ITER Project Status

T.C. Luce
ITER Organization
Overview

• ITER has launched the assembly and installation process:
  – Tokamak building external structure completed for start of assembly
  – Cryostat base has been placed in the tokamak pit
  – All large components and tools for assembling the first tokamak sector are available (first VV sector arrives in France this week)
  – Installation of services in the tokamak building has commenced

• Plan for First Plasma at end of 2025 is still maintained
  – Effect of pandemic is under assessment and will be reported to ITER Council in the fall
Tokamak Building Construction:
Crane Hall closed - External cladding complete
Tokamak Building: Access Granted for IO Installation for Basement Levels 1 and 2

B11 B1 September 2019

B11 B1 March 2020
On 26 May, the ITER cryostat base was gradually lifted from its frame, carried across the Assembly Hall to the Tokamak Building and eventually lowered into the Tokamak Assembly Pit.
Three Toroidal Field Coils On-site

• First two TF coils arrived in April

• Third (required for first tokamak sector) arrived in June
Poloidal Field Coils Are Also On-site

- The divertor coils PF6 (below) and PF5 (right) are fabricated

- Upper and lower cryostat cylinders are ready to receive the coils
Moving Is Not Trivial

• PF6 was the widest load to be moved (10 m)
First Vacuum Vessel Sector Complete

• Fabricated, packed, and shipped—arrives in France Wednesday
Progress on Installation of Services
Installation Is Highly Complex

- Installation sequence must respect the needs of:
  - Operation
  - Inspection
  - Repair
  - Staged approach to completion of facility
Commissioning Status:

- Steady-state electric system basic services are in operation; commissioning of power supplies for clients continues.
- Cooling water system commissioning has started; next six months are critical (heat rejection system, chilled water, first client cooling loop).
- Cryoplant commissioning starts early 2021.
- Reactive power compensation for the coil power supplies starts commissioning in early 2021.
ITER Is Progressing Toward First Plasma