FUKUSHIMA REVITALIZATION

- TEPCO’s Responsibility and Local Community Development -

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Tokyo Electric Power Company Holdings, Inc.
Areas to which evacuation orders have been issued
As of 2017/04/01

(Source: METI HP)
Fukushima Prefecture and TEPCO Nuclear Power Stations

【Fukushima Prefecture】

【Fukushima Daiichi NPS (4,696MW)】

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Unit 5</th>
<th>Unit 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>460 MW</td>
<td>784 MW</td>
<td>784 MW</td>
<td>784 MW</td>
<td>784 MW</td>
<td>1,100 MW</td>
</tr>
</tbody>
</table>

Okuma Town (2,812MW)  Futaba Town (1,884MW)

【Fukushima Daini NPS (4,400MW)】

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,100 MW</td>
<td>1,100 MW</td>
<td>1,100 MW</td>
<td>1,100 MW</td>
</tr>
</tbody>
</table>

Naraha Town (2,200MW)  Tomioka Town (2,200MW)

※Status at the accident
In operation  Under inspection

【Location】

Fukushima Daiichi NPS

Headquarters

Fukushima Daini NPS

J Village

20 km
Transition of Evacuation Zones and the Number of Evacuees

April, 2011

Evacuation order zone (warning zone)
Planned evacuation zone
Emergency evacuation preparation zone
(Evacuation instruction cancelled on September 30)

164,865 evacuees
(Source: HP of Fukushima Prefecture and METI)

April, 2017

30km radius
20km radius

Fukushima Daiichi NPS

76,853 evacuees

(Source : HP of Fukushima Prefecture and METI)
Evacuation Order Lifted in Ten Municipalities

The status of evacuation orders

(Source : HP of Fukushima Prefecture and others)

Summer Festival 2017 (Naraha)  Futaba World 2017 (Tomioka)

Starlight Festival (Tamura)

Wild Horse Chase Festival (Minamisoma)

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### Returning Intention of Evacuee Residents

<table>
<thead>
<tr>
<th>Location</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamura</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kawauchi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naraha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minamisoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kawamata</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Katsurao</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iitate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomioka</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Namie</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Survey on residents' intentions in Fukushima Prefecture in 2008 (Reconstruction Agency)

**An example of responses for return judgment necessary condition in Iitate Village (2016) n=251 Multiple answers**

- Infrastructure
- Community
- Radiation decontamination
- House / Work
- Radiation anxiety

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## Revitalization Activities

### Cumulative total people x day rendered as of the end of Aug, 2017

<table>
<thead>
<tr>
<th>Details</th>
<th>People x Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative total people x day rendered in Aug, 2017</td>
<td>6,808</td>
</tr>
<tr>
<td>- Indoor cleaning &amp; clearing</td>
<td>(657)</td>
</tr>
<tr>
<td>- Weed &amp; snow removal (town road, entrance, etc.)</td>
<td>(4,321)</td>
</tr>
<tr>
<td>- Assisting temporary stay</td>
<td>(705)</td>
</tr>
<tr>
<td>- Others (local events, nursing care, etc.)</td>
<td>(1,125)</td>
</tr>
<tr>
<td><strong>Cumulative total people x day rendered since January, 2013</strong></td>
<td><strong>371,751</strong></td>
</tr>
</tbody>
</table>

### Cumulative total people x day results since FY 2012

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5,341</td>
<td>61,532</td>
<td>104,609</td>
<td>204,977</td>
<td>237,215</td>
<td>308,388</td>
<td>337,695</td>
<td>342,966</td>
<td>349,677</td>
<td>357,152</td>
<td>364,943</td>
<td>371,751</td>
<td></td>
</tr>
</tbody>
</table>

**Percentages of each Activities from Apr to Aug, 2017**

- Cleaning: 52%
- Weed removal: 15%
- Assisting temp. stay: 22%
- Others: 11%

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TEPCO People Engaged in Actions

- Outdoor Cleaning and Clearing
- Weed Removal at Graveyards
- Free Seminar on Nursing
- Area Patrolling
Before and After: Making a Difference

- Indoor Cleaning and Clearing

- Weed and Mud Removal for Restoration of Agricultural Business
# Decontamination Activities

## Cumulative total people x day rendered as of the end of August, 2017

<table>
<thead>
<tr>
<th>Details</th>
<th>People x Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative total people x day rendered in August, 2017</td>
<td>4,799</td>
</tr>
<tr>
<td>- Activities for decontamination</td>
<td>(1,697)</td>
</tr>
<tr>
<td>- Activities for interim storage</td>
<td>(2,076)</td>
</tr>
<tr>
<td>- Activities for waste management &amp; recycling</td>
<td>(149)</td>
</tr>
<tr>
<td>- Activities for environmental restoration &amp; risk communication</td>
<td>(479)</td>
</tr>
<tr>
<td>- Others</td>
<td>(398)</td>
</tr>
<tr>
<td><strong>Cumulative total people x day rendered since January, 2013</strong></td>
<td><strong>247,705</strong></td>
</tr>
</tbody>
</table>

## Cumulative total x day results since 2012

<table>
<thead>
<tr>
<th>(people x day)</th>
<th>Reached 200,000 (Nov 18, 2016)</th>
<th>Reached 100,000 (May 7, 2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FY 2012</strong></td>
<td>5,284</td>
<td>42,550</td>
</tr>
<tr>
<td><strong>FY 2013</strong></td>
<td></td>
<td>94,686</td>
</tr>
<tr>
<td><strong>FY 2014</strong></td>
<td></td>
<td>103,823</td>
</tr>
<tr>
<td>May 2015</td>
<td></td>
<td>103,823</td>
</tr>
<tr>
<td>FY 2015</td>
<td></td>
<td>159,437</td>
</tr>
<tr>
<td>Nov. 2016</td>
<td>202,063</td>
<td>222,548</td>
</tr>
<tr>
<td>FY 2016</td>
<td>228,072</td>
<td>232,934</td>
</tr>
<tr>
<td>Apr. 2017</td>
<td>237,925</td>
<td>242,906</td>
</tr>
<tr>
<td>May. 2017</td>
<td>247,705</td>
<td>247,705</td>
</tr>
<tr>
<td>Jun. 2017</td>
<td></td>
<td>247,705</td>
</tr>
<tr>
<td>Jul. 2017</td>
<td></td>
<td>247,705</td>
</tr>
<tr>
<td>Aug. 2017</td>
<td></td>
<td>247,705</td>
</tr>
</tbody>
</table>

Percentages of each Activities from Apr to Aug, 2017:
- Special Decontamination Area: 35%
- Interim Storage: 44%
- Waste management & Recycling: 8%
- Environmental restoration & risk communication: 4%
- Others: 9%
Decontamination Work Ongoing

- Field survey on contamination density
- Status check after decontamination work in Furudono
- On-site training
- Decontamination work in Furudono
Continuous Air Dose Monitoring & Personal Dosemeter

- ADM in JR train for restoration of operation
- ADM on roads through elementary schools in Nishigo Village
- Personal Dosemeter

( total 190 km and 185,000 spots)

- ADM at Naraha Parking Area of Joban Expressway
- ADM on Joban Expressway
TEPCO develops IGCC Plants in Fukushima

Objectives

1. To create an industrial base and open up job opportunities as part of TEPCO’s support for local economic recovery.

2. To become a global leader in the next-generation clean coal technology through the application of IGCC systems.
TEPCO improves power grid for more RE in Fukushima

Fukushima RE Promotion Council

- Prefecture
- Municipalities
- Solicitation
- Application
- Registration Agreement
- Subsidy
- Investment & Financing Scheme
- Annual Fee
- Revitalization

Qualified RE Developer

Local Citizens & Corporations

- Local Investment
- RE Term Deposit (F)
- Local Fund (I)

Tohoku

- To install lithium battery at Minamisoma Substation

TEPCO

- To refurbish Shin-Fukushima Substation for grid connection
- Tech support for municipalities
Damage by Rumors in Fukushima

**Price of Rice**
- National average
- Fukushima
- Iwate
- Miyagi

**Price of Beef**
- National average
- Fukushima
- Iwate
- Miyagi

**Number of Tourists from Overseas**

Source:
- Rice: Ministry of Agriculture, Forestry and Fisheries “Report on Rice Transit”
- Beef: Tokyo Central Wholesale Market HP “Market Statistics Information”
- Sightseeing: Tourism Agency “Traveling Statistics Survey”
TEPCO promotes Agri-Products & Tourism in Fukushima

Major Supporting Companies

- Spread safety understanding about Fukushima foods
- Promote purchase of Fukushima foods
- Promote utilization of tourist facilities in Fukushima

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TEPCO supports Innovation Coast Initiative

Industrial bases under development through JAEA

Radioactive Substance Analysis, Research Facility (Okuma) for fuel debris and other materials
*To be in operation in 2017-2018*

Decommissioning International Collaborative Investigation Center (Tomioka) for international R&D
*Commenced operation in April, 2017*

Remote Technology Development Center (Naraha) for robot development & deployment
*Already in operation*
TEPCO and Sellafield entered into a corporation agreement in respect of decommissioning and communication in 2014.

Sellafield has developed its strong relationship with West Cumbria in its sixty years of experience. Sellafield and TEPCO will share a common challenge in communicating activities in order to restore the trust from local communities.

West Cumbria Stakeholder Meeting (UK)  Expert Meeting (Japan)
International Outreach

- TEPCO attended the panel discussion on Fukushima Revitalization hosted by the Weatherhead Center for International Affairs of Harvard University in May, 2017.

- Innovation Coast Initiative is modeled on successful cases in Richland (the nearest city from Hanford Site), WA in the U.S. TEPCO is reaching out to the local community there to learn active public involvement and close collaboration between industry and academia.

Panel Discussion (MA)  
Dialog with the local community (WA)
Thank you

www.tepco.co.jp/en/fukushima/index-e.html