

Continuous Innovation - R&D for Chinese Advanced PWR (CAP) Series

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Abstract

Only nuclear power can ensure the clean, affordable and reliable electricity needed to meet increasing global energy demand whilst ensuring climate goals can also be achieved. WNA proposed 50 GWe of new capacity in 2016-2020, 125 GWe in 2021-2025 and 825 GWe in 2026-2050. For China, nuclear power plant is an attractive option to optimize and secure the energy portfolio and to tackle the challenge of environment. On basis of the Advanced Passive PWR Technology, China has built R&D platform for CAP series development. CAP series with various features and capacity including CAP1400, CAP1700, CAP200, CAPs, etc. are able to satisfy the global diverse utilities demand. Innovative methodology is applying to the CAP series full life cycle including smart design, model-based enterprise, modularized construction and intelligent operation. Innovation is the only way out for nuclear community to move forward and these innovative R&D platforms boost economy improvement under safety assurance of CAP series.