Simulating the plasma startup scenario in the Alborz tokamak

M. Ghasemi, H. Sadeghi, D. Iraji, R. Amrollahi

1 Fusion Laboratory, Amirkabir University of Technology, Tehran, Iran

Abstract

The Alborz tokamak program was started from 2012 at Amirkabir university of technology – Iran. This device has been assembled recently and now the discharge tests are in the process of getting started. The startup process in tokamak machines presents unique challenges due to their characteristics. In the present study, a series of simulations are carried out in Alborz tokamak to improve the startup to test whether the proposed startup scenarios are feasible and appropriate. For this important goal, the power supply modification and its influence on discharge are considered and investigated in this work.