STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on January 18, 2018

COMMISSIONERS PRESENT:

John B. Rhodes, Chair
Gregg C. Sayre
Diane X. Burman
James S. Alesi

CASE 15-E-0751 - In the Matter of the Value of Distributed Energy Resources.

ORDER REGARDING COMPENSATION OF COMMUNITY DISTRIBUTED GENERATION PROJECTS

(Issued and Effective January 18, 2018)

BY THE COMMISSION:

INTRODUCTION AND BACKGROUND

On March 9, 2017, the New York State Public Service Commission (Commission) issued the Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters.[1] The VDER Phase One Order directed that the compensation for eligible distributed energy resources (DER) transition from net energy metering (NEM) to the Value Stack. The Value Stack is a methodology that bases compensation on the actual, calculable benefits that such resources create. As transitional mechanisms, the VDER Phase One Order established Phase One NEM, which includes a limited continuation of NEM-

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[1] Cases 15-E-0751, et al., Value of Distributed Energy Resources, Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017) (VDER Phase One Order).

style compensation, and an adder to the Value Stack for mass market customers, which is referred to as the Market Transition Credit (MTC).[2]

In order to manage the impacts of Phase One NEM and the MTC on non-participating ratepayers, the VDER Phase One Order established Tranches of megawatts (MW) for Community Distributed Generation (CDG) projects in each utility territory, with projects in Tranche 0 receiving Phase One NEM, and projects in Tranches 1 through 3 receiving a declining MTC.[3] The Tranches were sized based on a target net incremental revenue impact of 2%. The VDER Phase One Order explained that while the transitions from Tranche 0 through Tranche 3 would be automatic in each utility territory as Tranches 0/1 and 2 were filled, projects would continue to be placed into Tranche 3, even once its capacity allocation was reached, until the Commission took further action. To facilitate Commission consideration of appropriate action, the VDER Phase One Order instructed each utility to notify the Commission when 85% of the total MW capacity for its Tranches had been allocated.

On April 12, 2017, Orange and Rockland Utilities, Inc. (O&R) filed a letter notifying the Commission that 85% of the total MW capacity for its Tranches had been allocated. O&R has continued to assign projects to Tranche 3, consistent with the

[2] Mass market customers were defined as customers within a jurisdictional electric utility's residential or small commercial service class that are not billed based on peak demand.

[3] On-site mass market projects, such as residential rooftop solar, continue to receive NEM-style compensation and are subject to a separate capacity allocation from CDG projects. Options for compensating on-site mass market projects put into service after January 1, 2020 are under consideration in the VDER Phase Two Working Groups. The separate capacity allocation for on-site mass market projects has not yet been reached in any utility territory.

VDER Phase One Order. Since receiving O&R's notification, Department of Public Service Staff (Staff) has closely monitored the status of projects in O&R's territory and considered options for moving beyond Tranche 3. The full capacity allocation for Tranche 3 has now been reached in O&R's service territory; in fact, O&R's Tranche 3 now contains at least 28 MWs more than its original 12 MW size.

On December 1, 2017, Central Hudson Gas and Electric Corporation (Central Hudson) notified the Commission that 85% of its total allocation had been reached in its service territory. Subsequently, Central Hudson filed an update indicating that Tranche 3 has exceeded its 19 MW capacity, with 29.7 MW currently allocated to Tranche 3.

On August 29, 2017, the Secretary to the Commission (Secretary) issued a Notice seeking comments on Staff's Whitepaper that presented options and recommendations for moving beyond Tranche 3 (Whitepaper).[4] Although the Whitepaper acknowledged that the need for, timing, and design of these options might be impacted by VDER Phase One implementation issues that were under consideration by the Commission at that time,[5] it explained that expeditious consideration of those issues was necessary because a delay in moving beyond Tranche 3 could result in further impacts on non-participating ratepayers or in market uncertainty.

[4] Case 15-E-0751, supra, Staff Whitepaper on Community Distributed Generation Compensation After Tranche 3 (filed August 29, 2017).

[5] Those issues were subsequently resolved in the VDER Implementation Order. Case 15-E-0751, supra, Order on Phase One Value of Distributed Energy Resources Implementation Proposals, Cost Mitigation Issues, and Related Matters (issued September 14, 2017) (VDER Implementation Order).

In this Order, the Commission establishes a Tranche 4 for utilities where Tranche 3 is full or may be filled soon, including Central Hudson, O&R, and New York State Electric & Gas Corporation (NYSEG). Tranche 4 is established with an administratively set MTC, similar to Tranches 1 to 3, at a level below Tranche 3, and with a fixed capacity. Staff is directed to work with stakeholders to develop a recommendation for moving beyond Tranche 4, without unreasonably burdening particular sets of ratepayers.

STAFF WHITEPAPER

The Whitepaper discussed a number of options for compensating mass market members of CDG projects beyond Tranche 3. It analyzed the benefits and costs of each option, recommended particular options, and identified questions regarding which option should be selected and the implementation details related to the options.

One option discussed was continuing Tranche 3, by either increasing or eliminating the MW allocation. This approach would have the benefit of encouraging continued development of DER, which would both benefit participants in those projects and support the State's clean energy goals. However, the Whitepaper explained that this option would also impose further, and possibly unbounded, impacts on non-participating ratepayers, without due consideration of whether similar benefits could be achieved at lower costs. The Whitepaper argued that the fact that the first three Tranches have been exhausted so quickly suggests that total compensation resulting from the Value Stack plus Tranche 3 MTC in O&R's service territory is still above the compensation required to attract investment.

Another option discussed was eliminating the MTC and compensating all future projects based only on the Value Stack. According to Staff's Whitepaper, this option would be consistent with the intention expressed in the VDER Phase One Order to limit impacts on non-participating ratepayers to an incremental net revenue impact of 2%, and further the ultimate goal of the VDER proceeding to base compensation only on actual values created, rather than on other characteristics of the project like the identity of offtakers. However, given the significant drop this would represent in CDG compensation, Staff explained that this could completely eliminate viable economic opportunities for further development of CDG in O&R's service territory, to the detriment of both customers interested in participating in CDG and the State's clean energy goals. Furthermore, Staff noted that the MTC was intended to partially compensate for values not currently included in the Value Stack, which will be further developed in VDER Phase Two. As the VDER Phase Two consideration of the Value Stack has only just begun, Staff explained that it is not yet prepared to propose updates or additions to the Value Stack, and therefore eliminating the MTC would likely result in at least some CDG projects receiving compensation lower than the values they create.

A third approach explained in the Whitepaper was the establishment of a Tranche 4, and possibly further Tranches as well, using the same principles used to develop Tranches 1 through 3. In this approach, Tranche 4, and potentially Tranches 5, 6, and so on, would be established with a MW cap and an MTC based on a further 5% decrease of total compensation. This method, according to Staff, would offer the potential for further development at lower relative ratepayer impact than continuing Tranche 3. However, this method may still result in a higher ratepayer impact per project than necessary because the choice of a 5% decrease would be administratively established rather than based on actual market need. Given both the quick exhaustion of Tranches 1 through 3 and the Commission's pending consideration of methods to further reduce development costs, including consideration of increased maximum project sizes and consolidated billing, Staff argued that the MTC necessary to ensure financially viable projects may be substantially lower than what a 5%, or even 10%, reduction from Tranche 3 would yield.

The Whitepaper described and recommended a fourth option: establishment of a Tranche 4, sized at 12 MW based on the size of Tranche 3, with the MTC set through an auction process. Staff identified a number of benefits that could accrue if developers were required to bid an MTC level at which each would be willing to develop a fixed MW amount of Tranche 4 CDG projects in O&R's service territory. First, it would allow developers to rely on the most recent set of facts and knowledge base, as the auction would occur after the issuance of the VDER Implementation Order. Second, this process would allow the competitive solicitation to reveal the minimum MTC necessary to encourage the development of the next Tranche of CDG MWs. Staff noted that many design parameters would have to be decided before a solicitation could be conducted.

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking regarding the whitepaper was published in the State Register on September 13, 2017 [SAPA No. 15-E0751SP9]. The time for submission of comments pursuant to that Notice expired on October 30, 2017. In addition, the Secretary issued a Notice Soliciting Comments on Staff Whitepaper (Secretary's Notice) on August 29, 2017.

The Secretary's Notice requested initial comments by October 30, 2017, and reply comments by November 13, 2017. The comments received on the Whitepaper are summarized and addressed below.

SUMMARY OF COMMENTS

Joint Utilities

Central Hudson, Consolidated Edison Company of New York, Inc., O&R, Niagara Mohawk Power Corporation d/b/a National Grid, NYSEG, and Rochester Gas and Electric Corporation (collectively, the Joint Utilities) submitted comments urging the Commission to act quickly to close Tranche 3 for O&R, as well as for other utilities when they reach their Tranche 3 targets, to prevent further cost-shifting above the 2% target. The Joint Utilities support the Whitepaper's effort to continue the development of the CDG market in the most cost effective way for customers and also support the emphasis on "cost effectiveness, rather than queue order" in determining which projects are selected for further compensation. The Joint Utilities strongly support the Whitepaper's recommendation that the current Tranche 3 MTC provide a ceiling for any future CDG compensation rates.

The Joint Utilities agree that auction mechanisms are important policy tools in determining the minimum compensation needed to encourage the development of clean energy infrastructure. However, the Joint Utilities state that the specific circumstances present in O&R's service territory, including the small number of MWs at issue, call into question the efficacy of auction mechanisms to resolve the overflow of Tranche 3 for O&R. To the extent the Commission proceeds with an auction mechanism, the Joint Utilities recommend that the auction use a sealed-bid-single-clearing-price for the MTC. The Joint Utilities also recommend that the auction rules incorporate certain safeguards so that the auction has a sufficient number of bidders to provide a competitive result and monitor auction results to protect against any influence of market power.

In reply comments, the Joint Utilities note that O&R's non-participating residential customers are already projected to see bill impacts in the range of 2.5%, significantly above the 2% target. The Joint Utilities state that extending the Tranche 3 compensation to an additional 12 MW of projects would increase these bill impacts to 2.9%. The JU argues that the comments filed by the Clean Energy Parties (CEP), discussed below, do not offer any justification for this further increase in potential bill impacts. The Joint Utilities urge the Commission to act expeditiously to close Tranche 3 and establish a Tranche 4 mechanism that will appropriately manage the potential impacts.

The Joint Utilities also dispute CEP's argument that an auction should not be used because it "could result in compensation to CDG customers and projects that is lower than their actual value to the grid and society," noting that the MTC might already result in compensation to CDG customers and projects at a rate that is higher than the projects' actual value to the grid and society.

Solar Progress Partnership

The Joint Utilities, Borrego Solar Systems, Inc., Clean Energy Collective, LLC, and Sunrun, Inc. filed comments jointly as the Solar Progress Partnership (SPP) recommending that any policy tool developed should provide for the transparent, timely, and prospective closure of Tranche 3 to facilitate an orderly market transition. SPP recommends that to avoid market disruption, the Commission set the date for the closure of Tranche 3 at the same time that it establishes the subsequent mechanism. They state that a timeline should be established that provides for market continuity and recognizes the effects of the mechanism selected on the interconnection process. SPP agrees that given the market conditions in the O&R service territory, MTCs provided through a Tranche 4 mechanism should be capped at a level below those provided by the current Tranche 3.

SPP argues that, given the limited 12 MW size of the proposed auction mechanism and the fact that such a mechanism would be open only to CDG projects, an auction may not attract a sufficient number of bidders to produce a competitive outcome. SPP notes that many CDG and commercial-scale projects are already being developed on co-located 2 MW parcels in New York, leading to larger total project sizes, such that a 12 MW auction could result in awards to only one or two developers' projects. SPP explains that given this risk and the potential costs of preparing potentially lengthy submissions, many developers might not participate in the auction.

Given the relatively small size of the incremental tranche for O&R as proposed by Staff, and the need to establish market clarity, SPP recommends that the Commission consider an administrative process to set the MTCs for a Tranche 4 by discounting the existing Tranche 3 levels or by directing Staff to determine the appropriate MTC compensation level to allow the CDG market to continue. The level should be selected to allow for a smooth transition to the next phase of the VDER tariff while limiting cost impacts for non-participating customers.

Clean Energy Parties

The Coalition for Community Solar Access, Pace Energy and Climate Center, the Solar Energy Industries Association, and Vote Solar (Clean Energy Parties or CEP) argue that Tranche 3 must remain open until a subsequent mechanism is established and available to ensure market continuity. Closing Tranche 3 without a solution for Tranche 4 fully in place and available would cause major disruption to customer and developer expectations and represent a significant setback for the New York DER market and REV goals. CEP recommend keeping Tranche 3 open until more real-world data is available regarding project attrition from the existing VDER tranches and the financeability of the VDER Phase One value stack tariff, as demonstrated by projects moving into construction.

CEP state that the MTC continues to be necessary to serve as a proxy for the values not currently accounted for the in the VDER tariffs. They argue that an auction approach, focused on achieving the lowest possible value, is not an appropriate or effective tool for establishing an MTC as it could result in compensation to CDG customers and projects that is lower than their actual value to the grid and society. CEP explains that auctions for distributed generation are risky, and where tried, have often failed to drive DER deployment due to problems with speculative bidding and attrition.

Once better market data is available to inform establishment of a Tranche 4, CEP recommend the Commission establish a Tranche 4 for O&R with an additional step down to the MTC. CEP states that a 12 MW Tranche 4 with a 5% step down may be appropriate. CEP recommends that Tranche 4 be followed by further tranches with an additional 5% step down for each tranche until the MTC level reaches 80% of the base retail rate as calculated pursuant to the VDER Phase One Order, at which point the credit rate to CDG customers should remain at that 80% of base retail rate level until the Phase Two VDER tariff is implemented.

CEP states as an alternative that MTC levels could be administratively established for several additional tranches based on the New York State Energy Research and Development

Authority's (NYSERDA) modeling of CDG project economics. CEP states NYSERDA has proven its expertise in modeling CDG project economics and market uptake, as the development patterns in the various territories and tranches to date closely track those predicted by NYSERDA.

In reply comments, CEP take issue with the Joint Utilities' assertion that the impact to O&R's non-participating residential customers "has grown" and "will exceed" the 2% target established. CEP argues that the Joint Utilities' statement is not based on real-world data but on a set of assumptions about the projects currently holding tranche reservations, including the assumption that there will be no project attrition, and should therefore be given limited weight.

LEGAL AUTHORITY

As described in the VDER Phase One Order, the Commission has the authority to direct the treatment of DER by electric corporations pursuant to, inter alia, Public Service Law (PSL) §§ 5(2), 66(1), 66(2), and 66(3). Pursuant to the PSL, the Commission determines what treatment will result in the provision of safe and adequate service at just and reasonable rates consistent with the public interest and the efficiency of the electric system.

DISCUSSION AND CONCLUSION

Establishment of Tranche 4 and Continuation of the MTC

The Commission established Tranches 0 through 3 to as transitional mechanisms to ensure robust CDG development while managing potential impacts on non-participating ratepayers. In order to continue to meet those goals, the Commission must address the full capacity of Tranche 3 in O&R and Central

Hudson, as well as the potential that Tranche 3 will be filled at other utilities, particularly NYSEG.

Extending Tranche 3 would unreasonably increase the incremental net revenue impact and would not be consistent with the transitional nature of the Tranche and MTC design. While it is true that, as CEP argues, some projects currently assigned to Tranches 0 through 3 may not be constructed, the Commission expects that any attrition will be relatively limited given the significant capital and project maturity requirements for receiving a tranche assignment. Furthermore, the fact that Tranche 3 has been filled so quickly in O&R and Central Hudson indicates that the Tranche 3 MTC provides sufficient compensation for the development of a variety of projects in those service territories.

On the other hand, completely eliminating the MTC, at this time, and compensating new projects based on the Value Stack alone, would be unreasonable given that the MTC was partially intended to compensate for the incompleteness of Value Stack. Moreover, this would result in levels of compensation expected to be too low to maintain momentum in the market. For those reasons, the establishment of a Tranche 4, with an MTC lower than Tranche 3's MTC, is appropriate.

Determination of an MTC for Tranche 4

The Whitepaper discusses two alternatives for setting the MTC value for Tranche 4: (1) using an auction to select an MTC value; or (2) administratively determining an MTC value based on a percentage reduction.

All commenters recommend that, if a Tranche 4 is created, that the MTC be determined administratively rather than through an auction, primarily due to the small scale of the proposed new Tranche as compared to the cost and difficulty of developing and planning for a new auction on the part of the

Commission and Staff, utilities, and the developers. The Commission agrees with commenters that the complexity of setting up an auction for such a small quantity of MWs outweighs the auction's potential benefits at this time.

It is therefore appropriate to administratively set an MTC for Tranche 4. Doing so is consistent with the approach taken for Tranches 1 through 3 and therefore will not create increased transaction costs, confusion, or uncertainty. However, setting an MTC that is a 5% reduction from Tranche 3, as CEP suggest, could result in a higher MTC than is necessary to support continued development.

The Commission agrees with CEP that NYSERDA has demonstrated expertise in modeling CDG costs and compensation needs. Accordingly, based on Staff and NYSERDA's analysis regarding the level of compensation necessary for a viable Tranche 4, the Commission has determined an appropriate Tranche 4 MTC for each service territory. O&R's Tranche 3 MTC, at $0.0731 for customers in Service Class (S.C.) 1, was substantially higher than the MTCs of other utilities with substantial uptake.[6] Based on analysis of the necessary compensation for a viable market, O&R's Tranche 4 MTC will be designed to provide compensation at approximately 75% of the base retail rate.[7] While O&R will perform the final calculation based on previously established methodologies, the estimated O&R Tranche 4 MTC is to be $0.0461 per kWh for customers in S.C. 1

[6] For example, Central Hudson's MTCs for the fully subscribed Tranches 1 through 3 were $0.0599, $0.0524, and $0.0449, respectively.

[7] This Tranche 4 MTC will be calculated based on the methodology established in the VDER Phase One Order and VDER Implementation Order, by subtracting the "Estimated Value Stack" from 75% of the "Base Retail Rate," as defined in those orders.

and $0.0236 per kWh for S.C. 2 – Non-Demand, compared to the Tranche 3 MTCs of $0.0731 per kWh for customers in S.C. 1 and $0.046 per kWh for S.C. 2 – Non-Demand.

For Central Hudson, as well as other upstate utilities where Tranche 3 may fill up in the future, a more gradual decline is necessary due to the lower starting values. In those utilities, a Tranche 4 MTC based on providing compensation at approximately 85% of the base retail rate is appropriate.[8] While the utilities will perform the final calculations based on previously established methodologies, the Central Hudson Tranche 4 MTC is estimated to be $0.0374 per kWh for S.C. 1 and $0.0397 per kWh for S.C. 2 – Non-Demand, compared to the Tranche 3 MTCs of $0.0449 per kWh for customers in S.C. 1 and $0.0474 per kWh for S.C. 2 – Non-Demand.

These MTCs will continue to provide the opportunity for CDG development in O&R and Central Hudson's territories while reasonably limiting the impact on non-participating ratepayers. Both territories will still have MTCs higher than the MTCs for fully subscribed Tranches at NYSEG and other utility territories and the Commission expects developers to focus on developing projects that offer the most benefits as compared to costs, including by taking advantage of cost-reducing methods currently under consideration by the Commission, including an increase in maximum project capacity and consolidated billing.

<u>Size of Tranche 4</u>

Staff originally proposed that O&R's Tranche 4 be capped at 12 MW, which was the design size for Tranche 3. Commenters did not recommend a specific size for Tranche 4, although CEP argued that 12 MW is too small to prevent a

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[8] This Tranche 4 MTC will be calculated by subtracting the "Estimated Value Stack" from 85% of the "Base Retail Rate."

significant downturn in CDG activity. To address this issue and recognizing the potential that the Commission may increase the maximum project capacity to 5 MW, Tranche 4 will be capped at 15 MW in O&R. Applying a similar approach, Tranche 4 will be limited to 20 MW in Central Hudson and 80 MW in NYSEG. As substantial capacity remains in all of the other utility territories, the Commission will not establish Tranche 4 sizes or MTCs for these utilities at this time, as a further evolved VDER tariff may become available through the Phase 2 process before Tranche 4 would be necessary.

Compensation Beyond Tranche 4

Because placement in a Tranche represents a 25-year commitment and non-participating customers will be impacted over this period, the Commission is concerned with ensuring an appropriate limit is applied based on the best information available. The estimates provided by the utilities, as well as analysis conducted by Staff, demonstrates that the potential incremental net revenue impact on O&R and Central Hudson from projects currently enrolled in Tranches 0 through 3 is above the 2% target. Creating an unbounded Tranche 4, or establishing further Tranches using the same declining MTC methodology, would result in the imposition of an unreasonably high percent of impacts for the development of DER on non-participating residential ratepayers in O&R’s service territory. A similar problem could arise in Central Hudson or any other utility territory where an MTC was offered with no capacity limit. For that reason, once the capacity limit is reached in Tranche 4 in a utility territory, no further projects will be enrolled in Tranche 4 in that utility territory.

To avoid creating uncertainty regarding project compensation that would curtail development activity, Staff is directed to work with stakeholders, as well as NYSERDA, to develop and present recommendations for addressing the issue of compensation for projects once Tranche 4 is full. Staff shall file a whitepaper on this topic by April 30, 2018. In this whitepaper, Staff should focus on methods for ensuring that the costs for DER deployment do not unreasonably fall on one group of ratepayers. One option that should be considered is the development of a statewide base MTC, determined either administratively or through an auction.

Implementation of Tranche 4

With the issuance of this Order, Tranche 3 will be closed in Central Hudson and O&R and Tranche 4 will be open. CDG projects in Central Hudson and O&R's territories that make payment of 25% of interconnection costs, or execute a Standard Interconnection Contract if no such payment is required, after this Order is issued shall be placed in Tranche 4, until Tranche 4 is full. Once NYSEG reaches its original allocated capacity in Tranche 3, 77 MW, Tranche 3 will close and Tranche 4 will open in NYSEG's territory. The Commission anticipates taking further action before Tranche 4 is full based on the whitepaper that will be filed on April 30, 2018. However, if Tranche 4 is filled in a utility territory before a further decision is made by the Commission, any further projects will be entitled only to compensation based on the Value Stack with no MTC. Because the VDER tariffs, including the issues addressed in this Order, have been the subject of extensive public project, newspaper publication is unnecessary and is therefore waived.

The Commission orders:

1. Central Hudson Gas & Electric Corporation (Central Hudson), New York State Electric & Gas Corporation (NYSEG), and Orange and Rockland Utilities, Inc. (Orange & Rockland) are directed to file tariff leaves implementing Tranche 4 consistent

with the requirements in the body of this Order on not less than fifteen days' notice to become effective on March 1, 2018.

2. The tariff leaves filed by Central Hudson and O&R shall establish that any community distributed generation project that has not been placed in a Tranche based on its payment of 25% of interconnection costs or execution of a Standard Interconnection Contract by January 18, 2018 will be placed in Tranche 4 at the time when 25% of its interconnection costs have been paid, or a Standard Interconnection Contract has been executed if no such payment is required, until Tranche 4 is full.

3. The tariff leaves filed by NYSEG shall establish that any community distributed generation project for which 25% of interconnection costs are paid, or a Standard Interconnection Contract is executed if no such payment is required, after Tranche 3 is filled will be placed in Tranche 4, until Tranche 4 is full.

4. The tariff leaves filed by Central Hudson, O&R, and NYSEG shall establish that any community distributed generation project for which 25% of interconnection costs are paid, or a Standard Interconnection Contract is executed if no such payment is required, after Tranche 4 is filled will receive compensation based on the Value Stack with no Market Transition Credit unless and until the Public Service Commission takes further action.

5. Department of Public Service Staff shall file, by April 30, 2018, a whitepaper addressing the issue of compensation for projects once Tranche 4 is full, as discussed in the body of this Order.

6. The requirements of §66(12)(b) of the Public Service Law and 16 NYCRR §720-8.1 concerning newspaper publication of the tariff amendments described in Ordering Clause No. 1 is waived.

7. In the Secretary's sole discretion, the deadlines set forth in this order may be extended. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least one day prior to the affected deadline.

8. This proceeding is continued.

By the Commission,

(SIGNED) KATHLEEN H. BURGESS
Secretary