

**Technical Consulting Service for Development of
Methodology for Radiological Characterization
Evaluation of a Subsurface Residual Radioactive
Contamination.**

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한국전력기술주식회사
KEPCO ENGINEERING & CONSTRUCTION COMPANY, INC

1.0 OBJECTIVES

The objectives of this technical consulting service are to provide the following services:

- (1) Survey of cases/experiences (including licensing process with regulatory authority and lessons learned) of radiological characterization evaluation for residual radioactive contamination of a subsurface soil
- (2) Development of guideline for the radiological characterization evaluation for residual radioactivity of a subsurface soil

2.0 SCOPE OF SERVICES

To achieve the above objectives, the Contractor shall provide the technical consulting services to KEPCO E&C with the following tasks:

Task 1. Conduct of Kick-off Meeting

Contractor shall host a 2-hour kick-off meeting in video conference with KEPCO E&C staff within 2 weeks after the Execution Date. Activities that shall be done during the meeting are as follows:

- Explanation and clarification of purpose and content of the technical service
- Contractor presents the plan and strategy for performing this engineering service.
- Both discuss details on how to perform the consulting services and on the schedule

The Contractor provides the meeting minute including the presentation materials to KEPCO E&C after the meeting.

Task 2. Preparation of Technical Report

The Contractor prepares a technical report which includes the following information.

- (2.1) Survey of cases/experiences (including licensing process with regulatory authority and lessons learned) of radiological characterization evaluation for residual radioactive contamination of a subsurface soil.
- (2.2) Development of the radiological characterization process/procedures of a subsurface soil during decommissioning including the following but not limited to:

※ *It should be noted that all the necessary information shall be incorporated into the guideline to be developed, and is not limited to:*

- (a) Process for developing site-specific conceptual model based on spatial modeling or mapping area of contaminant (considering a subsurface radioactive contamination)
- (b) The methodology of radiological scoping survey for a subsurface radioactive contamination, including the following but not limited to
 - Process for determination of the number of sampling and its locations
 - Survey of sampling techniques/method
 - Survey of radiological measurement techniques
 - Method and process/procedure of radiological measurement
- (c) Methodology of the radiological characterization for a subsurface radioactive contamination
 - Methodology of selecting the suite of radionuclide of concern
 - Methodology of validation of representativeness/homogeneity of radiological measurements
 - Applicability of background level (i.e., natural radionuclides)

The Contractor provides the Preliminary Technical Report to KEPCO E&C when the above work activities are completed. KEPCO E&C will review the report and send comments and questions, if any. The comments shall be reflected in the Final Technical Report.

Task 3. Technical Meeting

A technical meeting is held after completion of Preliminary Technical Reports performed in Task 2 at Contractor's office for three (3) days with KEPCO E&C staff, or, if not available, in video conference. Activities that shall be done during the technical meeting are as follows

- (3.1) The Contractor presents the Preliminary Technical Report in detail.
- (3.2) Both sides discuss the results of the performance in Preliminary Technical Report.




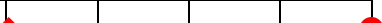
The Contractor shall revise the reports if there is any comment which impact on the reports during the technical meeting and submit the Final Technical Report to KEPCO E&C.

Details of the technical meeting agenda will be prepared at the time of completion of the Preliminary Technical Report.

3.0 METHODS OF PERFORMANCE

Consultation Schedule

The Contract Period shall be 4 months from the Execution Date.

Tasks	Months from the Execution Date			
	1	2	3	4
Task Kick-off meeting				
Task 2 Preparation of technical report				
Task 3 Technical meeting				
Final Technical Report for Task 2				

* Detailed time schedule can be adjusted during/after the kick-off meeting through discussion between Contractor and KEPCO E&C taking into account the date of contract awards and work schedule.

Method of Performance

The Contractor shall keep confidential all the data and information from this Contract, and shall not divulge them to any third parties. KEPCO E&C will provide information so that the Contractor could perform the tasks. KEPCO E&C will review the results of each task and Preliminary Technical Report which are prepared by the Contractor. KEPCO E&C will discuss the problems and issues encountered during the execution of Task 1 to Task 3.

Deliverables

The final deliverables are fully verified technical report which incorporates the KEPCO E&C's comments and all of the analysis input and output files in the tasks.

No	Activities/Deliverables	Date of Submittal*
1	Meeting minutes including Presentation materials for each meeting	Within 2 weeks after each meeting
2	Preliminary Technical Report	T0 + 3 months
3	Final Technical Report	T0 + 4 months

*T0 : Execution Date

[Attachment- List of Participants to perform Services]

Name	Position	Rate/Hour

*Contractor shall obtain KEPCO E&C's prior approval to change participants to perform the Services.