BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations.

R.11-10-023 Filed October 20, 2011

MOTION FOR PARTY STATUS OF IMERGY POWER SYSTEMS, INC., PRIMUS POWER, ZBB ENERGY CORPORATION, ENERVAULT CORPORATION AND UNIENERGY TECHNOLOGIES, LLC

Tim Hennessy President and COO Imergy Power Systems, Inc. 48611 Warm Springs Blvd. Fremont, CA 94539 Telephone: (510) 668-1485 Email: timothy.hennessy@imergypower.com

Eric C. Apfelbach President and CEO ZBB Energy Corporation N93 W14475 Whittaker Way Menomonee Falls, WI 53051 Telephone: (608) 576-7549 Email: eapfelbach@zbbenergy.com

Russell Weed VP Business Development & General Counsel UniEnergy Technologies, LLC 4333 Harbour Pointe Blvd. SW Suite A Mukilteo, WA 98275 Telephone: (425) 404-3307 Email: russ.weed@uetechnologies.com

February 18, 2014

Tom Stepien CEO Primus Power 3967 Trust Way Hayward, CA 94545 Telephone: (510) 342-7602 Email: tom.stepien@primuspower.com

Craig R. Horne, Ph.D. Chief Strategy Officer & Co-Founder EnerVault Corporation 1244 Reamwood Avenue Sunnyvale, CA 94089 Telephone: (408) 636-7519 Email: chorne@enervault.com

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations. R.11-10-023 Filed September 22, 2011

MOTION FOR PARTY STATUS OF IMERGY POWER SYSTEMS, INC., PRIMUS POWER, ZBB ENERGY CORPORATION, ENERVAULT CORPORATION AND UNIENERGY TECHNOLOGIES, LLC

Pursuant to Rules 1.4 and 11.1(b) of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), Imergy Power Systems, Inc. ("Imergy"), Primus Power ("Primus"), ZBB Energy Corporation ("ZBB"), EnerVault Corporation ("EnerVault") and UniEnergy Technologies, LLC ("UET" and, together with Imergy, Primus, ZBB and EnerVault, the "Joint LDES Companies") hereby respectfully move for party status in the above-captioned proceeding.

I. <u>INTRODUCTION.</u>

Imergy, headquartered in Silicon Valley, is a leading innovator in cost-effective energy storage products for applications around the world. Imergy's main product offering, the Energy Storage Platform, is a proprietary, scalable, low-cost, redox flow battery, combined with power electronics and controls and mounted in self-contained transportable containers, ranging from 2.5 kW up to 250kW. Imergy is developing the Energy Storage Platform for both small- and medium-

scale (in particular, mobile telecom) and large-scale, grid-connected, dispatchable energy storage solutions, which it seeks to make available in the California energy markets in the near future.

Primus is a leader in low-cost, grid-scale energy storage solutions with a scalable, distributed, multi-hour flow battery system that economically serves multiple storage applications. With 15 patented innovations in chemistry, cell design and system engineering, Primus' EnergyPod® products offer exceptional power density, reliability and portability at industry-low prices.

ZBB designs, develops, and manufactures advanced energy storage, power electronic systems, and engineered custom and semi-custom products targeted at the growing global need for distributed renewable energy, energy efficiency, power quality, and grid modernization. ZBB has deployed systems up to 2MWh and has multiple grid connected systems in California. ZBB is a strong believer that the long duration needs of the market, as outlined by the Energy Division staff analysis, will require discharge times of 3 hours or longer.

EnerVault is an innovative manufacturer of megwatthour energy storage systems that are inherently safe, reliable and cost-effective for long duration, grid-scale applications. Headquartered in the Silicon Valley, EnerVault brings innovative Redox Flow Battery technology to solve grid reliability challenges and expand grid operational flexibility. EnerVault understands the importance of Resource Adequacy ("RA") within a well-balanced and secure electrical grid. EnerVault believes long duration, grid-scale energy storage is an essential part of a robust and resilient RA strategy meeting California's unique needs. As a California manufacturer, EnerVault is committed to efficiency and surety within the state's energy market.

UET produces and delivers large-scale energy storage systems for utility and grid, microgrid, commercial and industrial, and other applications of value. UET's core technology is an

3

advanced vanadium flow battery. The Uni.System[™] is safe, operationally flexible, reliable, longlife, and cost-effective. UET has a 67,000 sqft engineering and manufacturing facility scaling up to produce 100MW annually, a sales force based in California, and ongoing energy storage project efforts in California. UET believes it is very important that the RA needs of California, including for Effective Flexible Capacity (EFC), be met as much as possible by renewables supported by energy storage resources which are capital-efficient and sized to meet the market's RA, including EFC, needs.

II. <u>REQUEST FOR PARTY STATUS.</u>

A. The Joint LDES Companies' Interest and Involvement in this Proceeding

The Joint LDES Companies are members of the California Energy Storage Alliance ("CESA"). The Joint LDES Companies have monitored this proceeding both through their membership in CESA and on their own. CESA, as a trade group, must attempt to represent the diverse views of its membership, which include both long-duration energy storage technology companies (such as the Joint LDES Companies) and companies with shorter-duration solutions. To be clear, the Joint LDES Companies believe that all energy storage solutions have a valuable role to play in the California energy market, both currently and as the market expands and changes over the years to come. That said, the Joint LDES Companies have determined at this time that, while they generally agree with the views CESA has expressed to date, there are specific points of divergence where CESA's views do not reflect those of the Joint LDES Companies and the Joint LDES Companies seek to provide the Commission with alternative viewpoints on such issues.

Each of the Joint LDES Companies thus requests party status, so that each may properly present its views to the Commission, views that are informed by their roles as long-duration energy storage solution companies active in the California market. Neither CESA nor any other party to this proceeding can adequately and fully represent the Joint LDES Companies' specific views on energy storage as it relates to the California market. The Joint LDES Companies' participation will therefore assist the Commission by offering a more comprehensive and in-depth record on which to base its decisions in this proceeding. The Joint LDES Companies' participation will further aid the contribution of the other parties by providing additional views for the parties to consider and answer as they deem appropriate.

B. Factual and Legal Contentions the Joint LDES Companies Intend to Make

Concurrently with this motion for party status, the Joint LDES Companies are filing postworkshop comments. These comments reflect the Joint LDES Companies' long-duration storage solution-specific views on the issues raised by the Staff Proposal Outline on Qualifying Capacity and Effective Flexible Capacity Calculation Methodologies for Energy Storage and Supply-Side Demand Response Resources, dated January 16, 2014 ("Staff ES Proposal Outline") and the January 27, 2014 workshop held in this proceeding. In their comments, the Joint LDES Companies support the minimum three hour EFC discharge requirement proposed by Energy Division staff, and argue that shortening this period is not merited at this time. Going forward, the Joint LDES Companies intend not only to further develop these comments but to make further factual contentions relating to long-duration energy storage and to make legal contentions based on these factual contentions. Both these factual and legal positions will be informed by the Joint LDES Companies' experience as long-duration energy storage solution companies. The Joint LDES Companies will also respond to, develop, and test the contentions of the other parties in this docket. Each element of the Joint LDES Companies' participation in this docket will incorporate their knowledge of and experience both in the California market and in the other emerging energy storage markets in which they participate, thereby deepening and broadening the information and positions available to the Commission as it investigates and decides these key energy storage and RA issues.

C. The Joint LDES Companies' Party Status in this Proceeding will not Prejudice Other Parties, Delay this Proceeding, or Broaden its Scope

The Joint LDES Companies' participation as parties to this proceeding will not prejudice any other parties, nor will it cause any delay in this proceeding. If this motion is granted and the Joint LDES Companies' comments are accepted for filing, all other parties will have an opportunity to reply by March 3, 2014, pursuant to ALJ Gamson's emailed Ruling of February 4, 2014. The Joint LDES Companies' participation as parties to this proceeding will not cause any delay as they are merely seeking to respond in-time with the other parties and not to delay any current filing, response or other obligation in the proceeding. The Joint LDES Companies' comments and intended future participation pertain to issues relating to the Staff ES Proposal Outline, EFC and the related issues in this docket, well within the scope of this proceeding. Therefore, no element of the Joint LDES Companies' participation in this proceeding will broaden its scope.

III. <u>COMMUNICATIONS.</u>

Service of notices, orders and other correspondence in this proceeding should be directed to:

Tim Hennessy President and COO Imergy Power Systems, Inc. 48611 Warm Springs Blvd. Fremont, CA 94539 Telephone: (510) 668-1485 Email: timothy.hennessy@imergypower.com Tom Stepien CEO Primus Power 3967 Trust Way Hayward, CA 94545 Telephone: (510) 342-7602 Email: tom.stepien@primuspower.com Eric C. Apfelbach President and CEO ZBB Energy Corporation N93 W14475 Whittaker Way Menomonee Falls, WI 53051 Telephone: (608) 576-7549 Email: eapfelbach@abbenergy.com

Russell Weed VP Business Development & General Counsel UniEnergy Technologies, LLC 4333 Harbour Pointe Blvd. SW Suite A Mukilteo, WA 98275 Telephone: (425) 404-3307 Email: russ.weed@uetechnologies.com Craig R. Horne, Ph.D. Chief Strategy Officer & Co-Founder EnerVault Corporation 1244 Reamwood Avenue Sunnyvale, CA 94089 Telephone: (408) 636-7519 Email: chorne@enervault.com

IV. <u>CONCLUSION.</u>

For the reasons set forth herein, each of the Joint LDES Companies hereby respectfully

requests that it be granted party status in this proceeding.

Respectfullysubmitted,

<u>/s/</u>

Tim Hennessy President and COO ImergyPower Systems, Inc. 48611 Warm Springs Blvd. Fremont, CA 94539 Telephone: (510) 668-1485 Email: timothy.hennessy@imergypower.com

<u>/s/</u>

Eric C. Apfelbach President and CEO ZBB EnergyCorporation N93 W14475 Whittaker Way Menomonee Falls, WI 53051 Telephone: (608) 576-7549 Email: eapfelbach@zbbenergy.com <u>/s/</u>

Tom Stepien CEO Primus Power 3967 Trust Way Hayward, CA 94545 Telephone: (510) 342-7602 Email: tom.stepien@primuspower.com

<u>/s/</u>_____

Craig r. Horne, Ph.D. Chief StrategyOfficer & Co-Founder EnerVault Corporation 1244 Reamwood Avenue Sunnyvale, CA 94089 Telephone: (408) 636-7519 Email: chorne@enervault.com

/s/ Russell Weed VP Business Development & General Counsel UniEnergyTechnologies, LLC 4333 Harbour Pointe Blvd. SW Suite A Mukilteo, WA 98275 Telephone: (425) 404-3307 Email: russ.weed@uetechnologies.com

Dated February 18, 2014