

ITER Plant Design Challenges

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US ITER participates in International Thermonuclear Experiment Reactor (ITER) that is constructed in Europe, at Cadarache, France. Specifically, US-ITER is responsible for design, engineering and procurement of the Tokamak Cooling Water System (TCWS). Because ITER as an experimental facility is designed and built first time, various design ideas and new concepts are evolving every day. Therefore, it is challenging that the design and engineering of TCWS is conducted in a manner to accommodate rather quickly such frequent changes in client system design while not to delay the overall project progress. Another difficulty exists in identifying physical and functional interfaces of TCWS with other systems. Details in system design and engineering challenges will be discussed during the presentation.