

## ECG 742 – Fall 2019 – Assignment # 8

Consider the 5-Bus power system below (this is sample case B5R in PowerWorld).

Watch the video related to QV Curves ( <https://www.powerworld.com/training/online-training/security-analysis/qv-curves> )

1. Plot the Q-V curve at Bus 5, then determine how much reactive load can be added at this bus before reaching voltage collapse
2. Repeat 1) at Bus 3.
3. Repeat 1) and 2) when the line connecting Buses 3 and 4 is faulted and removed from the system (as a contingency).

