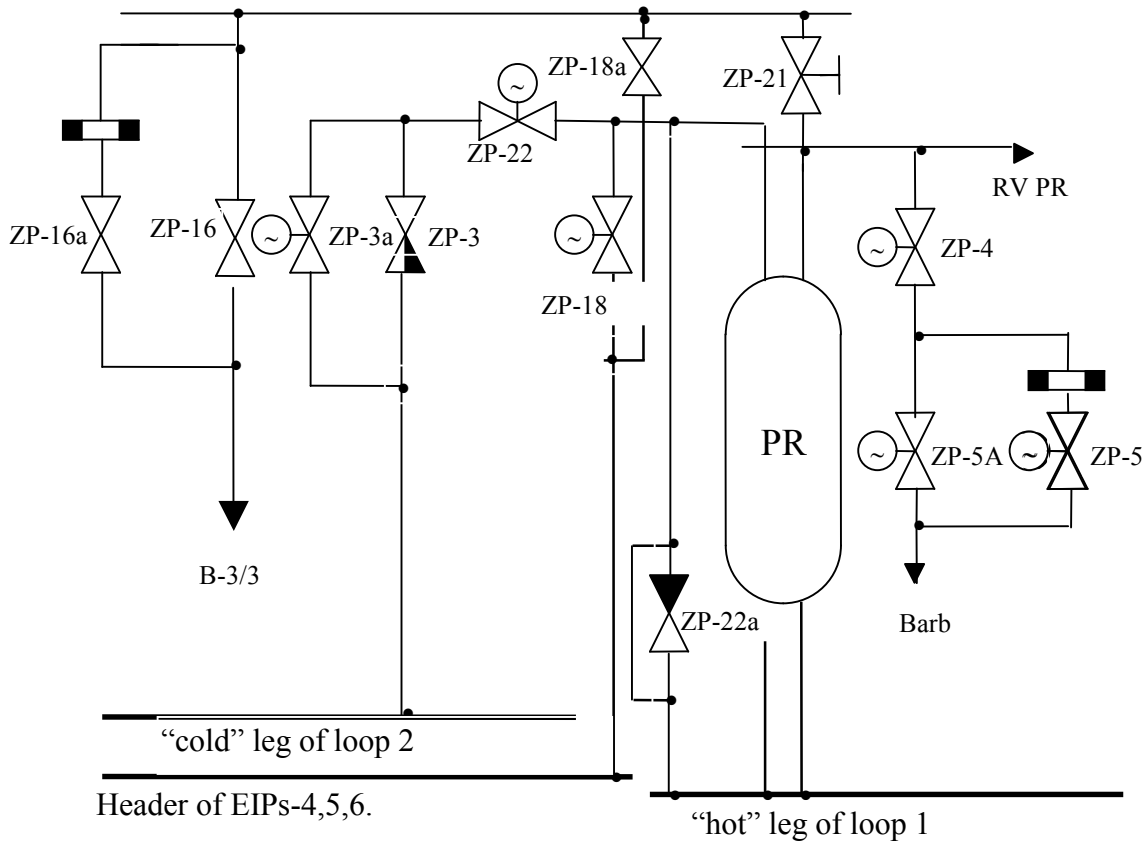
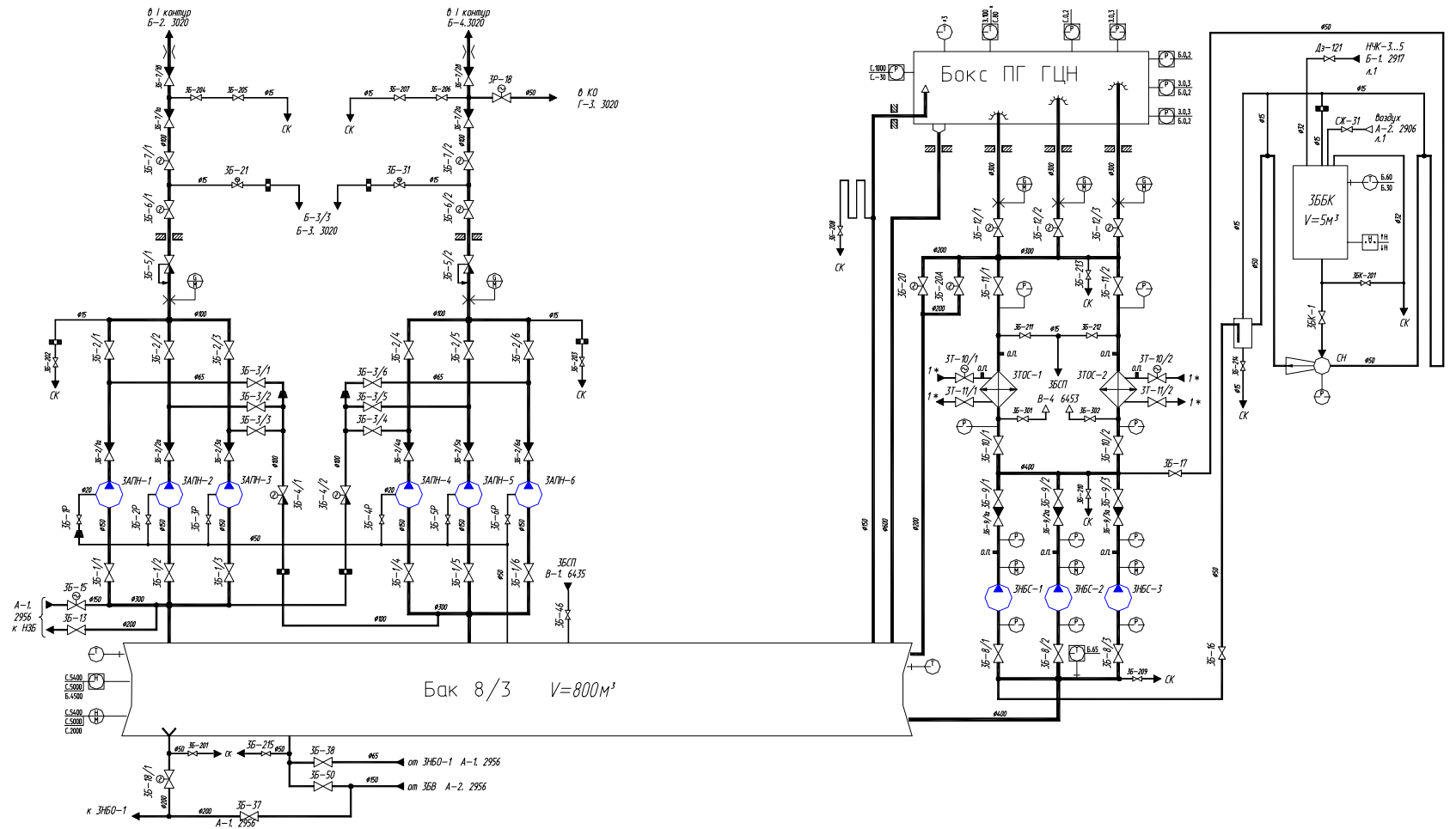


## **The important technical items for HPECCS and volume compensation system**

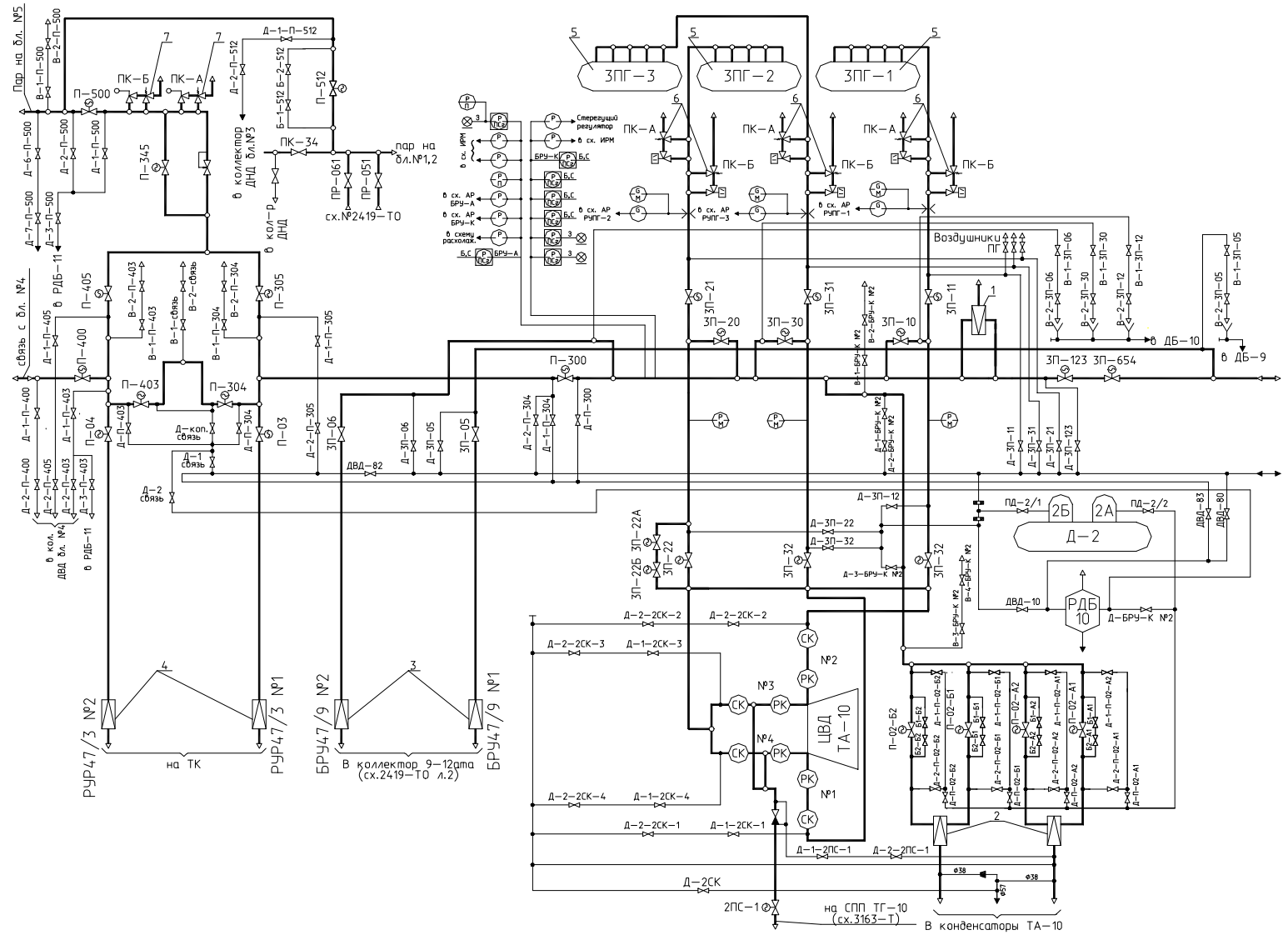
1. For maintenance of serviceability of EIP pumps at leaks in the SG – MCP compartment, the maintenance of coolant temperature in a tank B-8 not above 70 °C would be necessary, That is provided with operation of spray system and system of technical water.
2. Activation of HPECCS in modes without LOOP is carried out automatically at presence of a signal of pressurizer level decrease up to 2560 mm on the device of the common level
3. ZP-22 isolation valve on a line of injection in is closed at pressurizer pressure decrease up to 120 atm.
4. Steam isolation valves P-10-60 between MSH and SGs are closed at MSH pressure decrease up to 35 atm.
5. Steam isolation valve P-10(20,30,40, 50,60) and feed water isolation valve VP-11(21,31,41,51,61) of emergency SG are closed at increase of pressure difference between MSH and SG up to 5 atm and simultaneously decrease of SG pressure up to 35 atm. MCP of this loop is disconnected.



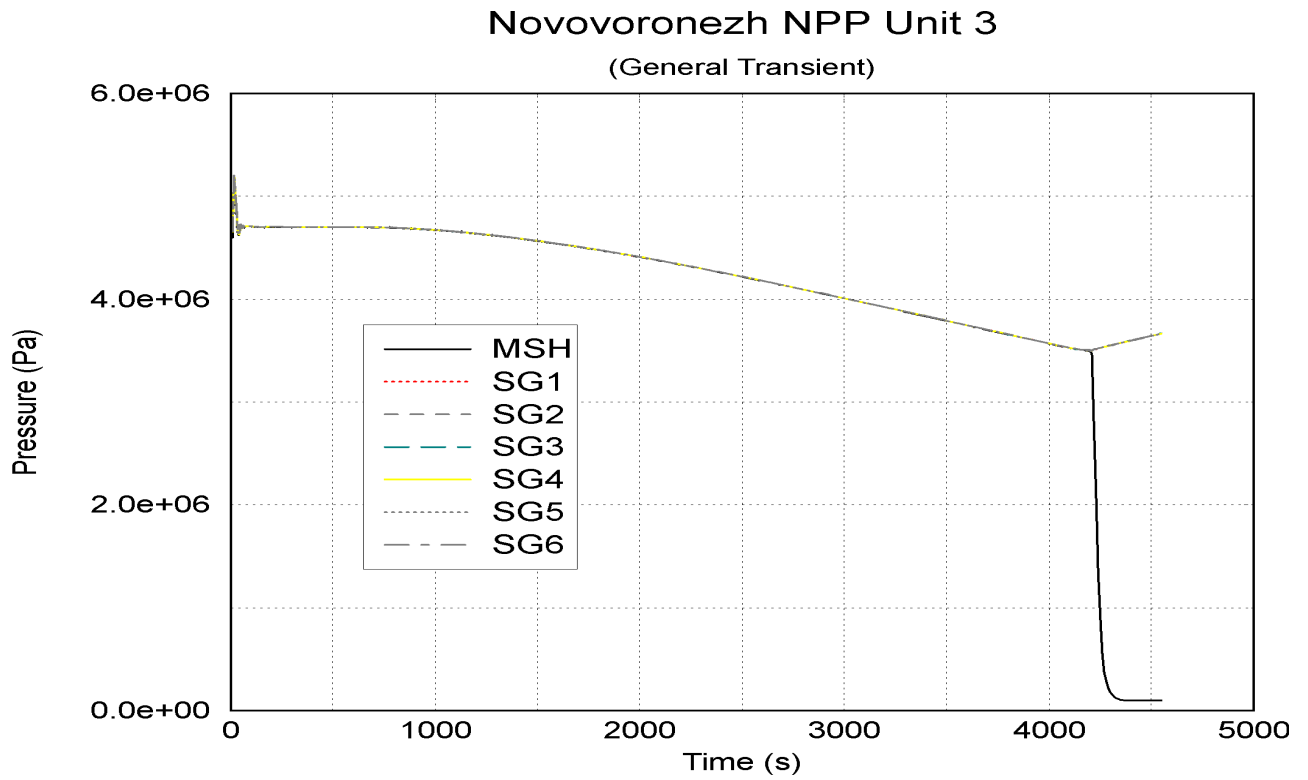
**The diagram of volume compensation system**



**Technological diagram of primary circuit emergency injection system for unit 3 of NvNPP**

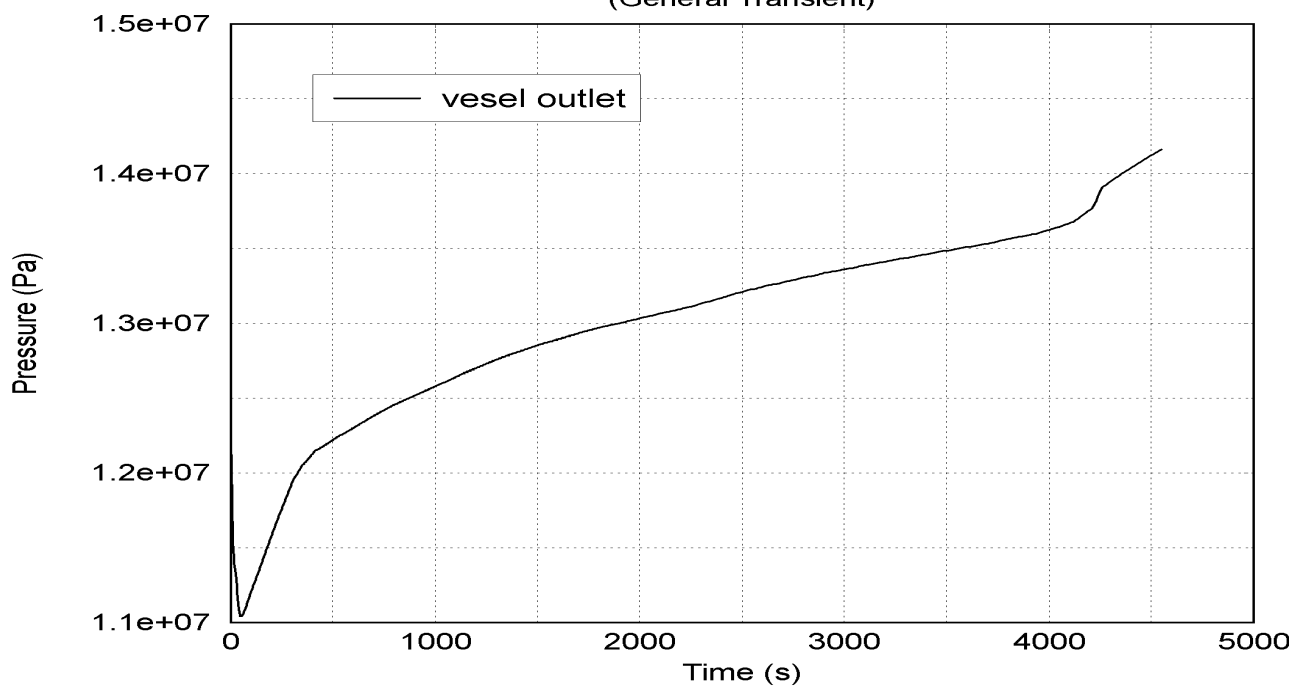


**Technological diagram of main steam lines (2-nd semisection) system for unit 3 of NvNPP**



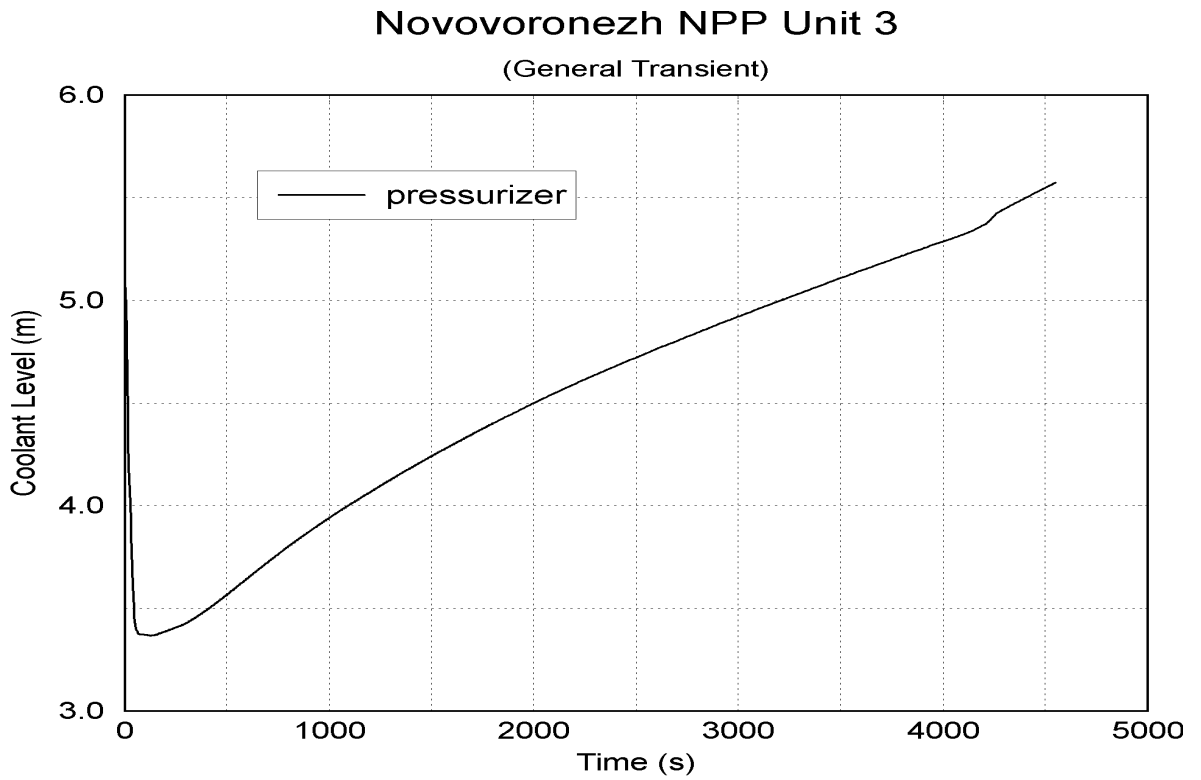
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**Fig.4. Secondary circuit pressure**  
Novovoronezh NPP Unit 3  
(General Transient)



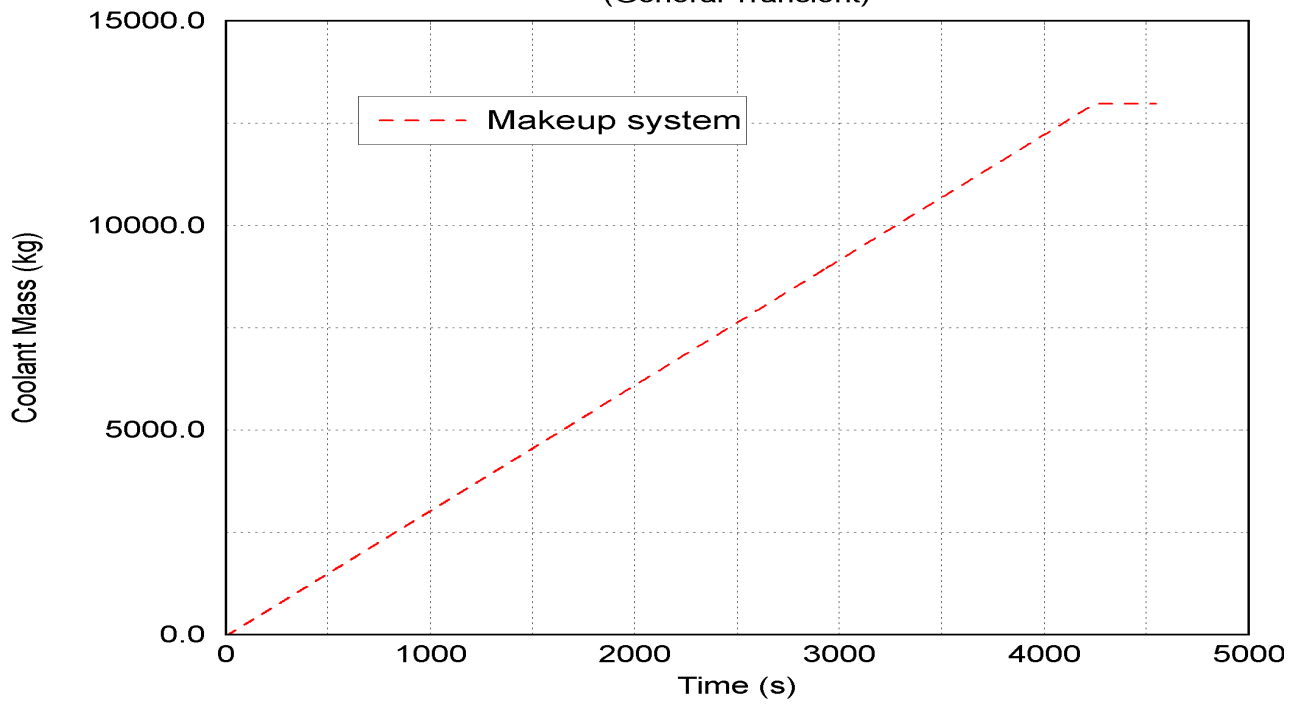
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**Fig.5. Primary circuit pressure**



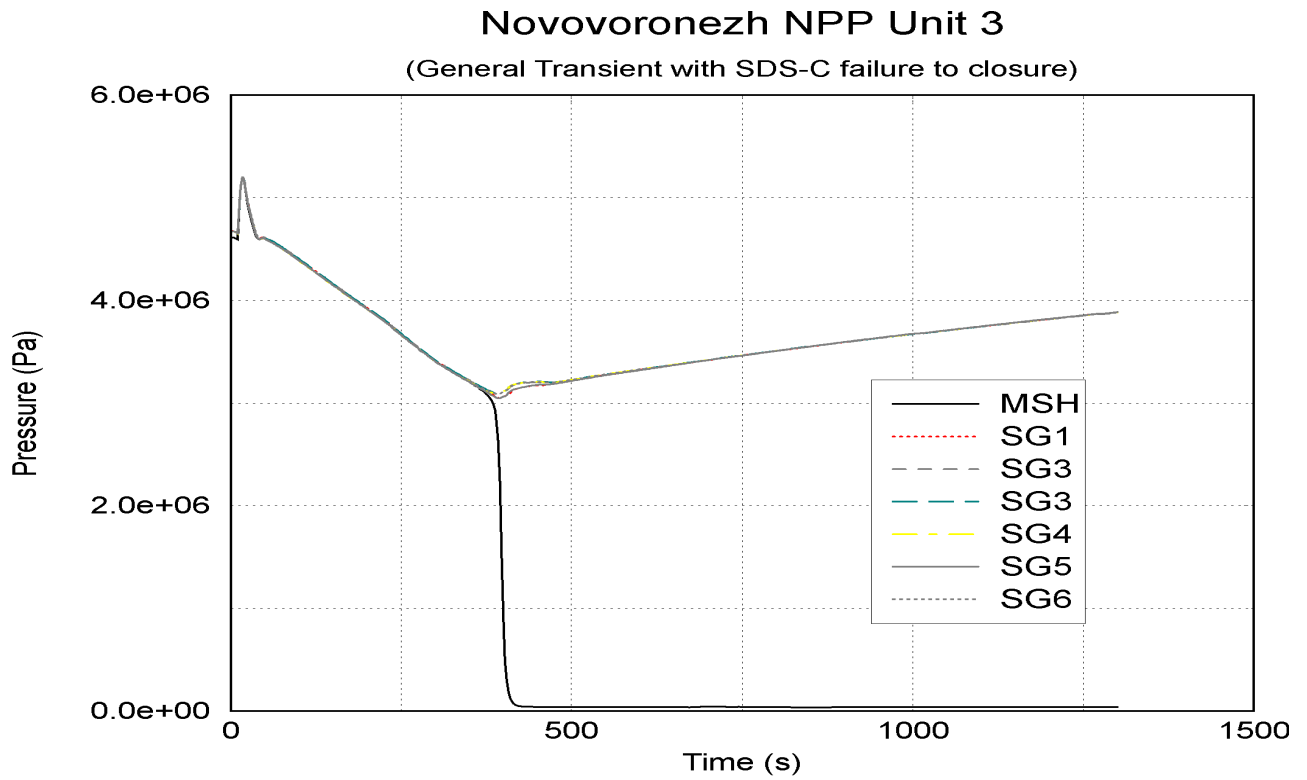
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**Fig.6. Coolant level of pressurizer  
Novovoronezh NPP Unit 3  
(General Transient)**



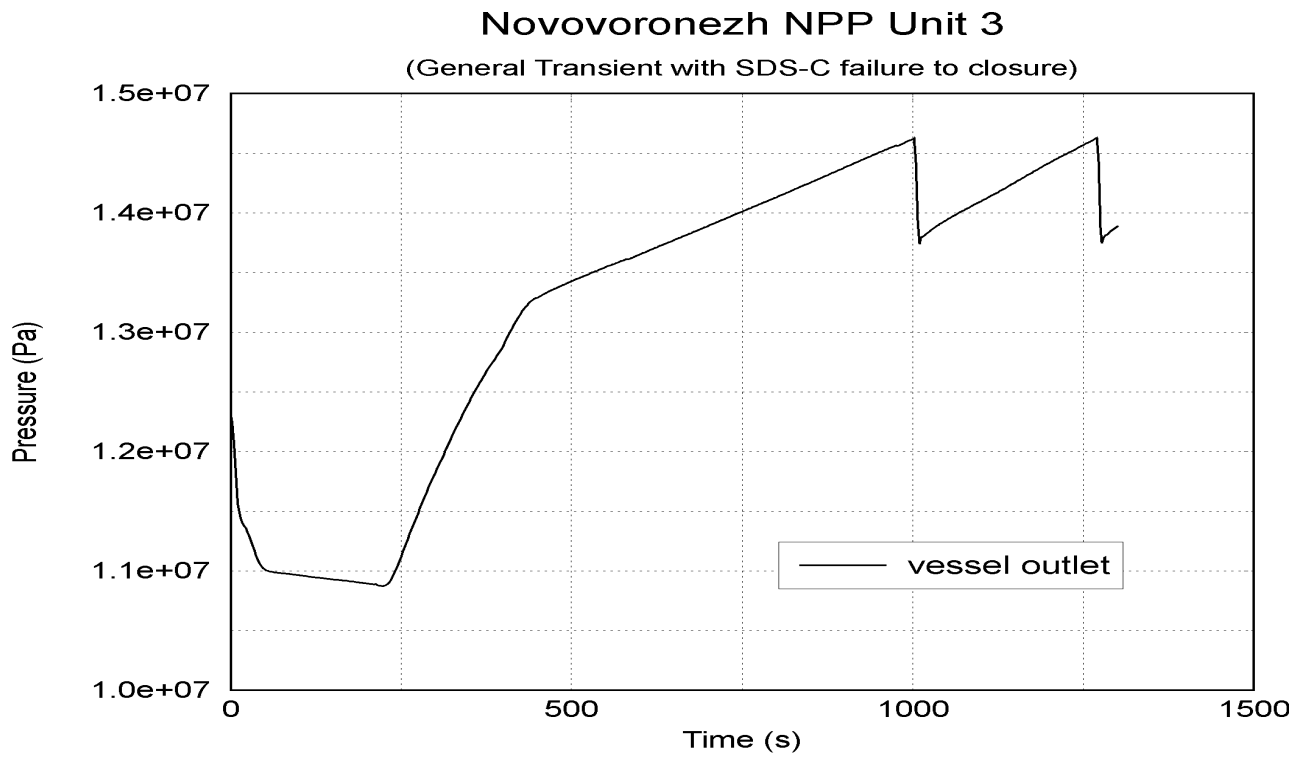
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**Fig.7. Coolant mass been injected into primary circuit by makeup system**



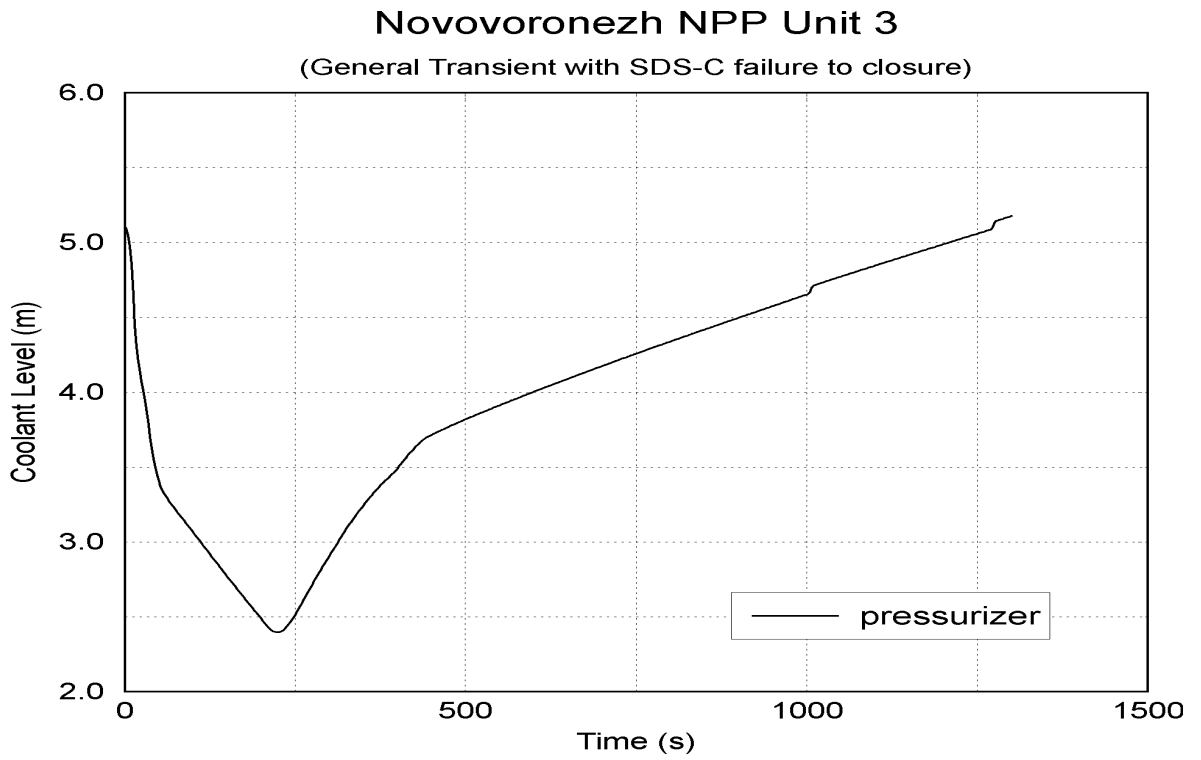
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**Fig.8. Secondary circuit pressure**



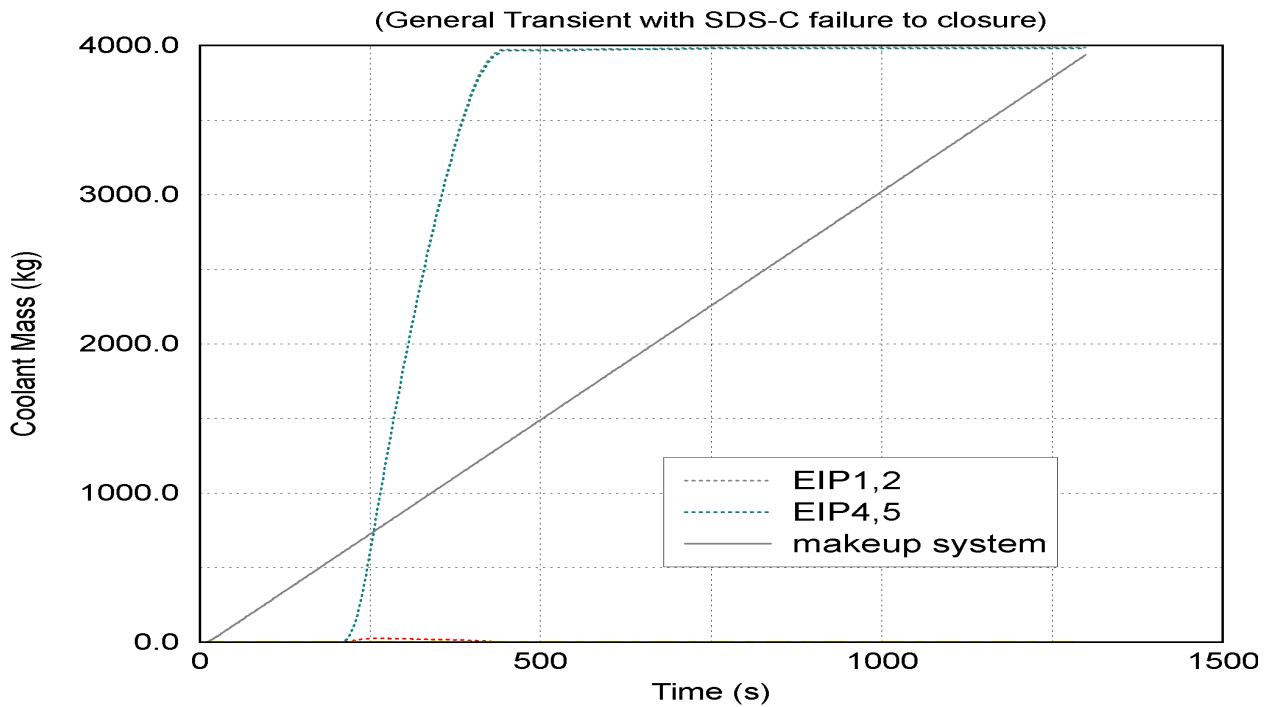
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**Fig.8. Primary circuit pressure**



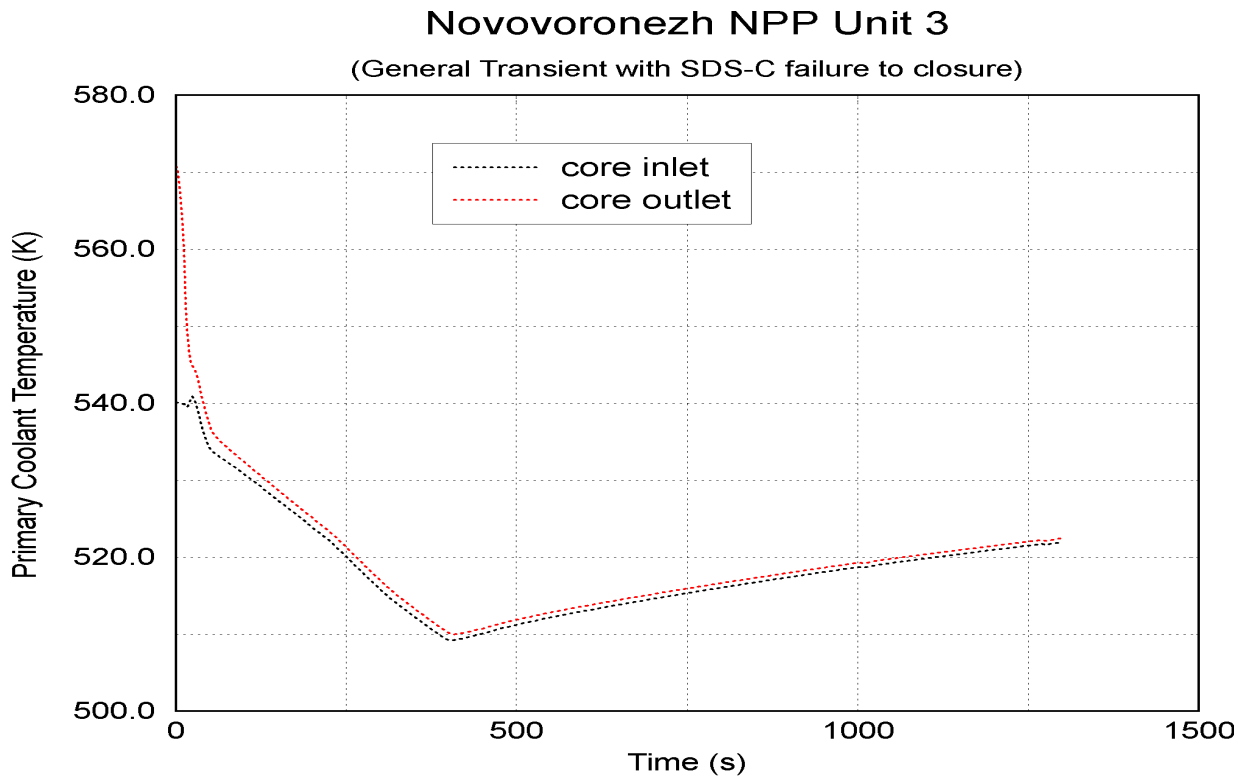
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**Fig.9. Coolant level of pressurizer  
Novovoronezh NPP Unit 3**



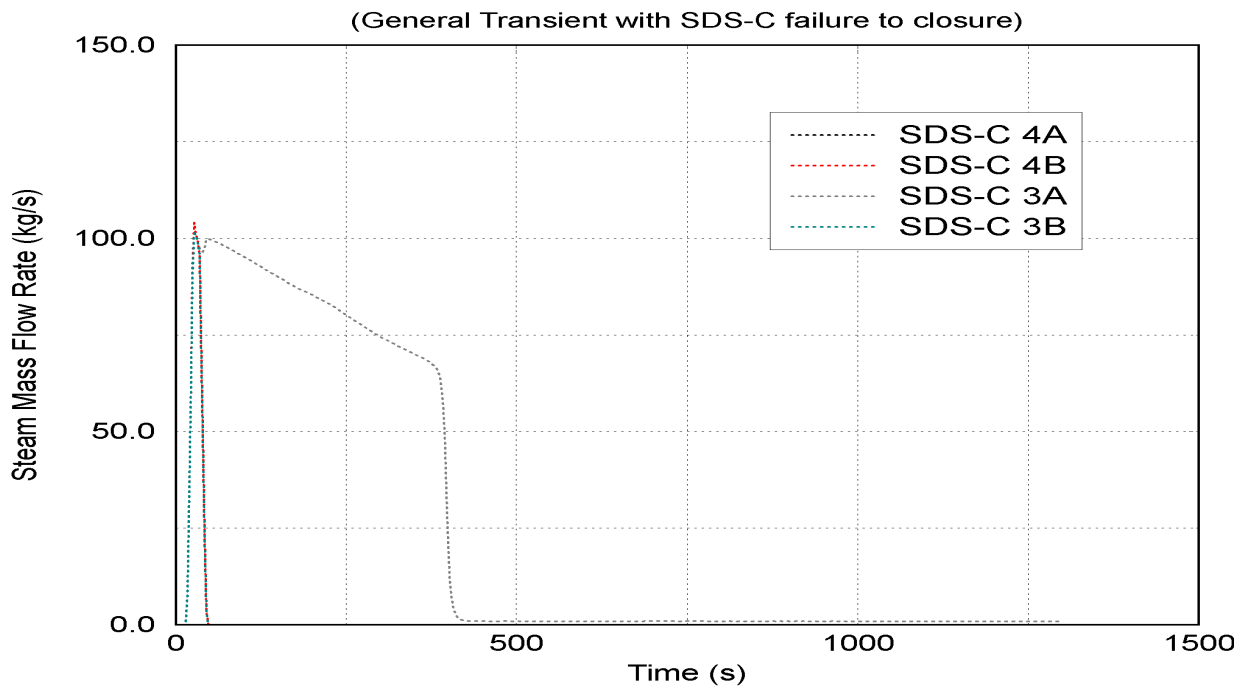
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**Fig.10. Coolant mass been injected into primary circuit by makeup and HPECC systems**



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**Fig.11. Temperature of primary circuit coolant**  
Novovoronezh NPP Unit 3



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**Fig.11. Steam mass flow rate into SDS**