June 9, 2011

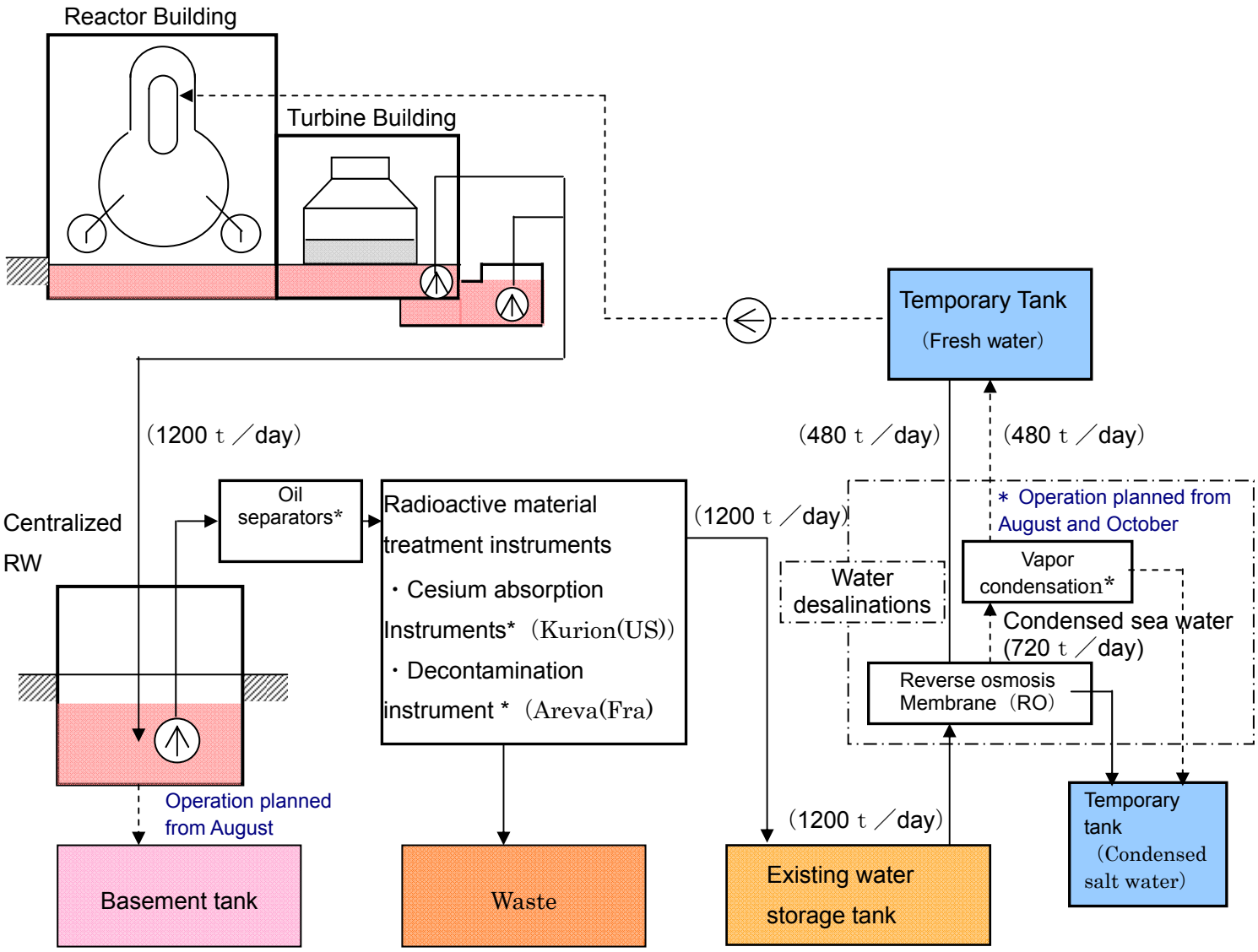
Tokyo Electric Power Company

Summary of radioactive accumulated water treatment system

For the purpose of preventing high level radioactive water accumulated in turbine buildings etc. from leaking, we began construction work to install facilities to treat accumulated water transferred and stored at the Centralized Radiation Waste Treatment Building, and to utilize the treated water to be injected into reactors, from the beginning of May, and have completed installing the main facilities. We are aiming to start the treatment from mid June.

■Summary of the facility

In order to remove oil from water transferred to the Centralized Radiation Waste Treatment Building, and decrease the radioactivity level, together with removing salt, the facility is composed of oil separators, radioactive material treatment instruments, and water desalinations.



* oil separators, radioactive material treatment instruments…Installed within the Process Main Building,

Cesium absorption Instruments…Installed within the Incineration Workshop Building

Composition of water treatment facility at Turbine Building, etc

■Summary of commissioning

By using low level contaminated water stored in the suppression pool water surge tank, we will check the function of the whole system in duration of about a week.

－Commissioning by Cesium absorption instruments on a stand-alone

－Commissioning by decontamination instruments on a stand-alone

－Overall commissioning

■Summary of instruments

・Oil separators

Oil separators remove oil and sludge in accumulated water by dissolved air flotation.

Oil separators

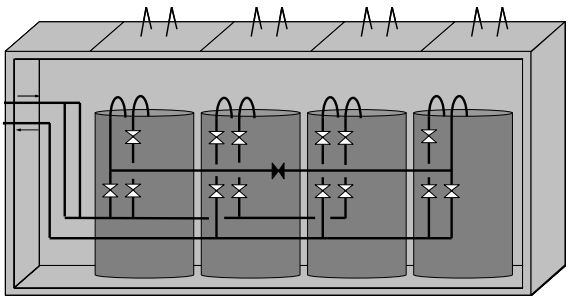
Inside the Oil separators

・Summary of Cesium absorption instruments

Cesium absorption instruments (Kurion(US)) remove contaminated materials by flowing water through vessel filled with three various absorptions.

It is an improved version of the reputable TMI water treatment.

Oil separators →



→ Decontamination instrument (Precipitation)

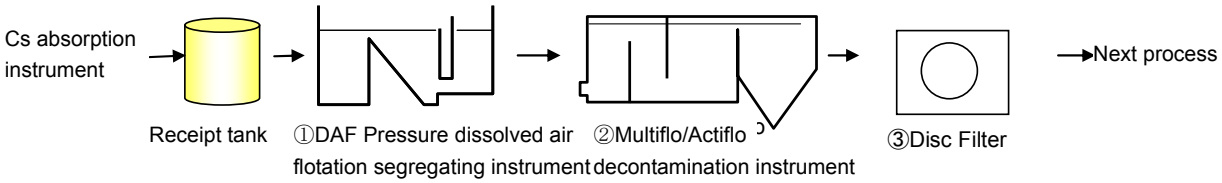
Filling of zeolite to vessels

skids

・Decontamination instruments

Decontamination instruments (Areva) remove contaminated matter by mixing the contaminated water in the tank, injecting chemicals, developing precipitation, and removing the purified upper layer.

It has a track record at the reprocessing plant at La Hague, France.



Chemical tank

AREVA decontamination instrument

・Water desalinations

Water desalinations desalt accumulated water already treated at Oil separators, Cesium absorption instrument and Decontamination instrument by using reverse osmosis membrane (RO).

Water desalinations (distillation instrument) is also planned to be in operation in line with water desalinations (RO), in August and October.

Water desalinations (RO membrane module)

Water desalinations (Filtration)

END

＜Reference＞

Fukushima Daiichi Nuclear Power Station onsite

Plan of accumulated water treatment and storing facility layout