Request for Comments regarding basic specifications for smart meter communications Guidelines for applicants

March 2012

Nuclear Damage Liability Facilitation Fund The Tokyo Electric Power Company, Incorporated With heavy damage to our facilities, particularly to nuclear power plants caused by the Great East Japan Earthquake centered in Sanriku-coast occurred on March 11, 2011, we deeply apologize for the inconvenience and anxiety caused to the residents in the affected areas as well as all of you.

In addition, we sincerely apologize for huge inconvenience to the residents in the areas supplied with electricity by Tokyo Electric Power Company, caused by the planned blackouts due to the shutdown of our nuclear power plants.

With regard to the nuclear accident at the Fukushima Daiichi nuclear power station, we determined the process to overcome the accident on April 17, and on July 19, achieved the goal of Step 1, that is, "A radiation dose rate is on a steady downward trend". Then, on December 16, we confirmed that the goal of Step 2 was achieved; "Radioactive material leak is controlled, and a radiation dose rate is substantially reduced".

Additionally, on December 21, we prepared a mid/long-term road map to decommission Reactor 1 to Reactor 4 at the Fukushima Daiichi nuclear power station. We will continue to make every effort to maintain a stable state of the plant and take necessary measures for the decommission of Reactor 1 to Reactor 4 over the mid-long term so that the people who are evacuating can return to their homes as soon as possible, and all the people in Japan can live with peace of mind.

The Tokyo Electric Power Company, Incorporated

### 1. Purpose of Request for Comments

### (1) Introduction

Nuclear Damage Liability Facilitation Fund (hereinafter referred to as *the Fund*) and The Tokyo Electric Power Company, Incorporated (hereinafter referred to as *TEPCO*) have launched the "Action plan to promote reform" (announced on Dec. 9, 2011), and at the same time, with regard to the "study and implementation of peak demand curb measures", we are discussing the most appropriate approach to curb peak demand by using smart meters. Additionally, the "Near-term energy demand-supply stabilizing project" announced by Energy and Environment Conference of National Policy Unit (on Jul. 29, 2011) has set a goal to install for smart meters of 80% of the aggregate demand within the next five years.

As part of the above activities, the Fund and TEPCO will promote the optimization of the specification based on domestic and international views on smart meters, and request comments that can contribute to reduce procurement costs.

Through these actions, we both will further increase business efficiency including capital spending cuts in the future.

## (2) Previous circumstances surrounding smart meters at TEPCO

From FY2006, TEPCO has ensured a safe working environment for the installation of meters, and developed highly-advanced smart meters at a low price.

Upon the launch of the automated meter reading plan, TEPCO is implementing verification tests of automated meter reading in Kodaira, Tokyo from October 2010, using about 1200 smart meters.

## 2. Definition of smart meter

## 2.1 Definition of a smart meter

A smart meter is defined as an electronic meter equipped with a two-way communication function and remote connect/disconnect operation function required for meter reading and electricity bill collection works at TEPCO. And smart meter can be separated into two parts; a metering part and a communication part.

## 3. Outline of application

### 3.1 Target of application

- $\circ$  Basic specifications for smart meter communications
- \* Basic specifications summarizes current TEPCO's "precondition of the basic concept for the functions of smart meter communication network."

#### 3. 2 Expected comments

At this request for comment, we will request not only communication technology specification but also precondition of communication network. We welcome your wide range of comments and suggestions concerning the matters to be considered from a technical standpoint, functions for efficient implementation, cost reduction, quality and function improvement, business efficiency, and the one which is on concept level.

Although this document explains the concept of our communication network, we also welcome your comments on both metering part and communication part of smart meter, as well as other metering related systems.

Ideas and comments that contribute to cost reduction and efficiency of construction and operation will be positively reflected into the specification.

Please note that comments and your individual name (or name of your company or organization) you provide may be released public later. If you request anonymity, please write down your name with "anonymity" on the form.

Please note in advance that we may make inquiries about your proposals on an as-needed basis.

#### **3.** 3 Expected applicants

We need comments and proposals from companies or individuals having a high level of knowledge in information and telecommunications technology. You do not need any qualifications and requirements to submit your comments.

#### 3.4 Application period

March 21 2012 to April 20 2012

#### 3.5 How to submit

Please write your comments on the designated form (attached) and e-mail it to the following address.

Your comments should be written in Japanese or English. If written in English, summary in Japanese should be attached. You can attach some materials including tables or figures to the form you submit for concrete descriptions.

E-mail address: tepcosmartcom@tepco.co.jp

### 3.6 Evaluation of the comments

Based on submitted comments, TEPCO will think over and consult the FUND which comments be reflected to basic specifications in consideration of the feasibility of

improvement in communication quality and function, and the effects on different functions or costs if your comments are adopted.

## 3. 7 Reply to the comments submitted

Our reply to your comments will be published on our website as soon as our preparations are complete.

In addition, please note that we cannot reply to every comment individually.

## 4. Handling of information

## 4. 1 Handling of patents and intellectual properties

Please note the following points before submitting your comments.

- The Comments proposed shall not limit future activities of the proposer, the Fund and TEPCO.
- The proposer is responsible for preservation (ex. patent applications) of its intellectual property rights related to the comments.
- If any comments adopted as specifications of smart meters' communication function include patent rights, utility model rights, design rights and other intellectual property rights owned by the proposer, for procurement of the given communication part of smart meters, the proposer agrees to grant to the vendor that supplies the communication part a license to use these rights under reasonable and non-discriminatory terms.
- For the submitted proposal, it shall be deemed that the proposer permits the Fund and TEPCO to use them for the purpose of discussing the specification.

## 4.2 Handling of personal information

Acquired personal information will be used for administrative processing related to the Request for Comments as well as for a report to administrative bodies including national government, or for publicizing documents related to the Request for Comments.

## 5. Others

## 5.1 Future plans

In order to decide the communication system to implement using basic specification based on the submitted comments (precondition of smart meter communication network, concept for selecting communication system and so on), technical field test has to be done considering full-scale deployment. Therefore, RFP (Request For Proposal) including field test about the submitted technology which has advantage in cost, function, quality and so on will be planned afterwards.

Technologies which are acknowledged to have advantage at the stage of field test will go on to preparatory stage for full-scale deployment.

## 5.2 Notes

- The materials provided by the Fund and TEPCO cannot be used for any purpose other than studying the submission of your comments, and cannot be reprinted without permission from the Fund and TEPCO.
- ② Submitted materials cannot be revised and returned.
- ③ The expenses necessary to submit comments shall be borne by the applicant.
- ④ When any of the following applies, the comments submitted become invalid in principle.
  - A) Your submission is after due date
  - B) False statements are found in the submitted comments
  - C) Conflict with this "Guidelines for applicants" or other related laws and regulations is found in the submitted comments

End

Note: When you make comments in English, please make sure to attach summary in Japanese.

Appendix

To person in charge of Request for Comments, TEPCO

# "Comments on basic specifications for smart meter communications "

	(Please write down the name of your company or organizations, the name of
[Name]	department and the name of person in charge)
[Address]	
[Tel. No.]	
[FAX No.]	
[E-mail address]	
[Comments]	
Target part (Please explicitly write the part on which you comment.)	
Details of your comments	
_	
•Reason (Attach or write the sources as evidence if possible.)	