

IEEE 123 100% DER, 0% Batteries. COPF. $T = 1$

Current Status: My MPCOPF line loss result matches with the previous COPF line loss results, which still is a little off the OpenDSS line loss. Voltages (on the next page) match closely, but not completely. I don't know the cause of the slight mismatch. (and whether it will blow up for bigger simulations, or not be an issue)

Multi-Period Simulation, $T = 1$, Batteries at 0%, DERs at 100% (85 buses)

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grandTotalTime = 7.4198
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Machine ID: ETRL204-ARYAN
Horizon Duration: 1
    "Nature of Simulation: "    "Centralized-OPF"
Line Loss: 12.0986 kW
Substation Power: 768.1766 kW
Substation Power Cost: 26.8862 $
Number of Macro-Iterations: 1
Simulation Time: 7.4198 s
Time to solve with sequential (non-parallel) computation: 6.0455 s
Time to solve if OPF computation parallellized: 6.0455 s
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OpenDSS Powerflow with DERs at 100% (85 buses)

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Line Loss: 12.0904 kW
Substation Power: 768.167 kW + 149.0344 kVAr
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WSU

Comparison with OpenDSS

