

# Executive Summary

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## **PROLOGUE: WHY SHOULD WE AIM FOR A NUCLEAR-FREE SOCIETY?**

In the case of a severe accident at a nuclear power plant, the scale of damage is unimaginably large and the period for recovery is impossibly long. Moreover, severe accidents have not only happened but can certainly happen again in the future. The continuation of these high-risk conditions is not ethically acceptable. Nuclear power must be phased-out through legislation.

## **CHAPTER 1: AN OVERVIEW OF THE DAMAGE CAUSED BY THE FUKUSHIMA NUCLEAR POWER PLANT ACCIDENT AND THE “RESTORATION OF HUMANITY”**

1. Only by following the basic principles outlined below will we be able to recover from nuclear disaster and achieve “Restoration of Humanity”:
  - 1) Give maximum respect for fundamental human rights such as the “right to health” and the “right to avoid exposure to radiation
  - 2) Adopt the precautionary principle and do not underestimate risks
  - 3) Ensure that relevant stakeholders participate in the decision-making process
2. A new “Basic Act for Recovery from the Nuclear Disaster” should be established based on the notion of “supporting while respecting rights to personal choice” described in the Victims Protection Act. Related laws should be organised under this umbrella policy and consistent long-term measures for reconstruction and relief should also be incorporated.
3. Develop and expand medical support for preventive care from health hazards and a system for regular check-ups, as well as mobile classes for children. In order to centrally manage all of the data related to various health surveys and screenings, the national government should be responsible for establishing a permanent health support centre. To implement the operation of this centre based on scientific and ethical considerations, it should be managed by a third-party committee formed on the premise of participation by both experts and citizens (including residents of the areas affected by the nuclear disaster).
4. Support for the reconstruction of evacuees’ lives should not be oriented entirely toward “early return” to the evacuated areas. Evacuation orders should not be hurriedly removed, and residents’ views must be respected to the utmost. The return of evacuees should not be carried out until after the additional radiation dose falls below 1 mSv per year. Even in this case, the central government must provide compensation and support to enable evacuees to decide for themselves whether to return or remain in refuge.

## **CHAPTER 2: THE ACTUAL STATE OF THE FUKUSHIMA DAIICHI NUCLEAR POWER PLANT REACTORS AND ISSUES SURROUNDING THE ACCIDENT SETTLEMENT**

1. Upon carrying out the liquidation of Tokyo Electric Power Company (TEPCO), the government’s Nuclear Damage Compensation and Decommissioning Facilitation Corporation and TEPCO’s Fukushima Daiichi Decontamination and Decommissioning Engineering Company should be combined to establish an “Agency for the Decommissioning of the Fukushima Daiichi Nuclear Power Plant (Fukushima Decommissioning Agency–FDA)” to centralise the promotion of decommissioning in one office.
2. Under the “FDA”, the accident settlement of Fukushima Daiichi, the site workers’ employment system, labour policies, and radiation dose management should all be radically reformed.
3. A shift from water cooling of the molten fuel debris to air cooling is proposed as a means to radically

alleviate the contaminated water problem. TEPCO's plan to remove fuel debris by the flooding method entails large risks and huge worker exposure to radiation and should therefore be suspended.

### **CHAPTER 3: TREATMENT AND DISPOSAL OF RADIOACTIVE WASTES**

1. Abolish nuclear fuel cycle development projects (i.e. reprocessing, fast breeder reactors, uranium enrichment). Reprocessing and fast breeder reactors are projects that result in huge economic losses and involve serious drawbacks related to nuclear non-proliferation and nuclear security.
2. It is imperative to regard all nuclear materials produced in the nuclear energy production process as nuclear waste and to promote their prudent management and disposal. It has become abundantly clear that all of the following are forms of nuclear waste: high-level liquid waste, irradiated fuel, separated plutonium, recovered uranium, depleted uranium, uranium waste soil, other low-level radioactive material discharged from nuclear facilities, decommissioned nuclear facilities, the Fukushima Daiichi facility itself and all of the radioactive materials emitted as a result of the accident. Since natural and enriched uranium have some economic value, abolishing the trading of these materials will require legislation and compensation. Unnecessary and non-urgent dismantling and removal of nuclear facilities should not be carried out. Rather, it is imperative to keep these facilities under close observation to allow sufficient time for radioactivity decay.
3. Establish a new government agency, tentatively called the "Japan Nuclear Decommissioning Authority (JNDA)", to centralise the management and disposal of nuclear waste. The amount of radioactive waste generated by the abolition of nuclear power plants will be enormous, and the period required for the management and disposal will extend to the ultra-long-term. Accordingly, centralised waste management and disposal by the government is essential. However, this does not eliminate the financial liability of private corporations. It should be noted that, the "Radioactive Contamination Project" of the "Fukushima Decommissioning Agency-FDA" can, after significant progress has been made, be transferred to the "JNDA".
4. While nuclear waste management and disposal facilities will have to be located within Japan, the siting of these facilities should, to as great an extent as possible, be based on the strictest safety standards and procedures and only decided after public discussions based on the principle of "fair and equitable burden" have been held.

### **CHAPTER 4: TECHNICAL GROUNDS FOR KEEPING REACTORS FROM RESTARTING**

1. Under the new regulatory standards, nuclear restarts must not be conducted for the following reasons:
  - 1) They would require turning a wilful blind eye to the "Location Regulatory Standards", the absolute conditions for protecting local residents from radiation exposure.
  - 2) There is always some residual risk, i.e. there can be cases in which nuclear power plants that fulfill regulatory standards cannot withstand earthquakes or tsunamis.
  - 3) A basic design review has not been implemented and current measures will not prevent severe accidents.
  - 4) Contingency plans against severe nuclear accidents are ineffective.
2. For the above reasons, the local council approvals of (existing) nuclear power plant siting should be made void. At the very least, all local authorities within a 30km radius of a nuclear power plant should initiate talks to develop a nuclear safety agreement.
3. Current works of power companies to implement severe accident prevention measures in advance of the new safety standard compliance screening should cease immediately. These measures represent

capital investments that are not necessary or effective and the costs should not be passed on to consumers.

## **CHAPTER 5: STEPS TO A NUCLEAR-FREE SOCIETY**

1. The government's and TEPCO's responsibilities for handling the nuclear accident should be clarified and the liquidation of TEPCO should be pushed forward. In addition, based on the government's role in nuclear power development and the accident, full compensation, "restoration of humanity", and the phasing out of nuclear power should be promoted.
2. In order to realise a nuclear-free society, it is imperative to establish a "Basic Act on Nuclear Phaseout" as well as "Basic Act on Energy Shift" that will support the development of renewable energy resources. Additionally, in order to move toward a nuclear-free society, it is both imperative to abolish the institutions and government agencies that have supported the development of nuclear energy and to establish a "Nuclear Energy Phaseout Agency" in their place.
3. The Japanese government must discontinue all policies aimed at promoting the export of nuclear power. Severe accidents of nuclear stations can occur not only in Japan, which is prone to earthquakes and tsunamis, but in other parts of the world as well. We cannot allow hazardous facilities to be exported. The provision of insurance and finance for nuclear power projects by joint public-private ventures and feasibility studies in Turkey and Vietnam should be discontinued.

## **CHAPTER 6: DEFECTS IN THE NUCLEAR POWER COMPLEX-LED DECISION-MAKING SYSTEM AND THE PATH TO DEMOCRATIC POLICY DECISIONS**

For Japanese society to take "steps for realising a nuclear-free society", it is imperative that proactive organisational approaches be taken with regard to the following issues: Electoral reform so that the will of the public is adequately reflected in legislative councils, activation of citizens' movements and deliberative democracy, strengthening of the ability of the Diet to shape policy, locally led policy initiatives, the formation of independent think tanks, and the development of critical media and the disclosure of information.