"Other" conditions monitored/alarms:
- Sudden Pressure
  - "Bucholtz Relay" → 63x → 867
- Oil Level
  - Low, Fill
    - Alarm
    - Shut Down
    - Trip
- N₂ Pressure
  - High Pressure Low
    - High — 20-40 psi
    - Low — 4-8 psi
  - Low/Tank Press
LTC min/max position

NLT \rightarrow LTC

NO-LOAD TAPS \rightarrow LOAD TAPS

HV \rightarrow LV

(12.47 or B.8)

5 TAPS: A - B - C - D - E

± 5%

10% of Vnominal

Nominal Voltage

Reversing Switch
Separate LTC Compartment

17 total Tap Points

⇒ Neutral

± 16 taps

16H (+10%)

33 total positions

Neutral

16L (-10%)
Other Alarms (Cont')

- Pressure Relief Valve - SCADA
- Loss of Power to AC 'loads'
- Cooling Fans / Pumps
- Controls

Annunciator - Monitor / Group Alarm Points.
Pass on to SCADA.

(in control cabinet on transformer)
Testing:
- Megger the core
- Also: $R_{dc}$ of each coil
- $TTR$
- $\frac{N_{new}}{N_{old}}$ (Near V ratio)
- $\frac{A_{w1}}{A_{w2}}$ (As Turns Ratio)
- "Doble Test" - Insulation Power Factor
- Typically $PF = 0.01$
- $PF = 0.327$ (Typical) $\frac{C}{R_1}$
- Freq Response Test

Freq Resp ⇒ $Z(f)$

$Z$ vs $f$

$dc$ to $wL$ to $f$
Finally, Gas in oil - Test - Lect. 29