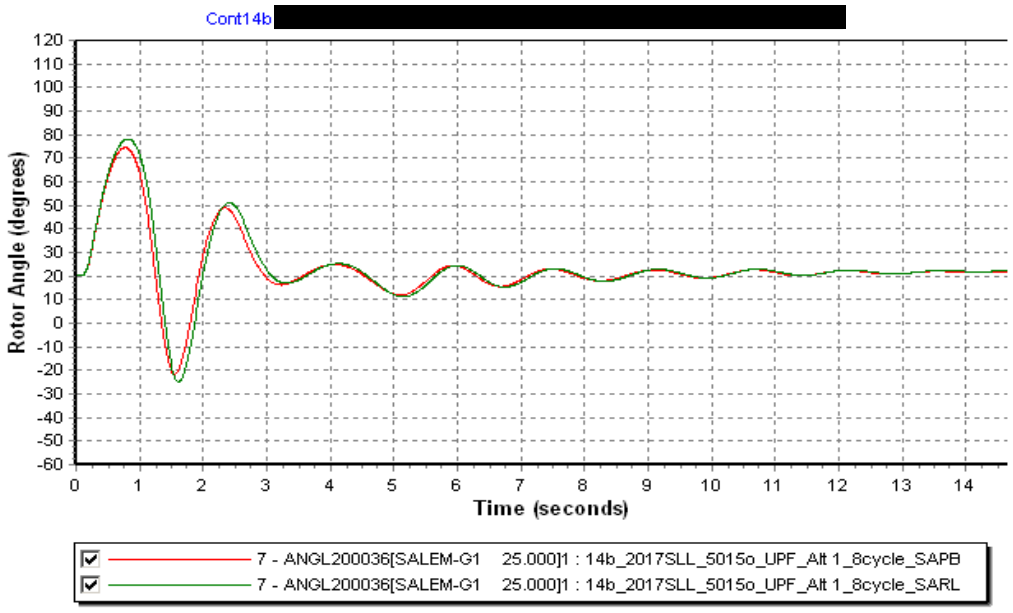
Figure2. Salem Generator Stability Plots for a 1% Neutral Reactor installed at the Salem GSUs and Hope Creek GSU



After PJM has verified our results, we can fine tune the exact size of the neutral reactor to, if possible, further reduce the total cost of the overall project. Regardless, we strongly believe that the cost of installing the neutral reactor would be a fraction of the cost of the SVC that will be eliminated.

Figure 3 presents the stability results of employing a back-to-back circuit breaker scheme to interconnect the PHI/Exelon proposed line to the Salem Substation. The delayed clearance time was set to be at 8 cycles, a 2.14 cycle reduction from the 10.14 cycles delayed clearing time of the existing Salem circuit breakers. No SVC is included in the simulation. As shown in the figure, the AI system maintains stability without a SVC. We are also providing the idev file for your staffs to verify our results.

Figure 3. Salem Generator Stability Plots for the back-to-back circuit breaker scheme with an 8-cycle delayed clearing time



Although PHI/Exelon is still in the midst of preparing the conceptual designs and the cost estimates of the above alternatives, we are very confident that the cost of either alternative will be significantly lower than and would likely be a fraction of the $80M cost of the SVC that PJM plans to add to the 500kV or 230kV proposals under consideration. We will submit the designs and cost estimates as soon as we complete them.

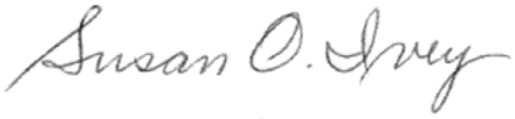
Finally, by eliminating the need of the $80M SVC as an integral part of the proposed PB-S line, the RL-S line or similar 500kV river crossing projects, these 500kV projects along with the above alternatives could be a more effective and less expensive AI solution.

PHI/Exelon respectfully requests PJM to give our and other 500kV proposals and these alternatives serious consideration.

Thank you.

Sincerely,

Gloria C. Godson
Pepco Holdings, Inc.
Vice President – Federal Regulatory Policy



Susan O. Ivey
Exelon
Vice President – Transmission Strategy & Compliance

cc: Paul Mc Glynn
Mark Sims