

ECE 444 / ECE 544 /

CS 444 / CS 544

Supervisory Control and Critical Infrastructure Systems

Session 30

~~177~~
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Microgrids

Communication Requirements

CS&ECE 444/544

Lecture 26

- Measurements with controller
- Controller to actuators
 - » Generators
 - » Loads
 - Responsive loads—Demand Response
 - Load shedding...
 - » Storage
 - » Protection and control
- With larger grid
 - » Grid connected versus isolated mode



Supervisory Control &
Critical Infrastructures

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Spring 2024

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Power Sources

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Lecture 26

- Rotating machines
 - » Diesel
 - » Gas
 - » Some utilize steam from other processes
 - » Small to medium sized hydro
- Power electronic controlled or interfaced (mostly voltage sourced converters)
 - » Photovoltaic (1 or 3 phase)
 - » Wind
 - » Energy storage



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