

650 MHz SCRF CAVITIES UPDATE

1. SINGLE-CELL CAVITIES

- **AES fabricating six beta=0.9 single-cell cavities (due FY2011)**
- **JLab has built one beta=0.61 single-cell cavity (JLab design)**

2. 650 MHz beta=0.9 FIVE-CELL CAVITIES

- **Prototype design complete**
- **Drawing set complete**
- **Fabrication specification complete**
- **Plan is to issue RFQ for two prototype cavities**
- **Minor delay due to potential tuning issue (cavity too stiff?)**
- **Moved stiffening rings in from r=141 mm to r=138 mm to make cavity more compliant – simulations are in progress to assess change**
- **Internal FNAL design review will be scheduled when tuning issue is resolved**

3. 650 MHz beta=0.61 FIVE-CELL CAVITIES

- **Neither FNAL nor JLab design exists**

4. Niobium/Nb55Ti MATERIAL

- **Sufficient material is on site to fabricate four five-cell cavities**
- **Two beta=0.9 and two beta=0.61 or four beta=0.9?**
- **Near term goal is four beta=0.9 and four beta=0.61 five-cell cavities**
- **Material to fabricate four additional five-cell cavities will be ordered in FY2011 (quote requested from Wah Chang)**