No CEA/DPD/AMI/2016/992-1025 Dt 31st August 2016

To

Pr. Secretary/Secretary (Power/Energy) of All States/UTs
(as per list enclosed)

Subject: Strategy for Rollout of Advanced Metering Infrastructure (AMI) in the States/UTs

Sir,

As you may be aware that Revised Tariff Policy issued on January 28th, 2016 lays down timelines in respect to installation of Smart meters on basis of consumption of Electricity by consumers. As per clause 3 of provision 8.4 of Revised Tariff Policy 2016 -

“Appropriate Commission shall, therefore, mandate smart meters for:

(a) Consumers with monthly consumption of 500 units and more at the earliest but not later than 31.12.2017;
(b) Consumers with monthly consumption above 200 units by 31.12.2019.

Further, two way smart meters shall be provided to all prosumers, who also sell back electricity to the grid as and when they require.

In order to enable energy audit in the distribution system, all distribution companies shall ensure smart meters in their electricity system throughout the chain from transformers at 132kV level right down to distribution transformer level at 11kV and further down to each consumer.”

To facilitate the states to roll out the implementation of Advanced Metering Infrastructure (AMI) in the country, CEA has formulated the “Functional Requirements of Advanced Metering Infrastructure (AMI)” after consultation with various stakeholders and the same has been placed on the website of CEA (www.cea.nic.in). These Functional Requirements also include the Technical Specifications of single phase and three phase whole current Smart Meters which are formed on the basis of BIS Standards i.e. IS 16444 & IS 15959 for Smart Meters and their communication protocols, respectively.
States/ distribution utilities may refer to these Functional Requirements as the guidelines for creating Advanced Metering Infrastructure (AMI) in the state as per their plan approved by respective Electricity Regulatory Commission.

Keeping in view the new technology & limited experience of the states, the concept of AMI Implementing Agency (AIA) has been introduced in the Functional Requirements for providing end-to-end AMI solution as the success of smart metering is contingent upon proper integration of the smart meters, communication media and the Head End System (HES) including data analytics, etc. However, depending upon the level of expertise available with the distribution utilities, other business model may also be considered / evaluated for implementation of AMI in the states.

It is also advised that while rolling out AMI in the states, the plan might be taken up area-wise or feeder wise, preferably in higher loss pocket areas initially, in place of identified category of consumers to take the full advantage of the smart metering solution.

In line with the provisions of National Tariff Policy 2016, the distribution utilities may prepare a detailed plan for installation of smart meters (creation of AMI) by 2019 in the states and submit the same to respective SERCs for approval, at the earliest.

Yours faithfully

( Ravindra Kumar Verma)
Chief Engineer