

Summary of 15th Technical Conference

1. Date: April 25, 2017 (Tues.) 09:30 ~ 12:40
2. Place: Board Room, Otemachi Headquarters, Central Research Institute of Electric Power Industry

3. Participants:

Chair: Yokoo (NRRC)

Members: Maki (Hokkaido EPCO), Takizawa (Tohoku EPCO, substitute for Kato), Igarashi, Kawamura (TEPCO Holdings), Ihara, Nakagawa (Chubu EPCO), Fukumura (Hokuriku EPCO, substitute for Takahashi), Haraguchi, Yoshihara (Kansai EPCO), Hayashi (Chugoku EPCO), Kawanishi (Shikoku EPCO), Inoue (Kyushu EPCO, substitute for Okano), Ishizaka (JAPC), Okamura (JNFL), Kuramoto (J-Power), Yotsuyanagi (Toshiba), Konno (Hitachi-GE), Yamagishi (MHI), Kurata (JANSI), Takahashi, Shimeno, Zama, Sakai, Yamamoto (NRRC)

Observer: Ono (FEPC)

4. Proceedings:

(1) R&D Results of FY2016

NRRC reported on the R&D results for the following research items in FY2016.

<Risk Assessment >

1. Fire PRA / Fire protection
2. Thermal-hydraulic analysis of containment vessel during severe accident
3. Fission product behavior during severe accident
4. Thermally induced-SGTR
5. Human reliability analysis
6. Risk-informed application
7. Risk communication
8. Level 3 PRA
9. Performance evaluation of filtered containment venting system
10. Implementation of PRA methodology at an actual PWR

<External Natural Events>

1. Extreme weather assessment and countermeasures
2. Evaluation method of fault activity
3. Evaluation method of seismic motions
4. Assessment of tsunami risk and impact
5. Advanced seismic safety assessment for equipment and pipes of NPP

6. Fragility assessment of NPP buildings and equipment
7. Advanced seismic-resistance evaluation of ground and structures
8. Assessment of the risk and hazard of volcanic eruption

(Remarks from members ◆Industry members, ◇CRIEPI members)

<Implementation of PRA methodology at an actual PWR>

- ◆Regarding the “Implementation of PRA methodology at an actual PWR”, which was sponsored by the Agency for Natural Resources and Energy of METI, I would like the R&D to be further pursued for later application.
- ◇We plan to pursue it as NRRC’s in-house R&D through our collaborative efforts with the pilot plant project for Ikata 3.

<Evaluation method of seismic motions>

- ◆Although we gained the knowledge of the length of faults with certain degree of confidence, the width of the faults must be studied further. I would like the NRRC to enhance the evaluation of both the width and length of faults while utilizing sophisticated underground structure modeling methods.

(2) Status of NRRC Activities

NRRC reported on the draft document of “Implementation Strategy of Risk-Informed Decision Making Process”.