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October 20, 2020

Via Electronic Filing

Aida Camacho-Welch, Secretary of the Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, New Jersey 08625

**Re: In the Matter of the Petition of Public Service Electric and Gas for Approval of its Clean Energy
Future-Electric Vehicle and Electric Storage ("CEF-EVES") Program on a Regulated Basis BPU
Docket No. E018101111**

Dear Secretary Camacho-Welch

Please find Power Edison's public comments relating to the CEF-EVES Program.

Power Edison is a New Jersey based privately held clean energy solutions developer with advanced solar, energy storage and electric vehicle charging technologies. Power Edison strongly supports the approval of Public Service Electric and Gas Company's (PSE&G) Clean Energy Future-Electric Vehicle and Electric Storage Program. Electric utilities are able to deploy energy storage projects most economically and prudently as evidenced by the majority of energy storage installations around the country and several industry reports. Rocky Mountain Institute's study, "The Economics of Battery Energy Storage", showed that out of 13 storage applications, the highest value applications reside with utilities. This was especially true for distribution and transmission upgrade deferral (please see attached excerpt from the report showing Figure ES1 with the relative values of storage applications). In addition, regulated utilities have access to low cost of financing which improves the economics of storage projects significantly. Finally, utilities are able to deploy energy storage systems in a manner that is socially fair on behalf of the ratepayers.

Although New Jersey established a goal of deploying 600MW of energy storage by 2021 and 2,000MW by 2030, there has been hardly any progress. This is especially disconcerting since energy storage deployments nationally have been growing even faster than wind or solar deployments (on a CAGR basis). We see PSE&G's energy storage program as an important first step to spearhead the energy storage market in New Jersey, leveraging local talent and maximizing local jobs with the aim to establish New Jersey as a national leader in clean energy.

We are looking forward to working with the stakeholders to build on PSE&G's pilot projects and to creating a path for deployment of meaningful MW's to meet the state goals.

Warm regards,

Dr. Shihab Kuran
President & CEO
Power Edison

Encl: Rocky Mountain Institute "The Economics of Battery Energy Storage" Report excerpt.

EXECUTIVE SUMMARY

UTILITIES, REGULATORS, and private industry have begun exploring how battery-based energy storage can provide value to the U.S. electricity grid at scale. However, exactly where energy storage is deployed on the electricity system can have an immense impact on the value created by the technology. With this report, we explore four key questions:

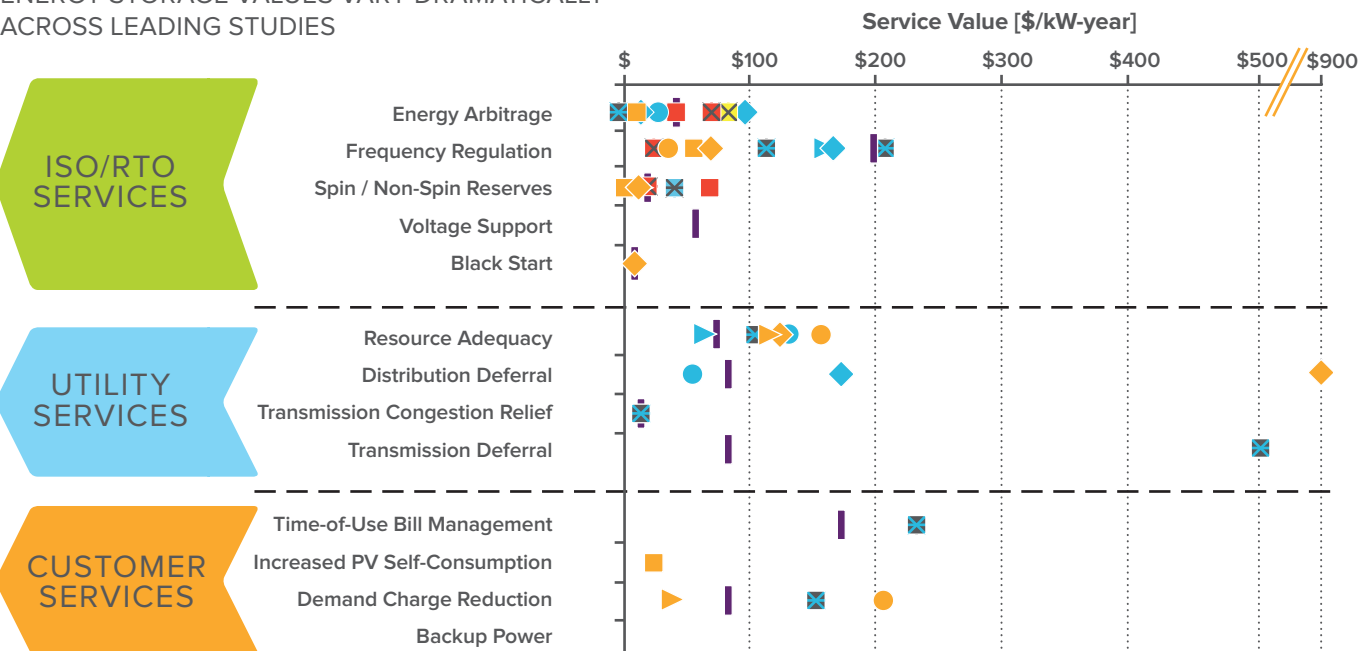
1. What services can batteries provide to the electricity grid?
2. Where on the grid can batteries deliver each service?
3. How much value can batteries generate when they are highly utilized and multiple services are stacked?
4. What barriers—especially regulatory—currently prevent single energy-storage systems or aggregated fleets of systems from providing multiple, stacked services to the electricity grid, and what are the implications for major stakeholder groups?

1. What services can batteries provide to the electricity grid?

Energy storage can provide thirteen fundamental electricity services for three major stakeholder groups when deployed at a customer's premises (behind the meter).

To understand the services batteries can provide to the grid, we performed a meta-study of existing estimates of grid and customer values by reviewing six sources from across academia and industry. Our results illustrate that energy storage is capable of providing a suite of thirteen general services to the electricity system (see Figure ES1). These services and the value they create generally flow to one of three stakeholder groups: customers, utilities, or independent system operators/regional transmission organizations (ISO/RTOs).

FIGURE ES1
ENERGY STORAGE VALUES VARY DRAMATICALLY ACROSS LEADING STUDIES



Results for both energy arbitrage and load following are shown as energy arbitrage. In the one study that considered both, from Sandia National Laboratory, both results are shown and labeled separately. Backup power was not valued in any of the reports.

● RMI UC I ◆ RMI UC II ► RMI UC III ■ RMI UC IV ✕ NYSERDA ■ NREL ● Oncore-Brattle ✕ Kirby
► EPRI Bulk ✕ EPRI Short Duration ◆ EPRI Substation | Sandia ✕ Sandia: LF