

# AP600

An Advanced Passive  
600MWe plant...  
simplified for the  
1990s and beyond

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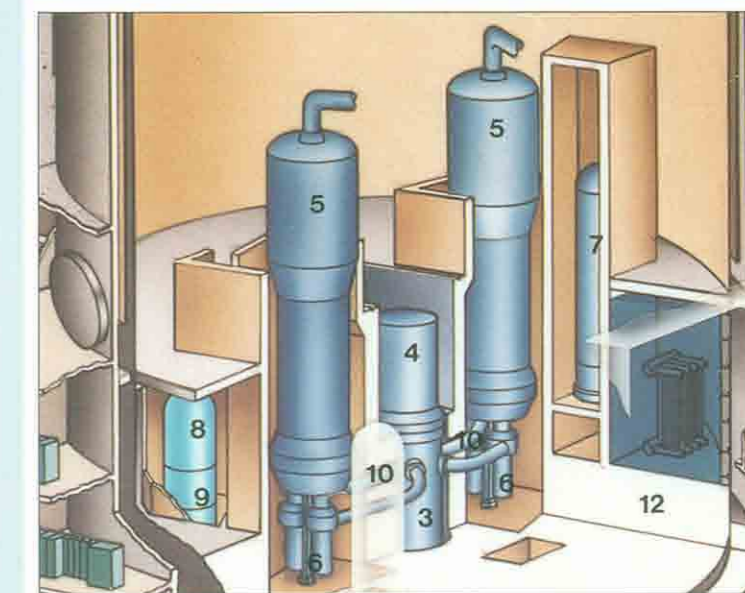
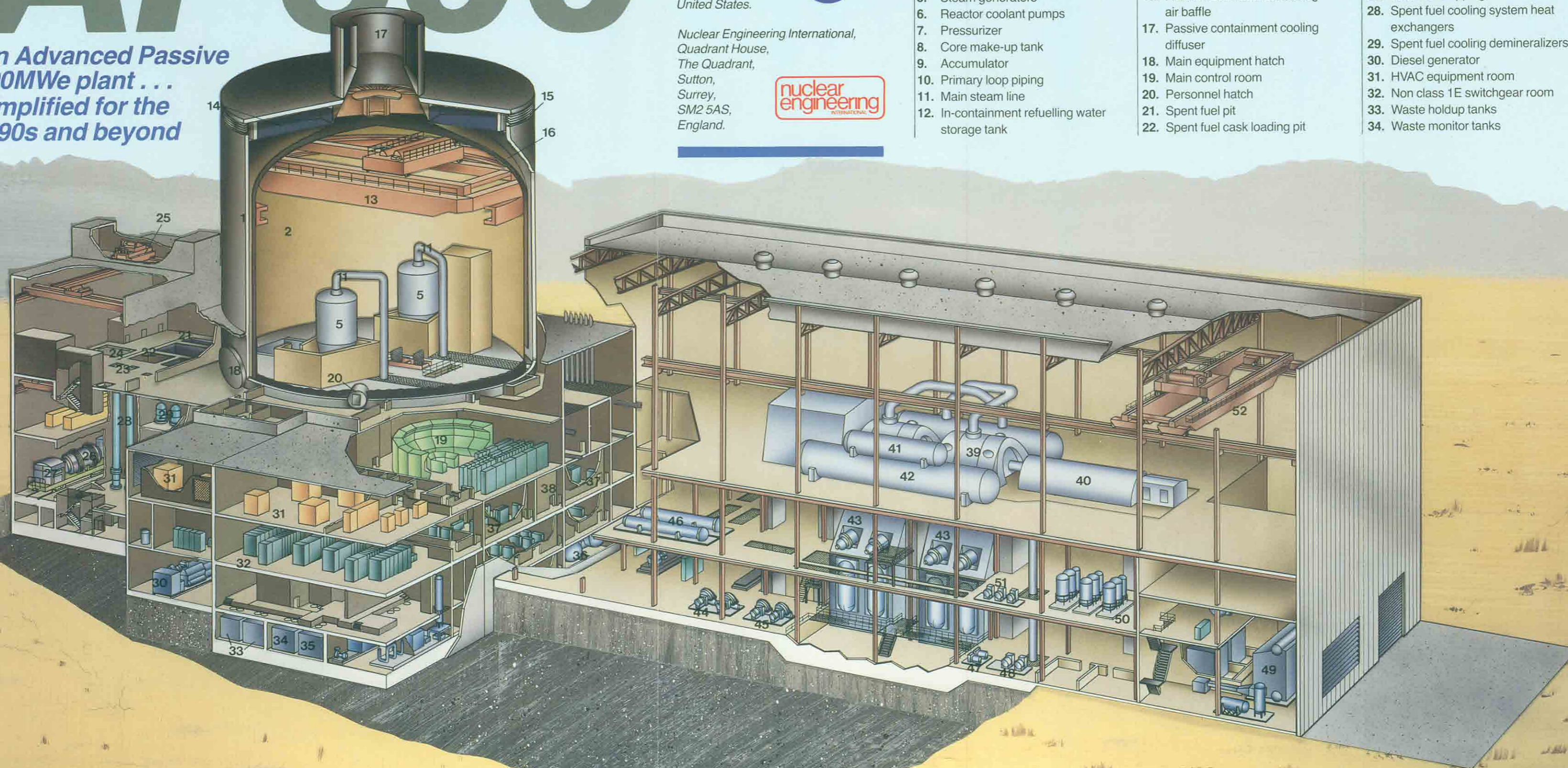


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## KEY

- |  |  |   |                                    |                                   |
|--|--|---|------------------------------------|-----------------------------------|
| 1. Shield building                               | 13. Polar crane                                    | 23. Spent fuel cask washdown pit              | 35. Spent resin tank               | 44. Startup feedwater pumps       |
| 2. Steel containment                             | 14. Passive containment cooling water storage tank | 24. Cask removal hatch                        | 36. Containment spray accumulator  | 45. Feedwater booster pumps       |
| 3. Reactor pressure vessel                       | 15. Passive containment air inlets                 | 25. Cask handling crane                       | 37. Integrated protection cabinets | 46. Feedwater heaters             |
| 4. Integrated head package                       | 16. Passive containment cooling air baffle         | 26. Cask                                      | 38. Emergency control room         | 47. Demineralizer water pumps     |
| 5. Steam generators                              | 17. Passive containment cooling diffuser           | 27. Cask rail shipping car                    | 39. Turbine                        | 48. Degasifier booster pumps      |
| 6. Reactor coolant pumps                         | 18. Main equipment hatch                           | 28. Spent fuel cooling system heat exchangers | 40. Generator                      | 49. Boiler                        |
| 7. Pressurizer                                   | 19. Main control room                              | 29. Spent fuel cooling demineralizers         | 41. Deaerator                      | 50. Demineralizers                |
| 8. Core make-up tank                             | 20. Personnel hatch                                | 30. Diesel generator                          | 42. Deaerator storage tank         | 51. Vacuum pumps                  |
| 9. Accumulator                                   | 21. Spent fuel pit                                 | 31. HVAC equipment room                       | 43. Condensers                     | 52. Turbine building bridge crane |
| 10. Primary loop piping                          | 22. Spent fuel cask loading pit                    | 32. Non class 1E switchgear room              |                                    |                                   |
| 11. Main steam line                              |  | 33. Waste holdup tanks                        |                                    |                                   |
| 12. In-containment refuelling water storage tank |  | 34. Waste monitor tanks                       |                                    |                                   |



## NSSS BASIC DATA

No. of steam generators (SG)	2	Steam flow rate, lb/hr per SG	$3.9 \times 10^6$
Steam generator model	F-1000	Turbine model	TC4F44
Type of SG	Vertical U-tube	No. of reheat stages	1
SG surface area, ft <sup>2</sup> /unit	55 000	No. of feedwater heaters	5
SG power, MWt/unit	909	Net electrical output, MWe	600
Primary coolant flow rate, gpm/unit	92 060		

## SITE PLAN

