Topics for Today:

- Course Info:
  - Web page: http://www.ee.mtu.edu/faculty/bamork/ee5220/
  - Book, references, syllabus, more are on web page.
  - Software - Matlab. ATP/EMTP [ License - www.emtp.org ] ATP tutorials posted on our course web page
  - EE5220-L@mtu.edu (participation = half letter grade, 5%)

- Term Project - Final Report - completed by Fri April 25th
- Term Project - On-campus teams present on Tues Apr. 29th 1pm - 3:30pm
- Applications in 3-phase systems - Chapter 5, 6, 17
  - Three-pole switching, CB issues
    - Cap Bank Switching (deenergization)
    - Reactor Switching (deenergization)
  - Synchronized switching for energization
    - Cap banks, Reactors, Transformers
Case 1

<table>
<thead>
<tr>
<th>Synch Switching</th>
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<tbody>
<tr>
<td>Cap</td>
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<tr>
<td>Reactors</td>
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<td>XFMRs</td>
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Case 2
Synch Sw. for XFMRS. close at V_{max}.

Synch Switching - Minimize Inrush.
- Depends on: initial \( f \) (\( f(0) = ? \))

If we knew that \( f(0) = 0 \), then close CB at \( \pm V_p \).

However... \(-0.677 p < f(0) < +0.677 p\)