

# POWER SURVEY

COMPANY

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2012 SEP -6 AM 9:08

PUBLIC UTILITIES COMMISSION

September 5, 2012

Luly Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02888

**Re: Docket 4237**

**Commission Investigation Relating to Stray and Contact Voltage Occurring in Narragansett Electric Company Territories**

Dear Ms. Massaro,

We would like to express our concern regarding the proposed "Pilot Survey" which National Grid has elected to include as part of the company's Request for Proposal. As a matter of corporate policy, Power Survey Company cannot engage in an uncontrolled, ad-hoc technical evaluation, particularly when the evaluator does not possess adequate qualification to assess e-field detection equipment.

Power Survey Company provides mobile contact voltage testing services to utilities and municipalities using a system called the SVD2000. Since 2006, the SVD2000 system has detected nearly 100,000 validated instances of contact voltage for utility customers, on two continents, in four countries, and in over 50 US cities. Since 2009, National Grid has used Power Survey's SVD2000 to satisfy New York's contact voltage testing regulations and has successfully detected thousands of instances of contact voltage in Buffalo, Albany, Syracuse and Niagara Falls.

Human fatality is a real consequence of failure to detect contact voltage. This inherent risk demands that test equipment used to detect these dangers must be vetted to the absolute highest degree.

Prior to regulatory acceptance in New York, the SVD2000 was subjected to extensive independent testing and certification designed and executed by an independent laboratory accredited to ISO 17025's specific standard for electric field detection instruments. Those tests occurred over a period of two years under the observation of the New York Public Service Commission. In parallel, the SVD2000 was deployed side-by-side against the prior benchmark for over 3 years in the field. At the point of final acceptance, the SVD2000 had detected over 30,000 validated contact voltage hazards and had been subjected to years of exhaustive qualified independent testing.

By contrast, the brief history of the Narda device is plagued with performance concerns, missed hazards, and a highly criticized "certification" document which was in fact written by the manufacturer, not a qualified test lab.

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The proposed two day "pilot survey" will provide the Commission with uncontrolled test data, useless for making any determination, particularly one which bears such grave human consequences.

In the interest of satisfying any questions regarding the relative performance of the SVD2000 and the Narda device, we recommend the Commission and National Grid examine prior "head-to-head" studies of these two technologies performed by National Grid in Buffalo, NY as well as tests performed by Con Edison and Rochester Gas and Electric.

In the fall of 2010, National Grid performed an equipment evaluation in which the Narda device attempted to detect energized structures in Buffalo, NY, that had been previously detected by the SVD2000. During that evaluation, the Narda device failed to identify known energized structures, prompting great concern on the part of the National Grid manager in charge of that effort.

In 2010, Rochester Gas and Electric attempted to use the Narda device in the field to comply with a New York Commission order; they determined that the Narda device failed to detect over 80% of the energized objects it passed. At the request of the New York Commission Staff, Con Edison prepared a report of their experience with the device; Con Edison, also concluded that it failed to detect the majority of energized objects in the field.

Between these three head-to-head evaluations, the Narda device failed to detect hundreds of energized objects in the field. In fact, since the Narda device was introduced in 2010, we are not aware of a single published field trial in which the device was shown to reliably detect contact voltage. By consequence, it is not being used in New York State by any utility, including National Grid.

As the only qualified provider of mobile contact voltage testing services, we understand the desire for competition in mobile contact voltage detection. However, we are certain the Commission and National Grid would agree that the desire for competition cannot supersede the interest of public safety.

Sincerely,



Angelo Verdoni PhD.  
Senior Member Technical Staff

cc: Jason Henry - National Grid