# AGREEMENT BETWEEN THE GOVERNMENT OF JAPAN

AND

THE GOVERNMENT OF THE REPUBLIC OF TURKEY
ON CO-OPERATION FOR DEVELOPMENT OF NUCLEAR POWER PLANTS
AND

THE NUCLEAR POWER INDUSTRY IN THE REPUBLIC OF TURKEY

#### PREAMBLE

The Government of Japan and the Government of the Republic of Turkey (hereinafter referred to individually as a "Party" and collectively as "the Parties");

Recognising the desire of the Government of the Republic of Turkey to develop the nuclear power industry through co-operation between the Parties in overall aspects of the nuclear power industry, such as nuclear safety and security, nuclear regulations, waste management, quality management systems, technology transfer, human resources development and localisation;

Expressing their mutual interest in the advancement of such co-operation;

Bearing in mind that Japanese companies supported by the Government of Japan have strong willingness and desire to invest in the development of nuclear power plants in the Republic of Turkey;

Bearing in mind that the Government of the Republic of Turkey has decided to choose Japan as the co-operation partner for the development of a nuclear power plant at the second site in the Republic of Turkey;

Recognising that Japan and the Republic of Turkey are members of the International Atomic Energy Agency and parties to the Treaty on the Non-Proliferation of Nuclear Weapons, done on 1 July 1968;

Noting the Agreement between the Government of Japan and the Government of the Republic of Turkey for Cooperation in the Use of Nuclear Energy for Peaceful Purposes, signed at Tokyo on 26 April 2013 and at Ankara on 3 May 2013 (hereinafter referred to as "the Nuclear Energy Cooperation Agreement");

Recognising that the Republic of Turkey is a party to the Convention on Third Party Liability in the Field of Nuclear Energy, done on 29 July 1960, as amended by the Additional Protocol, done on 28 January 1964, and by the Protocol, done on 16 November 1982, and to the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention, done on 21 September 1988;

Noting that the Agreement between Japan and the Republic of Turkey Concerning the Reciprocal Promotion and Protection of Investment, done on 12 February 1992 and the Agreement between Japan and the Republic of Turkey for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, done on 8 March 1993 are in force between the two states;

Affirming that nuclear energy provides a sustainable source of energy, which contributes to energy security and reduces carbon emission;

Reaffirming the importance of nuclear safety for any state in which nuclear facilities are operated; and

Welcoming the involvement of Turkish nationals and entities in all phases of the development of nuclear power plants in the Republic of Turkey;

Have agreed as follows:

## ARTICLE 1 DEFINITIONS

For the purpose of this Agreement:

- (a) The term "Project" means the nuclear power plant project to be implemented at the Project Site which includes overall aspects of the nuclear power plant starting from site activities until the end of decommissioning process;
- (b) The term "Project Site" means a land which will be allocated to the Project Company for the implementation of the Project at Sinop in Sinop Province, or at another location if circumstances so require, in the Republic of Turkey;
- (c) The term "Project Participant" means any Turkish State Entity or any private entity which will participate in the Project Company;

- (d) The term "Project Company" means a joint stock company which will be established by the Project Participants under the laws and regulations of the Republic of Turkey for the implementation of the Project;
- (e) The term "Turkish State Entity" means any enterprise which is owned or controlled by the Government of the Republic of Turkey;
- (f) The term "Project Contracts" means a group of contracts which will be concluded for the implementation of the Project by the Project Company, such as the Host Government Agreement and the Power Purchase Agreement;
- (g) The term "Host Government Agreement" means an agreement which will be concluded between the Government of the Republic of Turkey and the Project Company, covering the detailed terms and conditions necessary for the implementation of the Project; and
- (h) The term "Power Purchase Agreement" means an agreement which will be concluded between the Turkish State Entity concerned and the Project Company regarding the sale and purchase of the electricity generated by the nuclear power plant at the Project Site.

## ARTICLE 2 CO-OPERATION UNDER THIS AGREEMENT

- 1. Co-operation between the Parties under this Agreement shall be conducted subject to the Nuclear Energy Co-operation Agreement, the other relevant international agreements to which Japan and the Republic of Turkey are parties and the applicable laws and regulations of Japan and the Republic of Turkey. The Parties agree that the co-operation envisaged in sub-paragraph (b) of paragraph 2 of Article 2 of the Nuclear Energy Co-operation Agreement may be undertaken with regard to light water reactors.
- 2. The Parties shall use their best endeavours to cooperate in the implementation of the Project in the areas which include the following:
  - (a) conducting feasibility study including site activities and economic impact assessment of the Project;

- (b) design, engineering, procurement, construction, operation, maintenance, repair, refurbishing and decommissioning of the nuclear power plant at the Project Site;
- (c) supply of nuclear fuel for the nuclear power plant at the Project Site;
- (d) ensuring nuclear safety including environmental protection and emergency responses planning for the nuclear power plant at the Project Site; and
- (e) conducting operation and maintenance training programmes and promoting the establishment of a nuclear technology centre for the development of the skilled workforce for the nuclear power plant at the Project Site.
- 3. The Parties shall use their best endeavours to cooperate in the development of the nuclear power industry of the Republic of Turkey in the areas which include the following:
  - (a) development of nuclear regulations such as those on nuclear security and supervision, safety and licensing including license extension of nuclear power plants;
  - (b) development of a quality management system with regard to the operation of nuclear power plants;
  - (c) development of technologies in the field of the operation, maintenance and decommissioning of nuclear power plants and the management of spent fuel and radioactive waste in the light of relevant policies of the Republic of Turkey;
  - (d) promotion of the establishment of a nuclear fuel fabrication plant;
  - (e) provision of technical assistance to relevant Turkish entities through training for the enhancement of their capacity;
  - (f) organisation of workshops, meetings, seminars and conferences, including those to promote public awareness and acceptance on the peaceful uses of nuclear energy; and
  - (g) development and transfer of technology in the field of nuclear power industry.

4. If any technical assistance or any project for necessary infrastructure incidental to the Project takes place through Japan's official development assistance, it shall be implemented in accordance with the applicable laws and regulations of Japan and the Republic of Turkey, as well as separate arrangements to be made between the Parties or relevant entities of Japan and the Republic of Turkey.

### ARTICLE 3 STEERING COMMITTEE

For the purpose of co-ordinating the co-operation under this Agreement, the Parties shall establish a steering committee to be composed of the representatives of the Parties.

## ARTICLE 4 SITE AND INFRASTRUCTURE RELATED MATTERS

The Government of the Republic of Turkey shall:

- (a) allocate the Project Site required for the Project without ownership to the Project Company, free of charge until the end of decommissioning process of the nuclear power plant;
- (b) provide infrastructures necessary for the Project outside of the Project Site, free of charge;
- (c) in accordance with the laws and regulations of the Republic of Turkey, facilitate the access of relevant persons to the Project Site;
- (d) in accordance with the laws and regulations of the Republic of Turkey, facilitate the issuance of necessary permits for the employment of eligible foreign nationals for the Project; and
- (e) in accordance with the laws and regulations of the Republic of Turkey, facilitate the issuance of approvals, permits and licenses for the implementation of the Project.

## ARTICLE 5 HOST GOVERNMENT AGREEMENT AND POWER PURCHASE AGREEMENT

- 1. The Government of the Republic of Turkey shall conclude with the Project Company the Host Government Agreement, which together with this Agreement is necessary for the implementation of the Project, after necessary internal procedures are jointly completed with this Agreement. Essential elements of the Host Government Agreement as presumed by the Government of the Republic of Turkey and the Project Participants concerned as of the date of the signing of this Agreement are described in the Annex of this Agreement.
- 2. The Government of the Republic of Turkey shall ensure that the Turkish State Entity concerned will conclude the Power Purchase Agreement with the Project Company.

### ARTICLE 6 PROJECT FUNDING

- 1. The Government of Japan strongly supports and shall encourage appropriate Japanese financial institutions, in particular the Japan Bank for International Co-operation and the Nippon Export and Investment Insurance, to extend the financing required for the Project. When such financing is extended, its terms and conditions as well as the procedures for its utilisation will be governed by a financing agreement between the Project Company and appropriate Japanese financial institutions.
- 2. In the light of strong intention for the development of nuclear power plants as the national policy of the Republic of Turkey, the Government of the Republic of Turkey shall ensure, in accordance with the laws and regulations of the Republic of Turkey, that the Turkish State Entities concerned will fulfill their obligations under the Project Contracts for the implementation of the Project in a timely manner, when a financing agreement referred to in paragraph 1 of this Article is concluded.

## ARTICLE 7 TAXATION AND INVESTMENT

1. All taxes and duties to be levied in connection with the Project shall be subject to the applicable laws and regulations in force in Japan and the Republic of Turkey as well as, as appropriate, the Agreement between Japan and the Republic of Turkey for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, done on 8 March 1993.

2. All investments in connection with the Project shall be governed, as appropriate, by the Agreement between Japan and the Republic of Turkey Concerning the Reciprocal Promotion and Protection of Investment, done on 12 February 1992.

## ARTICLE 8 INTELLECTUAL PROPERTY RIGHTS AND TRANSFER OF TECHNOLOGY

- 1. The Parties shall ensure that intellectual property rights will be adequately and effectively protected in implementing the Project, subject to the relevant international agreements to which both Japan and the Republic of Turkey are parties and the applicable laws and regulations of Japan and the Republic of Turkey.
- 2. The Government of Japan strongly supports and shall not arbitrarily impede the transfer of technology required for the implementation of the Project in line with a technology transfer plan which will be made by the Government of the Republic of Turkey and the Project Company with due consideration to the outcome of the feasibility study and the economic impact assessment of the Project.
- 3. The Government of Japan strongly supports and shall encourage co-operation between Japanese research institutes affiliated with it and Turkish entities in the transfer of technology in the field of nuclear power industry.

## ARTICLE 9 DISPUTE SETTLEMENT

Any dispute arising from the implementation and interpretation of this Agreement in relation to the rights and obligations of either or both of the Parties will be settled amicably by consultation between the Parties.

## ARTICLE 10 ENTRY INTO FORCE, AMENDMENT AND TERMINATION

1. This Agreement shall enter into force on the date of the receipt of the written notifications, provided by the Parties through diplomatic channels on or after the date of the entry into force of the Nuclear Energy Co-operation Agreement, that their internal procedures necessary for the entry into force of this Agreement have been completed.

- This Agreement shall remain in force for a period of fifteen years, and shall be automatically extended for five-year periods thereafter unless either Party notifies the other Party through diplomatic channels in writing of its intention to terminate this Agreement not later than six months prior to the expiry date.
- This Agreement may be amended by a written agreement between the Parties. Amendments to this Agreement shall enter into force in accordance with the same procedure as set out in paragraph 1 of this Article.
- Notwithstanding the provisions of paragraph 2 of this Article, this Agreement shall be terminated if the Nuclear Energy Co-operation Agreement is terminated.
- Either Party may cease co-operation under this Agreement if co-operation under the Nuclear Energy Cooperation Agreement is ceased.

In witness whereof, the undersigned, being duly authorised by their respective Governments, have signed this Agreement.

Done in duplicate, each in Japanese, Turkish and English, each being equally authentic, and signed at Tokyo on the twenty-sixth day of April, 2013 and at Ankara on the third day of May, 2013. Should any dispute concerning the interpretation of the texts arise, the English version shall prevail.

For the Government of Japan:

For the Government of the Republic of Turkey:

Fumio Kishida Minister for Foreign Affairs Minister of Energy and

Taner Yıldız Natural Resources

#### ANNEX

#### ESSENTIAL ELEMENTS OF THE HOST GOVERNMENT AGREEMENT

Essential elements of the Host Government Agreement as presumed by the Government of the Republic of Turkey and the Project Participants concerned, namely the Electricity Generation Company Incorporated of the Republic of Turkey (hereinafter referred to as "EUAS"), Mitsubishi Heavy Industries, Ltd. and ITOCHU Corporation as of the date of the signing of this Agreement are as follows:

#### 1. IMPLEMENTATION OF THE PROJECT

- (a) The implementation of the Project is to be conducted in accordance with the laws and regulations of the Republic of Turkey and pursuant to the Project Contracts.
- (b) The purpose of the Project is to design, engineer, procure, construct, operate, maintain, repair, refurbish and decommission a nuclear power plant at the Project Site (hereinafter referred to as "the NPP") which is comprised of four (4) units of the ATMEA 1 type reactor.
- (c) The Project Site, including forestry lands, is to be allocated by the Government of the Republic of Turkey to the Project Company free of charge in order to carry out any activities related to the Project until the decommissioning of the NPP.
- (d) A feasibility study (hereinafter referred to as "the Feasibility Study") is to be conducted in order to evaluate the commercial viability of the Project and the appropriateness of the Project Site for the implementation of the Project, based on the terms and conditions to be agreed between EUAS and/or a consortium to be formed by EUAS (hereinafter referred to as "the Turkish Consortium") on the one hand and a consortium to be formed by Mitsubishi Heavy Industries, Ltd. and other entities (hereinafter referred to as "the Japanese Consortium") on the other.
- (e) The Project Company is to finalise the detailed investigations required by the Turkish regulatory body for the selected site and submit the site report to the Turkish regulatory body for the site license in a timely manner.

(f) The Project Company, in accordance with the guideline to be agreed by the Government of the Republic of Turkey and the Project Company, is also to finalise the economic impact assessment which reports the impacts of the Project on the Turkish economy and industry, assessment of the related industries and companies and human resources evaluation with respect to the field of nuclear power industry within two (2) years after the establishment of the Project Company. A preeconomic impact assessment is to be finalised by the Project Company within one (1) year after the establishment of the Project Company.

#### 2. PROJECT COMPANY

The Project Company is to design, engineer, procure, construct, operate, maintain, repair, refurbish and decommission the NPP in accordance with the applicable laws and regulations of the Republic of Turkey and the terms and conditions of the relevant Project Contracts. With respect to the construction of any infrastructure in connection with the NPP, the Project Company is to only be responsible for the construction of infrastructure within the Project Site and is not to be responsible for the construction of any infrastructure outside of the Project Site.

#### 3. PROJECT FUNDING

- (a) The Project costs are to be funded through a combination of (i) debt (70%) in the form of project financing and (ii) equity contribution (30%) by the Japanese Consortium and EUAS and/or the Turkish Consortium.
- (b) The Project Company is to conclude, subject to the outcome of the Feasibility Study and due diligence, a financing agreement with appropriate Japanese financial institutions, in particular the Japan Bank for International Co-operation, with the support of the Nippon Export and Investment Insurance where appropriate, in order to secure the above-mentioned debt.

#### 4. POWER PURCHASE AGREEMENT

(a) The Turkish Electricity Trading and Contracting Company of the Republic of Turkey is to conclude the Power Purchase Agreement with the Project Company based on the discussions which took place between the Government of the Republic of Turkey and the Project Participants concerned.

- (b) The tariff rate of [10.80/10.83] United States (US) cents per kWh (not including value added tax) calculated in the above-mentioned discussions is based on the following assumptions:
  - (i) Four (4) units will be constructed at the Project Site. The years of commissioning of the four (4) units are 2023 for unit I, 2024 for unit II, 2027 for unit III and 2028 for unit IV, respectively;
  - (ii) The Power Purchase Agreement will be valid for twenty (20) years from the date of commercial operation of each unit;
  - (iii) The rate is twenty (20) year average;
    - (iv) The rate is subject to the outcome of the Feasibility Study and a price adjustment mechanism;
      - (v) The total loss of electricity during transmission and frequency control will be two (2)%;
    - (vi) Fuel cost is not included in the rate and will be added on a pass-through basis;

  - (viii) The Government of the Republic of Turkey is responsible for securing 49% of equity in the Project Company in cash;
    - (ix) The Japanese Consortium is responsible for securing 51% of equity in the Project Company in cash;
      - (x) EUAS holds [30%/49%] of equity in the Project Company as long as the Power Purchase Agreement is in force;
    - (xi) The Japanese Consortium holds 51% of equity in the Project Company as long as the Power Purchase Agreement is in force; and
  - (xii) EUAS and the other Project Participants will be subject to the differentiated internal rate of return.

(c) After the Power Purchase Agreement expires, all the shareholders of the Project Company are entitled to equal rights and the same internal rate of return as per their shares.

#### 5. POWER TRANSMISSION LINES

The Government of the Republic of Turkey is to ensure that the Turkish Electricity Transmission Company of the Republic of Turkey will be responsible for the design, procurement, construction, operation, maintenance, repair, refurbishment and financing of power transmission lines which are to be connected to the switchyard of the NPP at its own cost and ensure that the power transmission lines will be made available for the NPP in a timely manner.

#### 6. FINAL DISPOSAL OF SPENT FUEL AND RADIOACTIVE WASTE

The Government of the Republic of Turkey is to be responsible for the final disposal of spent fuel and radioactive waste in accordance with the laws and regulations of the Republic of Turkey. The Project Company is to pay a contribution of 0.15 US cents per kWh for waste management as referred to in 4(b)(vii) above in accordance with Article 5(4) of the Turkish Law (No. 5710) on Construction and Operation of Nuclear Power Plants and Energy Sale.

#### 7. LIABILITY FOR NUCLEAR DAMAGE

The Government of the Republic of Turkey is to take measures to put in place a legal framework on liability for nuclear damage in accordance with its constitutional procedures.

#### 8. HUMAN RESOURCES DEVELOPMENT AND LOCALISATION

- (a) Turkish nationals are to be trained and employed for the Project, subject to the terms and conditions to be agreed by the Project Company and the Government of the Republic of Turkey.
- (b) Turkish nationals are to be trained in order to develop their capacity for the nuclear power industry of the Republic of Turkey, subject to the terms and conditions to be agreed by the Project Company and the Government of the Republic of Turkey.
- (c) The Project Company is to construct a full scope simulator for the training of operation staff including Turkish nationals.

(d) The Project Company is to develop and implement a localisation plan which includes targeted localisation ratio, taking into consideration advice from the Government of the Republic of Turkey. The localisation ratio is to be defined during the Feasibility Study and the economic impact assessment of the Project.

#### 9. TECHNOLOGY TRANSFER

The Government of the Republic of Turkey and the Project Company are to make, in co-operation with the provider(s) of the ATMEA1 type reactor technology, a technology transfer plan for the implementation of the Project with due consideration to the outcome of the Feasibility Study and the economic impact assessment.

#### 10. OTHER ESSENTIAL ELEMENTS

objectives; competent authority; co-operation fields; nuclear technology and training centre; nuclear fuel supply; business model; time table; rights and obligations of the Government of the Republic of Turkey; rights and obligations of the Project Company; infrastructure; land rights; access to the Project Site; approvals, licenses and permissions; expropriation; ownership of the electricity and the sale of the electricity; financing mechanism; taxes; incentives; insurance; liability; third party liability; nuclear industry zone; economic impact assessment; social responsibility; public awareness and public acceptance; labour safety; security; spent fuel and waste management; decommissioning; penalties; compensation; confidentiality; dispute settlement; force majeure; and intellectual property rights

Note: This document does not limit the content of the Host Government Agreement.