# The Federation of Electric Power Companies (FEPC) 1-3-2 Otemachi, Chiyoda-ku, Tokyo, 100-8118, Japan

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Dr. George Apostolakis Head, Nuclear Risk Research Center Central Research Institute of Electric Power Industry 1-6-1 Otemachi, Chiyoda-ku Tokyo, 100-8126 Japan

SUBJECT: TAC LETTER ON THE SUITABILITY OF MODELS FOR IKATA SITE PROBABILISTIC RISK ASSESSMENT

Dear Dr. Apostolakis,

In response to the subject letter by the NRRC Technical Advisory Committee (TAC) dated November 1, 2014, we offer the following comments.

#### Plan of the Utility Companies

We recognize that it is important that the utility companies proactively improve their PRAs for practical use in "Risk-informed Decision-making." In the process of PRA improvement, we needed to select a pilot plant so that the owner utility could apply the PRA to actual plant activities. Other utilities and the NRRC will support the owner utility.

First, Shikoku Electric Power Co., Inc., or "Yonden", as the owner utility, will complete its internal-event Level-1 PRA based on the latest knowledge and the present plant status including severe-accident (SA) measures. Second, Yonden will develop a Seismic Level-1 & 2 PRA. Third, Yonden will expand the scope of PRA to include other External Hazards and will conduct Tsunami and Fire PRAs. Seismically induced events, such as tsunami, fire, and flooding, will also be studied. Ikata Unit 3 was selected as the pilot plant for this process. Although the focus will be on Ikata Unit 3, the PRA will include the possible interactions of this unit with Ikata Unit 2.

### Recommendation 1

We agree that the PRA model does not include accident management measures and design enhancements that evolved from the Fukushima accident lessons learned. This is because that PRA was done upon regulatory request so as to confirm whether the utility company selected the accident sequences appropriately. It is not appropriate to call the model a "Restart Model". We plan to develop a "State-of-the-Practice" PRA model which will include accident management measures and design enhancements resulting from the Fukushima accident. In addition, this PRA will include the latest methodological advancements developed by the NRRC and others. According to current regulatory requirements, we will have to submit a "Safety-Improvement Assessment Report (SAR)" to the Nuclear Regulation Authority within 6 months after the first refueling outage following plant restart.

## Recommendations 2-5

We thank TAC for these technical recommendations. Not only the owner utility, Yonden, but every other utility is now reviewing them and will take action, as appropriate.

### Closing Remarks

We acknowledge that there are many challenges on the road to the development of a PRA suitable for risk-informed decision making. We believe that the NRRC R&D results and the TAC reviews will be very important in our efforts to meet these challenges.

Thank you for your continuing support.

Sincerely,

農松秀己 Hideki Toyomatsu

Chairman

**Nuclear Development Committee** 

**FEPC**