

TRIP REPORT FROM FUKUSHIMA

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Trip background

- US Japan Nuclear Working Group
- Meetings
 - February 2012 San Francisco
 - May 2012 Tokyo
 - June 2013 Washington DC
 - October 2013 Fukuoka, Osaka, Fukushima, Tokyo

Briefing/Tour

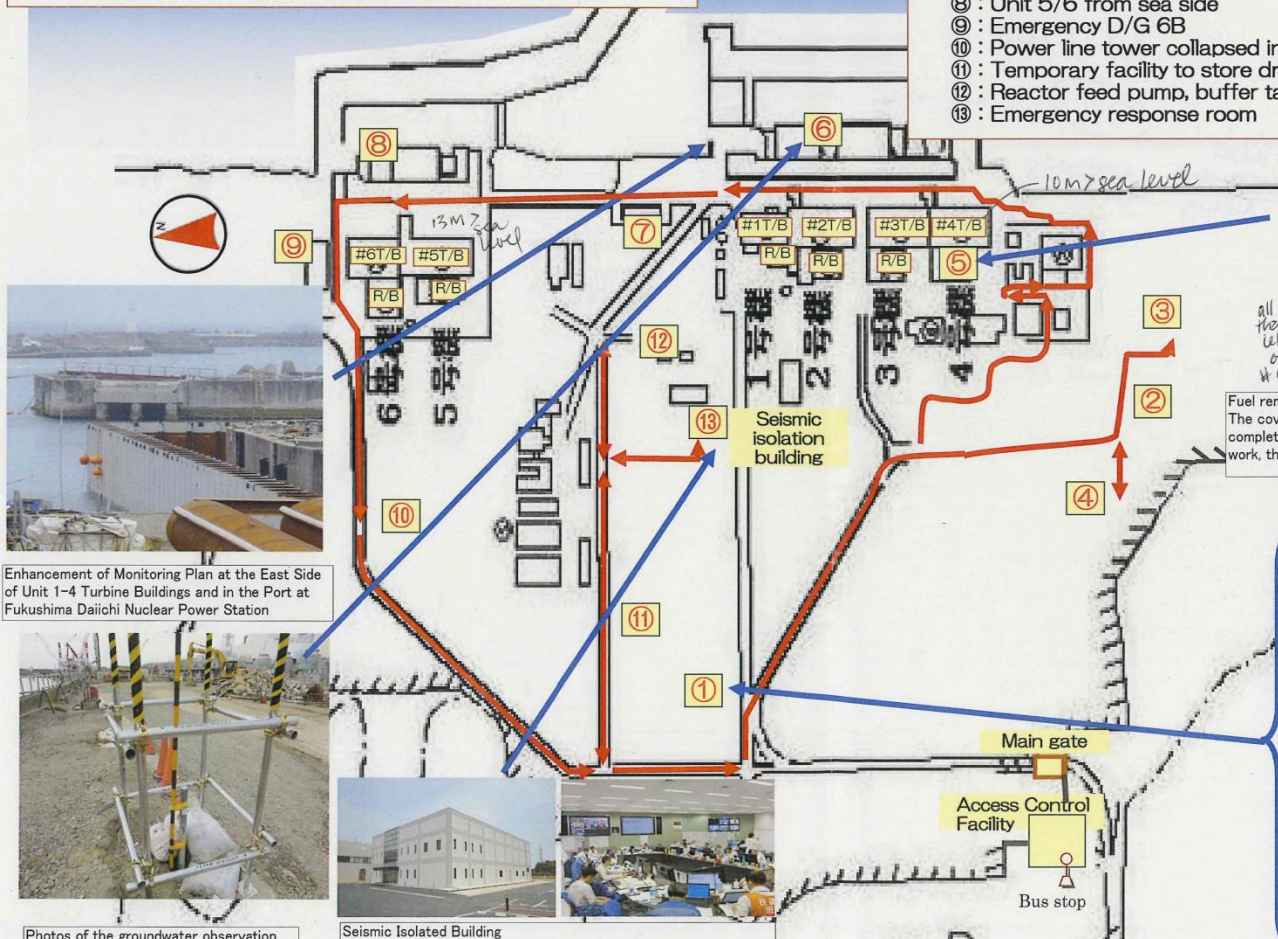
- Japan Village outside 20-km zone
- Briefing (see materials)
- Bus to exclusion zone (@ 8 km)
 - Route map
 - No photos
- Back to Japan Village

Trip Route

Route map for site visit

Tokyo Electric Power Company, Ltd
Fukushima Daiichi Nuclear Power Station
2th Oct, 2013

- ① : Multi-nuclide Removal Equipment
- ② : Control room for high level radioactive water treatment facility
- ③ : View point of R/B unit 1-4
- ④ : Storage tanks
- ⑤ : Unit 4 R/B
- ⑥ : Unit 1- 4 from sea side
- ⑦ : Cask custody building
- ⑧ : Unit 5/6 from sea side
- ⑨ : Emergency D/G 6B
- ⑩ : Power line tower collapsed in the quake
- ⑪ : Temporary facility to store dry casks
- ⑫ : Reactor feed pump, buffer tank for reactor feed water
- ⑬ : Emergency response room



Enhancement of Monitoring Plan at the East Side of Unit 1-4 Turbine Buildings and in the Port at Fukushima Daiichi Nuclear Power Station



Photos of the groundwater observation holes at Fukushima Daiichi Nuclear Power



Seismic Isolated Building
Emergency Response facility with seismic isolated structure



Fuel removal from the Spent Fuel Pool at Unit 4.
The cover installation for fuel removal is ongoing (to be completed at around mid FY 2013). In addition to the foundation work, the steel frame construction was started on Jan.8th.



Overview of the Multi-nuclide Removal Equipment (ALPS) at Fukushima Daiichi Nuclear Power Station



structure to remove fuel
Nov 2013
↓
Nov 2014 process
then # 3
2
1

will go to common fuel pool, which will store #1-6, but it's already 90% full so will build dry cask storage

On the ground

- Between 8km and 20km, residents allowed to “visit” but not stay overnight (no services)
- 3000 workers within the zone, but ZERO foreign workers
- Some hot spots; most radiation levels set very low
- Earthquake = mudslides = loss of external power

Radiation levels

- At 20km = .2 microsieverts/hr
- At 10 km = .8 microsieverts/hr
- Outside #3 reactor = 970 microsieverts/hr
- Outside #4 reactor = 65 microsieverts/hr
- Outside #5, 6 reactors = 2.8 microsieverts/hr
 - (or 1 millisievert/hr)
- To compare:
 - Annual limit = 100 millisieverts in 5 years or 50 millisieverts in 1 year
 - Monthly limit ~ 1 millisievert

Contaminated water issues

- Rainwater versus highly contaminated water
- TEPCO's responses

Other meetings

- PM's office (Kanehara)
- NRA Commissioner OSHIMA
- Diet members