

# An Answer to the Crisis at Fukushima Daiichi

**October 2012** 

**Skilled Veterans Corps for Fukushima** 

# Disaster at Fukushima Daiichi

11th Mar. 2011

2:46pm Earthquake hit FD

3:26pm Tsunami hit FD:

All power lost

12th Mar. 2011

6:50am High radiation at main gate

3:36pm Explosion in Unit 1

14th Mar. 2011

11:01am Explosion in Unit 3

15th Mar. 2011

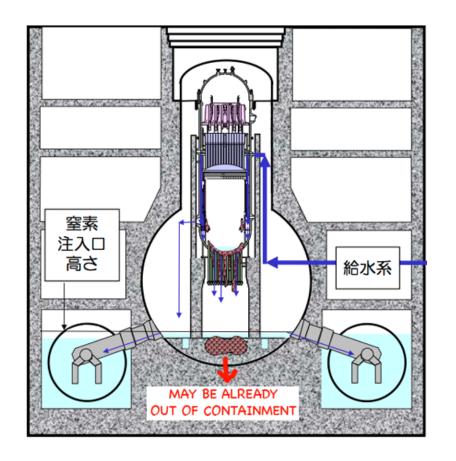
6:10am Explosion Sound in Unit 2

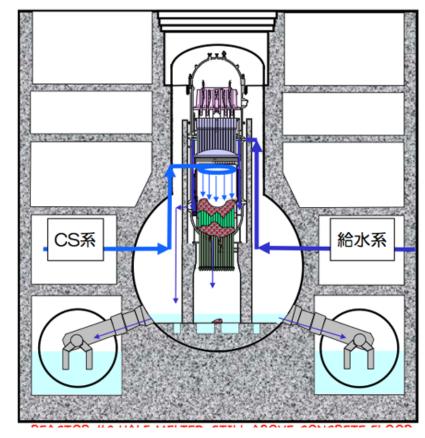
6:14am Explosion in Unit 4





Within days, Units 1, 2, & 3 experienced meltdowns. Unit 4 was not operated at the time and did not experience a meltdown.





In Units 1, 2, 3 the fuel in reactor have melted through the container. They must be continuously cooled to prevent nuclear chain reaction. Heat is the greatest concern.

### UNIT 3

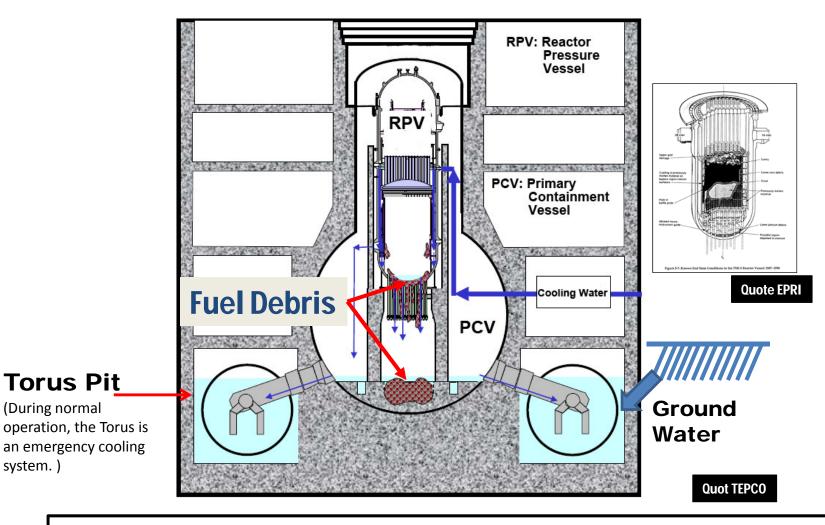


The soundness of housings of Units 1, 2, 3 have not been inspected because the radiation levels are too high. The risk of damage due to future earthquake to Units 1, 2, 3 is much greater than for Unit 4.

### UNIT 4



The preparation of removal of spent fuel in Unit 4 has began before the other units because there is less radiation.



**Torus Pit** 

(During normal

system.)

The Earthquake cracked the foundation of units 1, 2, 3 so that ground water can leak in and out. In order to avoid leakage of contaminated water into the ground, water levels in the pit must be kept lower than ground water level. Water amount increases daily.



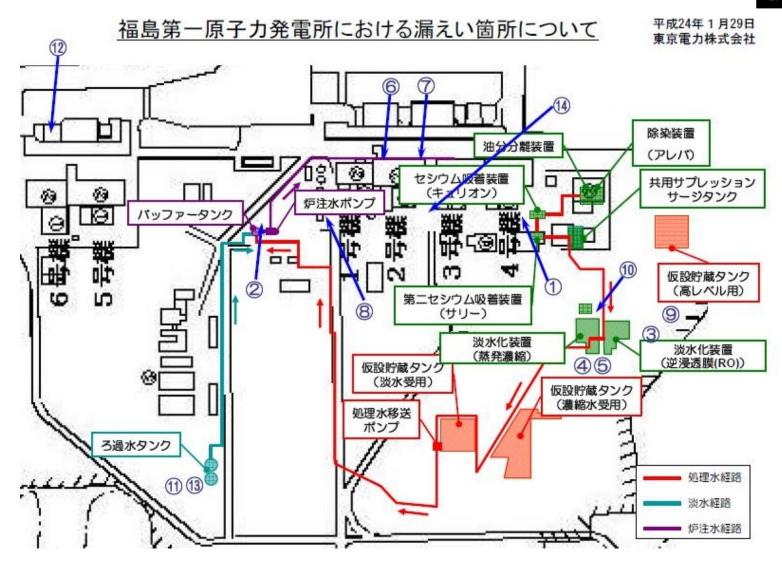
Water Tanks were built to hold the excess water which is contaminated. TEPCO didn't weld the tank shell, only used nuts and bolts. The tanks are often leaking.





In addition to the tanks, TEPCO built underground water pool which is shielded with plastic sheets. In the case of an earthquake, the sheets may rupture and water leak into the ground.

**Quote TEPCO** 



Water is conducted through 2.5 miles of hoses.



**Quote TEPCO** 

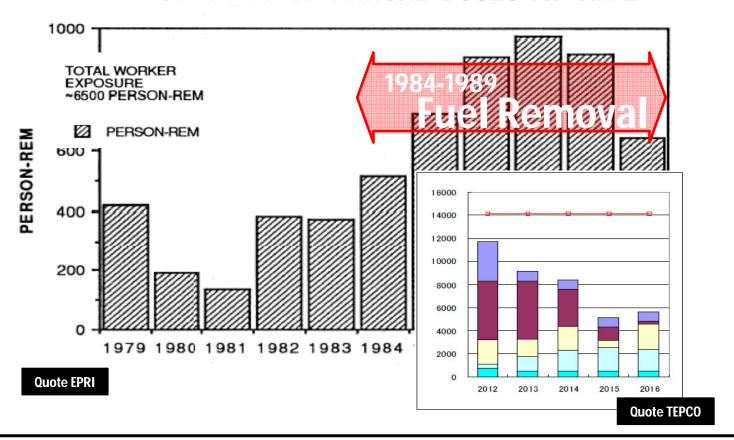


Plastic hoses damaged by freezing during last winter. Disorganization and random order of the hoses makes it difficult to trouble shoot and repair problems.



Temporary seawall. TEPCO claims that computer models predict that this seawall will endure for 40 years withstanding tsunamis.

### SUMMARY OF ANNUAL DOSES AT TMI-2



Radiation exposure of each worker is regulated within a limit value. In case of TMI radiation exposure increased during fuel removal.

TEPCO has only planned on a workforce until 2016, which will decrease over time. Their time plan is lacking in a long term efforts, as Fuel Removal is planned to begin in 2022.

# **SVCF** requests:

**Skilled Veterans** be allowed to work at Fukushima Daiichi to reduce doses for Younger Workers

March 11, 2011 Earthquake and Tsunami

April 10, 2011 First Appeal was delivered

May 4, 2011 First negotiation with TEPCO

May 24, 2011 Meeting with Mr. Hosono

and TEPCO

July 12, 2011 SVCF Inspection Team visited

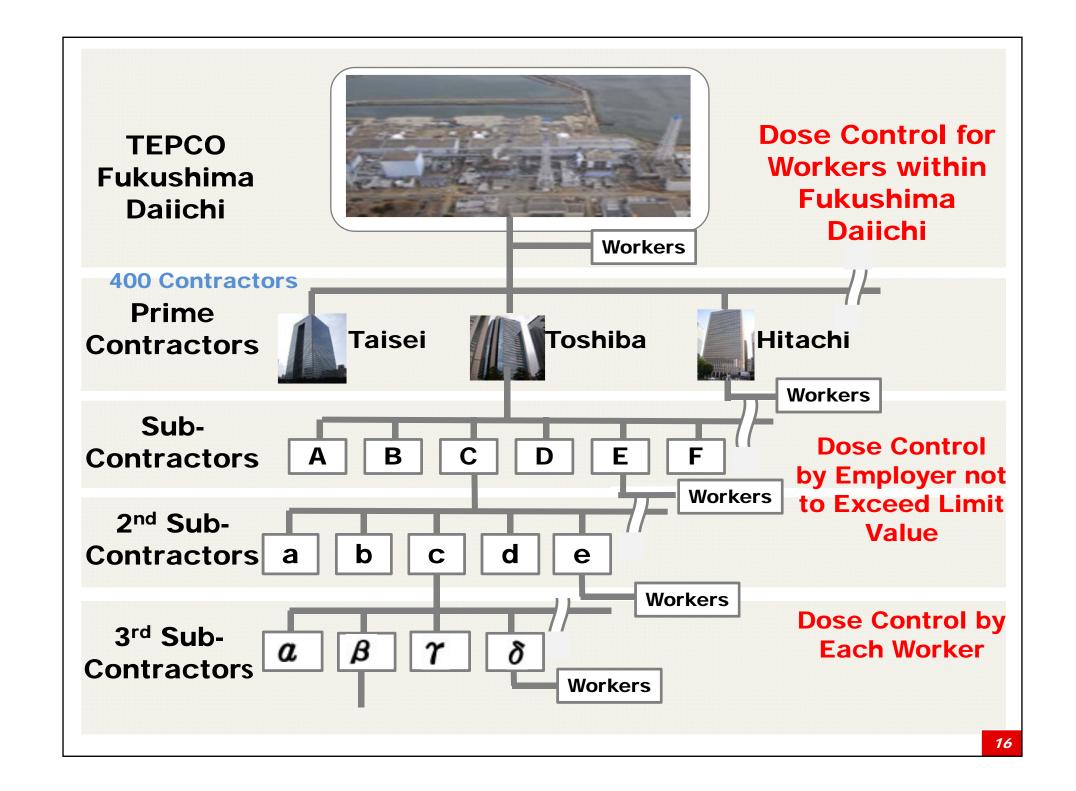
**Fukushima Daiichi** 

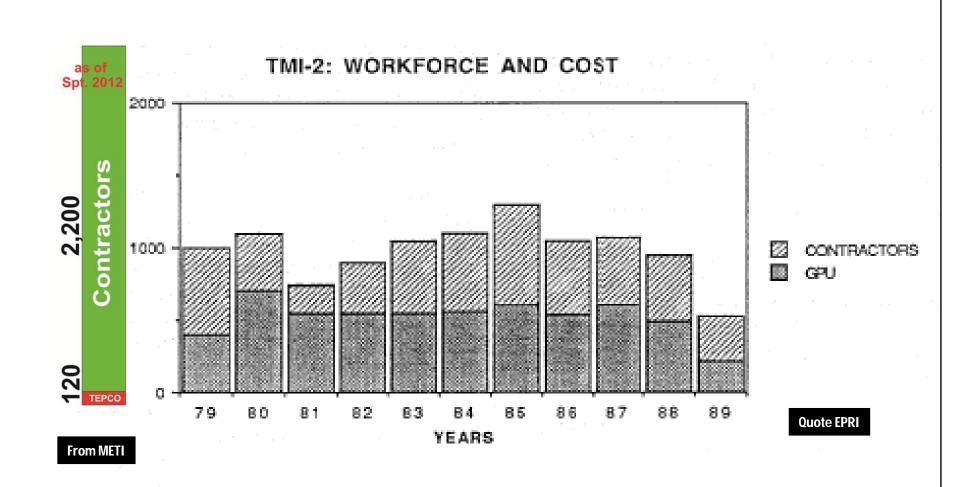
August 3, 2011 Proposal to Government and

**TEPCO** 

# **Current Situation of SVCF**

- Japan Government appreciated our proposal and asked TEPCO to consider us but does not enforce.
- TEPCO has responded but does have no room for SVCF.
- We believe that the multi-layered contracting system is the major problem.





GPU owns TMI and

Bechtel was the project manager.

TEPCO can't control subcontractors.

### **SVCF** requests

## Cleanup of Fukushima Daiichi

Offering skills, knowledge, muscle works, surveys, etc.

### **Obstacles**

### **Industrial Structure**

Multi-Layered Contracts in Traditional Heavy Industries; Closed Nuclear Power Group (Nuclear Village)

**Political Behavior** 

**Back-passing Government; Fragmented Bureaucracy** 

**Profit Sharing Structure** 

**Bribed local communities**;

Alliance of Central / Local Governments and Businesses

**Fukushima Daiichi** 

**Containment Work** 



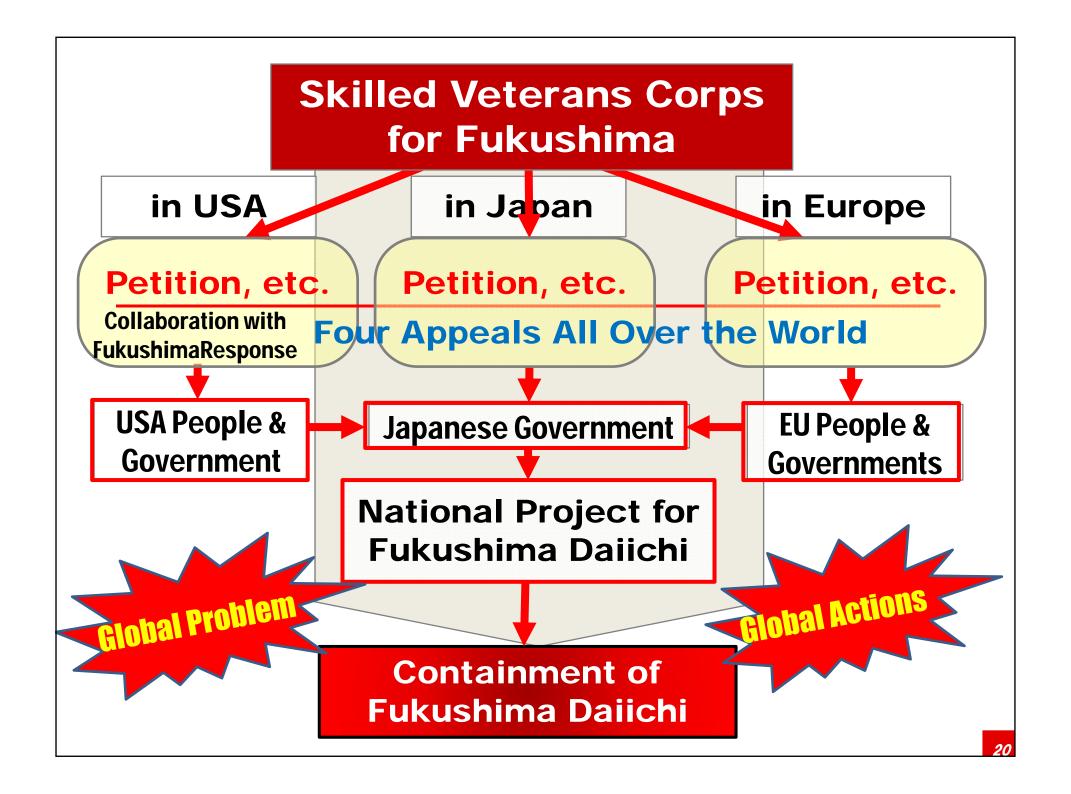
**Cleanup Work** 

# **National Project**

- 1. Independent from TEPCO's HQ
- 2. Employ worldwide expertise
- 3. Integrated Project Management
- 4. International Inspection Team



Even TEPCO is owned by the government it is still profit oriented company, as the same case as GM



# **SVCF** wants your help

# Raise awareness:

- Contacting with politicians
- Organizing local groups
- Talking with your friends, family
- 1. Form a National Project Team for Fukushima Daiichi, which is independent from TEPCO's HQ
- 2. Utilize all of expertise in the world
- 3. Integrated Project Management reforming traditional multi-layered subcontract structure
- 4. Form an International Inspection Team