

Cases where inappropriate actions were identified (16 cases)

Plant	Components	Outlines	Summary of inappropriate actions
Fukushima Daiichi Nuclear Power Station			
Unit-1	Core shroud	<ul style="list-style-type: none"> - Cracks were detected in a self-imposed inspection in 1993, 1995 and 1996 respectively. But these were not mentioned in the Japanese-version reports for each year. 	<ul style="list-style-type: none"> - The existence of cracks were not reported to MITI. - The signs of cracks were mentioned in the English-version report, but not in the Japanese-version report. - A detailed review was not performed for the cracks detected on the replaced shroud.
	Steam dryer (the case which was submitted to MITI)	<ul style="list-style-type: none"> - Cracks were detected in a self-imposed inspection in 1989. The serious ones were reported to MITI in the following month. - The cracks which were not reported to MITI were not mentioned in the Japanese-version report, nor in its data sheets. 	<ul style="list-style-type: none"> - The date on which the cracks were detected was not reported precisely, and was falsified as the same date as that of report. - Although three cracks in the center ring part were repaired by underwater welding, there was no record on this repair within TEPCO. - TEPCO ordered GE staff to revise the inspection report.
	Core spray sparger	<ul style="list-style-type: none"> - A crack was detected in an inspection in 1993. Four clamps were installed, and were coated with black paint so that they might not be discovered. - The clamps were removed and four new clamps were installed during the periodical inspection from 1996 to 1997. - A report to MITI and a press release about the detected crack were made in 1999, and a new clamp was installed. 	<ul style="list-style-type: none"> - Intentional actions were conducted so that the installed clamp would not be discovered. - Permission of construction plan was applied for this kind of clamp installation in 1997. MITI was not consulted with at that time about the necessity of permission of the construction plan, but permission of the construction plan was given in 1999. - The existence of the crack was reported to MITI in 1999; the report falsified the date on which it was detected.
	Jet pump (Riser pipe)	<ul style="list-style-type: none"> - Cracks were detected in 1996, and TEPCO reported the cracks to MITI two months after TEPCO actually found them. 	<ul style="list-style-type: none"> - The cracks detected in September 1996 were reported to MITI as if they had been discovered in November 1996.
Unit-2	Core shroud	<ul style="list-style-type: none"> - Some cracks were detected in a self-imposed inspection in 1994. Only the cracks that went almost completely around the shroud were reported to MITI and repaired. And only those cracks were mentioned in the Japanese-version report. - Though the other cracks that went almost completely around the shroud were detected during a self-imposed inspection from 1995 to 1996, they were not mentioned in the Japanese-version report. - In 1998, when MITI's on-site inspectors carried out the inspection after MITI received anonymous information about the cracks, TEPCO deleted the descriptions of the cracks from the report. - A metal plate was used at the base of the temporary shroud stand so that the cracks were not visible during the inspection of the shroud carried out by MITI, which was to be removed. 	<ul style="list-style-type: none"> - MITI was not informed of the cracks which went around the lower part of the shroud. - The cracks were mentioned in the English-version report, but not in the Japanese-version report except the one officially announced. - In order to prepare for the record confirmations by MITI, TEPCO requested to delete the descriptions of the cracks, from the English-version report in order to be consistent with the Japanese-version report. - Before MITI inspected the replaced shroud, measures were taken in order to ensure that the cracks were not identified. - A detailed review was not performed for the cracks detected on the replaced shroud.
Unit-3	Core shroud	<ul style="list-style-type: none"> - Cracks which include the ones that went almost completely around the shroud were detected in a self-imposed inspection in 1994. But they were not mentioned in the Japanese-version report. - Cracks were detected in a self-imposed inspection from 1995 to 1996. But they were not mentioned in the Japanese-version report. 	<ul style="list-style-type: none"> - MITI was not informed of the cracks that went almost completely around the shroud. - The cracks were mentioned in the English-version report, but not in the Japanese-version report. - A detailed review was not performed for the cracks detected on the

		<ul style="list-style-type: none"> - When the core shroud was replaced in 1997, cracks on the shroud support were detected and repaired. 	replaced shroud.
Unit-4	Core shroud	<ul style="list-style-type: none"> - Signs of cracks were detected in a self-imposed inspection from 1993 to 1994. But these were not mentioned in the Japanese-version report. - Indications were detected in a self-imposed inspection in 1996 and 1997 respectively. But they were not mentioned in the Japanese-version reports for each year. 	<ul style="list-style-type: none"> - MITI was not informed of the existence of signs of cracks. - Signs of cracks were mentioned in the English-version reports, but not in the Japanese-version reports. - The signs of cracks that TEPCO had detected previously were not reported to METI in the report regarding self-imposed inspection plan for the shroud in October 2001. The report was requested in accordance with METI's notification.
	In-core monitor housing	<ul style="list-style-type: none"> - A crack was detected in a self-imposed inspection in 1992. - In 1997, the existence of the crack was reported to MITI and the housing was replaced. 	<ul style="list-style-type: none"> - The crack was not reported to MITI in the various periodical inspection reports. - To be consistent with the report to MITI, TEPCO asked the plant manufacturer to revise the data, and TEPCO made some modification later in order to conceal the signs of the previous revision. - When the cracks were reported to MITI in 1997, the report falsified the date of detection.
Unit-5	Core shroud	<ul style="list-style-type: none"> - Cracks were detected in a self-imposed inspection in 1994. These were not mentioned in the Japanese-version report. 	<ul style="list-style-type: none"> - MITI was not informed of the existence of cracks. - Signs of cracks were mentioned in the English-version report, but not in the Japanese-version report. - A detailed review was not performed for the cracks detected on the replaced shroud.
	Access hole cover	<ul style="list-style-type: none"> - A bolt which was not fully tightened was discovered during the replacement of the access hole covers in 1992, but the cover was confirmed to be sufficiently tightened by the other bolts. - MITI's pre-service inspection was completed without the inspector being notified. - Tightening of the bolt was carried out using an additional nut after the pre-service inspection. 	<ul style="list-style-type: none"> - The existence of the bolt which had not been fully tightened was not reported to the inspector.
Unit-6	Access hole cover	<ul style="list-style-type: none"> - Cracks were detected in the inspections performed in 1991. A support cover was installed temporarily. - In 1992, the replacement was carried out. 	<ul style="list-style-type: none"> - A temporary repair was carried out with the existence of the cracks being concealed.
Fukushima Daini Nuclear Power Station			
Unit-1	Steam dryer	<ul style="list-style-type: none"> - Repairs were carried out in 1993 and 1995 respectively. In the English-version report which was attached to the Japanese-version report, it appeared as if all repairs were carried out in 1995. 	<ul style="list-style-type: none"> - TEPCO asked GE to make the data sheets that show the welding lines were welded in 1995, which was not actually the case.
Unit-2	Core shroud	<ul style="list-style-type: none"> - Signs of cracks were detected in a self-imposed inspection in 1994, but they were not mentioned in the Japanese-version report. - Signs of cracks were detected in a self-imposed inspection in 1995 and some indications identified previously could not be seen, after they were brushed off. They were not mentioned in the Japanese-version report. - Signs of cracks were detected in a self-imposed inspection in 1997. But they were not mentioned in the Japanese-version report. 	<ul style="list-style-type: none"> - MITI was informed of the existence of the signs of cracks. - The existence of signs of cracks was not mentioned in the Japanese-version report. - The signs of cracks that TEPCO had detected previously were not reported to METI in the report of the self-inspection plan for the shroud in October 2001 although the report was requested in accordance with METI's notification.

Unit-3	Core shroud	<ul style="list-style-type: none"> - Signs of cracks were detected in a self-imposed inspection in 1994. They were not mentioned in the Japanese-version report. - Some signs of cracks which included the ones that went almost completely around the shroud were detected in a self-imposed inspection in 1997, but they were not mentioned in the Japanese-version report. - After a depth measurement was carried out, TEPCO reported the cracks to METI, and repaired them. 	<ul style="list-style-type: none"> - MITI was not informed of the cracks that went almost completely around the shroud. - In June 1997, TEPCO declined the GE proposal that the signs of cracks detected by the self-imposed inspection on the shroud should be mentioned in the report. - Though the existence of cracks was confirmed in May 2001, it was reported to METI that the cracks were detected on July 6.
Unit-4	Core shroud	<ul style="list-style-type: none"> - Signs of cracks were detected in a self-imposed inspection in 1995 and 1998 respectively, but they were not mentioned in the Japanese-version report. 	<ul style="list-style-type: none"> - The existence of signs of cracks was not relayed to MITI. - The existence of signs of cracks was not mentioned in the Japanese-version report that TEPCO received. - Indications that TEPCO had detected previously were not reported to METI in the report of the self-inspection plan for the shroud in October 2001. The report was requested in accordance with METI's notification.
Kashiwazaki Kariwa Nuclear Power Station			
Unit-1	Core shroud	<ul style="list-style-type: none"> - Signs of cracks were detected in a self-imposed inspection in 1994, but they were not mentioned in the Japanese-version report. - Signs of cracks were detected in a self-imposed inspection in 1996 and 1997 respectively, but they were not mentioned in the Japanese-version reports in each year. 	<ul style="list-style-type: none"> - The cracks were mentioned in the English-version report, but not in the Japanese-version report.

MITI: Ministry of International Trade and Industry

METI: Ministry of Economy, Trade and Industry

Cases where inappropriate actions were not identified (13 cases)

Plant	Components	Outline	Summary of inappropriate actions
Fukushima Daiichi Nuclear Power Station			
Unit-1	Shroud Head Bolt	- Cracks were detected in a self-imposed inspection in both 1986 and 1987. These bolts were replaced in 1988 (the same periodical inspection as 1987) and 1989.	- As cracks detected in 1986 were very small, these posed no significant safety concern, and therefore operation was continued. All bolts with cracks were replaced and were reported to MITI in 1987. No other issue was identified.
Unit-2	Shroud Head Bolt	- Cracks were detected in a self-imposed inspection in 1987. These bolts were replaced in 1987 and 1988.	- All bolts with cracks were replaced and were reported to MITI. No other issue was identified.
	Access Hole Cover	- Cracks were detected and repaired in 1991 with the process planned in advance. - GE was commissioned to make a metallurgical analysis of the replaced access hole cover.	- The cracks that were found during replacement operations were very small and they were repaired as planned in advance. Therefore it was judged that reporting to MITI was unnecessary. No other issue was identified.
Unit-3	Others (the case filed to MITI)	- A GE employee said the person lost a set of Allen wrenches in the nuclear reactor Unit-1 in 1994, but this was found in Unit-3 when the shroud was replaced in 1997. TEPCO could not confirm the GE employee's report.	- TEPCO could not confirm the report. Although the set of wrenches had been lost, it was deemed not to be a safety concern. No other issue was identified.
Unit-6	Shroud Head Bolt	- Cracks were detected in a self-imposed inspection in 1988. These bolts were replaced in 1988 and 1989.	- All bolts with cracks were replaced and plans had already been reported to MITI. No other issue was identified.
	Jet Pump (Wedge etc.)	- Gaps between the set screw and the inlet mixer, and wear on the wedge were detected in a self-imposed inspection in 2000.	- Gaps between the set screw and the inlet mixer, and wear on the wedge do not affect the function and performance of a jet pump. Therefore it was judged that reporting this to MITI was unnecessary. Moreover, these repairs were already completed. No other issue was identified.
	Jet Pump (Sensing Line)	- The signs of cracks were detected on the sensing line in a self-imposed inspection in 1996.	- Gaps between the set screw and the inlet mixer, and wear on the wedge do not affect the function and performance of a jet pump. Therefore TEPCO judged that reporting this to MITI was unnecessary. No other issue was identified.
Fukushima Daini Nuclear Power Station			
Unit-2	Jet Pump (Wedge etc.)	- Gaps between the set screw and the inlet mixer, and wear on the wedge were detected in a self-imposed inspection in 2000.	- Gaps between the set screw and the inlet mixer, and wear on the wedge do not affect the function and performance of a jet pump. Therefore it was judged that reporting this to MITI was unnecessary. No other issue was identified.
Unit-3	Jet Pump (Wedge etc.)	- Gaps between the set screw and the inlet mixer, and wear on the wedge were detected in a self-imposed inspection in 2001.	- Gaps between the set screw and the inlet mixer, and wear on the wedge do not affect the function and performance of a jet pump. Therefore it was judged that reporting this to MITI was unnecessary. No other issue was identified.
Unit-4	Jet Pump (Wedge etc.)	- Gaps between the set screw and the inlet mixer were detected in a self-imposed inspection in 1995 and 1998.	- Gaps between the set screw and the inlet mixer, and wear on the wedge do not affect the function and performance of a jet pump. Therefore it was judged that reporting this to MITI was unnecessary. No other issue was identified.

Plant	Components	Outline	Main issue
Kashiwazaki Kariwa Nuclear Power Station			
Unit-1	Steam Dryer	- GE damaged the guide portion of the steam dryer and repaired this in 1994.	- This damage does not affect the function and performance of a steam dryer. Therefore it was judged that reporting this to MITI was unnecessary. Moreover, these repairs had already been completed. No other issue was identified.
Unit-2	Jet Pump (Wedge etc.)	- Gaps between the set screw and the inlet mixer, and wear on the wedge were detected in a self-imposed inspection in 2001.	- Gaps between the set screw and the inlet mixer, and wear on the wedge do not affect the function and performance of a jet pump. Therefore it was judged that reporting this to METI was unnecessary. No other issue was identified.
Unit-5	Jet Pump (Wedge etc.)	- Gaps between the set screw and the inlet mixer, and wear on the wedge were detected in a self-imposed inspection in 1988. - An auxiliary wedge was attached as a precaution in 2000. It was also found that additional gaps were detected on other jet pumps.	- Gaps between the set screw and the inlet mixer, and wear on the wedge do not affect the function and performance of a jet pump. Therefore it was judged that reporting this to MITI was unnecessary. No other issue was identified.

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