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Overview of Progress on the NSTX-U Recovery Project¹ STEFAN GERHARDT, JOHN GALAYDA, LESLIE HILL, Princeton Plasma Physics Laboratory, NSTX-U RECOVERY ENGINEERING TEAM — The NSTX-U Recovery Project has exited the design phase and is now in the fabrication & installation phase. The Project received CDE-3B approval signifying completion of final design in June 2020; when combined with the CDE-3A approval from September 2019, full authorization has now been granted to complete the Project. Improvements to the test cell nuclear shielding, including a new labyrinth, are completed. Six inner-PF coils are nearing completion at Sigmaphi in France. The centerstack casing, a large weldment that provides the inner vacuum boundary and supports numerous coils and tiles, is well on the way to completion, and parts for the inner-PF coils supports are being fabricated. Mechanical reinforcements for the in-vessel stabilizing plates and helium distribution lines are being installed. All plasma facing components on the center column and in the divertors are being fabricated, with special features (castellation, fish-scaling) in the high heat flux regions of the machine. The vertical field coils are being realigned to ensure low error fields. A new access control systems, compliant with IEC 61508/61511 is being installed. Progress on the Project, and the plans for commissioning, will be presented.

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