Topics for Today:

- Announcements
  - Last homework "Dispatch" due ~Fri this week.
  - Term Project final report due Fri Dec 10\textsuperscript{th} (Online students may request ext.)
  - Final Project presentations - Wed Dec 15\textsuperscript{th} 12:45 start
  - Office: EERC 614. Phone: 906.487.2857

- Project Presentations (by local students)
  - Emphasize your project (Journal paper analysis in Appdx)
  - ~6 presentations in 2 hrs - 20 mins each including Q&A.
  - Provide .ppt handouts for audience (min 12 copies).
    - \textbf{Bring on mem stick!}

- Wrap-up of Stability (background for EE6210)
  - Changes in Transfer impedance due to faults, switching.
  - Equal area criterion for first-swing
  - Effect of reclosing strategies

- Connection of EE5200 to EE5223 - Power System Protection
  - Short circuit calcs: balanced and unbalanced
  - Protective devices, measure $V(t)$, $I(t)$, $Z(t)$, etc.
  - Must understand system planning \& operations
EE 5200 - Term Projects

Time: Finals Week Wednesday 12:45-2:45pm Room: EERC B45

Allotted Time: ~15-20 minutes per presentation; 2-4 mins between.

<table>
<thead>
<tr>
<th>Start Time</th>
<th>Team Members</th>
<th>Topic</th>
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<tbody>
<tr>
<td></td>
<td>Dereli, Gaikhe</td>
<td>Network Loss Coefficients with Distributed Gen</td>
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<td></td>
<td>Seelam, Sapre</td>
<td>Educational GUI for Equal Area and Swing Curves</td>
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<td></td>
<td>Malichkar, Mehta</td>
<td>AGC of DFIG in Wind Power Applications</td>
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<td>Bunker, Heinisch</td>
<td>Voltage &amp; Freq Control for Wind Farm Interconnects</td>
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<td>Lukowski, Nichols, McCoy</td>
<td>PEV and PHEV Vehicle Charging Infrastructure</td>
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<td></td>
<td>Martin, Norkus</td>
<td>Microgrids, Distributed Generation</td>
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<td></td>
<td>Ahsan</td>
<td>(away on family emergency, TBD)</td>
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Online Teams

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<thead>
<tr>
<th>Schlangen, Millner</th>
<th>Passive Methods for Control of Line Loading</th>
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<tbody>
<tr>
<td>Badgero, Gollapalli, Town</td>
<td>Fault Current Issues for Large Induction Motors</td>
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<tr>
<td>Leung + ?</td>
<td>PS Xfmrs vs. Variable Freq, Asynch Power Transfer</td>
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<tr>
<td>Bolz, Matthews</td>
<td>Neutral Grounding for SLG faults</td>
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<td>Thomasson</td>
<td>??</td>
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Fault

$Z_{XFR} = j \cdot 333$

$V_{TH} = 333 \text{ p.u.}$

$P_{max} = \frac{(1.2)(0.333)}{0.333} = 1.2 \text{ p.u.}$

Tie Line Trips

$Z_{XFR} = j0.6 \text{ p.u.}$

$V_{TH} = 1.0$

$P_{max} = \frac{(1.2)(1.0)}{j0.6} = 2.0 \text{ p.u.}$
\( p_m = 1.5 \)

0 - S.S.
1 - Fault
2 - Clear
3 - Reclose