Lab 4: Transient Stability Simulation

ECE 433 – Power Systems Stability and Transients

# Pre-lab Questions

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| **Name** | **Student ID** | **CCID** | **Lab Section** |
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## Questions

1. What is transient stability? How does the transient instability manifest in a power system?

2. What are the main objectives of stability analysis?

3. Give the definitions of swing curve. Explain what is the scenario of loss of synchronism?

4. What is the maximum real power output of a generator (simplified synchronous generator model) to an infinite bus?

5. Explain the equal area criterion.

6. List at least four factors that can be influence transient stability and how to improve the system transient stability by changing these factors.