



Status of Activities on the Project of  
the Land-Based Small Nuclear Power Plant on the Basis of  
RITM-200N Reactor Plant

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Electric power, MW (gross)	55
Reactor plant thermal power, MW	190
Refueling interval, years	6
Service life, years	60
Steady-state availability factor	over 0.9



Yakutia SNPP construction camp



Characteristics and Status of the First-of-a-Kind SNPP Project with RITM-200N Reactor Plant



PROJECT STATUS

2021 r. – materials have been developed to justify investments in the construction of SNPP

2022 r. – detailed design for the RITM-200N reactor plant and core developed

2023 r. – a siting license obtained for a nuclear plant for the facility:  
power unit No.1 of Yakutia SNPP (Ust-Kuiga village)

– a detailed design is developed for nuclear fuel handling equipment complex

– the first shift camp of builders for 250 people was put into operation in the Ust-Kuiga village

2024 r. – Design documentation and justification materials are developed to obtain the Construction License

– Decision is made to switch to two-unit version. Electric power – 110 MW (gross)

Commissioning of the first power unit is scheduled in 2030

The main building of the SNPP is designed to withstand:

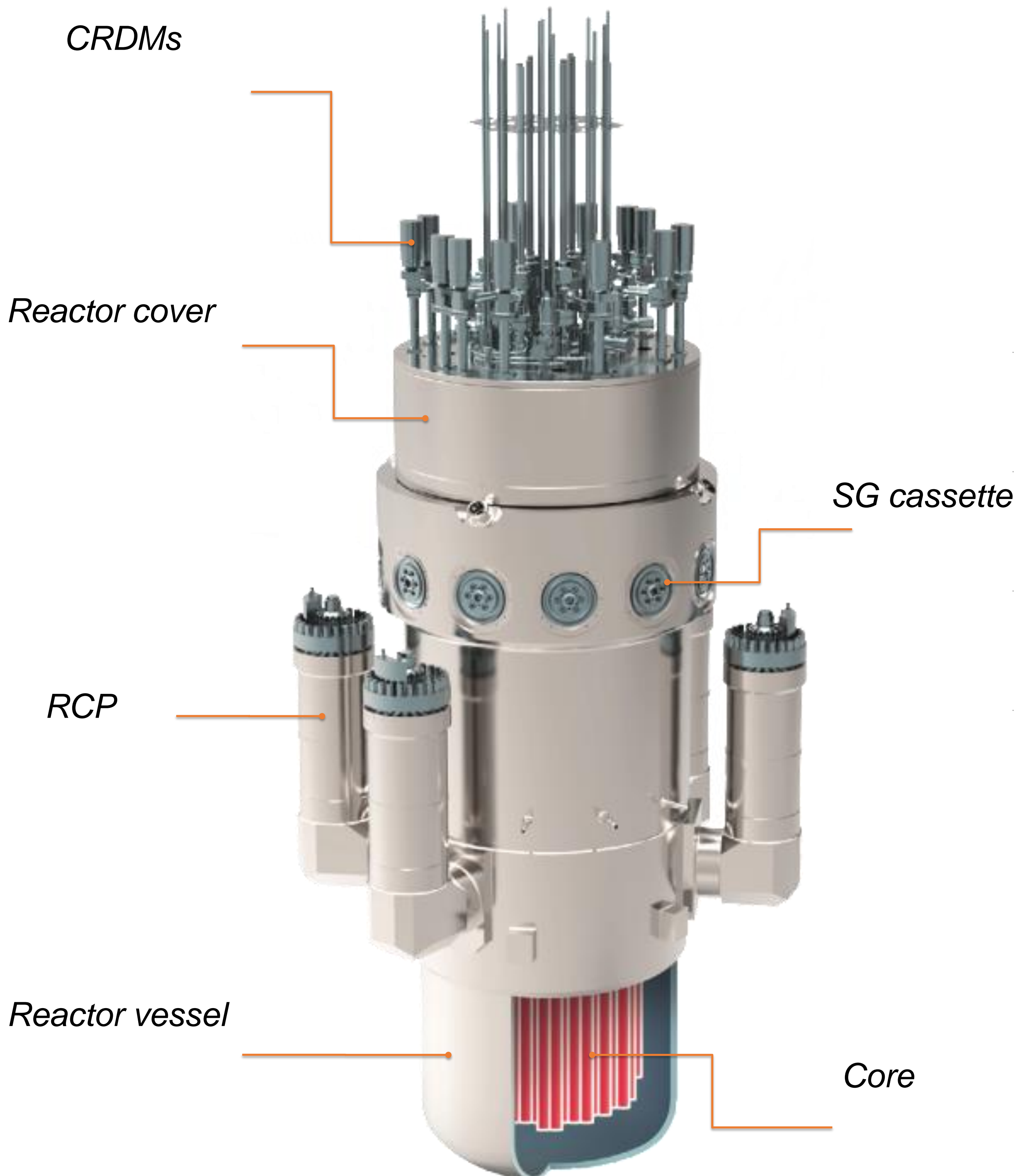
✓ a crash of a 5,7-ton aircraft

✓ a design-basis earthquake of 7 points with 0.13g as per MSK-64

✓ a maximum design-basis earthquake of 8 points with 0.28g as per MSK-64

✓ computations for the RP equipment were performed by 9 points

Integral Reactor of RITM-200N Reactor Plant



Integral reactor

Manufactured in series.  
8 RPs are RITM-200 mounted on 4 MNIs  
Arktika, Sibir and Ural  
Arktika, Sibir and Ural have been put into operation

Reactor vessel

Assigned service life: 60 years  
Assigned lifetime: 495,000 h

SG cassette

Assigned service life: 20 years  
Assigned lifetime: 165,000 h

MCP

Assigned service life: 20 years  
Assigned lifetime: 165,000 h

ShRDM and SRDM

Assigned service life: 20 years  
Assigned lifetime: 165,000 h

Overall dimensions(L × B × H): 3.47 × 4.55 × 12.1 m  
Weight: 250 t