**Action Items from WG mtg re MQXFA17 overheated splice**

**(January 19, 2024)**

Indico page: [MQXFA17 splice overheating (January 19, 2024) · INDICO-FNAL (Indico)](https://indico.fnal.gov/event/62866/)

**Action Items – responsible person:**

1. Cut sample (max length ¼ inch) from the end of the overheated splice; use diamond saw if possible; give this sample (#1) to Mike Naus – Josh
2. Make mockup splice (reproducing the 3/4 splice with CLIQ lead) using fresh NbTi cables and cut sample similar to sample #1; give also this sample (#2) to Mike - Josh
3. From the overheated-sample (#1) extract wires for magnetization measurements (5 mm long), at least the following samples - Mike
   * 2 wires from the cable closest to the heater
   * 2 wires from the cable on the opposite side of the heater
4. From the control-sample (#2) extract wires for magnetization measurements: at least 2 wires from the cable closest to the heater - Mike
5. From a virgin strand extract 2 samples for magnetization measurements; and deliver to Lance all samples for magnetization measurements - Mike
6. Perform magnetization measurements on the following samples - Lance
   * 1 wire from overheated sample #1 closest to the heater
   * 1 wire from overheated sample #1 on opposite side of heater
   * 1 wire from control sample #2 closest to the heater
   * 1 virgin wire
7. Perform metallographic analysis of some strands in sample #1 (at least from bottom and top cables) and compare with strands in sample #2 – Mike
8. Evaluate resistance at room temperature of NbTi-NbTi splices in the “pizza box” of last 6 magnets using data in the electrical QC spreadsheets – Vittorio
9. Develop plan for replacing damaged coil leads - Dan
10. Collect results from 6, 7 and 8; arrange mtg to discuss them and decide disposition of this NCR – Giorgio