158 FERC ¶ 61,051
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 35

[Docket No. PL17-2-000]

Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery

(Issued January 19, 2017)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Policy Statement.

SUMMARY: The Commission issues this policy statement to clarify its precedent and provide guidance on the ability of electric storage resources to provide services at and seek to recover their costs through both cost-based and market-based rates concurrently. We are mindful that, by providing electric storage resources the opportunity to receive cost-based rate recovery concurrently with other revenue from market-based services (e.g., through organized wholesale electric markets), there can be implementation details that may need to be addressed, including protections against the potential for double-recovery of costs from cost-based ratepayers, adverse market impacts, and regional transmission organization (RTO)/independent system operator (ISO) independence from market participants. The Commission provides guidance in this policy statement as to how electric storage resources seeking to receive cost-based rate recovery for certain services (such as transmission or grid support services or to address other needs identified by an RTO/ISO) while also receiving market-based revenues for providing separate

market-based rate services could address these concerns and also clarifies some past precedent on these issues.

EFFECTIVE DATE: This policy statement will become effective [date of publication in the *Federal Register*].

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SUPPLEMENTAL INFORMATION:

158 FERC ¶ 61,051
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;
Cheryl A. LaFleur, and Colette D. Honorable.

Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery — Docket No. PL17-2-000

POLICY STATEMENT

(Issued January 19, 2017)

1. The Commission issues this policy statement to clarify its precedent and provide guidance on the ability of electric storage resources to provide services at and seek to recover their costs through both cost-based and market-based rates concurrently. We are mindful that, by providing electric storage resources the opportunity to receive cost-based rate recovery concurrently with other revenue from market-based services (e.g., through organized wholesale electric markets), there can be implementation details that may need to be addressed, including protections against the potential for double-recovery of costs from cost-based ratepayers, adverse market impacts, and regional transmission organization (RTO)/independent system operator (ISO) independence from market participants. The Commission provides guidance in this policy statement as to how electric storage resources seeking to receive cost-based rate recovery for certain services (such as transmission or grid support services or to address other needs identified by an RTO/ISO) while also receiving market-based revenues for providing separate market-

based rate services could address these concerns and also clarifies some past precedent on these issues.

I. Background

2. Electric storage resources have the ability both to charge and discharge electricity and can provide a variety of grid services to multiple entities (e.g., RTO/ISOs, transmission and distribution utilities) or in multiple markets. In addition, these resources are able to provide multiple services almost instantaneously and can switch from providing one service to another almost instantaneously. As such, electric storage resources may fit into one or more of the traditional asset functions of generation, transmission, and distribution. Enabling electric storage resources to provide multiple services (including both cost-based and market-based services) ensures that the full capabilities of these resources can be realized, thereby maximizing their efficiency and value for the system and to consumers. On November 9, 2016, Commission staff led a technical conference to discuss the utilization of electric storage resources as transmission assets compensated through transmission rates, for grid support services that are compensated in other ways, and for multiple services.[1] On November 14, 2016, in that same proceeding, the Commission issued a notice inviting post-technical conference

[1] *Utilization In the Organized Markets of Electric Storage Resources as Transmission Assets Compensated Through Transmission Rates, for Grid Support Services Compensated in Other Ways, and for Multiple Services*, Notice of Technical Conference, Docket No. AD16-25-000 (issued Sept. 30, 2016). The Commission issued supplemental notices on November 1, 2016, and November 7, 2016.

comments.[2] The Commission received more than 30 comments from interested parties in response to that notice. The discussions at the technical conference and the comments highlight the different ways in which industry is considering using electric storage resources and have prompted us to issue this policy statement to clarify our precedent and provide guidance regarding electric storage resources seeking to receive cost-based rate recovery for certain services while also receiving market-based revenues for providing market-based rate services.

3. The Commission previously has discussed such concerns in *Nevada Hydro*[3] and *Western Grid*.[4] In *Nevada Hydro*, the Commission found that it would not be appropriate, as requested by The Nevada Hydro Company, Inc.'s (Nevada Hydro), to require the California Independent System Operator Corporation (CAISO) to assume "any level of operational control" over the proposed Lake Elsinore Advanced Pumped Storage project (LEAPS) or functionalize it as transmission for rate recovery purposes.[5]

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[2] *Utilization In the Organized Markets of Electric Storage Resources as Transmission Assets Compensated Through Transmission Rates, for Grid Support Services Compensated in Other Ways, and for Multiple Services*, Notice Inviting Post-Technical Conference Comments, Docket No. AD16-25-000 (issued Nov. 14, 2016).

[3] *The Nev. Hydro Co. Inc.*, 122 FERC ¶ 61,272 (2008) (*Nevada Hydro*).

[4] *Western Grid Dev., LLC*, 130 FERC ¶ 61,056 (*Western Grid*), *reh'g denied*, 133 FERC ¶ 61,029 (2010).

[5] *Nevada Hydro*, 122 FERC ¶ 61,272 at PP 1, 82-83. LEAPS was intended to be a pumped hydro storage facility with an installed generating capacity of 500 MW and a pumping capacity of 600 MW. *Id*. P 3.

Nevada Hydro had proposed that LEAPS be treated as a transmission facility under CAISO's operational control.[6] According to Nevada Hydro, CAISO would serve its ancillary services needs consistently from LEAPS, and Nevada Hydro would consistently bid LEAPS' stored energy into the market at a price of zero dollars.[7] Nevada Hydro asserted that it had carefully crafted its proposal to avoid market distortions. CAISO argued that its independence would be compromised, as it would have to decide when LEAPS would operate, how much energy it would produce, and when it would operate the pumps to store water for future generation.[8] The Commission stated that the purpose of CAISO's transmission access charge (TAC) is to recover the costs of transmission facilities under the control of CAISO, not to recover the costs of bundled services.[9] The Commission noted that it was denying the request that LEAPS be placed under CAISO's operational control. The Commission stated that, for these reasons, LEAPS' costs were not properly recovered through the TAC. The Commission added that, absent information that justified treating LEAPS differently from the existing pumped hydro facilities in CAISO's footprint, allowing LEAPS to receive a guaranteed revenue stream through CAISO's TAC would create an undue preference for LEAPS compared to these other similarly situated pumped hydro generators. Therefore, the Commission rejected

[6] *Id.* P 5.

[7] *Id.* P 74.

[8] *Id.* P 81.

[9] *Id.* P 83.

Nevada Hydro's proposal to include the costs of LEAPS in CAISO's rolled-in transmission charge.

4. In *Western Grid*, the Commission accepted Western Grid's proposal to provide cost-based rate recovery for electric storage resources through transmission rates based on the proposed uses (voltage support and thermal overload protection for relevant transmission facilities) and on other conditions Western Grid proposed, including a commitment to forego any sales into CAISO's organized wholesale electric markets.[10] Western Grid asserted that its electric storage resources would be used to solve transmission reliability problems identified by CAISO,[11] at significantly lower cost than traditional transmission upgrade methods.[12] As relevant here, in *Western Grid*, the Commission found that, based on the specific circumstances and characteristics of the Western Grid Projects, they would be wholesale transmission facilities subject to the Commission's jurisdiction if operated as Western Grid described.[13]

5. The Commission explained that Western Grid proposed to operate the Western Grid Projects under the direction of CAISO in a manner similar to the way in which high-

[10] *Western Grid*, 130 FERC ¶ 61,056 at PP 18-24, 45-46. The proposed electric storage projects (Western Grid Projects) were to be composed of sodium sulfur batteries that ranged in size from 10 to 50 MW. *Id.* P 4.

[11] *See* Western Grid November 20, 2009 Petition, Docket No. EL10-19-000, at 4.

[12] *Id.* at 6.

[13] *Western Grid*, 130 FERC ¶ 61,056 at P 43.

voltage wholesale transmission facilities are operated by participating transmission owners under the direction of CAISO (e.g., capacitors that address voltage issues or alternate transmission circuits that address line overloads or trips).[14] The Commission noted that Western Grid stated that it would only operate the Western Grid Projects to address voltage support and thermal overload protection needs at CAISO's direction and that CAISO's involvement was consistent with CAISO's operating obligations for transmission assets. Western Grid also stated that it would be responsible for all operating functions, including maintenance, communication, and system emergencies. The Commission noted that, most importantly, Western Grid would be responsible for energizing (i.e., maintaining the state-of-charge on) the Western Grid Projects needed to address voltage support and thermal overload protection at CAISO's direction. The Commission found that, because of this, the independence of CAISO would be maintained because CAISO would not be responsible for buying power to energize the Western Grid Projects or physically operating the batteries when they were being charged and discharged. The Commission added that, importantly, Western Grid would operate the Western Grid Projects, at CAISO's direction, only as transmission assets.

6. The Commission noted that, just like other transmission assets, and unlike traditional generation assets, Western Grid proposed that it would not retain revenues outside of the TAC and would credit any revenues it might accrue as a result of charging

[14] *Id*. P 45.

and discharging the Western Grid Projects through its participating transmission owner tariff to transmission customers.[15] The Commission further noted, in particular, that Western Grid proposed that it would not arbitrage wholesale energy market prices. The Commission found that, based on the facts as presented by Western Grid, the Western Grid Projects would function as transmission.

7. The Commission also found that the Western Grid Projects would not undercut bids by other market participants because Western Grid would not be offering the Western Grid Projects into the CAISO markets and the Western Grid Projects would only be used to provide voltage support and to address thermal overload situations at the CAISO's instruction.[16]

8. The Commission also found that the facts and circumstances in *Western Grid* were sufficiently distinguishable from those in *Nevada Hydro* to justify a different result.[17] The Commission explained that an important issue that arose in *Nevada Hydro* – and that protesters echoed with respect to the Western Grid Projects – involved the question of whether CAISO's operation of the LEAPS storage facility would render it an energy market participant.[18] The Commission found that Western Grid's proposal eliminated

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[15] *Id*. P 46.

[16] *See id*. P 51.

[17] *Id*. P 48.

[18] *Id*. (citing *The Nev. Hydro Co. Inc.*, 117 FERC ¶ 61,204, at PP 28-32; *Nevada Hydro*, 122 FERC ¶ 61,272 at PP 82-83).

that concern because (1) Western Grid itself would maintain the state of charge of its electric storage resources (rather than CAISO), and (2) Western Grid would credit any incidental net revenues from such transactions to its customers via the TAC.[19] Therefore, the Commission concluded that there was little likelihood that CAISO would become a profit-seeking energy market participant.

II. Policy Statement

9. We believe that it is timely to provide additional guidance regarding issues that arise for electric storage resources seeking to recover their costs through both cost-based and market-based rates concurrently. We also believe that clarification regarding our *Nevada Hydro* and *Western Grid* precedent is warranted due to potential confusion with respect to that precedent. Accordingly, through this policy statement, we provide guidance and clarification regarding the ability of electric storage resources to receive cost-based rate recovery for certain services (such as transmission or grid support services or to address other needs identified by an RTO/ISO) while also receiving market-based revenues for providing separate market-based services. We clarify that there may be approaches different from Western Grid's approach under which an electric storage resource may receive cost-based rate recovery and, if technically capable, provide market-based services.

[19] *Id*. P 49.

10. In *Western Grid*, the applicant proposed to operate only as a transmission resource and to forego any sales into CAISO's organized wholesale electric markets.[20] Western Grid also proposed to take responsibility for charging its electric storage resources. The Commission found that Western Grid's proposals addressed the concerns described above. However, that order was limited to the facts that Western Grid presented to the Commission. Thus, that order should not be read to require other entities to forgo market sales as Western Grid proposed. We clarify that there may be approaches different from Western Grid's approach under which an electric storage resource may receive cost-based rate recovery and, if technically capable, provide market-based services that may address these concerns. To that end, we provide the following guidance on how applicants seeking cost-based rate recovery for electric storage resources providing certain services while also providing separate services at market-based rates could address concerns related to double recovery of costs, adverse market impacts, and RTO/ISO independence.

Multiple Uses and Revenue Streams

11. As noted above, electric storage resources can provide a variety of services to multiple entities. An electric storage resource receiving cost-based rate recovery for providing one service may also be technically capable of providing other market-based rate services. Most participants in the technical conference and commenters generally

[20] *See id*. PP 19, 21-23; *see also id.* PP 48-50.

support multiple uses and revenue streams, including both cost-based and market-based revenues, for electric storage resources.[21] Commenters believe that the key question is not whether to allow multiple use applications for electric storage resources but how to allow and enable such applications.[22] Commenters also note that it would be inefficient and wasteful to let electric storage resources that are not being used to serve a transmission need to sit idle and instead these resources should be permitted to provide other market services to capture their full system benefits and maximize economic efficiency and value to consumers.[23]

12. To the extent that an electric storage resource seeks cost-based rates for a particular service, that resource may need to compete at least in part on cost against other alternatives that could provide the service. In some cases, an electric storage resource may only be cost competitive for the cost-based service if expected market revenues are considered in the evaluation of the electric storage resources. Such market revenues can

[21] *See, e.g.*, Pacific Gas and Electric Co. Dec. 14, 2016 Comments at 2-3; Xcel Energy Services Inc. Dec. 16, 2016 Comments at 6-7; SolarCity Corp. and Tesla Motors, Inc. Dec. 14, 2016 Comments at 2-4, 8-10; AES Companies Dec. 14, 2016 Comments at 4; Alevo USA Inc. Dec. 14, 2016 Comments at 3-4; Renewable Energy Systems Americas, Inc. Comments at 2-3, 5.

[22] *See, e.g.*, California Energy Storage Alliance Dec. 14, 2016 Comments at 5.

[23] *See, e.g.*, Technical Conference Transcript, Docket No. AD16-25-000, at Tr. 34: 11-20 (posted Nov. 9, 2016); Exelon Corp. Dec. 14, 2016 Comments at 2, 6; Union of Concerned Scientists Dec. 14, 2016 Comments at 9-10; Energy Storage Association Dec. 14, 2016 Comments at 3, 6, 12-13.

be used to offset the electric storage resource's costs for providing the cost-based rate service.

13. Additionally, if an electric storage resource seeks to recover its costs through both cost-based and market-based rates concurrently, the following issues, as raised in prior proceedings, should be addressed: (1) the potential for combined cost-based and market-based rate recovery to result in double recovery of costs by the electric storage resource owner or operator to the detriment of cost-based ratepayers; (2) the potential for cost recovery through cost-based rates to inappropriately suppress competitive prices in the wholesale electric markets to the detriment of other competitors who do not receive such cost-based rate recovery; and (3) the level of control in the operation of an electric storage resource by an RTO/ISO that could jeopardize its independence from market participants.

14. We note that these or similar issues were raised by commenters in *Western Grid* or *Nevada Hydro*. This policy statement is not intended to resolve the detailed implementation issues surrounding how an electric storage resource may concurrently provide services at cost- and market-based rates. Rather, it is intended to clarify that providing services at both cost- and market-based rates is permissible as a matter of policy, provide guidance on some of the details and allow entities to address these issues through stakeholder processes and in filings before the Commission.

1. Avoiding Double Recovery of Costs

15. One issue associated with an electric storage resource receiving cost-based rate recovery while concurrently receiving compensation for market-based rate services

involves potential double recovery of costs borne by the relevant cost-based ratepayers. Most participants in the technical conference and commenters believe that double recovery can be addressed by appropriate market revenue crediting.[24]

16. While we believe there may be additional approaches for addressing this concern beyond the one proposed in *Western Grid*, we clarify that crediting any market revenues back to the cost-based ratepayers is one possible solution. The Commission has sought to prevent the subsidization of public utility shareholders at the expense of their captive customers.[25] Proposals to allow public utilities using electric storage resources to recover costs under cost-based rates from captive customers should address the potential for the recovery of those same costs through market-based sales.

17. We note that the amount of this crediting may vary depending on how the cost-based rate recovery is structured. For example, if the electric storage resource indicates that it will seek to recover its full, unadjusted costs through cost-based rates, it may be reasonable for the electric storage resource owner or operator to credit all projected

[24] *See, e.g.*, Technical Conference Transcript at Tr. 47: 25 – Tr. 48: 1; Tr. 50: 13-15; Tr. 168: 4-9; AES Companies Comments at 4; Exelon Corp. Comments at 8, 10; NextEra Energy Resources, LLC Dec. 14, 2016 Comments at 7; Transmission Access Policy Study Group Dec. 14, 2016 Comments at 5-6.

[25] *See, e.g.*, *Heartland Energy Servs, Inc.*, 68 FERC ¶ 61,223, at 62,062-63 (1994) (prohibiting transfer of benefits from captive customers of a franchised public utility to affiliates and shareholders). *See also Golden Spread Elec. Coop. v. Southwestern Public Serv. Co.*, 123 FERC ¶ 61,047, Opinion No. 501, at P 40 (2008) (citing *Minnesota Power & Light Co.*, 47 FERC ¶ 61,064, at 61,183 n.2, 61,184 (1989)), *order on reh'g*, Opinion No. 501-A, 144 FERC ¶ 61,132 (2013).

market revenues earned by the electric storage resource over a reasonable period of time (e.g., the expected useful life of the asset or the term of the cost-based rate service if it differs from the useful asset life). We believe that the accounting provisions in Order No. 784[26] (including the supplemental accounting and reporting guidance issued in Docket No. AI14-1-000)[27] coupled with the requirement to submit Electric Quarterly Reports pursuant to Order Nos. 2001[28] and 768[29] provide sufficient transparency to allow effective oversight for any needed revenue crediting.

18. Alternatively, at the electric storage resource owner's or operator's discretion, this market-revenue offset can be used to reduce the amount of the revenue requirement to be

[26] *See Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies*, Order No. 784, FERC Stats. & Regs., Regulations Preambles ¶ 31,349 (July 30, 2013), *order partly granting clarification*, Order No. 784-A, 146 FERC ¶ 61,114 (2014).

[27] *Accounting and Reporting Guidance for New Electric Storage Technologies*, Docket No. AI14-1-000 (Feb. 20, 2014).

[28] *See Revised Public Utility Filing Requirements*, Order No. 2001, FERC Stats. & Regs. ¶ 31,127, *reh'g denied*, Order No. 2001-A, 100 FERC ¶ 61,074, *reh'g denied*, Order No. 2001-B, 100 FERC ¶ 61,342, *order directing filing*, Order No. 2001-C, 101 FERC ¶ 61,314 (2002), *order directing filing*, Order No. 2001-D, 102 FERC ¶ 61,334, *order refining filing requirements*, Order No. 2001-E, 105 FERC ¶ 61,352 (2003), *order on clarification*, Order No. 2001-F, 106 FERC ¶ 61,060 (2004), *order revising filing requirements*, Order No. 2001-G, 120 FERC ¶ 61,270, *order on reh'g and clarification*, Order No. 2001-H, 121 FERC ¶ 61,289 (2007), *order revising filing requirements*, Order No. 2001-I, FERC Stats. & Regs. ¶ 31,282 (2008).

[29] *Electricity Market Transparency Provisions of Section 220 of the Federal Power Act*, Order No. 768, FERC Stats. & Regs. ¶ 31,336 (2012), *order on reh'g*, Order No. 768-A, 143 FERC ¶ 61,054 (2013), *order on reh'g, Order No. 768-B*, 150 FERC ¶ 61,075 (2015).

used in the development of the cost-based rate. This up-front rate reduction would also help ensure that the cost-based rate remains just and reasonable and provide the electric storage resource owner or operator with an incentive to estimate market revenues as accurately as possible. In this scenario, the need for crediting of market revenues could be proportionally reduced as well. In other words, full cost recovery through cost-based rates may require full crediting of projected market revenues; no cost recovery through cost-based rates would require no crediting of projected or actual market revenues; and partial cost recovery through cost-based rates could require partial crediting of market revenues. For example, if the cost-based rate is based on 25 percent of the asset's full cost-of-service, then perhaps only 25 percent of market revenues would need to be credited to cost-based ratepayers.

19. We recognize there may be other ways for an electric storage resource owner or operator seeking to recover costs through cost-based rates and market-based rates to prevent the double recovery of costs. Any solution would need to comport with cost-of-service precedent cited earlier.

2. Minimizing Adverse Impacts on Wholesale Electric Markets

20. Another issue associated with an electric storage resource receiving cost-based rate recovery while concurrently receiving compensation for market-based rate services that the Commission addressed in *Nevada Hydro* and *Western Grid* is the adverse market

impacts that could occur.[30] Some commenters believe that any potential adverse impacts on wholesale electric markets either do not need to be addressed because numerous resources participating in organized wholesale electric markets currently receive cost-based rate treatment for other services as well[31] or can be addressed by appropriate market revenue crediting.[32] Other commenters argue, however, that permitting new electric storage resources that receive transmission-based rate recovery to participate in the competitive organized wholesale electric markets could undermine competition and suppress market prices to sub-competitive levels.[33]

21. As provided above, we clarify that electric storage resources may concurrently receive cost- and market-based revenues for providing separate services. We do not

[30] We note that the Supplemental Notice of Technical Conference, setting forth the agenda and questions for the technical conference, which also formed the basis for post-technical conference comments, referred to "cross-subsidization" when discussing this issue. *See supra* nn.1, 2. We consider "cross-subsidization" to refer to concerns over the allocation of costs between different customer classes for the same services, or between customers under different services, not concerns that resources or public utilities receiving both cost-based and market-based revenues undermine competition in the wholesale electric markets. Therefore, for more precision, here, we use the term "adverse market impacts" instead.

[31] *See, e.g.*, Technical Conference Transcript at Tr. 65: 8-18; NextEra Energy Resources, LLC Comments at 9-10; Exelon Corp. Comments at 6.

[32] *See, e.g.*, Transmission Access Policy Study Group Comments at 6.

[33] *See, e.g.*, FirstLight Power Resources, Inc. Dec. 14, 2016 Comments at 2, 6-7; New England Power Generators Association, Inc. Dec. 14, 2016 Comments at 2-9.

share commenters' concerns and are not convinced that allowing such arrangements will adversely impact other market competitors.

22. We agree that many assets that participate in RTO/ISO markets receive some form of cost-based rate recovery. For example, many participating generation resources seek and are paid a cost-based rate for providing reactive supply, even as they make market-based rate sales into organized wholesale electric markets.[34] Further, as noted during the discussions at the technical conference and in comments, a significant amount of generation in certain RTO/ISO markets is owned by vertically integrated public utilities that recover some or all of their costs through cost-based retail rates.[35] Similarly, some vertically integrated public utilities make cost-based rate sales to captive wholesale requirements customers such as transmission dependent utilities while also making off-system market-based rate sales to others.[36] As noted earlier, in these circumstances, the Commission has required crediting of an appropriate portion of market revenues to captive wholesale customers in order to prevent the subsidization of public utility shareholders at the expense of their captive customers. But the Commission has not required any other measures to address the potential competitive impact of such market-based rate sales on other competitors in those markets. One commenter also points to

[34] *See, e.g.*, SolarCity Corp. and Tesla Motors, Inc. Comments at 9.

[35] *See, e.g.*, Technical Conference Transcript at Tr. 65: 8-18; NextEra Energy Resources, LLC Comments at 9-10.

[36] *See, e.g.*, Opinion No. 501, 123 FERC ¶ 61,047.

bilateral contracts as another example of resources receiving both cost-based and market-based revenues.[37] It is also true that there are many public utilities in restructured states that have transmission assets with cost-based recovery and generation assets that receive market-based revenues. If we were to deny electric storage resources the possibility of earning cost-based and market-based revenues on the theory that having dual revenue streams undermines competition, we would need to revisit years of precedent allowing such concurrent cost-based and market-based sales to occur as described above.

23. Moreover, we believe any concerns that electric storage resources would offer in a manner that suppresses market clearing prices simply because they receive cost recovery (in whole or in part) through cost-based rates could be addressed by the manner in which double recovery is addressed and the costs that go into the cost-based rates are established.[38]

3. RTO/ISO Independence

24. Another issue relevant to this policy statement is maintaining RTO/ISO independence from market participants. The discussions of this issue at the technical conference and in comments crossed into other issues such as adverse market impacts (discussed in the previous section) and largely focused on RTO/ISO discretion and the role of the RTO/ISO in operating the electric storage resources, especially for planning

[37] *See* NextEra Energy Resources, LLC Comments at 9.

[38] We note that cost-based rates are reviewed by the Commission and can only be accepted if the rates are just and reasonable.

and reliability purposes.[39] Nevertheless, we believe that clarification is required in this area.

25. Coordination between the RTO/ISO and the electric storage resource owner or operator will be necessary for electric storage resources that concurrently provide services compensated through cost-based rates and services compensated through market-based rates. Among any other operational concerns that individual RTOs or ISOs may need to address, the electric storage resource should be maintained so that the necessary state of charge can be achieved when necessary to provide the service compensated through cost-based rates. But, assuming this priority need is reasonably predictable as to size and the time it will arise each day, the electric storage resource should be permitted to deviate from this state of charge at other times of the day in order to provide other, market-based rate services. We recognize that this assignment of responsibility is premised on the need for the service compensated through cost-based rates being predictable enough to allow the appropriate charge management structure to be implemented. In situations where this premise does not hold, and the need for the service for which cost-based rates are provided is not reasonably predictable as to size or the time it will arise each day, the cost-based rate service may be the only service that the electric storage resource could provide.

[39] *See, e.g.*, Technical Conference Transcript at Tr. 50-51; PG&E Comments at 3; NextEra Energy Resources, LLC Comments at 11-13.

26. We also provide guidance that, when the circumstances leading to the need for the service compensated through cost-based rates arise, RTO/ISO dispatch of the electric storage resource to address that need should receive priority over the electric storage resource's provision of market-based rate services. Performance penalties could be imposed on the electric storage resource owner or operator for failure to perform at these times.

27. We further provide guidance that the provision of market-based rate services should be under the control of the electric storage resource owner or operator, rather than the RTO/ISO, to ensure RTO/ISO independence. In other words, while the RTO/ISO always performs the actual optimization of resources participating in the organized wholesale electric markets, during periods when the electric storage resource is not needed for the separate service compensated at cost-based rates, the RTO/ISO would rely on offer parameters provided by the electric storage resource owner or operator for such operation, just as the RTO/ISO does with other market participants.

28. In this regard, we believe that one statement in *Nevada Hydro* requires clarification. Specifically, the Commission's conclusion that it would not be appropriate to require CAISO to assume "***any*** level of operational control"[40] over the LEAPS facility should not be taken out of context because RTOs/ISOs arguably always exercise some level of operational control over the resources they dispatch through their markets. The

[40] *Nevada Hydro*, 122 FERC ¶ 61,272 at P 82 (emphasis added).

Commission's decision in *Nevada Hydro* was discussing only the six proposals for operation of LEAPS as a transmission asset that were discussed in CAISO's stakeholder process.[41] Other facts may warrant a different decision from the Commission. Therefore, we clarify that there is nothing unreasonable about an RTO/ISO exercising some level of control over the resources it commits or dispatches where it can be shown that the RTO/ISO independence is not at issue. When those resources are dispatched through the organized wholesale electric market clearing process, the level of RTO/ISO control will be lower because such dispatch will be based on offer parameters submitted by resource owners or operators. When resources are operated outside of the organized wholesale electric market clearing process (e.g., to address reliability needs), then the RTO's/ISO's control may be greater.

29. We are willing to consider other solutions proposed by an electric storage resource owner or operator seeking to recover costs through cost-based rates and market-based rates that are shown to be effective in avoiding these RTO/ISO independence issues.

III. Document Availability

30. In addition to publishing the full text of this document in the *Federal Register*, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through FERC's Home Page (http://www.ferc.gov) and in FERC's Public Reference Room during normal business

[41] *See id.*

hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A, Washington, DC 20426.

31. From FERC's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

32. User assistance is available for eLibrary and the FERC's website during normal business hours from FERC Online Support at 202-502-6652 (toll free at 1-866-208-3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at public.referenceroom@ferc.gov.

IV. Effective Date

33. This policy statement will become effective [date of publication in the *Federal Register*].

By the Commission. Commissioner LaFleur is dissenting with a separate statement attached.

(S E A L)

Kimberly D. Bose,
Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery	Docket No.	PL17-2-000

(Issued January 19, 2017)

LaFLEUR, Commissioner *dissenting*:

Today's order addresses whether a storage resource can receive cost-based revenues for providing a transmission service while also participating in the Commission's wholesale markets. The Commission has previously considered related issues in individual cases, such as our *Western Grid* orders from 2010,[1] and I agree that the Commission should be flexible and open to proposals that go beyond the model contemplated in those orders. I am open to potential structures that compensate storage providing transmission service at a cost-based rate while participating in the wholesale markets. However, I am concerned about the broad rationale for this approach put forth in the Policy Statement, which I believe is both flawed in its conclusions and premature in its timing.

I particularly disagree with the Policy Statement's sweeping conclusions about the potential impacts of multiple payment streams on pricing in wholesale electric markets.[2] The Policy Statement summarily dismisses concerns regarding the impact of such arrangements on market competition, and leaves far more than just "implementation details" to be worked out. Indeed, the Policy Statement provides no guidance on how the Commission could evaluate whether a particular filing under section 205 of the Federal Power Act successfully avoids adverse market impacts.

I am concerned that the Policy Statement, while nominally limited to storage resources, could be read to reflect the Commission's views about the impact of multiple payment streams on market pricing more generally, thus implicating broader regional discussions on state policy initiatives and their interaction with competitive markets. These issues, which are currently being discussed by several RTO/ISOs and their

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[1] *Western Grid Dev., LLC*, 130 FERC ¶ 61,056, *reh'g denied*, 133 FERC ¶ 61,029 (2010).

[2] *Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery*, 158 FERC ¶ 61,051 (2017).

stakeholders, will require careful and holistic consideration to ensure that policy advancements can be achieved while the benefits of competition are preserved for customers.

Furthermore, I disagree with the Commission's decision to separate this issue from its pending Notice of Proposed Rulemaking on storage participation,[3] which is itself directed to enabling greater participation of storage technologies in wholesale markets. The conclusions of this Policy Statement regarding market participation of storage resources would benefit from being considered and commented on as part of that broader discussion.

Storage is an important and promising resource that warrants Commission attention to ensure that our markets are appropriately adapted to recognize storage's unique characteristics and contributions. However, efforts to accommodate these resources should not come at the expense of careful market design after full public participation.

For these reasons, I respectfully dissent.

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Cheryl A. LaFleur
Commissioner

[3] *Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice of Proposed Rulemaking, 157 FERC ¶ 61,121 (2016).