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 TRANSMISSION ACCESS POLICY STUDY GROUP AND THE TRANSMISSION DEPENDENT UTILITY SYSTEMS

The Transmission Access Policy Study Group ("TAPS") and the Transmission Dependent Utility Systems ("TDU Systems") submit these comments in response to the June 22, 2012 Notice of Proposed Rulemaking.[1] The NOPR proposes "ways to foster transparency and competition in ancillary services markets" and revisions in the Commission's "accounting for and reporting of sales from energy storage devices." NOPR P 1.

TAPS and TDU Systems support third-party ancillary services sales to an Open Access Transmission Tariff ("OATT") transmission provider ("TP") so long as they do not increase the TP's OATT ancillary service rates or provide an opportunity for exercise of market power. Specifically:

- TAPS and TDU Systems agree with the NOPR that significant technical requirements and limitations that apply to the provision of Reactive Supply and Voltage Control, Regulation and Frequency Response, Operating Reserve-Spinning and Operating Reserve-Supplemental, render the Order No.

[1] Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies, 77 Fed. Reg. 40,414 (July 9, 2012), FERC Stats. & Regs. ¶ 32,690 (2012) ("NOPR").

697[2] horizontal market power screens for energy and capacity not adequate to capture the potential exercise of market power for those services, and therefore an inappropriate basis for granting market-based rate authority.

- TAPS and TDU Systems disagree with the NOPR's proposal to extend the Order No. 697 horizontal market power screens for energy and capacity markets to Energy Imbalance and Generator Imbalance service because significant technical limitations limit the resources that can provide these within-hour services. Further, absent special arrangements, first-tier resources included in the horizontal market power screen are not available to provide intra-hour imbalance service.

- Significant data limitations argue against the use of an optional ancillary services market power screen that would compare the amount of capacity that a potential seller can dedicate to providing the ancillary service in the relevant geographic market with the buyer's reported requirement for that ancillary service. If nevertheless the Commission adopts this proposal, such adoption should be on an experimental basis and for a limited period, subject to further Commission review.

- TAPS and TDU Systems support the NOPR's first price cap proposal to permit third-party sales of Reactive Supply and Voltage Control, Regulation and Frequency Response, Operating Reserve-Spinning and Operating Reserve-Supplemental to a TP at rates not to exceed that TP's existing OATT rate for the same ancillary service.

- TAPS and TDU Systems disagree with the NOPR's alternative proposal to cap the price of third-party ancillary services sales based on the highest TP rate in the region. This proposal is not defensible as either a cost-based or market-based rate, is at odds with the physical limitations on the provision of ancillary services in non- Regional Transmission Organization ("RTOs") regions, and will subject OATT customers to unjust and unreasonable ancillary service rates.

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[2] Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities, Order No. 697, 72 Fed. Reg. 39,904 (July 20, 2007), FERC Stats. & Regs. ¶ 31,252 (2007) ("Order No. 697"), *clarified*, 72 Fed. Reg. 72,239 (Dec. 20, 2007), 121 FERC ¶ 61,260 (2007), *on reh'g*, Order No. 697-A, 73 Fed. Reg. 25,832 (May 7, 2008), FERC Stats. & Regs. ¶ 31,268 (2008), *clarified*, 124 FERC ¶ 61,055 (2008), *on reh'g*, Order No. 697-B, 73 Fed. Reg. 79,610 (Dec. 30, 2008), FERC Stats. & Regs. ¶ 31,285 (2008), *on reh'g and clarification*, Order No. 697-C, 74 Fed. Reg. 30,924 (June 29, 2009), FERC Stats. & Regs. ¶ 31,291 (2009), *corrected*, 128 FERC ¶ 61,014 (2009), *clarified*, Order No. 697-D, 75 Fed. Reg. 14,342 (Mar. 25, 2010), FERC Stats. & Regs. ¶ 31,305, *clarified*, 131 FERC ¶ 61,021 (2010), *reh'g denied*, 134 FERC ¶ 61,046 (2011), *review denied sub nom. Mont. Consumer Counsel v. FERC*, 659 F.3d 910 (9th Cir. 2011), *petition for cert. filed sub nom. Pub. Citizen, Inc. v. FERC,* 80 U.S.L.W. 3497 (U.S. filed Feb. 10, 2012) (No. 11-1009).

- Third-party sales to TPs of Energy Imbalance and Generator Imbalance should be limited to the supplier's incremental cost.

As to the NOPR's additional proposals:

- TAPS and TDU Systems support the NOPR's proposal regarding customer self-supply and ask that it expressly incorporate demand response resources.
- TAPS and TDU Systems support the NOPR's proposals for storage accounting and reporting, but suggest two revisions to reflect the fact that storage operations can garner revenues by means other than energy sales.

INTEREST OF TAPS

TAPS is an association of transmission-dependent utilities in more than 30 states, promoting open and non-discriminatory transmission access.[3] TAPS members both purchase ancillary services provided by transmission providers and others, and hold generation and demand response resources capable of providing ancillary services. TAPS has participated actively in numerous Commission proceedings concerning ancillary services and storage resources and filed comments in these proceedings in response to the Commissions' June 16, 2011 Notice of Inquiry.[4]

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[3] Tom Heller, Missouri River Energy Services, chairs the TAPS Board. Cindy Holman, Oklahoma Municipal Power Authority, is TAPS' Vice Chair. John Twitty is TAPS' Executive Director.

[4] Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies, 76 Fed. Reg. 36,400 (June 22, 2011), 135 FERC ¶ 61,240 (2011) ("NOI").

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INTEREST OF TDU SYSTEMS

The TDU Systems participating in these comments include the following rural electric generation and transmission ("G&T") cooperatives: Arkansas Electric Cooperative Corporation; North Carolina Electric Membership Corporation; PowerSouth Energy Cooperative; and Seminole Electric Cooperative, Inc. Through their member distribution cooperatives and other wholesale customers, these G&T cooperatives serve approximately 2.7 million metered accounts in five states (Alabama, Arkansas, Florida, North Carolina, and Oklahoma Texas). The TDU Systems are, first and foremost, load-serving entities within the meaning of Section 217(a)(2) of the Federal Power Act ("FPA"), and they and their distribution cooperative members were formed to provide reliable service to their member-owners at the lowest reasonable cost. While some of the TDU Systems own substantial transmission facilities, all of them rely on the transmission systems of neighboring investor-owned public utility transmission owners regulated by the Commission in order to move their power supplies to their member distribution cooperatives' loads. Indeed, some have loads embedded in the transmission systems of as many as three different transmission providers. As transmission customers, the members of TDU Systems are affected by the Commission's proposed changes to its policies and regulations regarding third-party sales of ancillary services.

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COMMENTS

I. THIRD-PARTY SALES OF ANCILLARY SERVICES TO TRANSMISSION PROVIDERS

In order to expand the market for ancillary services, the NOPR proposes to revise its *Avista*[5] restriction on third-party market-based sales of ancillary service obligations to TPs seeking to meet their ancillary services obligations under the OATT, absent a market study showing the lack of market power, to address seller inability to obtain the data to conduct formal market power studies. See NOPR P 11, 17. TAPS and TDU Systems share the Commission's interest in promoting the supply of ancillary services, including new resources capable of efficiently providing such services. However, this Commission's laudable interest must be tempered by the Commission's FPA obligation to ensure just and reasonable rates. "[T]he Commission approves applications to sell electric energy at market-based rates only if the seller and its affiliates do not have, or adequately have mitigated, market power. . . ." *La. Energy & Power Auth. v. FERC*, 141

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[5] *Avista Corp*., 87 FERC ¶ 61,223 ("*Avista"*), *order on reh'g*, 89 FERC ¶ 61,136 ("*Avista* Rehearing Order") (1999).

F.3d 364, 365 (D.C. Cir. 1998). As recognized in *WSPP Inc.*, 134 FERC ¶ 61,169, P 24 (2011):

> While the Commission wishes to foster entry into ancillary service markets, we also must guard against potential anticompetitive behavior by third-party suppliers who may have market power. We cannot simply assume that no anticompetitive behavior would occur were we to grant WSPP's request.

TAPS and TDU Systems support expanding the market for third-party provision of ancillary services, provided this is done in a manner that does not increase costs to ratepayers dependent on TP OATT ancillary services. The primary purpose of the Federal Power Act ("FPA") is to provide consumers "a complete, permanent, and effective bond of protection from excessive rates. . . ." *Atlantic Ref. Co. v. Pub. Serv. Comm'n of N.Y.,* 360 U.S. 378, 388 (1959). This overriding consideration should be the central touchstone in the Commission's efforts to further market-based "sales to a public utility that is purchasing ancillary services to satisfy its own OATT requirements to offer ancillary services to its own customers." NOPR P 5.

The need to ensure just and reasonable OATT ancillary services rates is heightened by the fact that transmission customers are, in many instances, captive as regards to ancillary services. Indeed, Order No. 890-A[6] rejected TAPS' request that the Commission require TPs to afford OATT transmission customers rights to dynamic scheduling or pseudo tie arrangements that would open up alternative ancillary service supply options to those

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[6] Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2007) ("Order No. 890-A"), *order on reh'g*, Order No. 890-B, 73 Fed. Reg. 39,092 (July 8, 2008), 123 FERC ¶ 61,299 (2008), *order on reh'g and clarification*, Order No. 890-C, 74 Fed. Reg. 12,540 (Mar. 25, 2009), 126 FERC ¶ 61,228 (2009), *order on clarification*, Order No. 890-D, 74 Fed. Reg. 61,511 (Nov. 25, 2009), 129 FERC ¶ 61,126 (2009).

customers.[7] Particularly given the limitations on customer supply options, the Commission's FPA duty to protect OATT customers from excessive rates resulting from third-party sales of ancillary services is paramount.

The NOPR recognizes "that if third parties who had not been shown to lack market power were permitted to sell to public utilities seeking to meet their OATT ancillary service obligations, the public utility's ability to recover such purchase costs in OATT rates might lead it to agree to above-market purchases, which would then be incorporated into the public utility's OATT ancillary service rate and gradually increase that rate." NOPR P 6. Order No. 697 concluded that third-party entry into ancillary services markets should be at prices that are lower, but in any case not higher, than transmission provider's cost-based rates, which serve as a backstop protecting OATT transmission customers from excessive prices. "The backstop of cost-based ancillary services from the transmission provider provides, in effect, a limit on the price at which customers are willing to buy ancillary services." Order No. 697, P 1048. The Commission highlighted the dangers of non-cost-based ancillary services sales to TPs in *WSPP Inc.*, 134 FERC ¶ 61,169, P 26:

> The prohibition on third-party ancillary service sales to transmission providers in order for those transmission providers to meet their own ancillary service requirements thus was designed to address the Commission's concern that transmission providers not be allowed to substitute purchases under non-cost-based rates for their mandatory service obligation. We believe this concern remains valid

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[7] "Under a pseudo-tie, the control area receiving the new load or generation signal assumes responsibility for ensuring that the load is properly balanced moment-to-moment, for planning for the load, and for providing various other ancillary services including energy or generator balancing service." Order No. 890-A, P 631. The Commission even expressed concern "that the mandatory cost-based provision of pseudo-ties could allow transmission customers to cherry-pick among transmission providers based on differences in service, including ancillary service costs." *Id.*

> today. Under WSPP's proposal, transmission providers that cannot fully self-supply their reserve service requirements would be able [to] purchase reserve services from third-party suppliers at the prevailing market price where no market power study has been performed, and pass those costs through to transmission customers. In such circumstance, in the absence of a cost-based cap on the price of reserve services sold to transmission providers that rely on third-party suppliers to meet all or a portion of their reserve service needs, transmission customers would not be protected from unjust and unreasonable rates if the market price for reserve services is the result of the exercise of market power.

TAPS and TDU Systems support the ability of third-party sellers to provide ancillary services to an OATT transmission provider in lieu of self-supply by the transmission provider *provided* that such purchases do not flow through OATT rates unless they are priced (per unit of ancillary service provided) below the existing OATT rate, such that they do not increase the total ancillary services charge. If an OATT provider can turn to the market for the supply of ancillary services at lower cost than the OATT provider's own cost of self-supply, and free up the TP's own capacity for other uses, then it should be able to do so (assuming proper ratemaking and implementation as discussed below). Market efficiency is served and consumers are protected where a market priced substitute is lower than the OATT provider's cost of self-supply.

A. Technical Limitations Argue Against Applying the Energy and Capacity Horizontal Market Power Screen to Ancillary Services

TAPS and TDU Systems agree with the NOPR that there are "significant technical requirements or limitations that apply to the provision of ancillary services other than Energy Imbalance and Generator Imbalance such that the existing market-based rate screen may not be adequate to capture the potential horizontal market power of sellers of these other ancillary services." NOPR P 21. However, TAPS and TDU

Systems disagree with the NOPR's proposal "to provide that sellers passing existing market-based rate analyses in a given geographic market should be granted a rebuttable presumption that they lack horizontal market power for sales of Energy Imbalance and Generator Imbalance ancillary services in that market." *Id*.

To assess horizontal market power in non-RTO energy and capacity markets, "the Commission will generally use a seller's balancing authority area plus first-tier markets . . . as the default relevant geographic market." *Id.* P 15. The Commission's default geographic market traces back to the "hub and spoke" market-based rate test and includes control area resources plus first tier resources because the Commission presumes these resources to be "competitors in that market," i.e., these first-tier interconnected generation resources can compete with within control area resources based on technical and economic considerations. *Sw. Pub. Serv. Co.*, 72 FERC ¶ 61,208, at 61,966 (1995).

The assumption that all internal and first-tier resources can compete to supply the TP's ancillary services requirements does not apply to ancillary services, as the Commission correctly acknowledges as to most of the ancillary services. First-tier resources are not generally available to provide Reactive Power and Voltage Control service within the TP's control area, because "reactive power does not travel well."[8] The universe of resources available to provide Regulation and Frequency Response, Operating Reserve-Spinning, and Operating Reserve-Supplemental services is also more narrow than the resources included in the energy and capacity market power screens because practicably available off-line units have particular minimum ramp rate and start-

[8] NOPR at n.45 (quoting FERC, *Principles for Efficient and Reliable Reactive Power Supply and Consumption*, Docket No. AD05-1-000, at 18 (2005) *available at* http://www.ferc.gov/EventCalendar/Files/20050310144430-02-04-05-reactive-power.pdf). See also NOPR P 23.

up requirements (NOPR P 22) and available on-line units are limited by the fact that "not all types of units may be capable of extended periods of operation below their fully loaded set point, or such operation may be prohibitively uneconomic." *Id.* Specialized technical requirements also limit the market, such as requirements for Automatic Generation Control ("AGC"). NOPR PP 21-23. For these reasons, the NOPR rightly finds it inappropriate to apply the energy and capacity market screens to ancillary services other than imbalance. *Id.*

Nevertheless, the NOPR proposes to extend the Order No. 697 horizontal market power screen for energy and capacity markets to Energy Imbalance and Generator Imbalance service. *Id.* PP 19-21. TAPS and TDU Systems oppose this proposal. As the NOPR recognizes, application of the generic screen depends on whether there are "unique technical requirements or limitations that apply to the provision of Energy Imbalance or Generator Imbalance." *Id.* P 19. The NOPR finds, preliminarily, that "any available unit in a given geographic market would appear to be capable of providing energy that helps address imbalances in that market." *Id.* That is not the case.

The NOPR supports its approach by noting (P 19) that the cost basis for imbalance service is based on "the incremental cost of the last 10 MW dispatched by the transmission provider for any purpose, without imposing any requirement that this last 10 MW be based on resources with any particular capabilities." But the pricing of OATT imbalance service does not demonstrate the absence of restrictions on the supply of intra-hour energy that allows TPs to provide energy imbalance service. In proposing to revise imbalance service rates, the Commission used incremental cost (or multiples thereof) to "provide the proper incentive to keep schedules accurate without being excessive."

Order No. 890,[9] P 677. The Commission did not limit the TPs compensation to energy from the particular resources that were ramping up and down within the hour to provide the imbalance service, but defined incremental cost as "the cost of the last 10 MWs dispatched for any purpose, i.e., to serve native load, correct imbalances, or to make off-system sales." Order No. 890-A, P 309. Any third-party seller, including those with market-based rate ("MBR") authority, can sell energy to the TP that may be reflected in the TP's OATT energy imbalance charge if it is within that last 10 MW dispatched. Indeed, *pro forma* Schedules 4 and 9 expressly allow for inclusion of purchased and interchange power costs in the charges to OATT customers. Nothing in the NOPR affects the ability of third-party sellers to make such energy sales at MBR to the TP or other market participants. Rather, what is at issue in this NOPR is third-party sales of energy required for the TP to perform its OATT imbalance obligation.

Energy and Generator Imbalance are within-hour services. As described in *pro forma* OATT, Schedule 4, "Energy Imbalance Service is provided when a difference occurs between the scheduled and the actual delivery of energy to a load located within a Control Area over a single hour." Imbalance service is a control area function that is part of maintaining Area Control Error ("ACE") in accordance with NERC requirements.[10] The provision of imbalance service is subject to significant technical restrictions. As

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[9] Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, 72 Fed. Reg. 12,266 (Mar. 15, 2007), FERC Stats. & Regs. ¶ 31,241 (2007) ("Order No. 890"), *order on reh'g and clarification*, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2007), *order on reh'g*, Order No. 890-B, 73 Fed. Reg. 39,092 (July 8, 2008), 123 FERC ¶ 61,299 (2008), *order on reh'g and clarification*, Order No. 890-C, 74 Fed. Reg. 12,540 (Mar. 25, 2009), 126 FERC ¶ 61,228 (2009), *order on clarification*, Order No. 890-D, 74 Fed. Reg. 61,511 (Nov. 25, 2009), 129 FERC ¶ 61,126 (2009).

[10] *See, e.g.*, NERC Reliability Standard BAL-005-1b R8 (calculation of ACE every six seconds); BAL-002 R.4.1 and R.4.2 (obligation to restore ACE to zero following reportable disturbance (loss of generation) within 15 minutes).

discussed above, Order No. 890-A (P 631) found that generation outside the control area can provide imbalance service when pseudo-tied and thus subject to within-area dispatch control.[11] The Commission emphasized that this is a complex undertaking. "[P]seudo-ties are both services that involve metering, telemetry, computer software, hardware, communications, engineering and administration. Each service is crafted to meet the unique needs of each customer, typically requiring the cooperation and services of at least two control areas, as well as contractor-providers of the components of the services." Order No. 890-A, P 630. Absent special arrangements, the first tier resources included in the horizontal market power screen are not generally available to provide intra-hour imbalance service.

The particular units that can provide imbalance service in non-RTO regions are also limited. In a non-RTO region, imbalance service is typically provided by the energy associated with regulation and operating reserves. The NOPR recognizes (P 22) that units providing Operating Reserve-Spinning and Operating-Reserve Supplemental "are maintained to convert to energy if needed, as with imbalance services." This is consistent with Order No. 890's finding that "demand costs of providing imbalance service are already being provided under Schedule 3, 5, and 6 charges [i.e., Regulation and Frequency Response Service, Operating Reserve – Spinning Reserve Services, and Operating Reserve Supplemental Reserve Services]." Order No. 890, P 690. As the

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[11] Such a finding is consistent with organized markets. For example, to participate in Southwest Power Pool's ("SPP") Energy Imbalance Market, an External Resource must be pseudo-tied into the SPP's market. See, e.g., SPP Tariff, Attachment AE, Section 1.1, definition of Resources (Assets which are defined within the EIS Market systems which inject energy into the transmission grid, or which reduce the withdrawal of energy from the transmission grid, and may be self-dispatched or subject to direct dispatch by the Transmission Provider. These Resources may include generation or Controllable Load that is part of the SPP Market Footprint through its physical interconnection and External Resources included in the SPP Market Footprint through an External Resource Pseudo-Tie.)

NOPR acknowledges, the units that can provide these services are limited by ramp rate and start up requirements and economic and technical considerations that limit unit operations for extended periods of time below their fully loaded set point. NOPR P 22.

Outside organized markets where the market operator can issue dispatch signals throughout the hour (e.g., every four minutes), generators capable of providing imbalance service must have a special relationship with the control area operator in order to supply changing within-the-hour energy needs, without the constraints of hourly transmission scheduling requirements. It is best to have these resources on Automatic Generator Control subject to the TP's control. *See Id.* P 23.[12] Scheduling limitations also impair the ability of resources outside the TP's transmission system from providing intra-hour imbalance energy; remote provision of these services require point-to-point service through the remote (i.e., first-tier) transmission system (absent pseudo-tie or other special scheduling arrangement). Even the recently adopted 15 minute scheduling[13] is insufficient, especially when combined with the need to schedule 20 minutes in advance.

In short, because unique technical requirements for providing intra-hour imbalance service prevent all first-tier resources from competing with control area resources to provide that service, the factual predicate for application of traditional MBR screens cannot be satisfied.[14] Thus, the NOPR's proposed reliance on the energy

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[12] "[C]onventional resources generally require Automatic Generation Control (AGC) equipment in order to provide Regulation and Frequency Response service." *Id.* Units providing Regulation and Frequency Response service provide imbalance service. Order No. 890-A, P 300.

[13] Integration of Variable Energy Res., 77 Fed. Reg. 41,482 (July 13, 2012), FERC Stats. & Regs. ¶ 31,331, P 91, 118 (2012) ("VER Rule").

[14] The universe of within control area resources able to compete to supply ancillary services is also constrained in a way that precludes meaningful reliance upon the traditional MBR screens for horizontal market power.

horizontal market power screen is unsound for third-party provision of energy and generator imbalance service to TPs, as well as the other ancillary services.

B. The Proposed Optional Market Power Screen May Not Ensure Just and Reasonable Rates

The NOPR proposes an optional ancillary services market screen that "would . . . compare the amount of capacity in MWs (or, as applicable, MVARs) that a potential seller can dedicate to providing the ancillary service in the relevant geographic market with the buyer's reported aggregate requirement for that ancillary service, taking into account any reported historical locational requirements. . . ." NOPR P 26. "[S]ellers whose available capacity is no more than 20 percent of the relevant reported aggregate requirement for an ancillary service would then receive a rebuttable presumption that they lack horizontal market power for the ancillary service in question." *Id.*

The usefulness of the NOPR's novel proposal is uncertain, particularly given the acknowledged significant "data limitations." *Id.* P 5. Among other things, it is unclear how TPs will identify locational constraints concerning particular ancillary services, and whether they do so on a uniform and transparent basis. It is also unclear how sellers will calculate their available capacity for providing a particular ancillary service, and whether these calculations will be uniform and transparent. Fundamentally, it is not clear whether the proxy screen would be a test that few if any third-party sellers could pass, or (like the old "hub-and-spoke" MBR test) a test that no third-party seller could fail. There is no way to have confidence that the proxy would provide a meaningful screen for market power, as required to assure that the resulting MBR rates will be just and reasonable.

If the Commission nevertheless adopts this proposal, such adoption should be "on an experimental basis until the Commission has more experience with the evolution of ancillary service markets and in reviewing the quality of optional market power screens," as suggested in the NOPR (P 30). The Commission should establish a defined sunset limit (e.g., 3 years) for the optional market power screen and any associated grants of ancillary services MBR authority, subject to further Commission review.

C. Adoption of Some But Not All of the Proposed Cost-Based Mitigation Would Be Consistent with the Act

1. Individual TP OATT Rate Price Caps for Third-Party Supplied Ancillary Services Are Acceptable for Certain Services

Given the difficulty of applying MBR screens, the Commission proposes the use of price caps to mitigate market power and protect transmission customers from bearing costs associated with above-market purchases of ancillary services in circumstances where "sellers [are] unable or unwilling to perform the market power study" necessary to demonstrate a lack of horizontal market power. *Id.* P 32. The first of two price cap proposals on which the NOPR seeks comment is: "[T]hird parties would be permitted to sell to a public utility buyer at rates not to exceed the buying public utility transmission provider's existing OATT rate for the same ancillary service." *Id.* P 34.

TAPS and TDU Systems support the first price cap proposal, as applied to Reactive Supply and Voltage Control,[15] Regulation and Frequency Response, Operating

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[15] The compensation to be paid to third parties for reactive supply generally should be limited to reactive supply beyond the established power factor range established. In Order No. 2003, the Commission emphasized that an interconnecting generator "should *not* be compensated for reactive power when operating its Generating Facility *within* the established power factor range, since it is *only* meeting its obligation." *See* Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, 68 Fed. Reg. 49,846 (Aug. 19, 2003), FERC Stats. & Regs. ¶ 31,146 (2003) ("Order No. 2003"), *modified*, 68 Fed. Reg. 69,599 (Dec. 15, 2003), *clarified*, 69 Fed. Reg. 2,135 (Jan. 14, 2004), 106 FERC ¶ 61,009 (2004), *order on reh'g*, Order No. 2003-A, 69 Fed. Reg. 15,932 (Mar. 26, 2004), FERC Stats. & Regs. ¶ 31,160 (2004), *order on reh'g*, Order No. 2003-B, 70 Fed. Reg. 265 (Jan. 4, 2005), FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, 70 Fed. Reg. 37,661 (June 30, 2005), FERC Stats. & Regs. ¶ 31,190 (2005), *aff'd sub nom. NARUC v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 128 S. Ct. 1468 (2008). Generators interconnected to a TP's system thus need only be compensated

Reserve-Spinning and Operating Reserve-Supplemental. This price cap is consistent with the FPA, and promotes the economic use of resources. As the NOPR observes, it "should be relatively non-controversial to implement as the buyer's OATT ancillary service rates will have already been found to be just and reasonable." NOPR P 34. Capping the price at which third parties can supply the TP with ancillary services at the TP's OATT rate for that service is consistent with Order No. 697's determination that third-party entry into ancillary services markets should be at prices that are lower, but in any case not higher, than transmission providers' cost-based rates, which stand act as a backstop protecting OATT transmission customers from excessive prices:

> The Commission based its *Avista* policy on the expectation that, as entry into ancillary service markets occurs, prices will decrease from the level established by the transmission provider's cost-based rate. Under these circumstances, customers will pay prices for ancillary services that are no higher than and will very likely be lower than the transmission provider's cost-based rate. The Commission explained that the ancillary services customer is protected in part by the availability of the same ancillary services at cost-based rates from the transmission provider. The backstop of cost-based ancillary services from the transmission provider provides, in effect, a limit on the price at which customers are willing to buy ancillary services.

Order No. 697, P 1048.

The NOPR (P 34) asks whether a price capped at the TP's OATT rate will "serve as a disincentive to the entry of additional resources to provide ancillary services" and

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when the TP directs the generator to operate *outside* the power factor range. *Mich. Elec. Transmission Co.*, 96 FERC ¶ 61,214, at 61,906, *order on reh'g*, 97 FERC ¶ 61,187, at 61,852 (2001), *clarified*, 98 FERC ¶ 61,104 (2002). The only exception to this limitation on third party reactive compensation is where the TP pays its own or its affiliated generators for reactive power within the established range, it must also pay the Interconnection Customer. Order No. 2003-A, P 416. See Section 9.6.3 of the *pro forma* Large Generator Interconnection Agreement.

states that “an individual buyer’s OATT ancillary service rates may be higher or lower than the cost of new entry and that they do not necessarily signal whether investment is needed to provide the service.” But this price cap is not the complete picture of opportunities for third parties to supply ancillary services to the TP. Nothing prevents a third-party supplier from competing to serve a TP’s needs for new ancillary service supply using the supplier’s own cost-based rate—the question here is when a third-party supplier can support a sale to the TP to meet the TP’s OATT requirements at a *non*-cost-based rate without satisfying a market power screen, on the assumption that any market power has been mitigated. Nor does this price cap foreclose other options for signaling the need for investment, such as competitive solicitations in accordance with Commission policy, with the NOPR’s proposed additional requirement (which TAPS and TDU Systems support) of a “demonstrat[ion] to the Commission that the solicitation attracted sufficient seller interest to properly discipline market prices.” NOPR P 45.

Further, a price cap based on the TP’s OATT rate is easy to administer, and is a good match for the geographic limits on supply of ancillary services (NOPR P 35):

> [A] price cap based on the buyer’s OATT ancillary service rate may best match the geographic limitations of an ancillary service like Reactive Supply and Voltage Control, and may provide the simplest route to expanded supply at just and reasonable rates for service areas that require more Reactive Supply and Voltage Control.

Even beyond Reactive Supply and Voltage Control, the scope of the geographic market for ancillary services is typically defined by TP boundaries, absent special pseudo-tie or dynamically scheduling arrangements, as described above.

Thus, capping the price at which ancillary services may be sold to a TP to meet OATT ancillary services requirements at the TP’s OATT rate is a useful step toward expanding the market opportunities for sales of ancillary services in non-RTO regions, while protecting consumers in accordance with the Act. After it gains experience with the operation of this cap and its impact on the market, the Commission will be in a better position to assess whether an alternative cost-based mitigation is necessary and appropriate.

2. The Commission Should Reject the Proposed Regional Price Cap for Third-Party Supplied Ancillary Services

The NOPR (P 36) seeks comments on a second cost-based mitigation option for third-party sales to TPs of Reactive Supply and Voltage Control, Regulation and Frequency Response, Operating Reserve-Spinning and Operating Reserve-Supplemental: "Under the second option, third parties could propose to sell a given ancillary service to a public utility buyer at rates not to exceed the highest public utility transmission provider OATT rate within the relevant geographic market for physical trading of the ancillary service in question." TAPS and TDU Systems oppose the NOPR's regional price cap proposal. It is not defensible as either a cost-based or market-based rate, is at odds with the physical limitations on the provision of ancillary services in non-RTO regions, and will subject OATT transmission customers to unjust and unreasonable ancillary service rates.

The NOPR's proposal to cap the price of third-party ancillary services sales based on the highest TP rate in the region is very similar to the regional energy price cap that the Commission rightly rejected in accepting the Western Systems Power Pool ("WSPP") Agreement on a non-experimental basis in 1991. In that order, the Commission found unjust and unreasonable a proposed regional price cap for energy that was based on the costs of the highest cost participant.[16] The peculiar characteristics of ancillary services make such a price cap even more unjust and unreasonable in this context.[17]

OATT transmission customers should not be subject to paying for ancillary services at a rate *higher* than the TP's own cost of self-supply. The fact that one TP in the contiguous geographic area may have a much higher OATT rate for a particular ancillary service does not mitigate a third party's potential market power in making ancillary service sales to another TP that has a lower OATT rate for that service. Nor does another regional TP's higher rates bear any relationship to either the third-party supplier's or the purchasing TP's cost of supply.

The Commission has found that a seller without MBR authority can profit from the exercise of market power even where prices are capped at a hypothetical participant regional average cost rate (i.e., a price cap *lower* than the NOPR's proposed highest participant cost regional price cap) and should instead be limited to charging rates based upon its own costs.

> Because the WSPP Agreement's "up to" demand charge is not based upon a seller's specific costs, its use by a seller may be unjust and unreasonable in markets where the seller does not have market-based rate authority to the extent that such seller is only able to cost justify a demand charge lower than that contained in the WSPP Agreement. While

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[16] *W. Sys. Power Pool*, 55 FERC ¶ 61,099 at 61,321-25, *order on reh'g*, 55 FERC ¶ 61,495 (1991), *petition denied sub nom.*, *Envtl. Action v. FERC*, 996 F.2d 401, 403 (D.C. Cir. 1993). *See W. Sys. Power Pool*, 122 FERC ¶ 61,139 P 2 (2008) ("the Commission rejected WSPP's proposed system of price caps based on the costs of its highest cost participants. . ."). The 1992 WSPP order approved a price cap based on the average costs of a hypothetical participant utility and this was upheld on appeal. As discussed below, in 2008, after instituting a Section 206 proceeding, the Commission found it unjust and unreasonable for sellers that lacked MBR authority to avail themselves of the hypothetical "up to" price cap and required such sellers to justify a demand charge "based upon the seller's own cost." *Id.* P 22. The Commission explained its change of position based on issuance of Order No. 697 and its "considerable experience with market-based pricing. *Id.* P 19.

[17] See *WSPP Inc.*, 134 FERC ¶ 61,169, PP 24-26.

> technically the WSPP rate is a cost-based ceiling rate, it nevertheless has some of the flexibility of a market-based rate to the extent an individual seller is allowed to negotiate a rate above its own cost-justified demand charge, albeit subject to a ceiling. Our concern is that such a seller may be able to exercise market power with respect to such transactions.

W. Sys. Power Pool, 122 FERC ¶ 61,139, P 21. The same conclusion would be true with respect to ancillary services sales capped at the highest TP rate in the region, as proposed by the NOPR.

Further, the concept of a regional price cap for ancillary services is based on a premise that is unsupportable in many non-RTO regions. The NOPR contemplates that the scope of the region for establishing price caps would be defined by any contiguous trading area in which the supplier proposes to make physical trades of ancillary services, and "often may include the seller's home balancing authority area plus first-tier balancing authority areas and possibly additional areas where transmission capacity is available." NOPR P 37. But in many non-RTO regions, the concept of "trading areas" for ancillary services does not reflect the facts on the ground.

As the NOPR acknowledges (PP 21-23, 37), and as discussed above, significant physical constraints limit the provision of ancillary services over a geographic area. For example, because "reactive power does not travel well" (*Id.* P 23 n.45), the Commission "recognizes that the single-public utility price cap option may best match the geographic limitations associated with Reactive Supply and Voltage Control service." *Id.* P 39. Significant physical and operational considerations limit the resources available to provide other ancillary services in non-RTO regions, particularly Regulation and Frequency Response or Operating Reserve-Spinning. Resources supplying these services must have specialized capability and be in a position to respond to the TP's intra-hour signals in order to supply the ancillary service in a manner that supports grid reliability. The TP must have dispatch control over the requisite resources necessary to be able to call on these resources for supplying the intra-hour capability required.

For example, as the NOPR recognizes (P 23), "conventional resources generally require Automatic Generation Control ("AGC") equipment in order to provide Regulation and Frequency Response service." In addition, the supplier's AGC must be in a position to respond to the TP's real time signal. Spinning reserves must similarly be responsive to the TP's real time signal to address real time changes on the TP's system. Outside RTO regions (where generators are in a position to respond to the market operator's signal every few minutes), the TP cannot contract with generators on a spot market basis for such ancillary services, particularly where the generator is located outside its balancing authority. Use of a remote generator requires transmission service, which is scheduled on an hourly basis, twenty minutes before each hour, on multiple TP systems (at minimum, point-to-point service on the transmission system on which the generator sits, as well as any intervening system). Even after implementation of fifteen minute scheduling pursuant to the VER Rule, scheduling requirements make remote supply of ancillary services impractical in many cases. While pseudo-tie or dynamic scheduling arrangements allow for exceptions, the potential availability of such arrangements hardly demonstrates that a seller's market power to make ancillary services sales to one TP is mitigated by capping the price at high ancillary services rates used by TPs one or two balancing authorities away. Thus, unless a region adopts market arrangements to allow for a fluid multi-balancing authority regional market in ancillary services, it makes no sense to talk about a broader "relevant geographic market for physical trading of the ancillary service in question." NOPR P 36.

Further, as the NOPR acknowledges (PP 37-38), use of regional price caps involves difficult implementation issues, with the potential for different regions for different ancillary services or even for different suppliers. Suppliers will have a strong incentive to overstate the breadth of the region to capture a high priced TP as part of its market area. A complicating factor is that the market size will be smaller for reactive supply, but also may be resource specific for other ancillary services (e.g., if a resource is pseudo-tied into a remote balancing authority and is able to work out scheduling arrangements with all intervening suppliers). Allowing suppliers to justify non-cost-based rates capped at the highest rate in a "region" broadly defined to include the area "within which trading of the ancillary service in question is physically possible" (NOPR P 36) invites gerrymandering, and provides no assurance that the resulting cap is "a more reasonable approximation of the cost of new entry," as the NOPR assumes (*id.*). All we know is that it will yield a higher price cap, which will do a less effective job at mitigating market power.

The Commission's regional price cap proposal is therefore arbitrary and will result in OATT transmission rates that are unjust and unreasonable. Use of price caps above the individual TP's OATT rate creates a significant danger that third-party resources priced at the highest rate used by another TP in the "region" will come to supplant the OATT provider's own resources as the source of ancillary service supply to the detriment of OATT transmission customers. To the extent transmission providers are able to recover the costs of higher priced third-party purchases from their OATT transmission customers, they will be incented to free up their own capacity for other uses, and turn to purchases from third-party suppliers to meet their ancillary service obligations. This purchased supply would likely become the new "cost" basis for the OATT provider's ancillary services rates (assuming they were charged under FPA Section 205) and serve as a new higher cost floor supporting ancillary service sales at escalating prices by third-party sellers that have never been subject to MBR scrutiny and have no cost basis, contrary to the FPA's mandate to ensure just and reasonable rates, and the Commission's position in Order No. 697 that third-party entry should be at prices that are lower, but in any case not higher, than transmission providers' cost-based rates, which act as a backstop protecting OATT transmission customers from excessive prices.

3. Third-Party Supply of Energy and Generator Imbalance Should be Incremental Cost-Based in Conjunction with Price-Capped Ancillary Capacity Sales

As discussed in Section I.A above, while third-party energy sales may be made after satisfaction of the ordinary Order No. 697 MBR screens, MBR sales of imbalance energy to meet the TP's intra-hour energy and generator imbalance obligations should not be allowed under the generic energy screens. Rather, such energy is typically the energy associated with the generating capacity used for Regulation and Frequency Response, Operating Reserve-Spinning and Operating Reserve-Supplemental services.

In conjunction with allowing third-party sales of such services at non-cost based rates subject to a price cap, it would be appropriate to limit third-party sales of the associated energy used to supply energy and generator imbalance service to incremental cost. Through the priced capped charges for Regulation and Frequency Response, Operating Reserve-Spinning and Operating Reserve-Supplemental services, the third-party seller will have been compensated (presumably at or above its cost[18]) for the capacity used to generate the intra-hour energy used to ensure that the balancing authority remains reliably in balance throughout the hour, despite deviations in loads and resources from their schedules. Having paid for the capacity, the TP should be able to call on the associated energy at incremental cost – the same basis on which the TP may charge OATT customers for energy imbalance.[19] Restriction of the third-party supplier to incremental costs would be consistent with the way energy charges are determined under many market-based power sales, in which the capacity charge is determined by negotiation, and the energy charges are at incremental cost or a proxy for determining such costs (e.g., using an agreed upon fuel index price cost and heat rate).

Insisting on the supply of third-party imbalance energy at incremental cost would also be consistent with the intent of RTO energy imbalance markets. RTO energy imbalance markets rely on single clearing price locational markets intended to provide suppliers with an incentive to bid their incremental costs, coupled with market power mitigation applied by a market monitor.[20] In a non-RTO area where there is no such

[18] If the third-party supplier's cost were higher than the cap, nothing would stop that supplier from competing to make such sales at a cost-based rate, as noted above.

[19] *See* Order No. 890, PP 687-90 (incremental cost recoverable through Schedules 4 and 9, recognizing that associated demand costs are recovered through Schedules 3, 5, and 6). *See also, e.g., W. Sys. Power Pool*, 122 FERC ¶ 61,139, P 3 (WSPP rates allowed for energy to be sold at the individual seller's forecasted incremental cost, plus an "up to" capacity charge).

[20] *See, e.g., San Diego Gas and Elec. Co. v. Sellers of Energy and Ancillary Service into Markets Operated by the Cal. Indep. Sys. Operator Corp.*, 95 FERC ¶ 61,115, at 61,362 (2001) ("The Commission finds that using marginal costs is the appropriate method for calculating bids during price mitigation. During a period when a supplier has available capacity, it should be willing to sell that capacity on a daily basis as long as it covers its marginal cost of producing it. Since marginal cost pricing best approximates competitive pricing, there is no need to include fixed or other costs in the bids. In the auction context, the market clearing price best simulates a competitive market, since in a competitive market, producers receive the market clearing price, regardless of their individual costs. If suppliers know that they are going to receive only what they bid, they will attempt to bid the market clearing price, a practice known as 'strategic bidding' and that introduces additional risks into the market.").

market, market power mitigation, or market monitor, the Commission should require the results the organized markets are intended to achieve.

D. Restrictions on Pass Through of Third-Party Ancillary Purchase Costs through OATT rates

The NOPR deals with third-party ancillary services sales to TPs for use in meeting their OATT obligations, but does not address when those charges may be passed on to OATT customers. TAPS and TDU Systems suggest, as TAPS did in its NOI comments, that the Commission set ground rules to ensure just and reasonable OATT ancillary services rates.

Just because a seller is authorized to market its generator to TPs for ancillary services provided on their OATT doesn't mean that a TP's purchase meets the prudence requirement that is an essential underpinning of cost-based rates. Why would it be prudent for an OATT transmission provider to procure, and force OATT transmission customers to bear the higher cost of, a third-party resource when the OATT transmission provider is capable of supplying the service from its own lower cost resources? Thus, any effort to increase existing OATT ancillary service rates to reflect purchases of higher priced third-party ancillary services must be scrutinized for prudence.

Further, ancillary services purchased from third-party vendors should be reflected in OATT ancillary services rates only if the share of the cost recovered from OATT customers represents a fully allocated share, i.e., retail native load is included in the rate divisor. OATT transmission customers should not be treated as the marginal ancillary services customers as compared to retail native load, and retail native load must ratably share responsibility for any purchases of ancillary services from third-party sellers at MBR. Indeed, new ancillary resources like quick-response storage are likely to be added to facilitate integration of wind resources procured to serve native load.

Ancillary services purchased from third-party vendors should not flow through OATT rates as an adder to existing stated rates, but should instead be incorporated by means of a Section 205 filing. Where existing OATT rates are stated rates, the Section 205 filing necessary to incorporate the new charge input must open the existing ancillary services charge to scrutiny to ensure that the overall result is just and reasonable. This is simply an application of the longstanding "integral part" doctrine, under which the Commission is obliged to "review[] a revised rate completely to assure that all its parts—old and new—operate in tandem to insure a 'just and reasonable' result."[21] It applies with added force to ancillary services purchased from third-party vendors (especially, but not only, ancillary services purchased from owners of electricity storage facilities), because the very existence of such new entrants suggests that usage and provision of ancillary services on the transmission owner's system is changing, and that the existing OATT rate therefore no longer predicts the forward-looking unit costs. The need to refresh the existing rate is especially strong where the existing rate is a stated unit rate set years ago, as is often the case.

II. CUSTOMER SELF-SUPPLY OPTIONS

TAPS and TDU Systems support the NOPR proposal (P 51) to require public utility transmission providers to specify in their OATTs provisions that the speed and

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[21] *Cities of Batavia v. FERC*, 672 F.2d 64, 75-77 (D.C. Cir. 1982); *see also Colo. Interstate Gas Co. v. FERC*, 791 F.2d 803, 809 (10th Cir. 1986).

accuracy of customer self-supplied regulating resources be taken into account when determining the quantity of required supply, to the extent a customer is seeking to rely on a particular regulating resource with unusual capabilities. The ability to self-supply services is important to OATT-dependent utilities and it is appropriate to modify the *pro forma* OATT in this manner in order "to address the potential for undue discrimination against customers choosing to self-supply their Regulation and Frequency Response needs." *Id.* P 52. TAPS and TDU Systems commend the Commission for making more transparent the TP's standards for evaluating different types of resources able to provide regulation service when a transmission customer opts to self-supply its requirements.

The NOPR (P 48) also solicited comment on other ways to extend outside RTOs the goals of the Frequency Regulation Compensation NOPR, which resulted in Order No. 755. Consistent with the plain language of *pro forma* OATT Schedule 3, which provides for the provision of Regulation and Frequency Response Service from appropriate non-generation resources, and the Commission's findings in Order No. 755[22] (P 5) that controllable demand resources are being used to provide frequency regulation service, TAPS and TDU Systems ask that the Commission state expressly that the NOPR's proposal to account for the speed and accuracy of customer self-supply regulating resources includes demand resources.

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[22] Frequency Regulation Compensation in the Organized Wholesale Power Markets, Order No. 755, 76 Fed. Reg. 67,260 (Oct. 31, 2011), FERC Stats. & Regs. ¶ 31,324 (2011) ("Order No. 755"), *reh'g denied*, Order No. 755-A, 138 FERC ¶ 61,123 (2012).

III. STORAGE ACCOUNTING AND REPORTING

TAPS and TDU Systems support the NOPR's proposals for storage accounting and reporting, and has two suggested revisions to the proposed new reporting requirements.

The NOPR proposes to add several new pages to Form 1/Form 1-F reporting. *See* NOPR P 104 & Appendix B. The additional reporting is worthwhile; it will helpfully support cost-based ratemaking and other Commission responsibilities. In particular, proposed new Page 414 should elicit considerable information regarding each storage facility's original costs, revenues, functional classification, and revenues.

However, modest revisions would enhance that value and should be adopted. A subtle difference separates Page 415 column heading (*l*) and the description of that column in item 7 of page 414's instructions, and the difference suggests that inserting one or more additional columns would be appropriate. The instruction refers to "revenues from energy storage operations," whereas the column header refers to "Revenues from the Sale of Stored Energy." The difference between these two word formulas resides in the fact that storage operations can garner revenues by means other than energy sales. For example, they may perform and be paid for the service of storing another entity's energy, analogous to the service that storage facilities owned by interstate gas pipelines provide when (consistent with the Commission's "shipper-must-have-title" policy[23]) they store gas owned by shippers. Relatedly, it should be made possible to match the reported revenues up against the amount reported in column (m) as "Power

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[23] *See, e.g., In re ConocoPhillips Co.*, 138 FERC ¶ 61,004, P 8 (2012) ("A central requirement of the Commission's open-access transportation program is that all shippers must have title to the gas at the time the gas is tendered to the pipeline or storage transporter and while it is being transported or held in storage by the transporter.").

Purchased for Storage Operations." Where an electricity "shipper" holds title to its stored energy, the amount to be reported in column (m) presumably will be zero.

In addition, storage facility operators may sell capacity as a product distinct from energy. Whereas "Power" (the term used in NOPR column (m)) is commonly understood to include both capacity and energy, that understanding is less clear as to "Energy" (the term used in NOPR column (*l*)).

At minimum, therefore, the column heading should be broadened to match its description. However, it would also be useful to support matching of stored-power sale revenues to the costs of power purchased and then stored, and to break out revenues specifically from the sale of stored energy, so that energy-related revenues can be credited against the energy component of two-part rates, consistent with proper rate design. To address all of these related concerns, TAPS and TDU Systems recommend that the NOPR's single column (*l*) be replaced by three columns, with corresponding instructions, and the subsequent columns re-lettered accordingly. The recommended substitute columns are: (*l*) Revenues from the Sale of Stored Energy; (m) Revenues from the Sale of Stored Capacity; and (n) Other Revenues from Energy Storage Operations.

CONCLUSION

For the reasons discussed above, the Commission should adopt the NOPR's proposals for storage accounting and reporting, with TAPS' and TDU Systems' two suggested revisions and allow for third-party sales of certain ancillary services to a TP to meet its OATT obligations at prices capped at the TP's own OATT rate for that service, and for Energy Imbalance and Generator Imbalance service capped at incremental cost. The Commission should not move forward with other proposals, which as demonstrated above, would expose OATT customers to unjust and unreasonable ancillary services rates.

Respectfully submitted,

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