## STA Narrative

San Diego Gas & Electric ("SDG&E") hereby requests Special Temporary Authority ("STA") to operate within a 20MHz bandwidth in the 2200-2290MHZ or 4400-4490MHz telemetry band pursuant to Section 5.61 of the Commission's rules. SDG&E notes a 20MHz bandwidth is preferable, but if 20MHz is infeasible, SDG&E alternatively requests to operate within a 10MHz bandwidth in the 2200-2290MHZ or 4400-4490MHz telemetry band. SDG&E requests that the Commission grant it temporary authority to operate on the frequencies centered at 2280MHz or 4410MHz from June 30, 2021 through December 30, 2021 as the emergency situation dictates. As explained below, SDG&E is filing an STA request to experiment with MESH networking as it relates to streaming HD data and infrared video in an aerial operation. SDG&E submits that there are extraordinary circumstances warranting a grant of the STA request.

SDG&E is experimenting with MESH networking to support a communications system to support HD data and infrared video streaming to improve situational awareness for Emergency Operators during fire, earthquake, and high wind events. In this endeavor, SDG&E is working with the U.S. Forest Service, Pacific Southwest Region, Operations Southern California (see attached letter). Video and data collected from an SDG&E helicopter will be shared and coordinated with federal and local fire-fighting agencies to improve communication during disasters. Due to the extreme frequency congestion in the San Diego area, SDG&E requests the use of these channels.

SDG&E certifies that the operation of the requested channels for the purposes specified herein will not cause interference to any established stations.

Grant of the instant request for STA for the 2.2 GHz or the 4.4 GHz band would serve the public interest by enabling SDG&E to experiment with enhanced operational awareness for their Emergency Operations Center and their Aerial Units as it relates to risks to field assets in real-time fire-line mapping with Federal, State, and Local Emergency Responders. The proposed service would enable the demonstration of Silvus Technologies, Inc. Streamcaster SC4240/4480 transceivers in a MIMO / MANET array in an aerial exercise.

In accordance with the Commission's Rules, the following is provided:

Applicants Name: San Diego Gas & Electric Address: 8680 Balboa Avenue

San Diego, California 92123

Type and Manufacturer Silvus Technologies, Inc.
Of Equipment: Streamcaster SC4240/4480

Power Output: 8W

## San Diego Gas & Electric Company STA Request

ERP: 40W AERIAL

Emission: 20M00D7W

Frequency: 2280.0MHz, 20M00D7W @ 40W AERIAL

4410.0MHZ, 20M00D7W @40W AERIAL

Area of Operation: 100Km

Coordinates: N 32 49 17.13

W 116 58 20.57

Antenna Height: 1500' AGL

Antenna: 6dBi Vertical

Antenna Gain: 6dBi

Dates of Operation: June 30, 2021 – December 30, 2021

SDG&E requests an STA to operate on the above-referenced frequencies under the terms outlined above.

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