

# Chapter 3

## Considerations and Policy Proposals

December 2019

**This chapter should be cited as**

ERIA (2019), 'Considerations and Policy Proposals', in Murakami, O. and V. Anbumozhi (eds.), *Public Acceptance of Nuclear Power Plants in Hosting Communities: A Multilevel System Analysis*. ERIA Research Project Report FY2018 no.18, Jakarta: ERIA, pp.45-48.

## Chapter 3

### Considerations and Policy Proposals

How can we improve the stakeholder involvement on nuclear energy?

This chapter makes several recommendations and defines stakeholders and coexistence and co-development with surrounding communities.

#### 1. Findings at the workshops

As the workshops were held by the hosting municipality in Omaezaki City and the neighbouring municipality in Maizuru City, each with a different background, findings from different perspectives were obtained. The following is the summary of those findings, which were reviewed at a wrap-up meeting held in Tokyo for policy recommendations.

##### 1) *Responsibility of each organisation*

- Recent government energy policy statements and objectives about the security and safety of future power sources and their significance for economic development mean that the government must be involved with the influence and direction for the local and prefecture activities.
- A stronger link between national government policies and implementation on the ground meaning outside host areas, as well as within, and with those managing and responsible for site operations would be a requisite.

##### 2) *Trust building*

- Despite all the good work and the progress the workshop participants experienced, there is the need for a far stronger involvement of third-party and independent sources of support to the nuclear option in the policy energy mix for the future.
- More public and wider understanding of ‘why nuclear power is so important to that mix for public benefits and economic development, wealth, jobs, and health in future.’
- Authorities and/or experts should be well-equipped with expertise and should be trusted.

##### 3) *Providing information*

- The media should have a more responsible role in strengthening that relationship with separate sessions with education and better understanding, and therefore more responsibility in being 'part' of the future solutions rather than creating fear and more problems.
- Incorrect information and images on prejudice destroy the life and heart of local residents in hosting municipalities. They have ‘accepted’ and lived together with nuclear facilities for decades, actively participating in the decision-making process.

- Information disclosure and sharing by websites, smart phones etc. would be effective.
- Asymmetry of information and of recognition exist between hosting municipalities and areas remote from the facilities. Hosting municipalities have achieved economic development.
- Learning from other countries experiences is important but only if adapted to their own cultural, socio- economic, and political scenes. No single country has it 100% correct as each country and 'local' situation is very different.

#### 4) *Nuclear risks and non-nuclear risks*

- Get across the safety aspects of nuclear risks in the event of natural disasters so that people understand that risks from radiation exposure are miniscule and that the risks are related more with earthquakes and tsunamis, not nuclear-centric in any sense.
- Reducing the gap between real understanding and perceptions is such an important task, and much more needs to be done.

As mentioned above, many findings were obtained through the project. In fact, an opinion leader from Europe found the project meaningful as he shared his experiences and learned new ideas (implications) for future studies by exchanging views with the workshop participants from around the world. Likewise, some participants from Asian countries found that building confidence between those who receive information and those who provide it is as important as providing technically accurate information and that capitalising on the media is key to sharing information amongst concerned parties.

## **2. Implications**

- Understanding energy issues greatly depends on children's education in particular. Most of us take for granted that energy is readily available, but how much our life depends on it should be recognised. While situations differ from country to country, there is no denying that each government's energy policy is designed primarily to secure energy supply and conserve the environment. Each government's objective is clear and rational, with nuclear power playing a major role in the energy mix.
- It is more important to prove the safety of nuclear power (i.e. the risks involved can be avoided) than to deal with risks identified through technical analysis.
- While human resources in nuclear industries are generally well qualified, they should pay more attention to what interests the public. In addition to providing accurate answers, they should respond to the concerns of those who do not know much about nuclear power. Specifically, the public is interested in how energy is related to their everyday life, work, property, and health. Technical explanations are important, but there should be more discussions on how nuclear power contributes to the economy and job creation. France's CLI provides a good communication model that suggests the need for the involvement of local stakeholders and communities.

- The following are the top 10 energy-related factors in which the public is interested (not all of them can be applicable due to differences in culture and experiences): i) safety, ii) security aspects, iii) reliable power source – affordable, iv) importance for economic and social needs, v) employment benefits – direct and indirect, vi) importance for future economic development, vii) social fabric of local communities, viii) education and training issues, ix) environmental factors, and x) health factors.
- Sweden’s decision-making structure, where the government communicates directly with local communities, serves as a good example as it facilitates discussions between the two parties.

Whilst Asian countries are still in their infancy when it comes to consensus building on nuclear power, the challenge is to secure public support in a country where life without nuclear power has never been experienced. Policies on energy, the economy, and nuclear power should thus be articulated properly.

Meanwhile, Japan is the only country that has experienced a Level 7 accident, the most significant level on the International Nuclear Event Scale, as defined by the International Atomic Energy Agency (IAEA). Because of its special circumstances, public acceptance of nuclear power in Japan may be different from that in other Asian countries such as China and India, where nuclear power is used. Thus, it is questionable whether they can learn lessons from the post-Fukushima accident public acceptance, which is mentioned below.

As is evident from the poll results shown in Chapter 1, most Japanese people doubt the safety of nuclear power, which is primarily based on a belief that a serious accident like the one in Fukushima results in irreparable damage. While some nuclear power experts asserted before the accident that multiple protections prevent serious accidents from happening, the concerned parties including the government, regulatory authorities, and power companies have been striving to improve safety and contingency plans since 2011, assuming that accidents cannot be prevented. Kyushu Electric Power Company, for example, released a pamphlet in March 2018 on the improved safety of the Genkai Unit 3 reactor, which is scheduled to restart following a successful safety assessment. An assertion to the effect that ‘the containment vessels are damage-proof with upgraded protection facilities and systems in place,’ however, was criticised by the hosting municipality and local communities who referred to it as a ‘revival of the safety myth.’

The regulatory authorities are tasked with verifying the compliance of nuclear facilities with certain standards. It is true, however, that complying with such standards does not guarantee perfect safety. On the other hand, the public generally demands ‘zero risk’ for nuclear facilities – i.e. there should be no accidents at all. For example, some residents living near the Tokai Daini nuclear power plant said at a briefing session held by the Ibaraki government that they would not tolerate the restart of the plant unless ‘accidents would never happen.’

Merely emphasising ‘how much safety has improved’ from the viewpoint of promoting nuclear power is not enough to obtain public consent. Their biggest concern is the possible impact of serious accidents on their lives, not the accidents themselves. Given that ‘zero risk’ is not possible, the government and power companies should explain their contingency plans in detail, assuming that accidents are unpreventable.

### **3. Policy proposals**

Clearly more efforts are needed to improve further public involvement, understanding, and acceptance towards nuclear power for the future. In addition, more needs to be done especially in non-host adjacent areas and municipalities as well as to secure general public awareness and acceptance.

- The national government should be responsible for its role – defining the basic energy policy and comprehensive rules for safety regulation, emergency preparedness and response, and long-term radioactive waste management.
- Policymakers should be responsible for a predictable and transparent decision-making process and for steady progress of the operation, actively inviting stakeholders in the schemes – residents, the business sector, the public sector, and the media.
- Education on energy security and risks is crucial, however, and should be consistent with the basic objectives of policy development. This would benefit environmental protection, jobs, and the wealth of all people.
- CLI (Local Information Commission) or similar schemes in other countries could be the models for stakeholder involvement. How can it practically work? That is the issue to be developed further. Mutual respect is the basic principle as the starting line.
- No agreement can be made without public understanding and consent. The conditions for consent can be 1) consistency with one’s own experience, 2) consistency with one’s own instinct (feeling), 3) integrity and validity of the other side’s logic, 4) credibility of information sources, and 5) trustworthiness of information communicators. These five conditions are prerequisites for obtaining public consent.
- The government, municipalities, and power companies should strive to build confidence of the public.

No single country has all the solutions but it is one of those special global sectors where we must collaborate because whilst accidents are rare, and nuclear risks most unlikely in terms of radiation fall out, we have a duty to current and future generations to ensure that those unlikely risks never materialise. On the other hand, the economic and environmental benefits from nuclear power are positive and essential for the socio-economic needs of current and future generations; which must also be pursued to ensure those benefits are secured.