

Moderator Reflector Assembly Installation

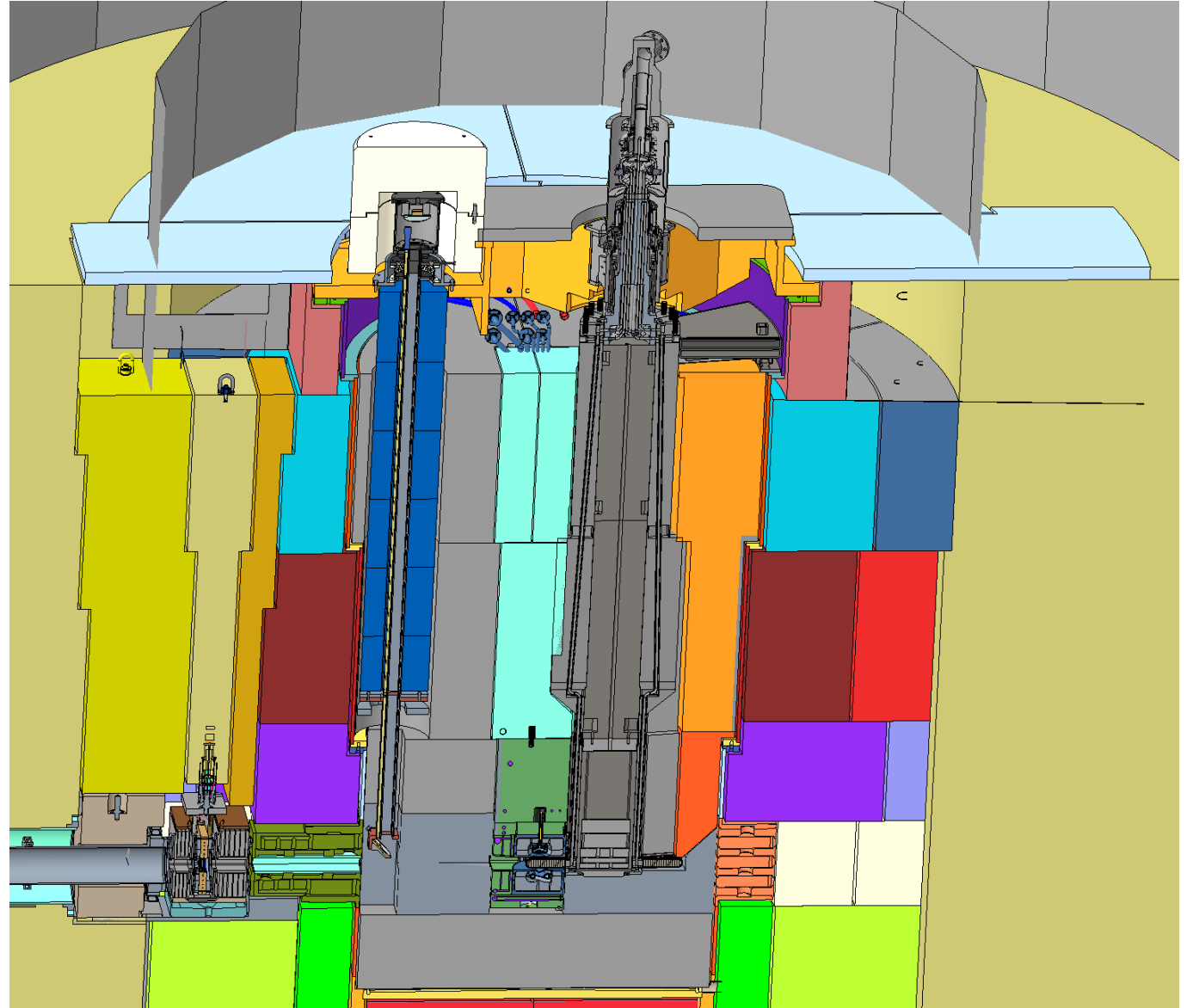
Jim Janney
MRA Lead Engineer

March 27, 2024

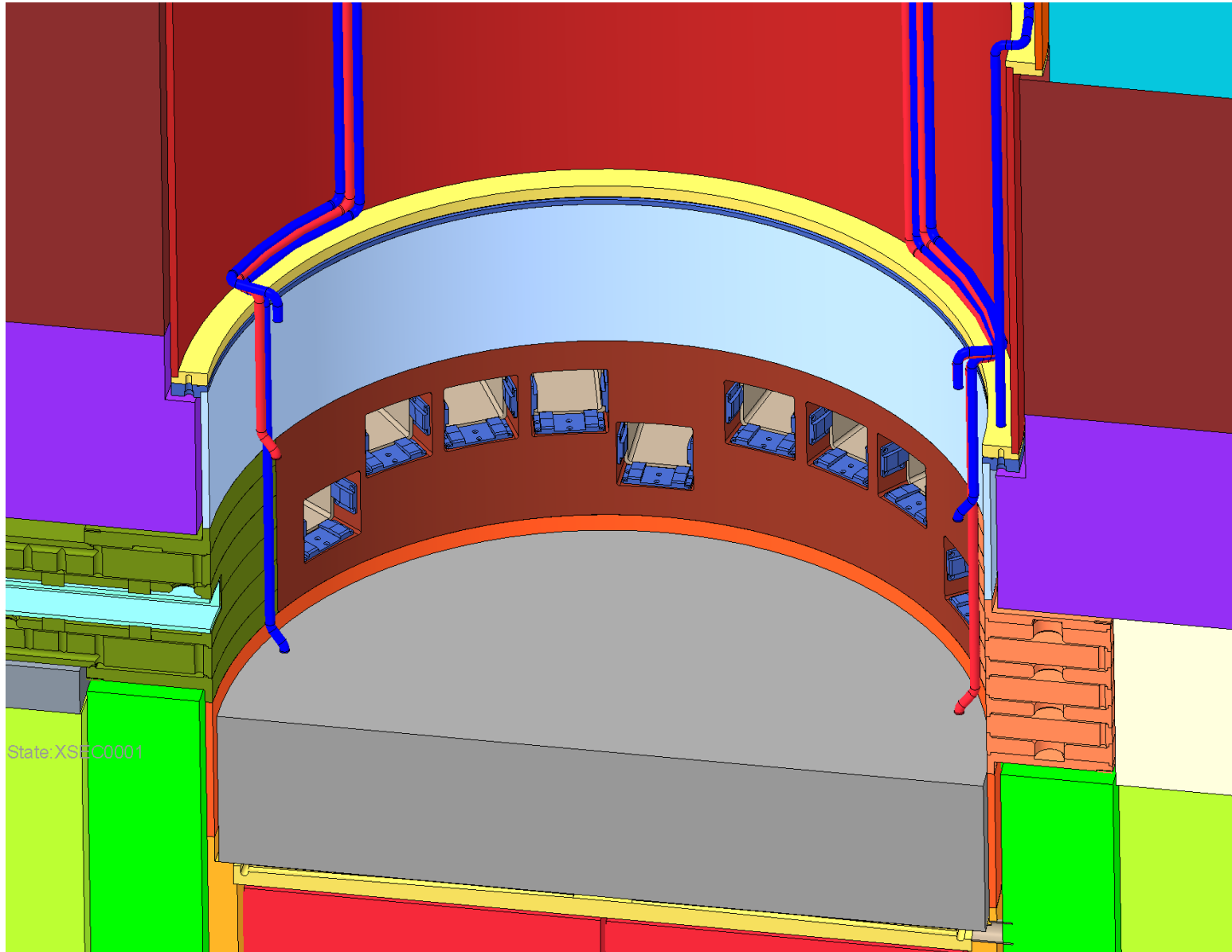
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Outline

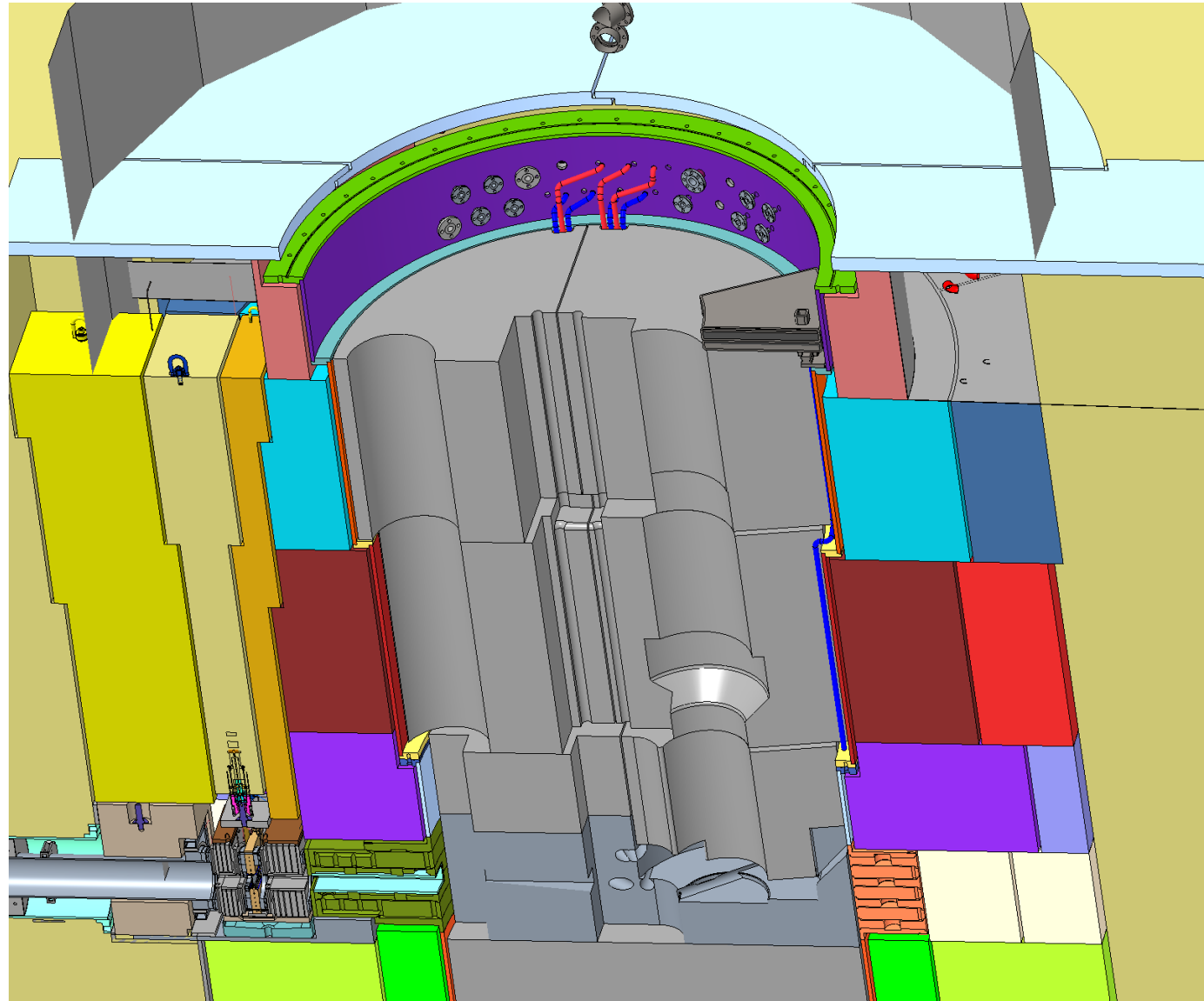
- Guide Interface Survey
- Target Station Installation Status
- MRA Mounting Feature Survey
- MRA Kinematic Mount Adjustment
- Post Install Survey
- Shield Install
- Utility Install



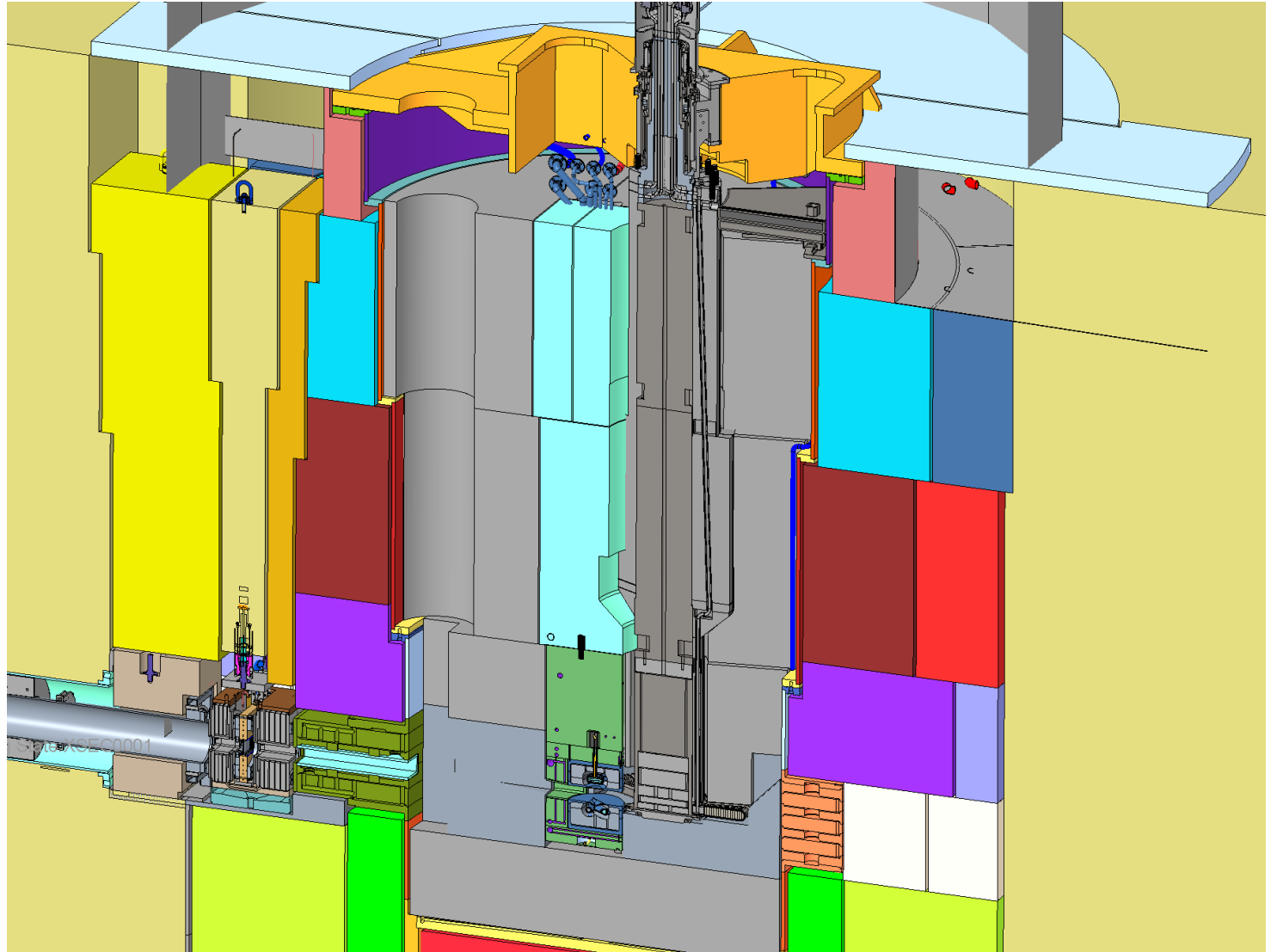
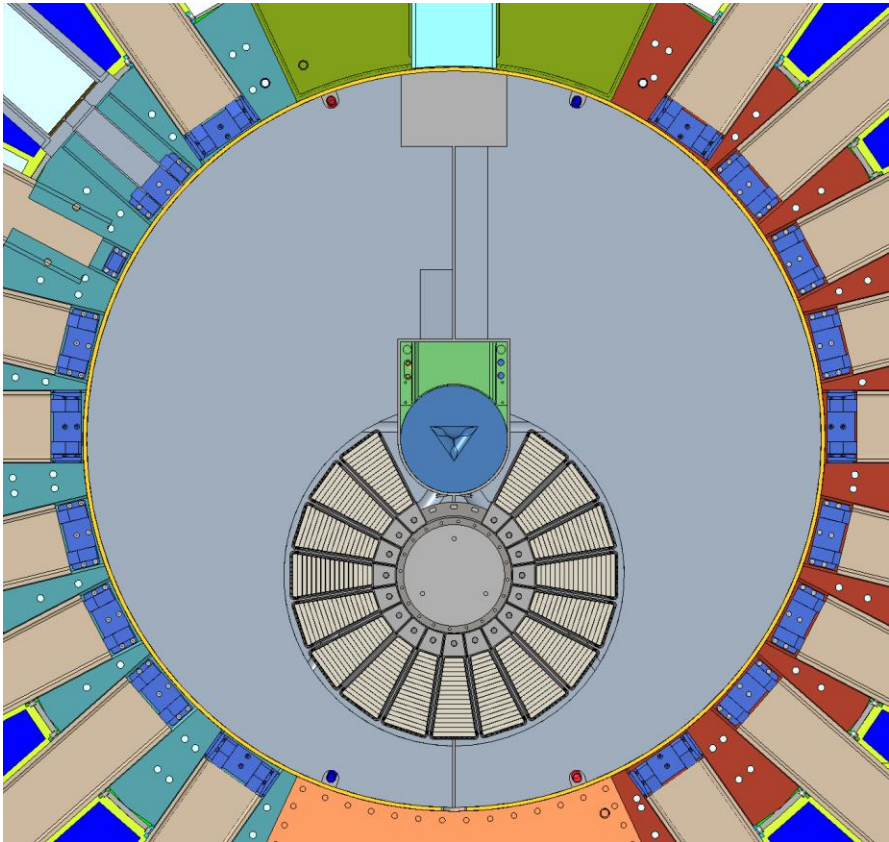
Earlier Survey of Guide Interface Features



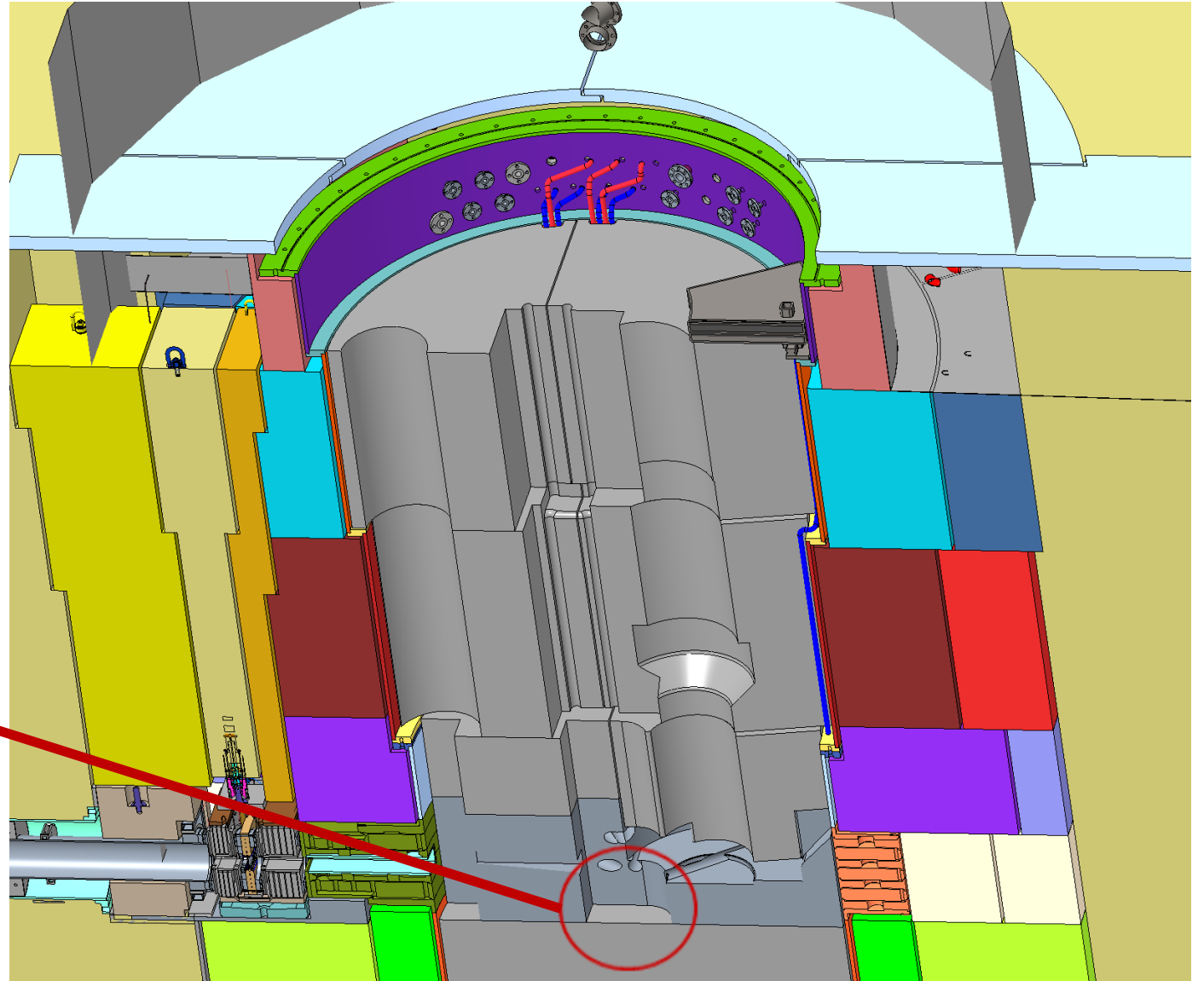
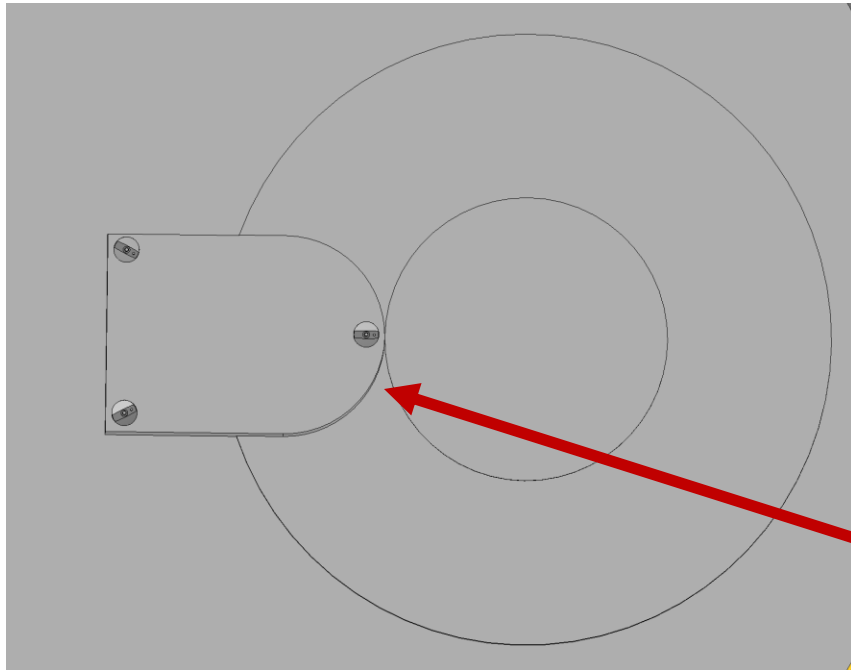
Target Station Installation Status – Without Target Assembly



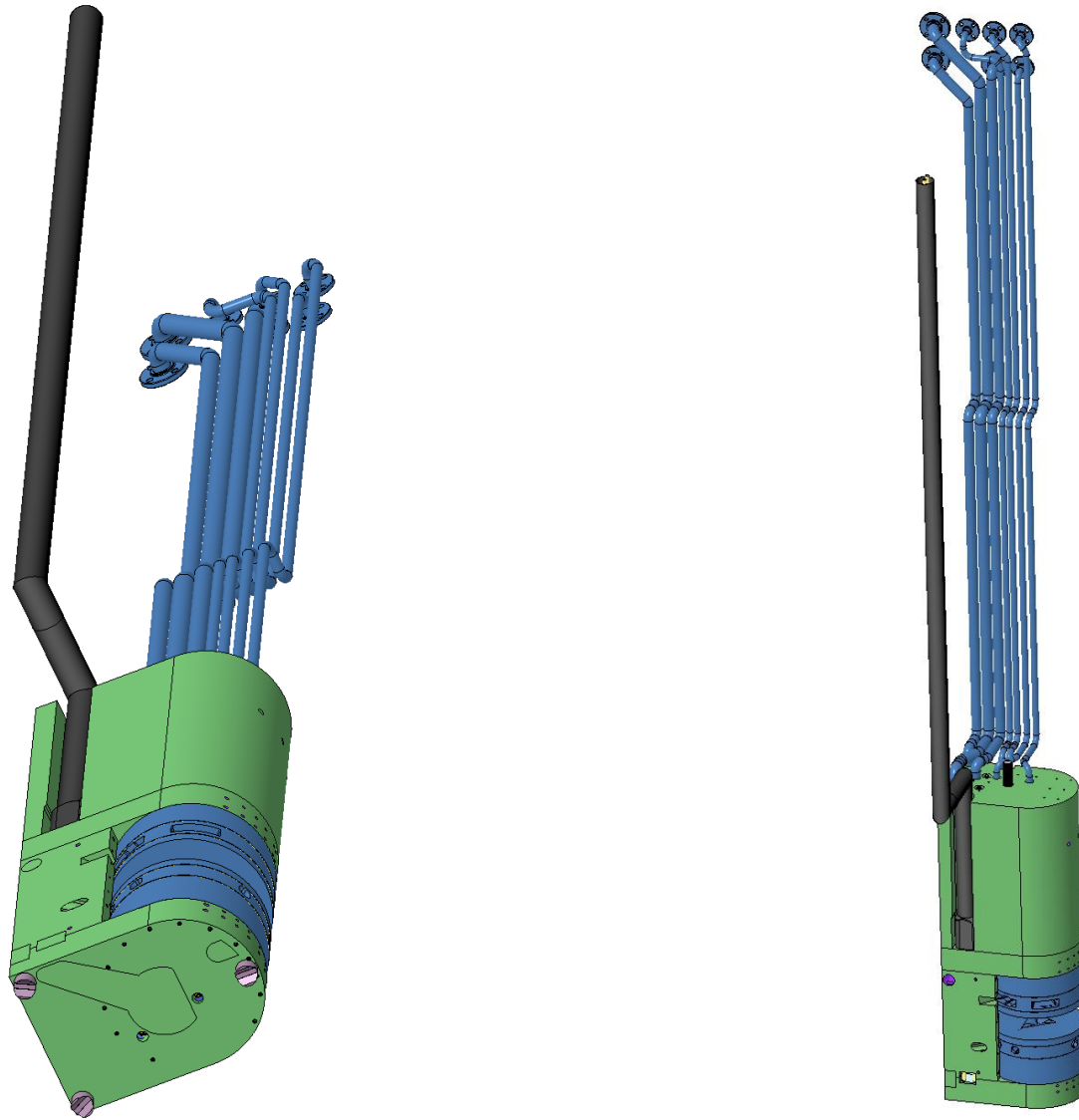
Target Station Installation Status – With Target Assembly



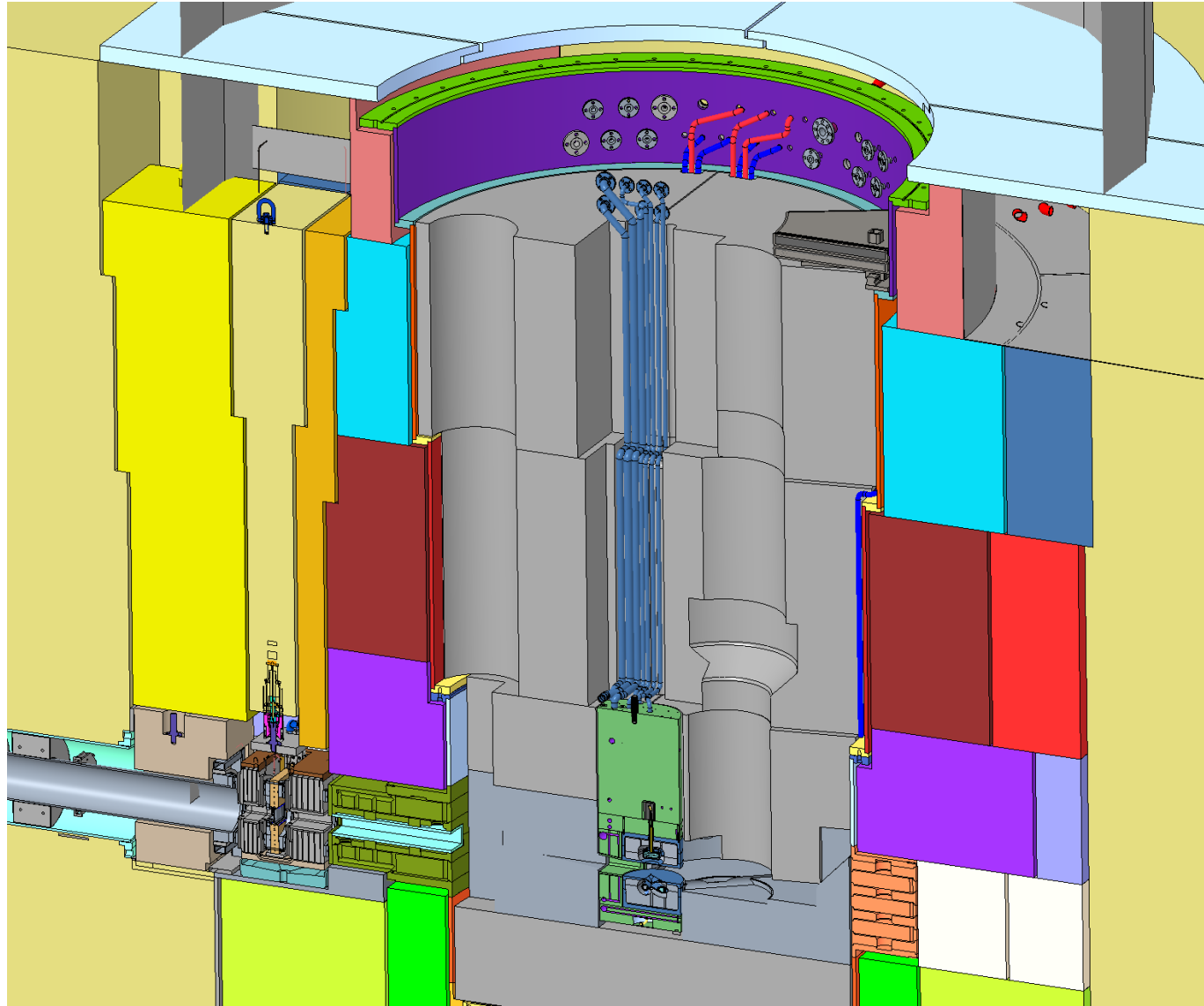
MRA Mounting Feature Survey



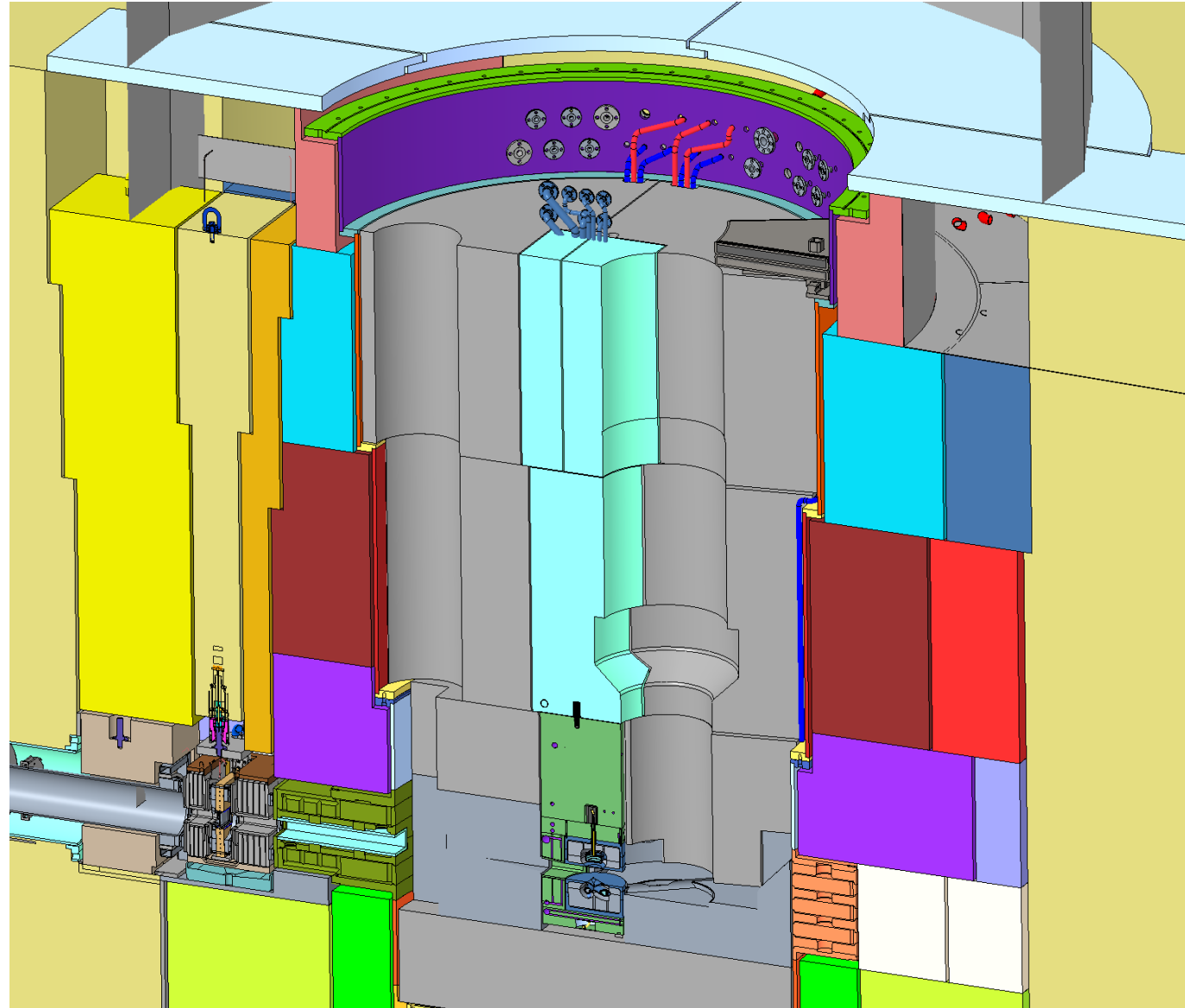
MRA Kinematic Mount Machining and Survey



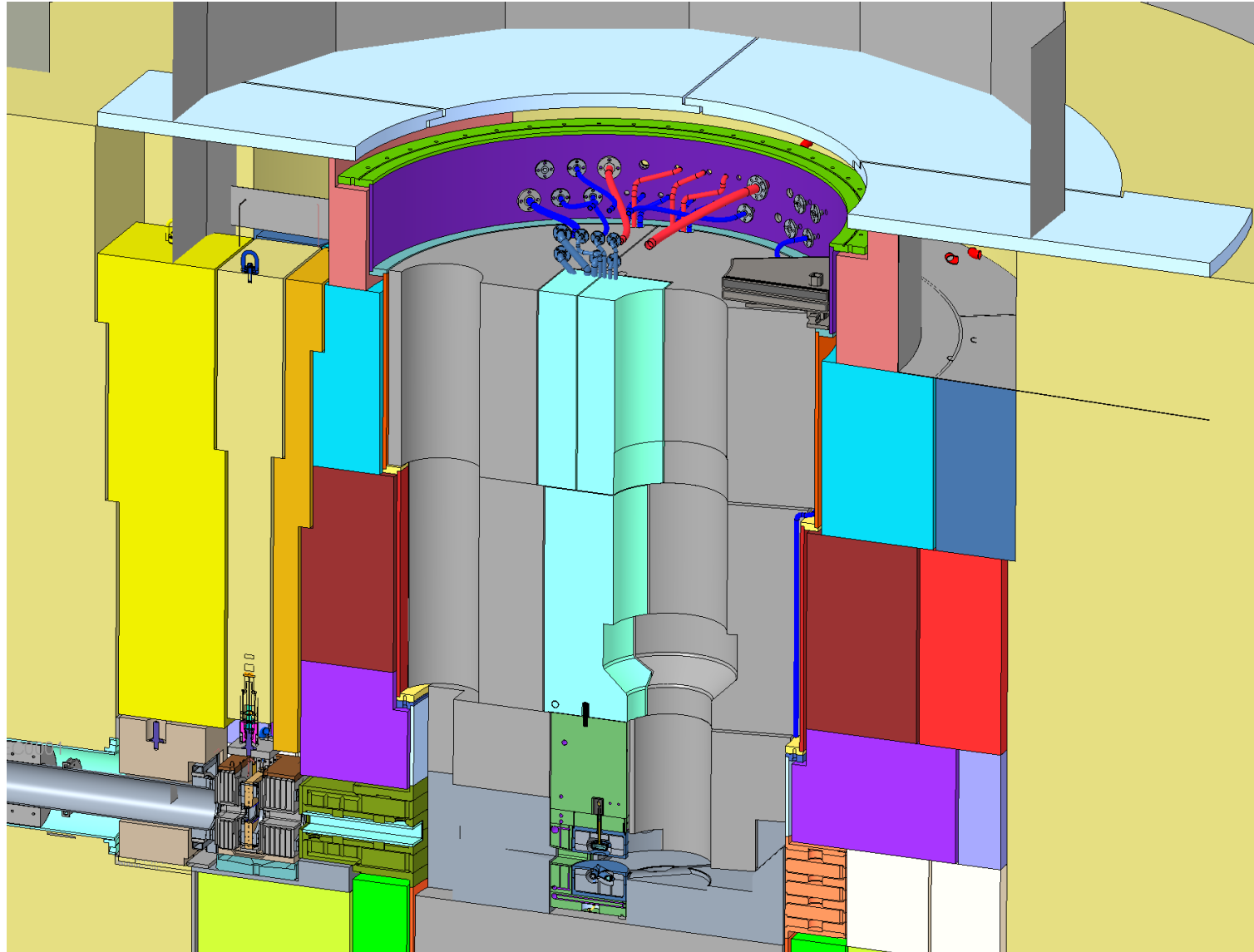
MRA Install and Post Installation Survey



Install MRA Access Shield Blocks

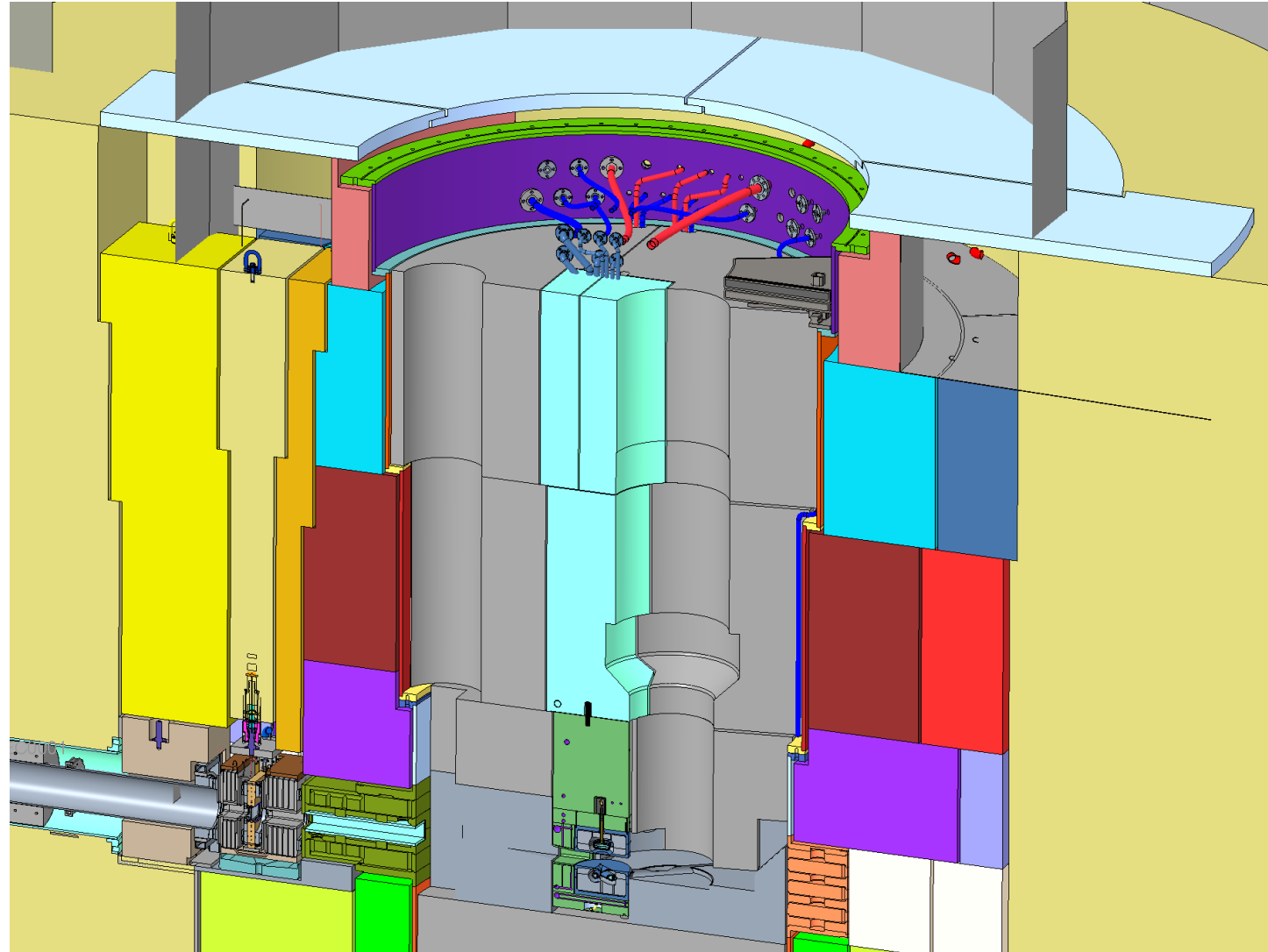


Install MRA Water Jumpers and Weld Transfer Line



Post Installation Tests

- Leak check water connections
- Cold shock, pressure test, and leak check, hydrogen transfer line connection



Summary

- Sequence for MRA installation has been shown, but full integration with Target Systems installation is incomplete
- No installation issues identified
- MRA Installation Plan will continue to develop along with Target Systems Plan

