

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies)	
)	Docket Nos. RM11-24-000
)	AD10-13-000
)	

**COMMENTS OF THE COALITION TO ADVANCE
RENEWABLE ENERGY THROUGH BULK STORAGE**

The Coalition to Advance Renewable Energy Through Bulk Energy Storage (“CAREBS”) hereby respectfully submits comments on the notice of inquiry¹ issued on June 16, 2011 by the Federal Energy Regulatory Commission (the “Commission”) in the above-captioned proceedings. CAREBS appreciates and supports the Commission’s efforts in this and other proceedings² to foster the further development of robust markets for electricity products and to adjust its policies to facilitate entry by new technologies, including energy storage technologies. As discussed below, CAREBS believes that the development of robust and competitive markets for ancillary services outside the organized markets will ultimately lead to much needed price transparency that reveals the actual marginal cost of providing ancillary services by cycling traditional, fossil-fueled generation facilities and that this price transparency will, in turn, facilitate the development of bulk energy storage and other facilities that can provide these services more efficiently. Among other things, CAREBS also supports the establishment of new accounts relating to energy storage resources and operations as a step in the right direction,

¹ *Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies*, 135 FERC ¶ 61,240 (2011) (the “NOI”).

² *See, e.g., Frequency Regulation Compensation in the Organized Wholesale Power Markets*, FERC Stats. & Regs. ¶ 32,672 (2011) (notice of proposed rulemaking on frequency response in organized markets).

because energy storage facilities often perform functions that do not fit neatly within the traditional generation, transmission and distribution asset classifications.

I.

CORRESPONDENCE AND COMMUNICATIONS

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II.

DESCRIPTION OF CAREBS

CAREBS is a coalition formed to educate legislators, regulators, other policy markets, and the public about the enormous benefits that bulk energy storage can provide in facilitating the development of renewable energy resources and increasing the efficiency and reliability of the nation's electric grid. CAREBS supports policies that will accelerate the development and commercial deployment of compressed air energy storage ("CAES"), pumped hydroelectric storage ("PHS"), and other bulk storage technologies. CAREBS members include: (1) Haddington Ventures, L.L.C., a private equity firm based in Houston, Texas that pioneered the development of high-deliverability natural gas storage projects and is currently participating in the development of various CAES projects; (2) Dresser-Rand Corporation, a corporation based in Houston, Texas, that is, among other things, a U.S. manufacturer of CAES equipment; (3) Iowa Stored Energy Plant Agency, an Iowa corporation formed by interested members of the

Iowa association of Municipal Utilities that is developing a CAES facility in Iowa; (4) HDR, a nationwide engineering and energy consulting firm that provides hydropower and related renewable energy consulting services to utility, industry, and government clients; (5) TetraTech, a nationwide engineering services firm based in Los Angeles that has offices throughout the United States; (6) Windsohy L.L.C., an Overland Park, Kansas-based energy company developing wind, CAES, and synthetic gas projects in order to help meet the demand for reliable baseload power from renewable energy sources; and (7) Magnum Energy L.L.C., a group developing an energy storage “hub” in the western U.S. that includes CAES, gas storage, and storage of other energy products.

Additional information about CAREBS and bulk energy storage can be found on CAREBS’s website at: <http://www.carebs.org>.

III.

THE NOI

In the NOI, the Commission seeks comment on “existing restrictions on third-party provision of ancillary services, irrespective of the technologies used for such provision. . . .”³ Specifically, the Commission requests comment on whether it should revisit restrictions on third-party market-based rate sales of ancillary services outside organized markets, absent a study showing that the seller does not have market power, established in *Avista Corporation*.⁴ In addition, the NOI seeks comment on “the adequacy of current accounting and reporting requirements as they pertain to the oversight of jurisdictional entities using electric energy

³ NOI at P 1.

⁴ 87 FERC ¶ 61,223 (“*Avista*”), *on reh’g*, 89 FERC ¶ 61,136 (1999).

storage devices.”⁵ The Commission states that it will “continue to address additional matters regarding rate treatment and products for electric storage on a case-by-case basis.”⁶

IV.

COMMENTS

As Commissioner Norris observed in his statement on the NOI, the electricity grid faces “numerous challenges” as a result of “increased penetration of renewable resources on the grid, the need to updated our aging infrastructure to accommodate new demands, and the pressure that environmental regulations will put on existing generation assets,” and “[s]torage technologies, if more fully developed and utilized, hold great promise to help us efficiently address these challenges and hold down costs to consumers.”⁷ It is, therefore, vital that, as Commissioner Norris suggested, the Commission “recognize that storage technologies may provide multiple services,” and that its policies be “geared toward fairly compensating these technologies for the full range of benefits they will provide when deployed.”⁸ CAREBS views the NOI as another in a series of important steps in precisely that direction.

A. Elimination Or Modification Of *Avista* Restrictions

CAREBS agrees that the current *Avista* restrictions appear to be limiting the development of ancillary services, and that eliminating or modifying those restrictions will allow for the development of robust and competitive ancillary services markets outside the organized markets. As the Commission explained in *Avista*, there are data problems that effectively “preclud[e] many potential sellers of ancillary services from performing reliable market analyses” as would

⁵ NOI at P 1.

⁶ *Id.* at P 10.

⁷ Statement of Commissioner John R. Norris on Policies for Ancillary Services, Storage Technologies, Docket Nos. RM11-24-000, *et al.* (June 16, 2011).

⁸ *Id.*

otherwise be required to obtain authorization to sell such services at market-based rates outside organized markets.⁹ While the intent of *Avista* was to provide an alternative means of obtaining authorization in order to facilitate the development of ancillary services markets outside organized markets,¹⁰ the associated restrictions have, in practice, foreclosed market-based rate sales to the most likely buyers of those services and thus worked to frustrate this intent.

Today, most ancillary services are provided by traditional hydroelectric and PHS facilities and by cycling fossil-fueled generation facilities. Facilitating the development of robust and competitive ancillary services markets outside organized markets will, in turn, foster the development of additional energy storage facilities and other technologies capable of providing these services at lower cost. This is because the price transparency provided by such markets will reveal the true marginal cost of ancillary services provided in this fashion, thereby permitting storage facilities to compete.

Robust and competitive ancillary services markets will also foster the development of energy storage facilities, because the fast-response capability of those facilities should translate into a premium for ancillary services provided by such facilities. In fact, the “un-organized” markets may outperform the organized markets in recognizing the value of fast-response capability, because the development of new products reflecting this value will occur purely in response to market forces, without the same need for administrative and stakeholder action before trading can occur. For example, where a customer sees value in the faster-response frequency regulation that a storage operator can provide, it will simply negotiate with the storage operator for the desired fast-response regulation product. In an organized market, the

⁹ *Avista* at 61,882.

¹⁰ *See id.*

development of such a new product would typically require a lengthy stakeholder process and Commission approval of tariff modifications.

In response to the Commission’s specific inquiry as to whether “a standardized competitive solicitation process [could] be developed for particular regions or markets,”¹¹ CAREBS would be concerned that an overly-prescriptive approach might be impractical in light of the differing circumstances and regulatory constructs in place outside the organized markets. The Commission might do better to establish guidelines or minimum requirements for competitive solicitations, but leave the details to be established on a case-by-case basis. At the same time, the Commission should consider developing policies that allow RTOs, ISOs, and stand-alone transmission system operators to enter into long-term contracts with energy storage and other facility owner/operators who can provide ancillary services. In this way, the costs of procuring ancillary services for the grid can be socialized among all the ratepayers who benefit from having those services provided.

Notwithstanding the greater efficiency and far smaller environmental footprint of bulk energy storage relative to the traditional, fossil-fuel generator that may be on the margin, the Commission is quite correct that new entrants’ costs may be higher than those reflected in current [open access transmission tariff (‘OATT’)] rates”¹² While some sort of price cap based on OATT rates might be appropriate, it is not clear that 105 percent of the applicable OATT rate, as suggested in the NOI,¹³ will be adequate, because the OATT rate is likely to reflect the average, not the marginal, cost of ancillary services procured to meet the OATT obligation. Ultimately, the priority should be on enabling the development of robust and

¹¹ NOI at P 21.

¹² *Id.*

¹³ *Id.*

competitive ancillary services markets outside organized markets, in which prices will naturally trend towards marginal cost.

B. Accounting And Reporting Requirements For Energy Storage Resources

CAREBS supports revisions to the Commission's Uniform System of Accounts and associated reporting regulations that will better accommodate storage facilities and operations that may be reflected in cost-of-service rates, including the establishment of a separate asset class for storage. The Commission should also allow costs of storage or storage service to be accounted for in different ways depending on the function being performed. For example, when the storage facility is acting as, and providing benefits to, transmission, it may be appropriate for transmission-based cost accounting methods can be used. Similarly, when a storage facility is acting as, and providing benefits of, generation, generation-based cost-accounting methods can be applied. In other instances, storage-specific accounts may be more suitable.

To elaborate, CAREBS supports having a separate storage asset account within the transmission function, so that when the storage facility is providing a transmission service, the existing accounting methods can be employed. Likewise, having a separate storage asset account within the generation accounting functions will allow the storage facility owner/operator to employ the existing generation accounting functions. CAREBS believes that the goal should be to use, where possible, existing accounting methods rather than invent new ones.

Having a separate asset class will better suit the multiple functions that energy storage facilities can perform, in much the same way that separate accounts for natural gas storage allowed for the development of high-deliverability natural gas storage. While natural gas storage was originally conceived purely as a tool for balancing flows on natural gas pipeline systems, stakeholders later found new and valuable ways in which to use such facilities. High-

deliverability (or high-turn) natural gas storage was one such innovation, and allowed for the exploitation of the option value of storing natural gas for shorter time periods.

In the NOI, the Commission states that it “does not seek comment on whether accounting and reporting requirements for [PHS] assets or operations should be revised.”¹⁴ As one of several organizations representing the interests of PHS developers, CAREBS respectfully requests that the Commission revisit this position insofar as it relates to new PHS facilities. While it may be appropriate not to disturb the accounting methods applied to existing PHS facilities, new PHS facilities may have attributes that warrant different treatment.

C. Regional Benefits And Cost Recovery

Where energy storage facilities are providing regional benefits by virtue of performing a transmission function or otherwise, the Commission should allow for recovery of costs of storage facilities on a regional basis when those facilities provide regional benefits, consistent with the approach contemplated for transmission facilities in the Commission’s recently-issued Order No. 1000.¹⁵ As recognized in Order No. 1000, failure to align cost allocation with benefits “lead to needed transmission facilities not being built, adversely impacting ratepayers.”¹⁶ The same is true of some bulk energy storage facilities, particularly those that may provide a viable substitute for transmission facilities. Consequently, to the extent that bulk storage facilities provide benefits on a regional basis – such as by reducing the amount of transmission necessary to move renewable energy to load centers, managing congestion, reducing the number of hours older fossil units are cycled (which is not only an expensive mode of operation, but significantly

¹⁴ *Id.* at n.46.

¹⁵ *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, 136 FERC ¶ 61,051 (2011).

¹⁶ *Id.* at P 499.

