Document 3

Questions for the 7th Round-Table for Studying Energy Situations ~Next-generation Technologies and Innovation for Decarbonization~

1: An image of society/technology pictured on the basis of the trend of "Decarbonization" (Common)

- ⇒Q1. Among the multiple innovative technologies for the decarbonization, why did you choose the relevant technology (Majumdar: next-generation power system, distributed energy system /NuScale: Small Modular Reactor(SMR))? What is the reason why you think it's promising? In addition, when do you expect it to be put into practical use?
- ⇒Q2. What do you think will be the requirements for the national government to make preparations for the decarbonization through the innovation? (e.g.: Construction of infrastructure, establishment of systems and the environment permitting social revolution)

2: Future strategy for "Decarbonization" (Individual)

<Majumdar>

- \Rightarrow Q3. Considering the trend of the decarbonization coupled with that of digitalization and distribution, what sort of structural changes and business models do you expect for the energy industries, such as power industry, including the entry of other industries such as IT industry etc.
- ⇒ Q4. What are the important points of governmental technology development/commercialization assistance for promoting innovation? (What do you think were the success factors for ARPA-E?)

<NuScale>

- \Rightarrow Q5. In the future when decentralization/decarbonization have progressed,
- ① In comparison with conventional nuclear reactor, what do you think of the significance of SMR development from the viewpoint of safety and economy? Furthermore, how do you expect the future of domestic and global demand?

- **2** There is an argument that SMR is easier for load following operation and has a higher affinity to renewable energy, what do you think about it?
- ⇒Q6. What assumptions do you make about nuclear reactor vendors, financing and operators (utilities) in relation to the outlook for the commercialization of SMR?
- ⇒Q7. In developing a new conceptual reactor type of SMR, it is pointed out that close communication with regulatory authorities is important because predictability of the future regulations is required, what do you think of the importance and the specific ways of such communication?