

EXHIBIT: Justification for the Number of Devices Needed for Testing

The Navajo Tribal Utility Authority (NTUA) submits this Exhibit in response to an email notification request posted by FCC personnel Anthony Sarafini on September 29, 2011, asking for “an exhibit that justifies the need for 200 units and discuss what will happen to these units at the end of the STA term.”

The size and geographic features of the Navajo Nation dictate that testing include a significant number of devices and locations. The Navajo Nation covers a land area of more than 27,000 square miles (larger than West Virginia) and extends into all or part of 13 counties in the states of Arizona, New Mexico and Utah. The territory has diverse topography that includes arid deserts and alpine forests, as well as high plateaus, mesas, and mountains. NTUA’s service territory covers the entire Navajo Nation. As explained in the STA application, NTUA seeks to implement a two-way smart grid Advanced Metering Infrastructure (AMI) to its utility services covering a large portion of its service territory within the Navajo Nation.

To obtain accurate data to demonstrate permanent, real-world smart grid operations throughout the remote areas of the Navajo Nation, NTUA must employ a sufficient number of units during its testing studies to simulate actual operations at different environmental settings and usage levels. Testing at approximately 200 unit sites will enable NTUA to obtain accurate testing data across its service territory, although it is now anticipated that only 93 units will be available for testing during the proposed test period, as a result of limited equipment availability from the vendor. The outcome of the testing will determine what happens with the equipment at the end of the STA term, but in no case will the testing units be used beyond a testing application underneath the STA.

Although a significant number of units will be required for STA testing, the installation of the testing equipment is not a commercial build-out. Moreover, once the testing of the equipment is complete, that equipment will be turned off and will no longer be operated underneath the STA. Assuming the testing demonstrates the capability for NTUA to implement a permanent smart grid AMI infrastructure throughout NTUA’s utility service area on the Navajo Nation, NTUA intends to build-out such an infrastructure. Any future permanent build-out will require the installation of more units and equipment and will not be operated as part of the STA. NTUA will only undertake operation of the AMI smart grid infrastructure after separately securing permanent rights to do so—not underneath the STA. With regard to the long-term disposition of the units used during testing, should the equipment be deemed acceptable it may be incorporated into NTUA’s permanent smart grid infrastructure. If the equipment is not deemed acceptable, NTUA’s vendor would be responsible for disposition of the units. NTUA and the vendor of the equipment have entered into agreements that detail the disposition of that equipment, depending on the outcome of the testing.

Dated: September 29, 2011