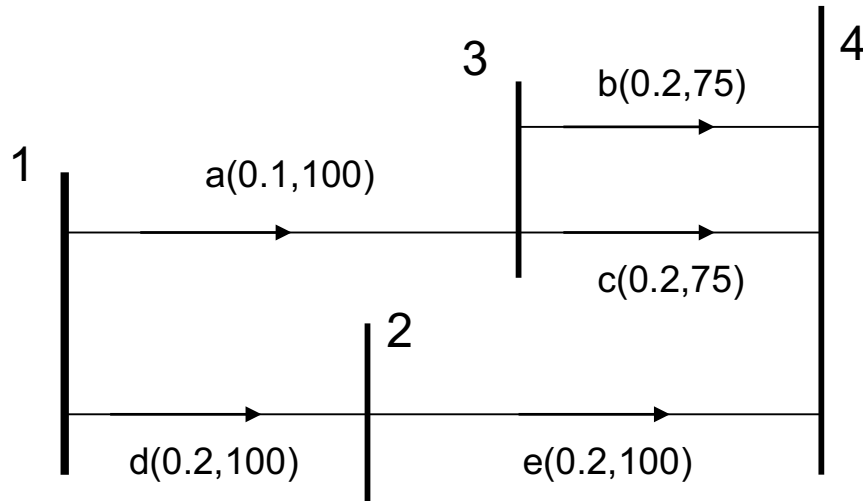


Application of PTDF and ATC:



The values between parentheses indicate respectively the reactance in pu and the maximum capacity in MW of the line

1. For the considered 4 nodes power system, use the PTDF approach in order:
 - a) to determine the power flow in each line for a transaction T_{23} of 100 MW. Initially the power system is not loaded.
 - b) to determine ATC_{14} while considering the transaction T_{23} .