Goals for this Meeting

• DOE “Annual Review” of nEDM Experiment week of March 29
• Goals for next few weeks
  – Discussion of design [today + next week (+ follow-up ?)]
  – At this point, we are looking for improved engineering estimate
  – On timescale of CD-2 Review, put in RFQ/RFP
    (today discuss many issues that would go into this)
Goals for this Meeting

• Presentation of the “Concept Design”
  – Engineering design for 6 sub-assemblies and their support infrastructure
  – Joints between the sub-assemblies (plus alignment issues)
  – Design incorporated many constraints imposed by requirements of, and interactions with, the other nEDM subsystems (cryogenics, polarized $^3$He, neutron beamline, infrastructure, etc.)
  – Input from R&D studies (next)
  – Also: Placeholders for full-shield-assembly carts (not in our sub-system)
  – Design much farther along than before
  – Discussion of transition to “Final Design” (by Amuneal)
Goals for this Meeting

• **Discussion of assembly and testing scenarios**
  – Initial assembly of sub-assemblies for fit/tolerance spec-tests on-site at Amuneal
  – Space (vertical?) issues: Will full assembly be possible?
  – Initial on-site tests: Measurements of residual fields
  – On-site occupancy timeline

• **Discussion of acceptance / performance criteria**
  – Discussion of FOB to Caltech Magnet Testing Facility (specs on shipping/freight)
  – Detailed measurements of residual fields (shielding factors)
  – Which performance criteria can be guaranteed?
  – How to agree on baseline criteria (finite-element-analysis modeling)?