Results of Confirming the Status of Position Induction Probe of Fukushima Daiichi Nuclear Power Station Unit 3

September 21, 2011 **Tokyo Electric Power Company** To judge the possibility of presuming the status of the bottom part of the reactor <Objective> pressure vessel (hereinafter "RPV") by checking the condition at the contact points of Position Induction Probe (hereinafter "PIP") and estimating the soundness of the Fig. 1 Outline of the Position Induction Probe part between PIP and the cable. Reactor pressure vessel <Contents> To confirm that the full insertion position switch is on and the full withdrawal position switch is off. <Term> September 17, 2011 – September 19, 2011 Control rods Regarding the 137 control rods, the results of confirming the operation of the four <Results> driving system contact points of PIP are as follows: There is a possibility that PIP or cable is damaged and short-circuit or disconnected since no detector which has sound conduction was found. As is the case with Unit 1. Full insertion Full insertion it is difficult to presume the status of the bottom part of RPV from this survey. of control rods of control rods PIP detection cable Fig. 2 Results of confirming the operation **Control rods position** Through-hole of primary of the Position Induction Probe detection switch containment vessel Middle of control rods Reactor [Color coding] pressure : Conduction at two contact points at full inserted position vessel Permanent : Conduction at four contact points Magnet : Conduction at one to three contact points : No conduction at four contact points Full withdrawal of [Frame coding] control rods 90° * White line:: Core quadrant sectional line **Position** Induction **Probe** Relationship was not discovered

Primary

vessel

containment

Through-hole of primary containment

vessel PIP detection cable

between Trough-hole of primary

containment vessel of PIP detection cable and conduction of contacts.

Connecter

(leads to control rods

position instruction system)