Work Procedure Review Following Unused Fuel Removal at Fukushima Daiichi NPS Unit 4

< Reference >
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- In the operation of fuel removal from the Unit 4 spent fuel pool, 22 unspent fuel assemblies were removed prior to spent fuel assemblies, and a procedure review was then conducted.
- The following table shows the results of the procedure review. Based on these results, although no particular problem was found in each step of the fuel removal work, there is room for improvement in how the work is conducted. We will continue the fuel removal work with first priority given to safety.

Results of Work Procedure Review	Corresponding improvements
< Work procedure> Each step was conducted in accordance with the procedure manual. Each step was found to have no particular problem in conducting the fuel removal work. However, we have decided to implement the following improvements for a better work environment.	–
< Work environment > • Dust inside the fuel assemblies was stirred up while fuel was loaded at the cask pit. This did not hinder the work but was found to have resulted in reduced underwater visibility. • Running water from a hose was used to remove dust on the cask lid flange. The dust was stirred up during this work, and placing the lid took extra time.	• The visibility inside the cask pit was improved after we suctioned water from inside the cask pit with a temporary pump and returned the thus suctioned water into the pool through a filter. Therefore, the same operation will be performed in case of low visibility. • Dust on the flange will be suctioned with a pump and returned into the pool through a filter so that the dust can be prevented from being stirred up.
< Radiation management > Radiation exposure of workers was managed to be low compared to the assumed atmosphere dose rate (0.2mSv/h). - Work with the fuel handling machine: 0.25mSv at a maximum (0.07mSv/h as the time taken for the work was 4 hours) - Work with the cask: 0.30mSv at a maximum (0.07mSv/h as the time taken for the work was 4.5 hours)	• We will continue making effort to keep the radiation dose as low as possible in compliance with the ALARA (As Low As Reasonably Achievable) principle.

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