

② Commercial Power Reactor Facilities in a Research and Development Stage

Facility name		Radioactive gaseous waste		
		Noble gas (Bq)	Iodine [ <sup>131</sup> I] (Bq)	Tritium [ <sup>3</sup> H] (Bq)
Japan Nuclear Cycle Development Institute Advanced Thermal Reactor Fugen Power Station	Nuclear reactor facilities total	N.D.	N.D.	11 9.3×10
	Annual release Target control level	*1 5.1×10 <sup>14</sup>	*2 2.7×10 <sup>10</sup>	*3 1.8×10 <sup>13</sup>
Japan Nuclear Cycle Development Institute Monju Prototype Fast Breeder Reactor	Nuclear reactor facilities total	N.D.	N.D.	9 2.8×10
	Annual release Target control level	8.2×10 <sup>13</sup>	1.5×10 <sup>8</sup>	-

Facility name		Radioactive liquid waste	
		Total radionuclides (excluding <sup>3</sup> H) (Bq)	Tritium [ <sup>3</sup> H] (Bq)
Japan Nuclear Cycle Development Institute Advanced Thermal Reactor Fugen Power Station	Nuclear reactor facilities total	N.D.	11 3.7×10
	Annual release Target control level	*4 7.4×10 <sup>9</sup>	13 1.1×10
Japan Nuclear Cycle Development Institute Monju Prototype Fast Breeder Reactor	Nuclear reactor facilities total	N.D.	*5 8 4.9×10 (N.D.)
	Annual release Target control level	5.5×10 <sup>9</sup>	12 9.2×10

Notes: The radioactivity (Bq) of gaseous (or liquid) waste is obtained by multiplying the concentration of the radioactive material (Bq/cm<sup>3</sup>) in the released gas (or liquid).

Values lower than the detection limit of radioactivity are indicated as N.D.

The detection limits are as follows.

Radioactive noble gases:  $2 \times 10^{-2}$  (Bq/cm<sup>3</sup>) or less

Radioactive iodine:  $7 \times 10^{-9}$  (Bq/cm<sup>3</sup>) or less

Total radioactive particulate matter (excluding <sup>3</sup>H):  $4 \times 10^{-9}$  (Bq/cm<sup>3</sup>) or less (the <sup>60</sup>Co value is used)

Tritium (gas):  $4 \times 10^{-5}$  (Bq/cm<sup>3</sup>) or less

Radioactive liquid waste (excluding <sup>3</sup>H):  $2 \times 10^{-2}$  (Bq/cm<sup>3</sup>) or less (the <sup>60</sup>Co value is used)

Tritium (liquid):  $2 \times 10^{-1}$  (Bq/cm<sup>3</sup>) or less

\*1, \*2: After October 1, 2003, due to the revision of the reactor facility safety regulations, control targets for noble gases and iodine have been removed from the annual release control targets for radioactive gaseous waste.

\*2: Annual release control targets at the exhaust stack of the waste treatment building are as follows.

Radioactive iodine:  $7.4 \times 10^6$  (Bq/cm<sup>3</sup>) or less

\*3: Annual release control targets at the exhaust stack of the waste treatment building are as follows.

Tritium (gas):  $3.7 \times 10^{11}$  (Bq/cm<sup>3</sup>) or less

\*4: According to the amendment to the Reactor Facility Safety Regulations, the annual liquid radioactive release control target levels have been changed since October 1, 2003.

Total radionuclides (excluding <sup>3</sup>H):  $2.8 \times 10^8$  (Bq) or less (prior to the amendment:  $7.4 \times 10^9$  (Bq) or less)

\*5: The value includes the water and steam derived tritium (N.D.).