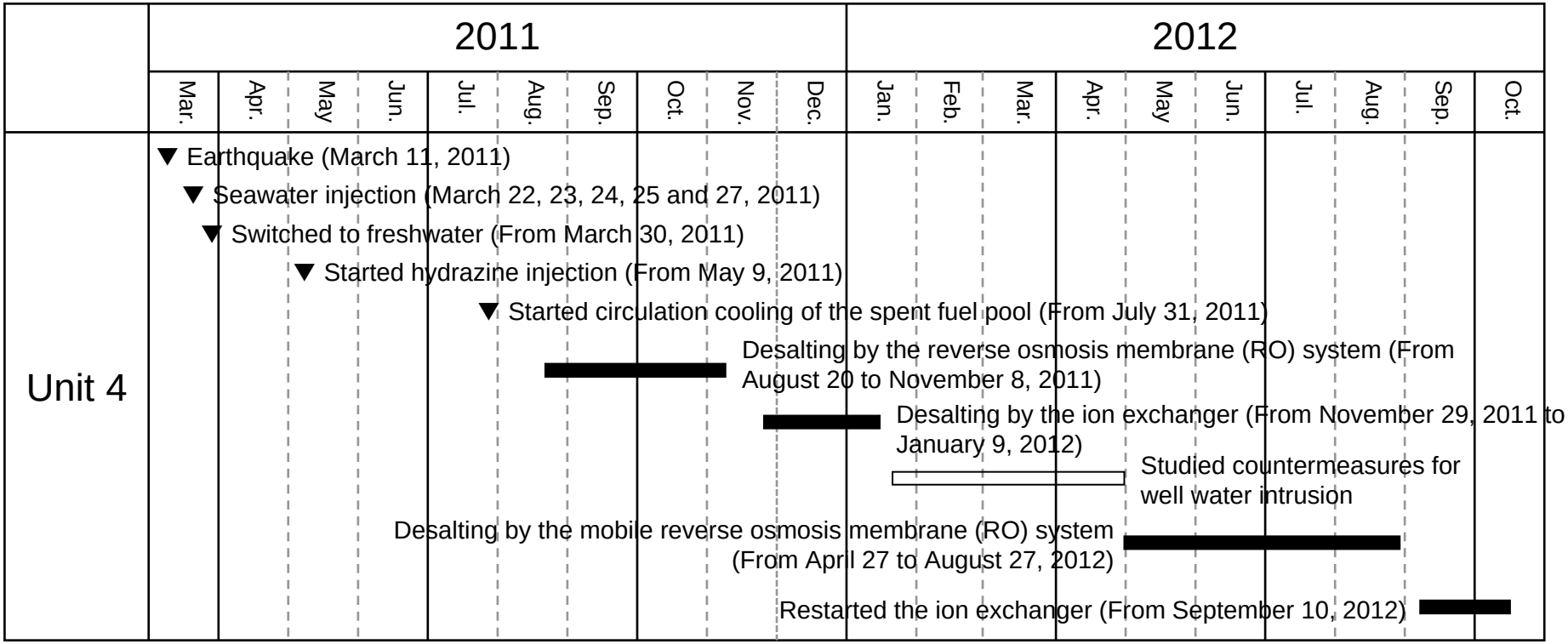
Desalting Completed at Unit 4 Spent Fuel Pool at Fukushima Daiichi Nuclear Power Station

<Reference >
October 12, 2012
Tokyo Electric Power Company

1. Work Implemented towards the Completion of Unit 4 Spent Fuel Pool Desalting



Circulation cooling equipment for the spent fuel pool

Reverse osmosis membrane (RO) system used for desalting

Ion exchanger used for desalting

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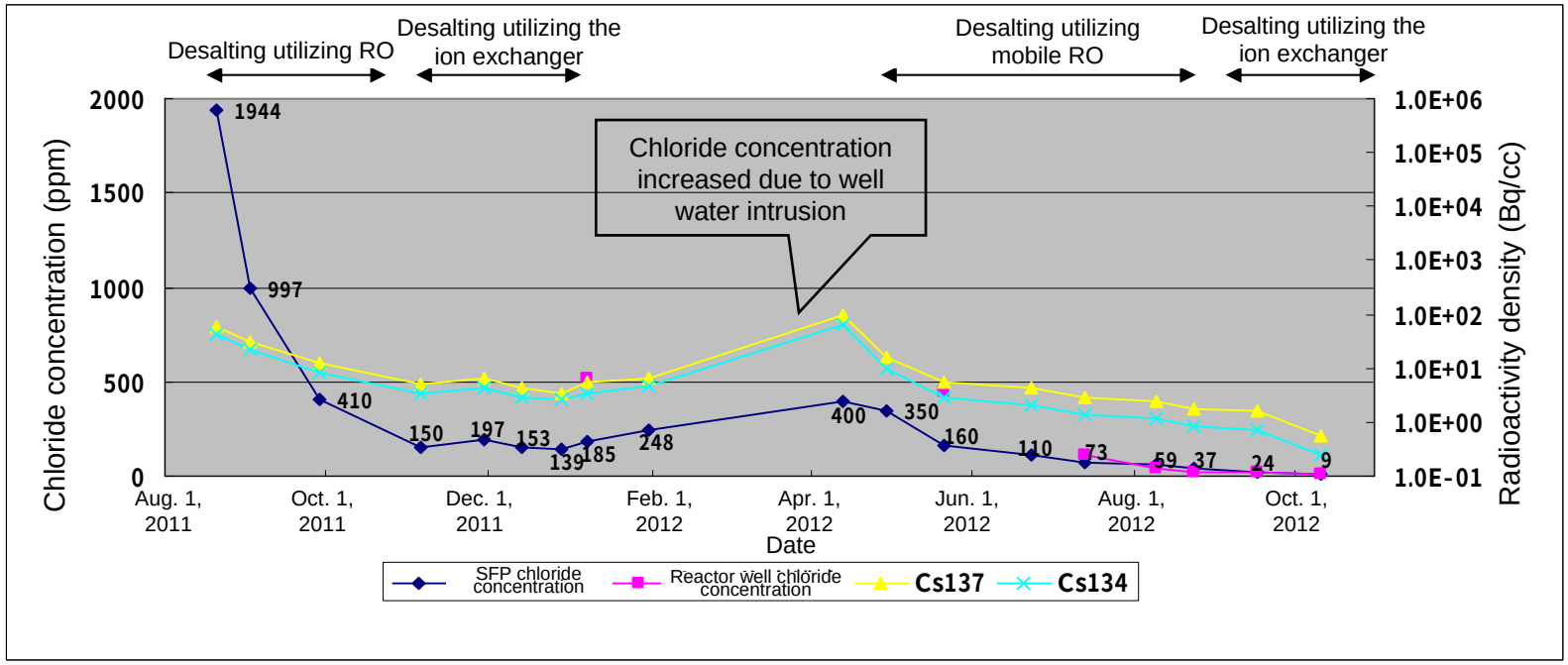
2. Change in Unit 4 spent fuel pool chloride concentration

- From August 20, 2011, desalting utilizing the reverse osmosis membrane (RO) system was started. Though desalting had been done utilizing the ion exchanger from November 29, 2011, the chloride concentration increased as a result of well water intrusion.
- On April 27, 2012, a new mobile reverse osmosis membrane (RO) system was installed for the purpose of desalting as well as well water purification.
- Today (October 12, 2012), desalting of Unit 4 spent fuel pool has been completed considering that the chloride concentration was sufficiently low (approx. 9ppm) (Maximum limit stipulated by the technical specification: 100ppm).
- Sampling and hydrazine injection will be done on a regular basis, and an ion exchanger, etc. will be used as necessary to maintain good water quality. In order to ensure visibility of underwater at the time of fuel removal, installation of purification equipment is being considered.



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3. Spent Fuel Pool Water Quality Sampling Results (As of October 12, 2012)

Sample	Date	pH	Conductivity	Cl (Chloride ion)	Cs137	Cs134	Remarks
		–	mS/m	ppm	Bq/cc	Bq/cc	
Unit 1	October 9, 2012	7.8	17.2	5*	1.6E+04*	9.5E+03*	* Data as of July 17, 2012
Unit 2	August 30, 2012	9.1	27	14	5.1E+01	2.8E+01	
Unit 3	September 28, 2012	9.2	56	72	3.9E+03	2.3E+03	Desalting in progress utilizing mobile RO
Unit 4	October 10, 2012	9.0	Pool: 9.1 Well: 8.5	Pool: 9 Well: 10	5.6E-01	2.6E-01	Desalting completed

- As for Unit 1-4 spent fuel pools, hydrazine injection is being intermittently performed. The hydrazine concentration is 200ppm or less. Hydrazine injection (10ppm or more) is done for the units the desalting has already been completed for the purpose of preventing the microorganisms from being generated.
- The desalination system (mobile RO) at Unit 3 spent fuel pool continues to be in operation.