Before the
Department of Energy
Washington, D.C. 20585

In the Matter of	**)**
	)
Implementing the National Broadband	**)**
Plan by Studying the Communications	**)**
Requirements of Electric Utilities To	**)**
Inform Federal Smart Grid Policy	**)**

NBP RFI: Communications Requirements

COMMENTS OF SPACE DATA CORPORATION

Space Data is the leader in high altitude balloon borne communications platforms where between 65-100,000 feet we have flown over 20,000 commercial SkySite® flights totaling over 250,000 flight hours as well as supply the military with our StarFighter® platform which extends 2 way radio communications from under 10 miles to over 400 miles. We were founded in 1999 and to develop our technology we decided that the ReFlex paging protocol was appropriate and that FCC licensed spectrum was available. Hence we participated in FCC Auctions 40, 41 and 50 and through secondary market transactions accumulated almost 2 of the 3 MHz allocated to Narrowband PCS (NPCS) in the 901/930/940 MHz bands.

Through the auctions and continued subsequent transactions we have been able to "re-purpose" our NPCS spectrum into 6 wide blocks from 100 KHz to 450 KHz for TDD transmission that total 1.8 MHz as well as 1.1 MHZ of this is SMR like offset paired blocks between the 901 and 940 MHz bands. We began to realize in 2008 that electric utilities had a great need for wide block private networks and have been fortunate to date to have worked with a number of radio manufacturers and utilities to assist them in their goals for dedicated, high power, high capacity two-way communications throughput to and from customers, collectors, capacitors, and other non-fiber served locations.

As far back as 2008 we announced with Full Spectrum, Inc, a new firm pioneering in WiMAX (e) technology below 1 GHz that our spectrum was available for mission critical industry customers including utilities. Full Spectrum completed type acceptance of their FullMAX radio in the NPCS band early this year and we have made our spectrum available to several major Investor Owned Utilities (IOU) for testing and pilots.

Last year one of the major AMI companies, Sensus, approached us about increasing its NPCS holdings from a single 50/50 KHz pair at 901.15/940.15 MHz. We completed a sale of an additional 225 KHz of spectrum – a combination of the adjacent 50/50

channel pair at 901.2/940.2 MHz, another 75 KHz of adjacent contiguous “device” band at 901.825, and 50 KHz in the middle of the 930 MHz band which pairs well with MAS band licenses they hold that operate between 928-960 MHz. This additional spectrum allows Sensus to increase the capacity of its uniquely licensed 900 MHz FlexNet® service and other smart grid services they offer already to over 5 million end-points in North America.

In March of this year we leased to CalAmp Corp. the 100 KHz from 901.9-902 MHz that is adjacent to the unlicensed Industrial, Scientific & Medical (ISM) frequency band. CalAmp is developing hybrid products that can operate fully protected at up to 7 watts ERP in the upper end of the licensed 901 MHz NPCS band and provide additional capacity in the 902-928 MHz ISM band.

We also are working with each of these and other leading utility manufacturers on a variety of market specific needs for municipal, co-op and IOU bids they are involved in where our 4 wide-blocks of 300-450 KHz have utility; and/or the potential exists for us to commence more nationwide spectrum transactions. Current FCC rules allow our spectrum to be partitioned and disaggregated respectively down to county or coordinate lines at any bandwidth from 12.5 KHz for an LMR channel to 400 MHz for an OFDM or other TDD radio as the NPCS band is fully licensed for flexible use.

We were pleased to see the DOE initiate this NBP RFI as while we have been an active commenter in both the NPB#2 and NBP#6 proceedings in FCC dockets 09-47, 09-51 and 09-137 we think the collection of comments here by utilities, manufacturers and any other licensed spectrum holders will prove most valuable to more rapid and complete deployment of the smart grid by electric utilities of all size. We trust our comments here will be helpful in industry becoming more aware that considerable capacity exists in a low down, strong propagation frequency band – NPCS.

Respectfully Submitted

/s/

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