

IAEA OSART Follow-up Mission Overview

Anywhere from 18 to 24 months after the OSART mission, a follow-up is performed during which the power station is visited once again in order to assess and confirm the effectiveness and progress of countermeasures implemented in response to recommendations that have been made.

- ✓ Assessment Period: Monday, July 31 through Friday, August 4, 2017
- ✓ Assessment Target: Kashiwazaki-Kariwa NPS Units 6/7
- ✓ IAEA members: : Peter Tarren (Team Leader) and three other assessors
- ✓ Fields Assessed: 8 fields assessed in total

- ① Leadership and management for safety
- ② Training and certification
- ③ Operations
- ④ Maintenance and technical support (mechanical, electrical instrument, civil engineering)
- ⑤ Review of operating experience feedback
- ⑥ Radiological protection and chemistry
- ⑦ Emergency plans and countermeasures
- ⑧ Severe accident management

IAEA OSART Follow-up mission assessment results

- ✓ Out of the 15 issues identified during the 2015 OSART mission, eight were deemed as “issue resolved” and seven were deemed to show “satisfactory progress to date” during the follow-up mission (there were no issues that were deemed to show “insufficient progress to date”)

(Issue)

Issue	Total	Issue Resolved	Satisfactory progress to date	Insufficient progress to date
Total	15	8	7	0
Recommendations	6	2	4	0
Proposals	9	6	3	0

- ✓ **Assessment criteria definitions**

Recommendation : Recommendations made in regard to assessed power station operations to make further improvements to safety

Proposal : Issues discovered in the course of assessing power station operations that did not require a recommendation but for which examination is recommended because there is room for improvement in regards to further improving safety

- ✓ **Review Results Definitions**

Issue resolved

Satisfactory progress to date

Insufficient progress to date

IAEA OSART Follow-up mission assessment results example

Example of assessment results for “recommendations”

Assessed field: Operations

Category: Department and Function

<p>Issue pointed out by the IAEA</p>	<p>The Operations Management Department needs to create more comprehensive guidance manuals in regards to activities related to operations tasks.</p>
<p>TEPCO handling status</p>	<ul style="list-style-type: none"> ● Guidance manuals related to operations tasks (that clarify the roles of each operator position and basic actions) have been created and the responsibilities and authority of all positions under the shift supervisor have been clearly noted. ● Methods for confirming that operators are fit for duty (alcohol checks, etc.) have been stipulated and are being implemented.
<p>Assessment by IAEA</p>	<p>【Issue resolved】</p> <p>The power station has appropriately analyzed the problem, created guidance manuals on operations tasks, implemented training, and established and implemented a program for confirming fitness for duty, so we have come to the conclusion that the issue has been resolved.</p>

IAEA OSART Follow-up mission assessment results example

Example of assessment results for
“proposal”

Assessed field: Radiological protection and chemistry
Category: Radiation work management

Issue pointed out by the IAEA	The power station needs to deliberate appropriate mechanisms for managing contamination and how to implement these mechanisms.
TEPCO handling status	<ul style="list-style-type: none"> ● Until now, when workers left contamination zones they removed protective clothing in order to prevent the spread of contamination, however going forward in conjunction with removal of protective clothing, body contamination checks will be performed to ensure that there is no contamination. ● Contamination checks will be performed prior to allowing workers to use toilets in controlled areas. ● Along with enhancing contamination checks at the exits of controlled areas we have also started conducting contamination checks on the non-controlled area side.
Assessment by IAEA	<p>【Issue resolved】</p> <p>We have confirmed that contamination management methods have been revised and have drawn the conclusion that the issue has been resolved.</p>

IAEA OSART Follow-up mission summary

- ✓ After analyzing the causes of the 15 issues pointed out during the 2015 OSART mission, TEPCO has implemented detailed improvement measures and OSART has assessed the progress and effectiveness of these countermeasures as being suitable.
- ✓ TEPCO shall leverage the assessment results of this follow-up mission conducted based upon IAEA safety standards and international knowhow to continually implement countermeasures that further improve safety as we aim to regain the trust of the local community and become a power station that causes no concerns.



[Reference] IAEA OSART Mission overview

- ✓ The Operational Safety Review Team (OSART) is a team put together by the International Atomic Energy Agency (IAEA) for performing operational safety assessments of power stations that last approximately three weeks.
- ✓ The team assesses safety conditions in accordance with IAEA safety standards, which have been formulated based upon practices deemed good by the international community, and the experience of the team members (the 12 members of the 2015 assessment team have a plethora of experience in the nuclear power industry).
- ✓ From 1983 until the OSART mission conducted at this power station in June 2015 approximately 182 OSART missions have been conducted (including technical exchanges and visits to assess safety).

✓ OSART Assessments in Japan

- 1988 KEPCO Takahama Units 3/4
- 1992 TEPCO Fukushima Daini Units 3/4
- 1995 Chubu Electric Hamaoka Units 3/4
- 2004 TEPCO Kashiwazaki-Kariwa Units 4/6
- 2009 KEPCO Mihama Unit 3
- 2015 TEPCO Kashiwazaki-Kariwa Units 6/7

Examples of IAEA safety standards



※ Can be downloaded from the IAEA website: <http://www-ns.iaea.org/standards/documents/default.asp?s=11&l=90&sub=10&vw=9#sf>