

Overview of Regulation for TEPCO's Fukushima Daiichi NPS

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福島第一廃炉と未来について話し合おう

1FDIV

第4回福島第一廃炉国際フォーラム

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The Outline of Regulation for Fukushima Daiichi NPS



- It is necessary for 1F to employ appropriate management methods in accordance with the state of facilities
- The NRA designated 1F a “Specified Nuclear Facility” on November 7, 2012
- And indicated to TEPCO measures which should be taken in order to secure the given nuclear facilities
- TEPCO made the “Implementation Plan” which describes methods for decommissioning 1F
- The NRA approved it on August 14, 2013

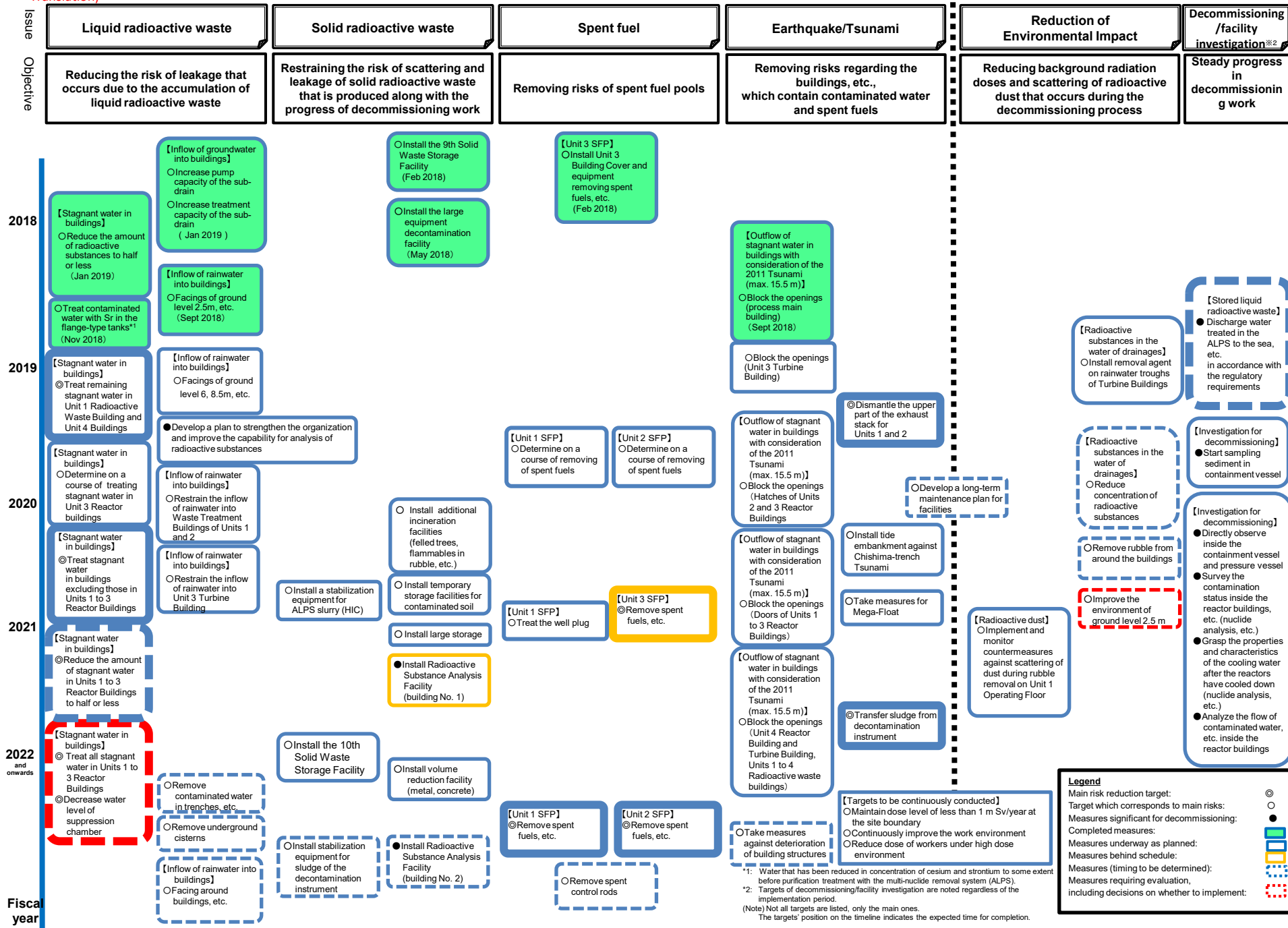


Fukushima Daiichi NPS (1F)

Mid-term Risk Reduction Targets of 1F



- The NRA formulated the “Mid-term Risk Reduction Targets” in February 2015
- To set out targets for risk reduction during the decommissioning of 1F
- Revised based on the status of 1F and the achievement status of the targets are evaluated (Latest revision, March, 2019)
- Its concept is,
 - Characters of the risk reduction target:
Focusing on presenting the residual risks,
in addition that has the characters of the risk reduction work processes.
 - Targets to be noted:
In principle, targets with high risks concerning radioactive substances are noted,
as well as targets of high interest for the completion of decommissioning.
 - Target period:
Approximately three years.
 - Targets' position on the timeline:
To be placed at the expected time of completion.



Legend

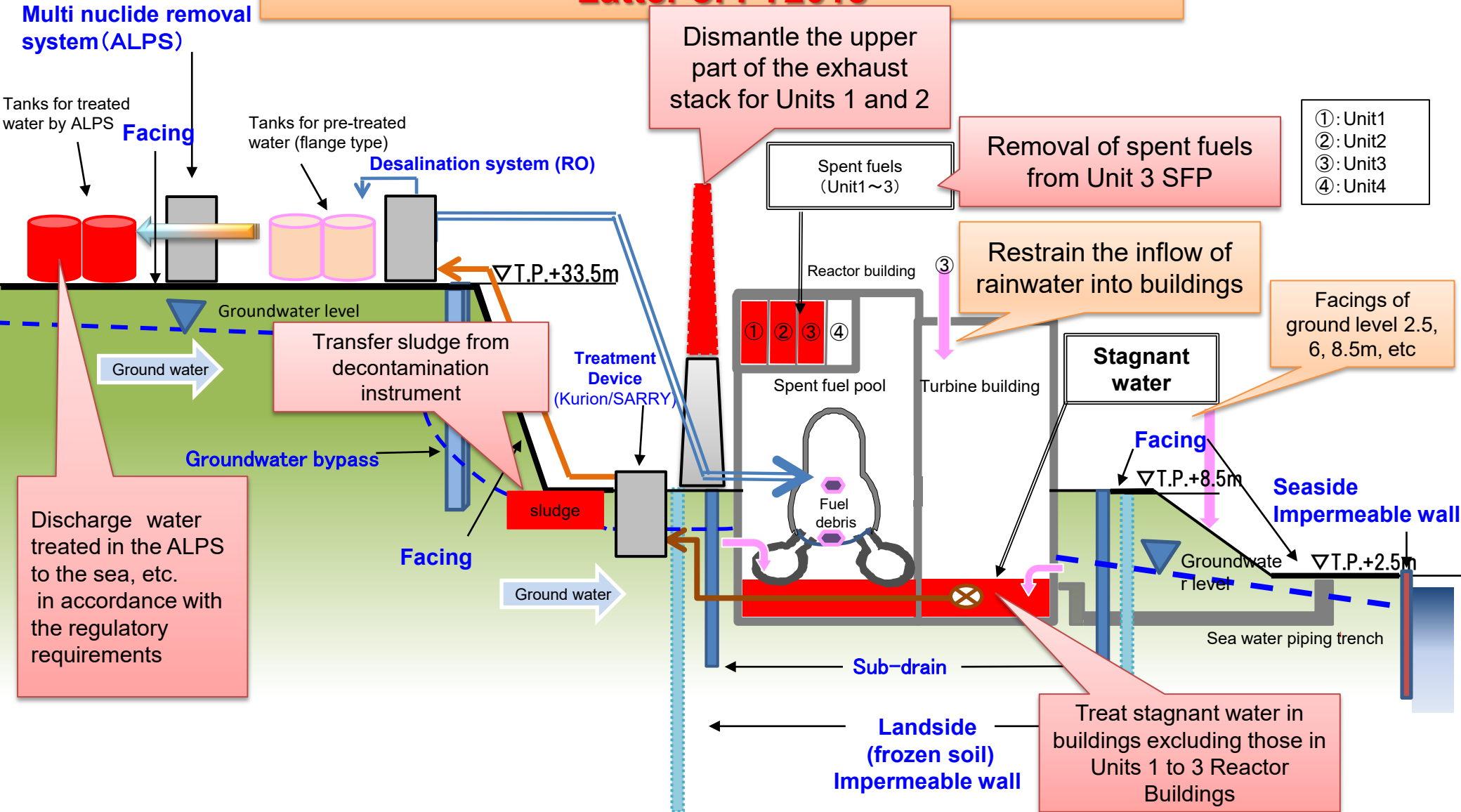
- Main risk reduction target: ○
- Target which corresponds to main risks: ●
- Measures significant for decommissioning: ○
- Completed measures: [Green box]
- Measures underway as planned: [Blue box]
- Measures behind schedule: [Yellow box]
- Measures (timing to be determined): [Dotted box]
- Measures requiring evaluation, including decisions on whether to implement: [Red dashed box]

*1: Water that has been reduced in concentration of cesium and strontium to some extent before purification treatment with the multi-nuclide removal system (ALPS).
 *2: Targets of decommissioning/facility investigation are noted regardless of the implementation period.
 (Note) Not all targets are listed, only the main ones.
 The targets' position on the timeline indicates the expected time for completion.

Conceptual Diagram of Main Risks, etc. for the Latter of FY2018 and the End of FY2021

TEPCO's Fukushima Daiichi Nuclear Power Station

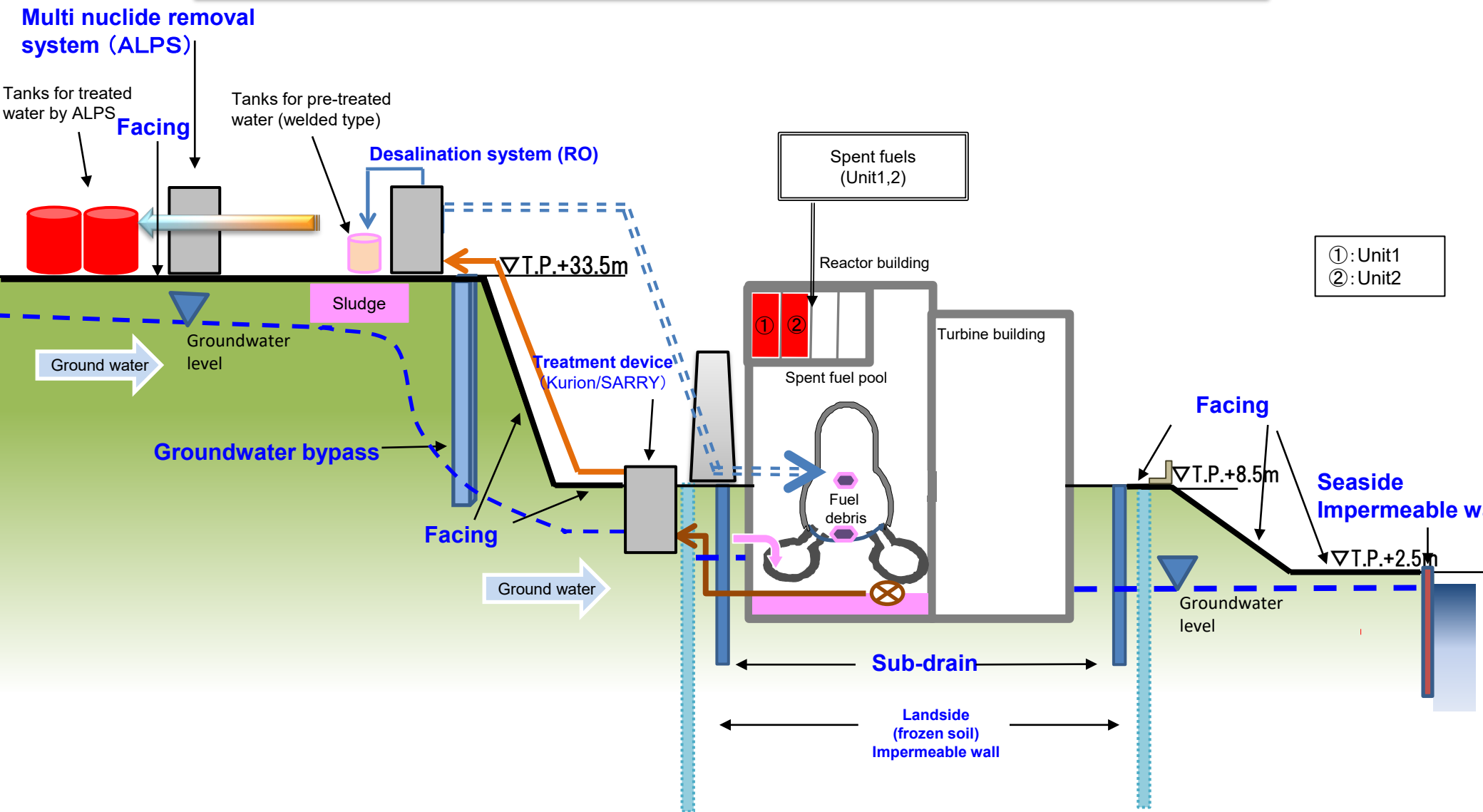
Latter of FY2018



Conceptual Diagram of Main Risks, etc. for the Latter of FY2018 and the End of FY2021

TEPCO's Fukushima Daiichi Nuclear Power Station

The End of FY2021

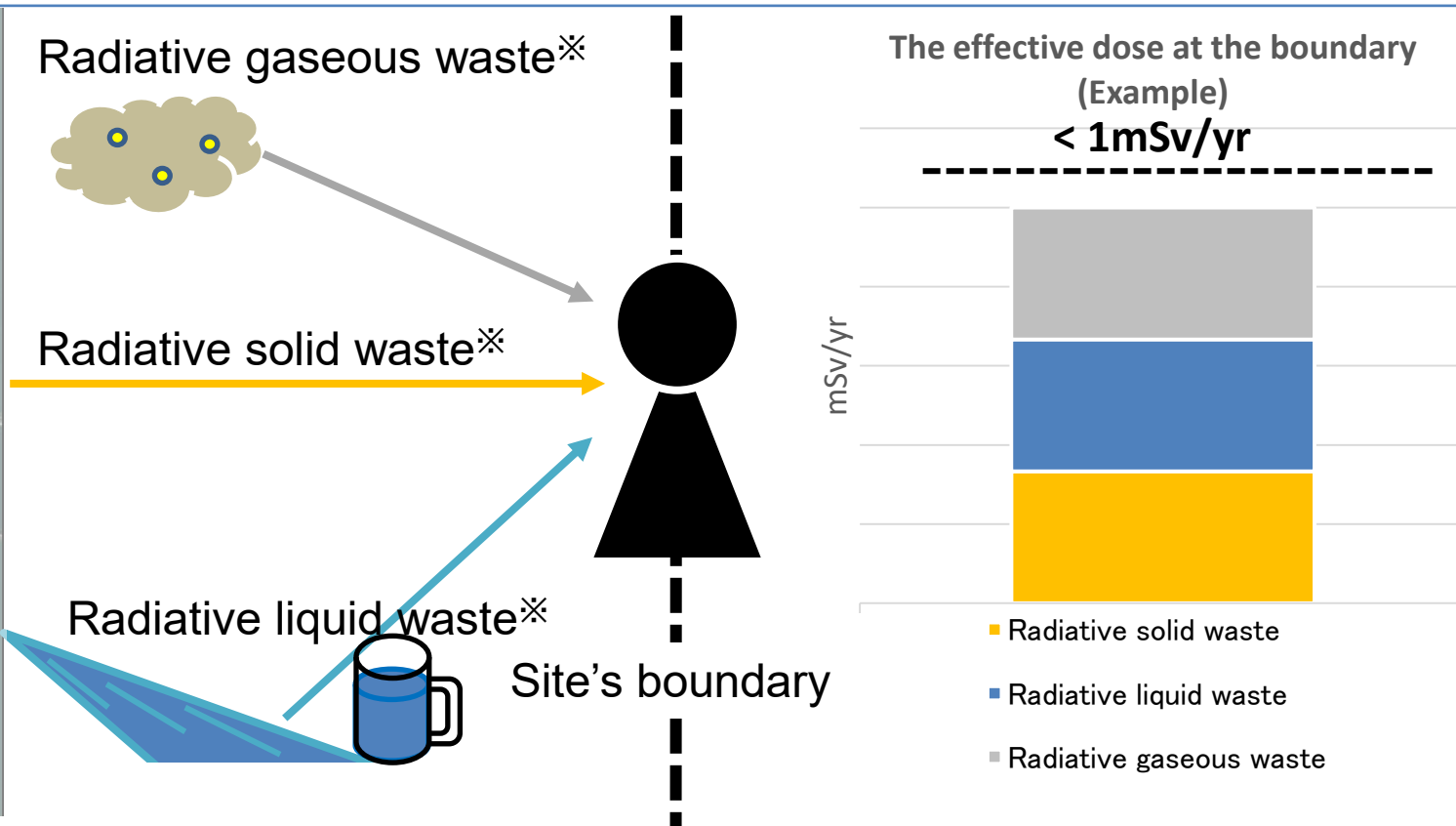


Requirement of effective dose at boundary of 1F



“Items required for Measures which should be taken at Tokyo Electric Power Co., Inc.’s Fukushima Daiichi Nuclear Power Station in line with the Designation as the Specified Nuclear Facility” (NRA decision in 2012)

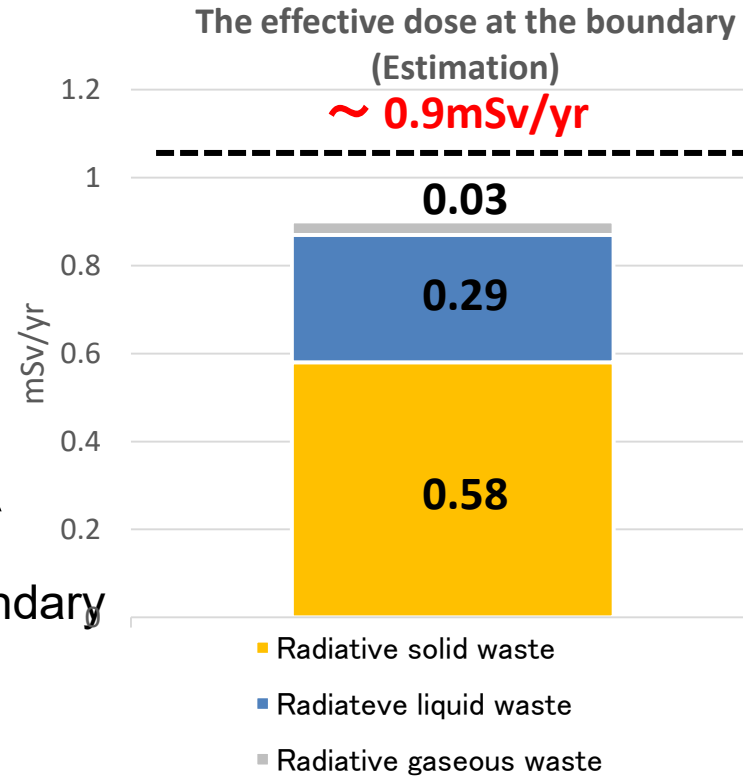
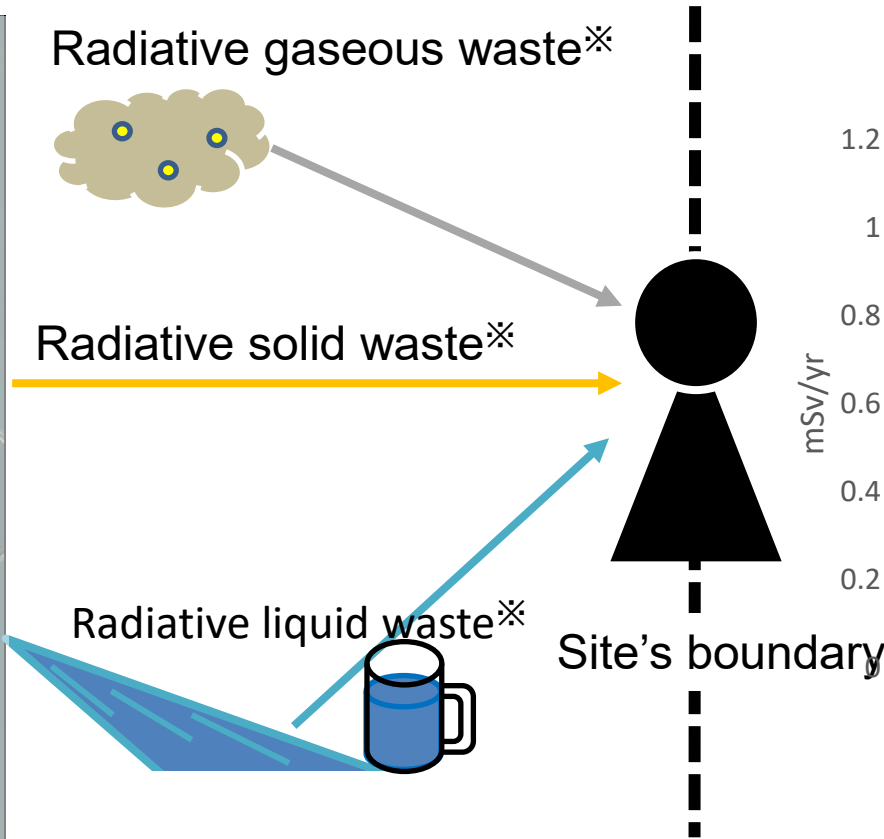
- Specifically, effective dose (estimated value taking into account additional releases of radioactive materials from the overall Facility due to rubble and contaminated water, etc. generated after the accident, which are stored in the Facility) along the site boundaries shall be reduced less than 1mSv/year by March 2013.



※Produced after 1F accident and during its decommission.

Requirement of effective dose at boundary of 1F (Estimation)

○ Effective dose, which additionally comes from rubble and contaminated water etc., is estimated about 0.9mSv/yr at boundary of 1F.



※Produced after 1F accident and during its decommission.

Summary



- ✓ NRA designated 1F a “Specified Nuclear Facility”, and imposed the appropriate regulation for its status.
- ✓ NRA formulated the “Mid-term Risk Reduction Targets”, and supervise TEPCO’s work for 1F decommission.
- ✓ NRA requires TEPCO to maintain effective dose, which additionally comes from rubble and contaminated water, etc., lower than 1mSv/yr at boundary of 1F.
- ✓ In present, the effective dose is estimated about 0.9mSv/yr.