## Status of Gaseous and Liquid Waste Management

## ① Commercial Power Reactor Facilities

|                                |                      | Radioactive gaseous waste |        | Radioactivity      |
|--------------------------------|----------------------|---------------------------|--------|--------------------|
|                                | •                    |                           |        | Radioactive liquid |
|                                |                      | Noble gas                 | Iodine | waste (excluding   |
| D                              |                      | 110010 gus                | Todine | <sup>3</sup> H)    |
| Power plant                    |                      | <b>(75.</b> )             | (D.)   | · /                |
|                                |                      | (Bq)                      | (Bq)   | (Bq)               |
| *1                             | Nuclear reactor      |                           |        | 6                  |
| Japan Atomic Power             | facilities total     | N.D.                      | N.D.   | 2.3×10             |
| Company Co., Ltd               | Annual release       |                           |        | 8                  |
| Tokai Power Station            | Target control level | -                         | -      | 3.7×10             |
| Japan Atomic Power             | Nuclear reactor      | 8                         |        |                    |
| Company Co., Ltd.              | facilities total     | 5.0×10                    | N.D.   | N.D.               |
| Tokai Daini Power Station      | Annual release       | 15                        | 10     | 10                 |
|                                | Target control level | 1.4×10                    | 5.9×10 | 3.7×10             |
| Japan Atomic Power             | Nuclear reactor      | 9                         | 5      |                    |
| Company Co., Ltd.              | facilities total     | 2.6×10                    | 3.8×10 | N.D.               |
| Tsuruga Power Station          | Annual release       | 15                        | 10     | 10                 |
| _                              | Target control level | 1.7×10                    | 3.8×10 | 7.4×10             |
| Tohoku Electric Power Co.,     | Nuclear reactor      |                           |        |                    |
| Inc.                           | facilities total     | N.D.                      | N.D.   | N.D.               |
| Onagawa Nuclear Power          | Annual release       | 15                        | 11     | 9                  |
| Station                        | Target control level | 2.6×10                    | 1.1×10 | 7.4×10             |
| Tokyo Electric Power Co.,      | Nuclear reactor      | _,,                       | 6      |                    |
| Inc.                           | facilities total     | N.D.                      | 9.7×10 | N.D.               |
| Fukushima Dajichi Nuclear      | Annual release       | 15.                       | 11     | 11                 |
| Power Station                  | Target control level | 8.8×10                    | 4.8×10 | 2.2×10             |
| Tokyo Electric Power Co.,      | Nuclear reactor      | 0.0**10                   | 1.0~10 | 2.2**10            |
| Inc.                           | facilities total     | N.D.                      | N.D.   | N.D.               |
| Fukushima Daini Nuclear        | Annual release       | 15. Is                    | 11.D.  | 11.D.              |
| Power Station                  | Target control level | 5.5×10                    | 2.3×10 | 1.4×10             |
|                                | Nuclear reactor      | 3.3^10                    | 2.5^10 | 1.4^10             |
| Tokyo Electric Power Co., Inc. | facilities total     | N.D.                      | N.D.   | N.D.               |
| Kashiwazaki-Kariwa Nuclear     | Annual release       |                           |        |                    |
|                                |                      | 15                        | 2.210  | 2.5 × 10           |
| Power Station                  | Target control level | 6.7×10                    | 2.3×10 | 2.5×10             |
| Chubu Electric Power Co.,      | Nuclear reactor      | MD                        | ND     | MD                 |
| Inc.                           | facilities total     | N.D.                      | N.D.   | N.D.               |
| Hamaoka Nuclear Power          | Annual release       | 15                        | 11     | 11                 |
| Station                        | Target control level | 5.1×10                    | 2.9×10 | 1.4×10             |
| Hokuriku Electric Power Co.    | Nuclear reactor      |                           |        |                    |
|                                | facilities total     | N.D.                      | N.D.   | N.D.               |
| Shika Nuclear Power Station    | Annual release       | 15                        | 10     | 10                 |
|                                | Target control level | 1.1×10                    | 3.0×10 | 3.7×10             |
| Chugoku Electric Power Co.,    | Nuclear reactor      |                           |        |                    |
| Inc.                           | facilities total     | N.D.                      | N.D.   | N.D.               |
| Shimane Nuclear Power          | Annual release       | 15                        | 11     | 10                 |
| Station                        | Target control level | 2.5×10                    | 1.3×10 | 7.4×10             |

<sup>\*1:</sup> Due to the commencement of the decommissioning process on December 4, 2001, <sup>60</sup>Co, <sup>134</sup>Cs and <sup>137</sup>Cs are the subjects of the annual release control targets for radioactive liquid waste.

|                              |                      |        |                     | Radioactivity      |
|------------------------------|----------------------|--------|---------------------|--------------------|
|                              |                      |        |                     | Radioactive liquid |
|                              |                      |        | Iodine              | waste (excluding   |
|                              |                      |        |                     | ` `                |
| Power plant                  |                      |        | [ <sup>131</sup> I] | <sup>3</sup> H)    |
|                              |                      |        | (Bq)                | (Bq)               |
| Hokkaido Electric Power Co., | Nuclear reactor      | 9      |                     |                    |
| Inc.                         | facilities total     | 6.0×10 | N.D.                | N.D.               |
| Tomari Power Station         | Annual release       | 15     | 10                  | 10                 |
|                              | Target control level | 1.1×10 | 1.1×10              | 7.4×10             |
| Kansai Electric Power Co.,   | Nuclear reactor      | 10     |                     |                    |
| Inc.                         | facilities total     | 1.6×10 | N.D.                | N.D.               |
| Mihama Power Station         | Annual release       | 15     | 10                  | 11                 |
|                              | Target control level | 2.1×10 | 7.4×10              | 1.1×10             |
| Kansai Electric Power Co.,   | Nuclear reactor      | 10     |                     |                    |
| Inc.                         | facilities total     | 1.6×10 | N.D.                | N.D.               |
| Takahama Power Station       | Annual release       | 15     | 10                  | 11                 |
|                              | Target control level | 3.3×10 | 6.2×10              | 1.4×10             |
| Kansai Electric Power Co.,   | Nuclear reactor      | 10     | 6                   |                    |
| Inc.                         | facilities total     | 5.7×10 | 1.1×10              | N.D.               |
| Ohi Power Station            | Annual release       | 15     | 11                  | 11                 |
|                              | Target control level | 3.7×10 | 1.0×10              | 1.4×10             |
| Shikoku Electric Power Co.,  | Nuclear reactor      | 9      |                     |                    |
| Inc.                         | facilities total     | 2.8×10 | N.D.                | N.D.               |
| Ikata Nuclear Power Plant    | Annual release       | 15     | 10                  | 11                 |
|                              | Target control level | 1.5×10 | 8.1×10              | 1.1×10             |
| Kyushu Electric Power Co.,   | Nuclear reactor      | 10     |                     |                    |
| Inc.                         | facilities total     | 1.1×10 | N.D.                | N.D.               |
| Genkai Nuclear Power Plant   | Annual release       | 15     | 10                  | 11                 |
|                              | Target control level | 2.2×10 | 5.9×10              | 1.4×10             |
| Kyushu Electric Power Co.,   | Nuclear reactor      | 10     |                     |                    |
| Inc.                         | facilities total     | 3.1×10 | N.D.                | N.D.               |
| Sendai Nuclear Power Station | Annual release       | 15     | 10                  | 10                 |
|                              | Target control level | 1.6×10 | 6.2×10              | 7.4×10             |

Notes: The radioactivity (Bq) of gaseous (or liquid) waste is obtained by multiplying the concentration of the radioactive material (Bq/cm³) in the released gas (or liquid) by the amount of released gas (or liquid) (m³). 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

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

amendment to the Reactor