
Plans and schedule for QXF

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SQXF plan and schedule

- Cable dimension finalized by 03/13
- Coil design and parts
 - 13 months (11/12 – 12/13)
- Coil tooling design and fabrication
 - 1 year (02/13 – 02/14)
 - CERN: 1 Wind&Curing + 2 React&impreg
 - LARP: 1 Wind&Curing + 2 React&impreg
- Beginning of coil winding at CERN and LBNL in 02/14
 - **First long coil wound in 05/14**
 - **Feed-backs from SQXF to LQXF on coil fabrication**

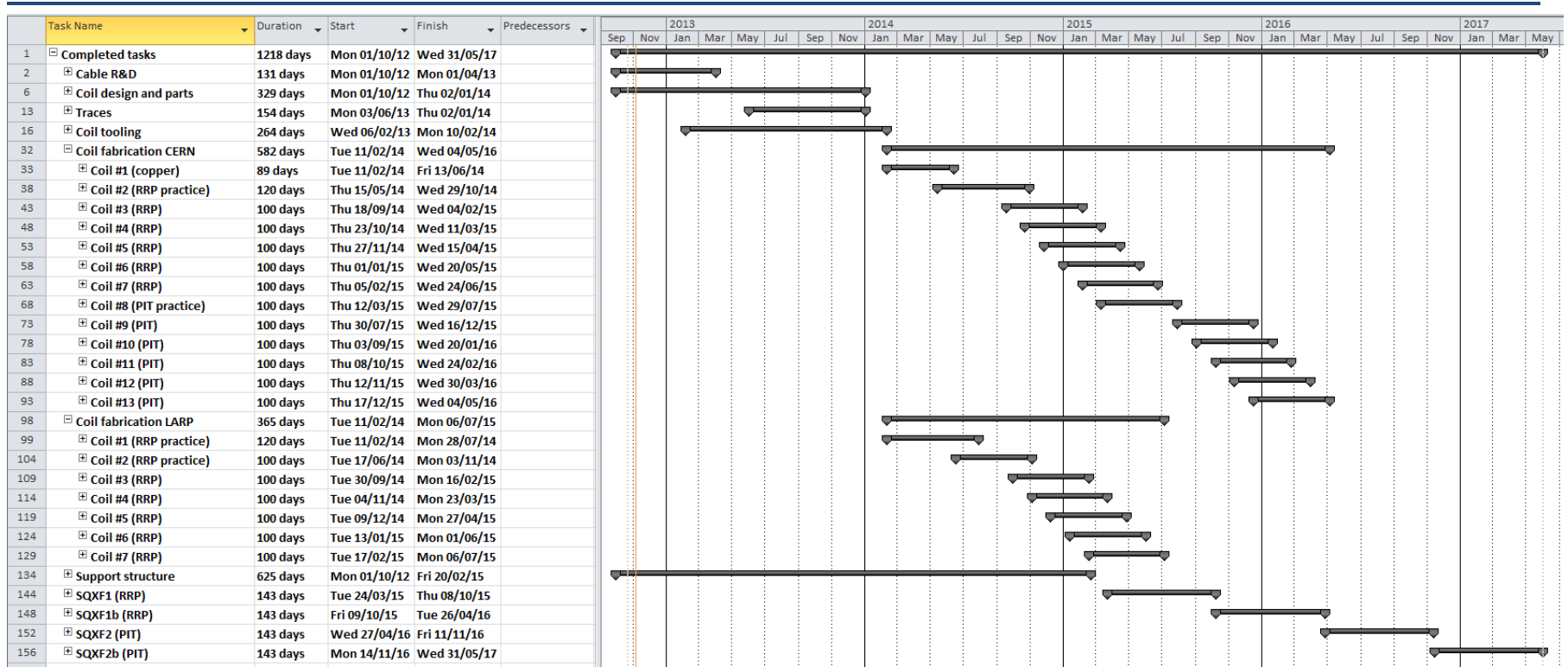
SQXF plan and schedule

- Number of coils
 - CERN
 - 1 Cu coil
 - 1 practice + 5 real RRP coils
 - 1 practice + 5 real PIT coils
 - LARP
 - 2 practice + 5 real RRP coils
- Coil fabrication time
 - 100 days (5 months) per coil, 1 coil produced every month
- Sequence: CERN will start with RRP coils
 - SQXF1 magnet will include the first available four RRP coils produced by the two “production lines”

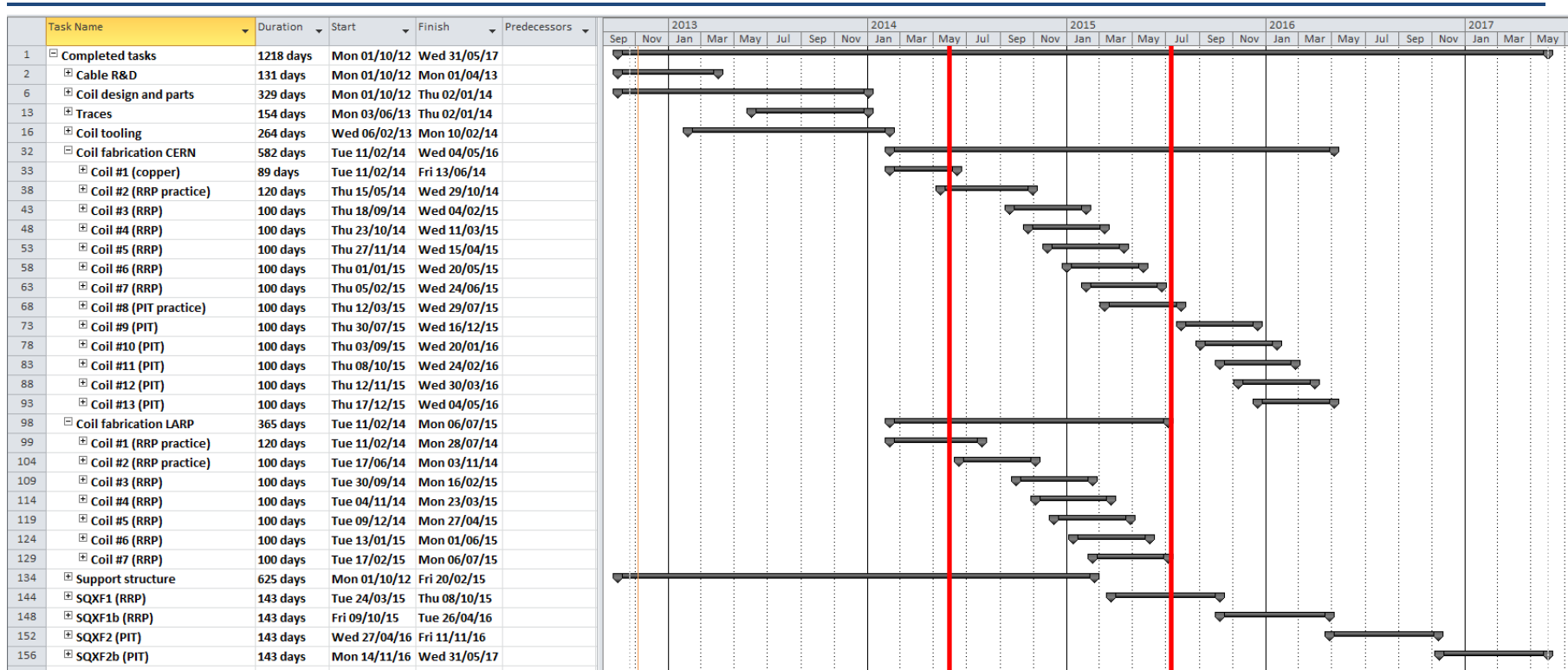
SQXF plan and schedule

- Support structure
 - LARP/CERN design of the same structure
 - 1 short structure fabricated and assembled at CERN
 - 1 long structure fabricated and assembled by LARP
 - From conceptual design to assembly and qualification
 - More than 2 years (11/12 – 02/15)
- Tests
 - First test (SQXF1) at CERN
 - Cool-down starts in 06/15
 - First assembly of LQXF in 06/15
 - Feed-backs from SQXF to LQXF on loading
 - Then SQXF1b (RRP), SQXF2 (PIT), SQXF2b (PIT)

SQXF plan and schedule



SQXF plan and schedule and LQXF milestones



Winding first LQXF coil

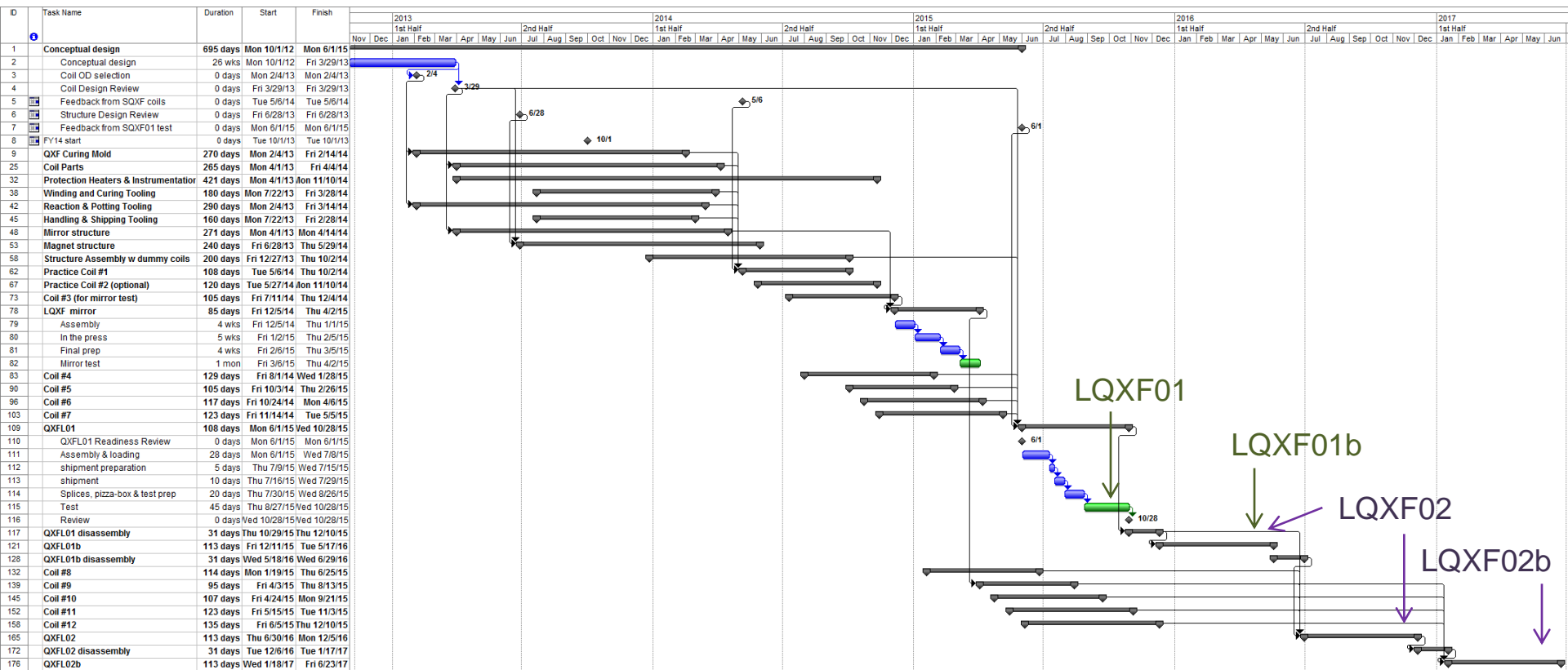
LQXF1 assembly

LQXF Plans

- Coil and tooling design performed with SQXF
 - Same coil parts, same tooling design, same process
- Coil fabrication starts after feedback from first SQXF practice coil(s)
 - One lab for LQXF practice coils
 - Coil test in mirror structure
 - LQ-team for LQXF production coils
- LQXF01 assembly starts after feedback from SQXF01

LQXF Schedule with reassembly options

Can be used for addressing issues and fine-tune assembly & pre-loading



LARP-CERN QXF Video-meetings

- Nov 27
 - Strand design and procurement
- Dec 4
 - Update on cable R&D
- Dec 11
 - Thermal analysis
 - Radiation resistance
- Dec 18
 - Magnetic analysis
- Jan 8
 - Mechanical analysis
- WAMSDO week
 - Quench protection