

Contact:

Laban Coblentz

Laban.Coblentz@iter.org

+33 6 14 16 40 85

25th ITER Council: All efforts converging toward the start of machine assembly

ST PAUL-LEZ-DURANCE, France (21 November 2019) – The ITER Council has convened to review the performance of the ITER Project toward First Plasma in 2025. The Council evaluated the progress of manufacturing, construction and installation against established performance metrics and the Revised Construction Strategy approved in June 2018. Project execution to achieve First Plasma is now more than 65% complete.

At its Twenty-Fifth Meeting on 20-21 November 2019, the ITER Council assessed the latest progress reports and project performance metrics. The project continues to maintain a vigorous pace and robust performance, with the ITER Organization and Domestic Agencies working as an integrated **One-ITER Team** to meet the project’s demanding schedule and groundbreaking technical requirements.

- china • Construction and manufacturing progress: Since January 2016, 42 scheduled Council-approved project milestones have been achieved.

eu
india
japan
korea
russia
usa

Since the Council last convened, Europe has completed civil works on the Tokamak Building, and is on pace to fully hand over the building to the ITER Organization (IO) in Spring 2020. India has completed the fabrication of the cryostat base and lower cylinder, and has turned these components over to the IO. Korea has nearly completed the first vacuum vessel sector; the first segments of the thermal shield have arrived at ITER, as well as the massive upending tool which—together with the already installed sub-sector assembly tools—will be used to assemble the vacuum vessel sectors, thermal shield, and toroidal field coils in two assembly lines. Europe and China have marked the completion of the first poloidal field coil (PF), and both PF5 and PF6 will be ready for cryogenic testing early next year. Installation of components from China, Europe, India, Korea, and Russia is well advanced on both the Cryogenics Facility and the Magnet Conversion Building, and the first cryolines have been installed in the Tokamak Building. Testing is well underway on the first central solenoid module in the United States, and Japan will be ready to ship the first toroidal field coil early next year.

Substantial progress is ongoing for every major ITER component, system and structure.

- Preparation for Assembly Phase: The Council reviewed the full scope of steps taken to prepare for the Start of Assembly in 2020. The results of the recent In-Depth Independent Review of Assembly and Installation Strategy were constructive, with some areas for improvement.

The reorganization of the ITER Organization, in preparation for the Assembly Phase, is on schedule for completion by January 2020.

Following international competitions, the ITER Organization has signed two major contracts for Tokamak assembly, in keeping with the Revised Construction Strategy. These contracts, both of which will last through 2024, will cover the assembly and installation of the Tokamak



core machine, including the vacuum vessel sectors, thermal shield, superconducting magnets, ports, cryostat, instrumentation, and associated cooling and support structures.

In the margins of the ITER Council meeting, the ITER Organization, the European agency Fusion for Energy and Japan's National Institutes for Quantum and Radiological Science and Technology signed a collaboration arrangement by which the experience gained by Euratom and Japan under the Broader Approach Agreement—in particular in the assembly, installation, integrated commissioning and operation of the tokamak JT-60SA, the construction of which will be completed next year—should support ITER activities in the coming phases of the project.

ITER Member support: The Council noted with appreciation the efforts made by all Members to meet their in-kind and in-cash commitments to enable successful implementation of the construction strategy to achieve First Plasma in 2025. Without full and timely support by all Members in the form of contributions in accordance with commitments, it was underlined that the capacity to remain on schedule for First Plasma will be at high risk. The Council reaffirmed the need for all ITER Members to meet their in-kind and in-cash commitments on a timely basis to enable successful implementation of the construction strategy.

In accordance with the ITER Agreement requirement to have a Management Assessment of the ITER Organization performance every two years, the 2019 ITER Management Assessment contract was signed.

Council Members reaffirmed their strong belief in the value of the ITER Project mission and vision to develop fusion science and technology, and resolved to work together to find timely solutions to facilitate ITER's success. The Council congratulated the One-ITER Team on the commitment to effective collaboration that has put the project on the path to success. The Council will continue to monitor project performance closely, and to provide the support needed to maintain this pace of achievement.

BACKGROUND TO THE PRESS RELEASE

ITER—designed to demonstrate the scientific and technological feasibility of fusion power—will be the world's largest experimental fusion facility. Fusion is the process that powers the Sun and the stars: when light atomic nuclei fuse together to form heavier ones, a large amount of energy is released. Fusion research is aimed at developing a safe, abundant and environmentally responsible energy source.

ITER is also a first-of-a-kind global collaboration. Europe is contributing almost half of the costs of its construction, while the other six Members to this joint international venture (China, India, Japan, the Republic of Korea, the Russian Federation and the USA), are contributing equally to the rest. The ITER Project is under construction in Saint-Paul-lez-Durance, in the south of France.

For more information on the ITER Project, visit: <http://www.iter.org/>