

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 ) File No. 0103-EX-PL-2015  
San Diego Gas and Electric Company ) Reference No.: 27581  
Application for Experimental Authorization )

**RECEIVED - FCC**

To: Chief, Experimental Licensing Branch

**MAY 14 2015**

Federal Communications Commission  
Bureau / Office

**PETITION FOR RECONSIDERATION**

San Diego Gas and Electric Company (“SDG&E” or “Company”), by its attorneys and pursuant to Federal Communications Commission (“FCC” or “Commission”) Rule Section 1.106, respectfully requests reconsideration of the April 14, 2015 dismissal without prejudice (“Dismissal”) of the above-identified application (“Application”) for experimental authorization. The Application requested experimental authority to operate a 449 MHz radar wind profiler (“RWP”) at two locations in Southern California. Reconsideration is requested as the Dismissal is not consistent with the technical information provided in the Application, with the FCC’s action on an essentially identical experimental application, or with real-world experience of both Federal and non-Federal users operating RWP facilities in the 449 MHz band. The Company urges the Commission to reconsider the Dismissal, reinstate the Application, and process it promptly for the reasons discussed herein.

**I BACKGROUND**

As explained in the Application, SDG&E is the primary utility providing gas and electric service in a 2,400 square mile territory in Southern California, covering all of San Diego County and portions of Imperial and Orange Counties. It provides service to approximately 1,400,000 electric meters and 800,000 gas meters. In response to growing power requirements in San Diego,

the Company recently completed construction of a 120-mile transmission line that carries renewable energy from the Imperial Valley to San Diego. Approval of the Sunrise Powerlink required SDG&E to enhance its fire mitigation program.

The Company already has installed an extensive network of weather stations in support of that effort and, in particular, is studying and modeling the atmospheric conditions that can contribute to the Santa Ana winds that produce dangerous wildfires in Southern California nearly every year. As part of its fire mitigation program, SDG&E filed the above-identified application for experimental authorization to operate RWPs that are used to model winds. This information helps identify the conditions with the greatest risk of producing wildfires and the likely location of those fires so that fire-fighting resources can be deployed most efficiently to protect public safety.

RWPs, like the model described in the Application, are operated on 449 MHz extensively by various Federal Government entities, including: the U.S. Air Force for the Tethered Aerostat System (“TARS”), the U.S. Army systems operated by the National Center for Atmospheric Research (“NCAR”), and the National Weather Service (“NWS”). DeTect, Inc. (“DeTect”), the vendor of the RWP proposed in the Application, was granted experimental authority by the FCC on January 7, 2014 for a nearly identical system under call sign WG2XRH. The DeTect RWP is authorized at a site in Longmont, CO, just outside of Boulder, CO, and has operated at that location for more than a year.

SDG&E’s Application was prepared with guidance from DeTect and was modified while pending to significantly reduce the requested power by comparison with the DeTect experimental authorization. In addition to the information requested in the Form 442, the Company provided a technical description of the RWP it proposed to use, including an explanation that the RWP was

designed to operate on a non-interference basis. It also amended the Application to include a letter of support from the NWS in San Diego. (See Attachment 1) The NWS letter confirmed that it already was operating RWP's on 449 MHz at multiple locations along the California coast. It explained that the data collected from RWP's add "tremendous value to our numerical weather modeling efforts" and endorsed SDG&E's request to deploy RWP's at the proposed locations, which RWP's the NWS expected to provide essential profile data at no cost to the American public.

The Company understands that its Application was reviewed by and received no objection from Federal Government agencies with primary radiolocation rights to operate at 449 MHz. To the best of SDG&E's knowledge, there have been no documented or even alleged instances of interference from RWP's to other radio spectrum users.

## **II DISMISSAL**

The FCC's Dismissal of the Application was brief:

You are advised that the Commission is unable to grant your application for the facilities requested. Harmful interference is anticipated to broadcast auxiliary and amateur operations.

The Dismissal does not explain the basis for that conclusion. It does not provide the particularity that is fundamental to an applicant's ability to respond to an FCC decision that the grant of an application would not serve the public interest. The conclusion is particularly perplexing, as it does not distinguish the Company's proposed operation from that approved in the experimental license granted to DeTect<sup>1</sup> or from the operations of the many RWP's operated by Federal Government agencies, all of which are authorized on this same frequency of 449 MHz and all of which, therefore, would be expected to have an identical impact on adjacent broadcast auxiliary and amateur operations.

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<sup>1</sup> The Commission's obligation to treat similarly situated applicants in a consistent manner or to explain disparate treatment is fundamental. *See Melody Music, Inc. v. FCC*, 345 F.2d 730, 732 (D.C. Cir. 1965).

Attachment 2 is a Technical Index prepared by DeTect that provides even more extensive technical information about its RWP and, for illustrative purposes, an analysis of the likely impact of the Company's Borrego Springs' operation on adjacent systems in the 450-460 MHz band. Because Attachment 2 includes proprietary information it is being submitted along with a request for confidential treatment. Attachment 2 also identifies the locations and certain technical information of known RWPs around the country. It reaffirms the absence of even alleged interference from other users in those areas.

The Company requests reconsideration of the Dismissal since there is no explanation of the technical analysis on which the Dismissal is based, and the conclusion reached is not consistent with the information provided in the Application or real-world experience with RWPs operating at 449 MHz. If the Commission would explain what has prompted this concern about potential interference, SDG&E would be pleased to address those issues, provide the FCC with any additional technical data it requests, and cooperate in any testing the Commission believes essential to verify that the Company's operations will not cause interference to either adjacent amateur or auxiliary broadcast users.

SDG&E appreciates that the FCC would not knowingly grant a license, even an experimental license, it expected to cause interference to other users. The Company is confident that its proposed RWP operations will not have that effect. However, like Special Temporary Authorizations that the Commission grants on Part 90 frequencies without the normally required prior frequency coordination, the risk falls on SDG&E as the experimental licensee. Experimental operations are not protected from harmful interference from allocated services, and licensees must not cause harmful interference to stations of authorized services, including secondary services.<sup>2</sup>

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<sup>2</sup> See 47 C.F.R. § 5.85; see also 47 C.F.R. § 2.102(b)(2) and (3).


The Commission noted that fundamental licensing hierarchy when it adopted liberalized experimental rules in 2013.<sup>3</sup> In what SDG&E considers the improbable event that it should cause interference to any protected user, the FCC could require the immediate cessation of the RWP operation. It then would be incumbent upon the Company to correct the interference problem before resuming operation.

### III CONCLUSION

SDG&E believes it is in the public interest for the Company and the NWS to have access to the data SDG&E expects to collect from the RWPs. In light of the demonstrable benefits that a grant of the Application would provide, the Company respectfully requests that the FCC offer a more granular explanation of its interference concerns and allow SDG&E a reasonable opportunity to respond to them.

Respectfully submitted,

**SAN DIEGO GAS AND ELECTRIC COMPANY**

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May 14, 2015

<sup>3</sup> In the Matter of Promoting Expanded Opportunities for Radio Experimentation and Market Trials under Part 5 of the Commission's Rules and Streamlining Other Related Rules, *Report and Order*, ET Docket No. 10-236, 28 FCC Rcd 758 (2013).

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**ATTACHMENT 1**



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service  
11440 West Bernardo Court, Suite 230  
San Diego, CA 92127-1643  
January 30, 2015

Dear Federal Communications Commission:

I am writing on behalf of a wonderful partner and friend to the National Weather Service (NWS), San Diego Gas and Electric (SDG&E) in their request for radio frequencies for wind profilers. The forecasting of weather conditions that impact the spread wild fires in Southern California is the number one challenge for the weather forecast team here in San Diego. SDG&E realizes this threat and the impact to their power grid across their service area and the NWS San Diego County Warning area. Basic weather data is a critical component in effectively forecasting weather conditions that impact wild fire behavior. SDG&E has worked together as a Federal partner in these data collections efforts and they have added over 140 basic data collection locations across our mutual area of interest. These data have been critical in forecasting fire weather conditions multiple times in the last 3 plus years.

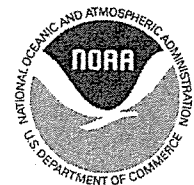
SDG&E wishes to add to this data collections effort by installing wind profilers that provide more than just basic weather data at the surface, but added critical wind data from multiple levels of the atmosphere. These data will add tremendous value to our numerical weather modeling efforts to better predict wind storms that can lead to dangerous fire weather conditions. These wind profilers are very much like the ones owned and operated by the multiple organizations within the National Oceanic and Atmospheric Administration (NOAA), including the NWS in other locations across the country. The licenses are held by the Federal agency to operate in the frequency band (i.e., 448-450 MHz) through the National Telecommunications and Information Administration (NTIA). Furthermore, NOAA is currently operating 449-MHz wind profilers in multiple locations along California's Coast through an agreement with California's Department of Water Resources.

SDG&E has time and again shown the NWS and Department of Energy their willingness to work with the Federal agencies as great partners working toward a common good and supporting the commerce of America. SDG&E's data have proved its value to the NWS multiple times and we look forward to having, no cost to the government access to the profiler data when they become available. Please support their request to use these frequencies for weather data collections.

If you have further questions or comments please contact me at 858-675-8716 or at my address above.

Sincerely,

Roger V. Pierce  
Meteorologist in Charge  
NOAA / NWS / San Diego



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**ATTACHMENT 2**

**Request for Confidential Treatment**

Submitted Under Separate Cover to the Secretary's Office