(Form 3(１))

Proposal Form for Conceptual Study of Innovative Approach for Fuel Debris Retrieval

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| 1. **Feasibility of Innovative Approach** | |
| * Detail of innovative approach is described. | |
| **Contents to be checked.**  \*Please check the box if the following items are described.  \*Please make sure that you fill in all the items listed in <Basic points>, and items in <Additional points> if applicable. | **Check box** |
| **<Basic points>**   * Proposed method is based on the present knowledge of Fukushima Daiichi NPS. * Proposed method clearly specifies the location of the fuel debris (in PCV, in RPV or both) to study. * Proposed method clearly specifies a series of the operation methods and procedures from delivery, installation of equipment for the fuel debris retrieval, retrieval work, and removal of used equipment by using conceptual diagram and/or flow sheet etc. | ☐  ☐  ☐ |
| **<Additional points>**   * Method of accessing the fuel debris by passing through PCV, RPV, or removing internal structures to emplace the equipment close to the fuel debris. * Location of installing fuel debris canister, and transfer route and its method of the loaded canisters to the temporary storage area is appropriate. * Existing technologies required to establish the innovative approach , and elssential technologies necessary to be developed | ☐  ☐  ☐ |
| 1. **Considerations of Safety of the Method** | |
| * Description of the safety of the method is described. | |
| **Contents to be checked.**  \*Please check the box if the following items are described.  \*Please make sure that you fill in all the items listed in <Basic points>, and items in <Additional points> if applicable. | **Check box** |
| **<Basic points>**   * Dose reduction method is concrete and appropriate. * Method of maintaining boundary to prevent release of radioactive material caused by dispersion and backflow for each step during the operation period. * The issue that the construction method should not impose a serious impact on the reactor building or any other existing structures is recognized. | ☐  ☐  ☐ |
| **<Additional points>**   * Ventilation and filtering within the barrier in consideration of dose reduction * Method of minimizing and mitigating the leakage of radioactive substances from PCV during the operation * Considerations of the seismic resistance * Maintenance method including equipment used for operation is appropriate. | ☐  ☐  ☐  ☐ |

\*Size of the column is allowed to be adjusted and figures and tables can be attached to this file.