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Federation of Electric Power Companies (FEPC)

March 11, 2015

SUBJECT: Supplementary Response to TAC Letter on THE SUITABILITY OF  
MODELS FOR IKATA SITE PROBABILISTIC RISK ASSESSMENT

Dr. G. Apostolakis  
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Dear Dr. Apostolakis

Regarding the subject letter by the NRRC Technical Advisory Committee (TAC) dated November 1, 2014, we had already replied with the FEPC letter dated January 9, 2015. In addition to that letter, we offer the following supplementary comments.

Recommendations 1 and 2

We agree to these recommendations in principle and would like to make the following supplementary comments regarding the upgrading process of the PRA model for Ikata Unit 3 presented at the 2nd TAC meeting.

Since the PRA model that was used in the application documents of Ikata Unit 3 for approval by the regulatory authority does not include accident management (AM) measures, the PSR-PRA model, which does include AM measures, is appropriate for the technical foundation of the eventual development of a full-scope PRA. On the other hand, the PSR-PRA model was developed and applied a long time ago and some parts of the methods are outdated. Therefore, taking the PSR-PRA model as a starting point, we are going to develop an improved PRA model that incorporates severe accident countermeasures and use this improved PRA model as the technical foundation.

### Recommendation 3

We agree to this recommendation. We note that the project team for improving the Ikata Unit 3 PRA is not organized by the NRRC but by Shikoku EPCO with the collaboration of the PRA Promotion Task Team of FEPC.

### Recommendation 4

We agree to this recommendation.

### Recommendation 5

- We agree to this recommendation.
- We will investigate how to subdivide the set of Initiating Events. We will also investigate how to calculate the frequency of Initiating Events and equipment failure rates based on the Ikata-specific operating experience using the Bayesian method.
- We have already received substantial support on the development and review process of the PRA model by experienced instructors of the operations training center and experienced operators of the Ikata NPP. We will maintain and reinforce the support by the operators.
- Once the evaluation models were developed by a vendor company and provided to Shikoku EPCO, the application, maintenance and modification of the models have been conducted by risk analysts of the Nuclear Research and Training Center of Shikoku EPCO with the collaboration of the risk assessment staff in Ikata NPP. We will maintain these practices and even intensify the participation of Ikata staff.

Thank you for your continuing support.

Sincerely,



Shigeru Urata

Leader, PRA Promotion Task Team  
Federation of Electric Power Companies