STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on September 19, 2024

COMMISSIONERS PRESENT:

Rory M. Christian, Chair
James S. Alesi
David J. Valesky
John B. Maggiore
Uchenna S. Bright
Denise M. Sheehan, recusing
Radina R. Valova

CASE 18-E-0138 - Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure.

ORDER APPROVING MODIFICATIONS TO MAKE-READY PROGRAM

(Issued and Effective September 20, 2024)

BY THE COMMISSION:

INTRODUCTION

On March 15, 2024, Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc. (Con Edison), Niagara Mohawk Power Corporation d/b/a National Grid (National Grid), New York State Electric & Gas Corporation, Orange & Rockland Utilities, Inc., and Rochester Gas & Electric Corporation (collectively, the Joint Utilities), submitted a petition requesting changes to the electric vehicle (EV) Make-Ready Program (Petition). In the Petition, the Joint Utilities request that the Public Service Commission (Commission) modify

two requirements from the Midpoint Review Order.[1] First, the Joint Utilities request modifications concerning the compliance dates for communication standards for electric vehicle supply equipment (EVSE) hardware and software in the light-duty Make-Ready Program and recommend that these compliance dates be subject to change based on supply chain constraints. Second, the Joint Utilities request an expansion to the eligibility criteria for incentives for customer-side costs for the Medium- and Heavy-Duty (MHD) Pilot. The Joint Utilities state that these proposed modifications would help enable New York State to achieve its near-term clean transportation goals, which may otherwise be unattainable absent the relief sought in the Petition.

By this Order, the Commission approves modifications to the communication standards requirement for EVSE hardware and software but finds that further changes to the compliance dates will be subject to Commission approval. The Commission also approves the proposed expanded eligibility criteria for customer-side costs for the MHD Pilot.

BACKGROUND

The Commission established the light-duty EV Make-Ready Program to support the buildout of a comprehensive charging network of Level 2 (L2) and direct current fast chargers (DCFC) across New York State.[2] The Make-Ready Program

[1] Case 18-E-0138, Order Approving Midpoint Review Whitepaper's Recommendations with Modifications (issued November 16, 2023) (Midpoint Review Order).

[2] Case 18-E-0138, Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs (issued July 16, 2020) (Make-Ready Order).

provides incentives covering 50 to 100 percent of the eligible costs to make a site ready for EV charging.

The Make-Ready Order discussed establishing communication standards, such as International Standards Organization (ISO) 15118 and Open Charge Point Protocol (OCPP), as ways to ensure interoperability of EVSE and reduce the risk of stranded assets. However, the Commission ultimately declined to adopt any communication standard requirement in the Make-Ready Order, citing the need for more time and experience before adopting any specific standards.[3]

The Make-Ready Order also established the MHD Pilot to support a direct reduction of diesel emissions located in disadvantaged communities, allocating $9 million to Con Edison to implement their Fleet DCFC Make-Ready Program, which was approved in their rate plan, and $15 million to the other members of the Joint Utilities. The Make-Ready Order specified that participants in the MHD Pilot must also receive support from the New York Truck Voucher Incentive Program managed by the New York State Energy Research and Development Authority (NYSERDA) or the New York City Clean Trucks Program managed by the New York City Department of Transportation to be eligible for incentives. Participation in these programs evidences the fact that a fleet owner has replaced an older, heavily polluting, diesel truck with clean vehicle technology that dramatically reduces or eliminates tailpipe pollution.[4]

The Make-Ready Order directed Department of Public Service staff (Staff) to conduct a midpoint review of the Make-Ready Program. On March 1, 2023, Staff filed the Department of Public Service Staff Electric Vehicle Make-Ready Program

[3] Make-Ready Order, p. 111.

[4] Make-Ready Order, pp. 129-131.

Midpoint Review and Recommendations Whitepaper (Whitepaper), in this proceeding. The Whitepaper outlined the progress of the Make-Ready Program and offered several suggestions for modifications to the program, based on lessons learned and stakeholder feedback, for consideration by the Commission.

Relevant to the Petition before the Commission, the recommendations proffered in the Whitepaper included the adoption of hardware and software requirements, OCPP version 1.6 or later and ISO 15118, respectively.[5] No specific timeline for adoption was provided in the Whitepaper. The Whitepaper also recommended an expansion of the MHD Pilot eligibility requirements to include the Environmental Protection Agency's (EPA) Clean School Bus Program, as well as any other relevant programs with disadvantaged community requirements established by the federal Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) as qualified voucher programs.[6]

Public comments on the Whitepaper expressed support for requiring ISO 15118 hardware readiness and cited criteria from the Federal Highway Administration (FHWA) as an already existing example of required conformance to ISO 15118. Commenters EDF and Advanced Energy United/ACE NY expressed that ISO 15118 can improve EV/EVSE reliability and future-proof customer funded assets.[7]

Following the public comment period, the Commission issued the Midpoint Review Order, which approved the Whitepaper's recommendations, with modifications. Among the recommendations adopted, the Commission directed each of the

[5] Whitepaper, p. 36.

[6] Whitepaper, p. 50.

[7] Case 18-E-0138, Comments regarding Midpoint Review Whitepaper, Environmental Defense Fund (EDF), p. 13 (filed May 15, 2023); 2) Advanced Energy United/ACE NY, p.9, (filed May 15, 2023).

Joint Utilities to confirm that any installation funded with Make-Ready Program incentives is in alignment with ISO 15118 Parts 2 and 20 and OCPP version 2.0.1 or later as a requirement for L2 and DCFC chargers.[8] The Midpoint Review Order required the Joint Utilities to ensure hardware conformance by Make-Ready incentive recipients with ISO 15118 and OCPP version 2.0.1 or later, within 30-days and one year, respectively, from the Midpoint Review Order issuance date, and software conformance with ISO 15118 within one year from the Midpoint Review Order issuance date. These timelines were set with the intention of aligning the communication standards for the Make-Ready Program with the already existing ISO 15118 and OCPP 2.0.1 requirements issued by the FHWA for the National Electric Vehicle Infrastructure (NEVI) program, as suggested by commenters. The program requirements from the FHWA required hardware conformance to ISO 15118 Part 3 and hardware capability of ISO 15118 Part 2 and 20 by February 28, 2023, and ISO 15118 Part 2 software conformance with Plug and Charge enabled and conformance to OCPP 2.0.1 by February 28, 2024.[9] The conformance deadlines issued in the Midpoint Review Order aimed to give program participants time to adjust and included additional time compared to the FHWA criteria.

The Midpoint Review Order also adopted the Whitepaper's recommendation to include participation in the EPA's transportation electrification programs with associated disadvantaged community requirements as an additional qualifying condition for MHD Pilot participation, as well as NYSERDA's NY School Bus Incentive Program. Additionally, the Midpoint Review

[8] Midpoint Review Order, p. 60.

[9] National Electric Vehicle Infrastructure Requirements, Interoperability of electric vehicle charging infrastructure, 23 C.F.R. §680.108.

Order extended incentives for up to 50 percent of customer-side make-ready costs drawing from utility specific dollar per kW ($/kW) baseline developed for DCFC. Customer-side costs were determined to only be eligible for sites located within a disadvantaged community and that meet the program participation requirement.[10]

THE PETITION

In the Petition, the Joint Utilities request two modifications to requirements contained within the Midpoint Review Order. The first requested modification from the Joint Utilities is to revise the Make-Ready Program's communication standard requirements for EVSE hardware and software. The second request is to alter the incentive eligibility criteria for customer-side costs in the MHD Pilot.

EVSE Communication Standards

The Joint Utilities state that based on industry research, developer feedback, and technology provider interviews, the communication standards and associated timelines that the Commission approved in the Midpoint Review Order cannot be met. The Joint Utilities caution that the communication standard requirements, as written, may impede the progress of EVSE deployment and cause certain projects to not move forward in development.

In the Petition, the Joint Utilities assert that, based on the current state of the market, the software standards required by the Midpoint Review Order are a barrier for L2 and DCFC EVSE deployments, while the hardware standards are a

[10] The Midpoint Review Order uses the Climate Justice Working Group's Disadvantaged Communities Criteria. Midpoint Review Order, footnote 46. See also, https://climate.ny.gov/Resources/Disadvantaged-Communities-Criteria.

barrier for L2 EVSE deployment. The Joint Utilities specify that testing procedures to ensure conformance with ISO 15118 Part 20 are still under development and that station developers are unable to procure compliant chargers, which can result in the delay of applications to the Make-Ready Program.

The Joint Utilities request several changes to the communication requirements imposed in the Midpoint Review Order. First, the Joint Utilities request that any communication standards only apply to newly committed projects rather than projects already under construction or that are installed. Second, the Joint Utilities request clarification that software conformance for ISO 15118 apply to either Part 2 or Part 20, not both ISO 15118 Parts 2 and 20. This revised software requirement would apply to DCFC projects committed on or after November 16, 2024, and for L2 projects committed on or after June 1, 2025. Third, the Joint Utilities request that hardware conformance apply to ISO 15118 Part 2 or Part 20, not both ISO 15118 Part 2 and Part 20, for DCFC projects committed on or after December 16, 2023, and for L2 projects committed on or after June 1, 2025. Lastly, the Joint Utilities request that the deadline for OCPP 2.0.1 or later hardware conformance be postponed and only be effective for L2 chargers committed on or after June 1, 2025, and DCFC chargers committed on or after November 16, 2024. The Joint Utilities recommend that the dates for hardware and software conformance be subject to change based on any further supply chain constraints.

Through conversations with industry experts and EVSE manufacturers, the Joint Utilities ascertained that the current communication standards will be met by mid-2025. Because of supply chain constraints, EVSE manufacturers are prioritizing DCFC over L2 chargers for ISO 15118 Part 2 hardware compliance. Manufacturers note that, in order to retrofit already deployed

L2 EVSE for hardware conformance with ISO 15118 Part 2 or Part 20, the entire EVSE must be redesigned to make room for the physical chips that run ISO 15118 Part 2 or Part 20, making it much more likely that L2 EVSE with ISO 15118 Part 2 or Part 20 capabilities will only be realized in the next generation of L2 equipment, which is estimated to be in mid-2025. The Joint Utilities state that if the current communication standards are not modified, there is a risk that 2,812 L2 plugs and 153 DCFC plugs would be out of compliance with the ISO 15118 Parts 2 and 20 software requirements and therefore be ineligible to receive incentives that developers and municipalities were counting on to cover the EVSE installation costs. This outcome, according to the Joint Utilities, is undesirable and may hinder New York State from achieving its goal of constructing a cohesive and complete statewide EV charging network.

The Joint Utilities explain how ISO 15118 Parts 2 and 20 are used to communicate between an EV and a charging station, allowing for plug-and-charge capability. Rather than requiring payment with a credit card, plug-and-charge allows an EV to plug into a charging station and be billed because the charging station can recognize the EV and charges the associated account. The Joint Utilities state that ISO 15118 Part 20 addresses wireless charging, bi-directional charging, and enhanced security features, but note that there is currently no conformance test for ISO 15118 Part 20, resulting in manufacturers not adopting that standard presently. For this reason, the Joint Utilities request that Make-Ready Program eligibility only require conformance to ISO 15118 Part 2 or Part 20 but not both, as is currently the case under the requirements of the Midpoint Review Order. Evaluating ISO 15118 hardware conformance, the Joint Utilities clarify in footnotes that ISO 15118 Part 3 governs the physical layer of the communication

standard and acts as a more accurate and precise measure of hardware readiness for ISO 15118.[11]

MHD Pilot Customer-Side Cost Eligibility

Currently, MHD Pilot participants are limited to locations entirely within a disadvantaged community. The Joint Utilities request that the criteria used to determine MHD Pilot customer-side cost eligibility expand to include projects that are located partially within a disadvantaged community and project parcels adjacent to a disadvantaged community. The Joint Utilities reason that projects located partially within a disadvantaged community or adjacent to a disadvantaged community serve the purpose of enabling clean transportation, lowering emissions, and improving health outcomes within disadvantaged communities. The Joint Utilities point to areas within Con Edison's service territory where there are large commercial customers whose parcels are only partially in a disadvantaged community and are therefore ineligible to participate in the MHD Pilot, even though such participation may have meaningful impacts on emissions reductions and result in improved health outcomes for the local community.

The Joint Utilities also request that MHD Pilot customer-side cost eligibility criteria be expanded to include sites directly adjacent to disadvantaged communities, consistent with the Commission's directives for the Micromobility Pilot and enhanced incentive tier for curbside L2 chargers in the Make-Ready Program, as discussed in the Midpoint Review Order. The Joint Utilities state that aligning the MHD Pilot eligibility for parcels adjacent to disadvantaged communities with the Micromobility Pilot and enhanced incentive tier for curbside L2 chargers would help expand the area of potential improved health

[11] Petition, footnote 32.

impacts that result from MHD fleet electrification. The Joint Utilities describe a school bus depot in National Grid's service territory that serves a disadvantaged community as an example of a site that has high potential to reduce emissions for a disadvantaged community but is ineligible to participate in the MHD Pilot because the depot itself is adjacent to, rather than inside, the disadvantaged community.

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rule Making (Notice) was published in the State Register on April 10, 2024. The time for submission of comments pursuant to the Notice expired on June 10, 2024. The 26 comments received in response to the Notice are summarized in Appendix A below.

LEGAL AUTHORITY

Pursuant to Public Service Law (PSL) §§5, 65, and 66, the Commission has the legal authority to take the actions prescribed in this Order. In particular, PSL §5 grants the Commission with authority to direct utilities to "formulate and carry out long-range programs, individually or cooperatively, with economy, efficiency, and care for the public safety, the preservation of environmental values and the conservation of natural resources." PSL §65 authorizes the Commission to ensure that every electric corporation furnishes and provides safe and adequate service, instrumentalities, and facilities at just and reasonable rates. Further, PSL §66(2) grants the Commission authority to "examine or investigate the methods employed by ...persons, corporations and municipalities in manufacturing, distributing and supplying ... electricity ... and have power to order such reasonable improvements as will best promote the

public interest, preserve the public health and protect those using such ... electricity. The Make-Ready Program, and modifications thereto, fall within the scope of this authority.

DISCUSSION

The Commission approved the Whitepaper's recommendation regarding the communication standards in the Midpoint Review Order with the intent and understanding that these standards would provide numerous benefits to EVSE developers and users, including interoperability between EVSE, EVs, and back-end systems, smooth customer transactions during charging sessions, as well as helping to enable vehicle-to-grid and managed charging services. Giving customers the ability to charge their EV, regardless of what third-party company owns the EVSE, thereby providing a positive customer experience, is important in promoting confidence in EVs as a viable alternative to fossil-fueled internal combustion engine (ICE) vehicles. Interoperability also reduces the risk of stranded assets if a new station owner purchases EVSE from another station owner.

The Commission also modified the eligibility criteria for the MHD Pilot in the Midpoint Review Order, specifying that these projects must be located within disadvantaged communities to help spur MHD vehicle electrification in such communities, where the replacement of fossil-fueled ICE vehicles with EVs would result in the greatest impact to air quality and corresponding positive health outcomes.

EVSE Communication Standard Modifications

The Commission approves the request by the Joint Utilities as it relates to implementing software and hardware requirements for ISO 15118 and OCPP 2.0.1 or later. The Commission is persuaded that the requested modifications will expand the number of acceptable chargers in the Make-Ready

Program and more closely align with the industry's current state of implementation of these standards. As discussed above, the ISO 15118 and OCPP 2.0.1 requirements were instituted with the intent of improving the customer charging experience and promoting interoperability of EVSE. The large majority of stakeholders, while agreeing with the implementation of ISO 15118 and OCPP 2.0.1 standards in the Whitepaper, also agreed with the proposed communication standard modifications by the Joint Utilities, stating that the required timeline for hardware and software conformance described in the Midpoint Review Order is out-of-step with the industry at present.

Specifically, the Commission modifies the Midpoint Review Order as follows. First, the effective date for ISO 15118 hardware and software conformance is postponed from December 16, 2023, and November 16, 2024, respectively, to June 1, 2025, for L2 chargers. Second, the Joint Utilities are directed to utilize the project commitment date, instead of installation date, when determining project compliance obligations for software and hardware conformance for L2 chargers.[12]

Additionally, the Commission clarifies the following Midpoint Review Order requirements. First, the ISO 15118 software requirement for DCFC and L2 projects pertains to Parts 2 or 20, not Parts 2 and 20. Second, the Commission clarifies that the ISO 15118 hardware requirement corresponds to meeting ISO 15118 Part 3 as explained in the Joint Utilities' Petition in addition to being capable of ISO 15118 Part 2 or Part 20.[13]

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[12] The commitment date refers to when a project signs the Program Agreement (i.e., a contract in the Make-Ready Program where the participant agrees to the service connection layout, the initial incentive offering, and other terms provided by the utility, before the participant can start construction).

[13] Petition, footnote 32.

ISO 15118 hardware requirements apply to DCFC projects committed on or after December 16, 2023. Finally, the hardware requirement for OCPP 2.0.1 or later is effective for DCFC projects committed on or after November 16, 2024, and for L2 projects committed on or after June 1, 2025.

The Commission also agrees with the comments of the Environmental Defense Fund that a gray area may exist for DCFC chargers committed on or after December 16, 2023, that are subject to the ISO 15118 hardware conformance requirements, if the Commission were to adopt the Joint Utilities' proposal to modify the requirement for ISO 15118 software conformance to go into effect for DCFC projects committed on or after November 16, 2024. These projects would be hardware-ready for ISO 15118 but have no corresponding obligation to achieve software conformance in the future. Therefore, the Commission maintains the requirement that DCFC chargers shall achieve software conformance with ISO 15118 Part 2 or Part 20 by November 16, 2024; however, this requirement only applies to DCFC projects committed on or after December 16, 2023. A summary of the required communications standards by commitment date and project type is attached in Appendix B and is adopted by the Commission.

The Commission, recognizing the developing state of the market as emphasized in the Joint Utilities' Petition and public comments, directs Staff to convene a technical conference within one year of the issuance of this Order to review the state of EVSE standards. The technical conference should discuss, at a minimum, the consideration of additional program requirements pertaining to ISO 15118 Part 20 and Transport Layer Security 1.3, as well as the status of communications standards requirements in the EVSE programs administered by the California Energy Commission and the FHWA.

Finally, the Commission declines to adopt the Joint Utilities' recommendation that the dates for hardware and software conformance be subject to change based on any further supply chain constraints. Rather, the Commission finds that EDF's suggestion that the Joint Utilities be required to file a petition that provides evidence of supply chain constraints is a reasonable approach and therefore requires the Joint Utilities to submit such a petition if they seek to modify the hardware and software conformance requirements established in this Order.

Medium and Heavy-Duty Pilot Customer-Side Cost Eligibility Modifications

The Commission approves the Joint Utilities' request to modify the MHD Pilot customer-side cost eligibility to include projects that are located partially within or adjacent to a disadvantaged community, aligning the MHD Pilot with the requirements of the Micromobility Pilot approved in the Midpoint Review Order.[14] The Commission is persuaded by the Joint Utilities' reasoning that expanding the eligibility criteria for customer-side incentives in the MHD Pilot to include projects adjacent to and partially located within disadvantaged communities would further the Commission's goal of providing health benefits within disadvantaged communities.

In the Midpoint Review Order, the Commission made projects located in disadvantaged communities and publicly accessible locations eligible for customer-side incentives in the MHD Pilot, in order to focus the limited budget on the highest priority use-cases. As stated earlier, siting MHD Pilot projects in disadvantaged communities has the potential to

[14] An area is adjacent to a disadvantaged community where the disadvantaged community border stops short of the street (i.e., if one side of the street is in a designated Disadvantaged Community, the opposite side of the street would be adjacent). Midpoint Review Order, p. 40, footnote 63.

reduce exposure to emissions in the communities impacted most by transportation-related air pollution. The Commission recognizes that projects adjacent to and partially located in disadvantaged communities are likely to provide similar air quality and health benefits to projects fully located within disadvantaged communities. The Commission also recognizes that the one example by National Grid is likely not the only situation where an otherwise-eligible site is located partially within or adjacent to a disadvantaged community. Therefore, the Commission expands the eligibility for customer-side incentives in the MHD Pilot to projects located partially within a disadvantaged community or adjacent to a disadvantaged community, employing the same definition of adjacent used in the Midpoint Review Order where an area is adjacent to a disadvantaged community where the disadvantaged community border stops short of the street.[15]

Implementation Plan and Program Participant Guide

The Joint Utilities are directed to update the utility-specific Make-Ready Program Implementation Plans and common Make-Ready Program Participant Guide to reflect the modifications to EVSE communication standards and conformance deadlines directed in this Order. In addition, the Joint Utilities are directed to update the MHD Pilot Implementation Plan to reflect the modifications effectuated by the Commission in this Order. The Commission directs the Joint Utilities to file the updated Implementation Plans and Program Participant Guide within 30 days of the issuance of this Order.

[15] Midpoint Review Order, p. 40.

CONCLUSION

The Commission is confident that the modifications effectuated herein will result in improved customer outcomes and help achieve the State's climate and zero-emission vehicle goals. The modification in effective dates for the communication standard requirements in the Make-Ready Program balances the need for increased interoperability and improved charging experience with the current state of the rapidly evolving EVSE market. In addition, the expanded eligibility criteria for the customer-side incentives in the MHD Pilot will help to increase the number of residents in disadvantaged communities that will benefit from MHD transportation electrification through reduced exposure to fossil-fueled ICE pollutants.

The Commission orders:

1. Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, and Orange and Rockland Utilities, Inc. are directed to ensure that recipients of Make-Ready Program funds are in compliance with the deadlines for EVSE communication standards for ISO 15118 hardware and software conformance and OCPP 2.0.1 or later hardware conformance, as described in the body of this Order and in Appendix B.

2. Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, and Orange and Rockland Utilities, Inc. are directed to file a petition if there becomes a need to further modify the hardware

and software compliance dates established in the body of this Order.

3. Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, and Orange and Rockland Utilities, Inc. shall file updated Make-Ready Program Implementation Plans and an updated Make-Ready Program Participant Guide reflecting the modifications described in the body of this Order no later than 30 days from the issuance of this Order.

4. Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, and Orange and Rockland Utilities, Inc. shall file an updated Medium- and Heavy-Duty Vehicle Make-Ready Pilot Program Implementation Plan reflecting the modifications described in the body of this Order no later than 30 days from the issuance of this Order.

5. The Commission directs that Department of Public Service Staff shall convene a technical conference within one year of the effective date of this Order, as described in the body of this Order.

6. This proceeding is continued.

By the Commission,

(SIGNED) MICHELLE L. PHILLIPS
Secretary

Appendix A - Summary of Stakeholder Comments

ABB, Alliance for Clean Energy NY, Apex Energy Tek LLC, Blink Charging Co., Bright Energy Services, City of New York, DVM Industries, Eaton Corporation, Energy Plus NY, Environmental Defense Fund, EVGo, EV Connect, Franklin Energy, Green Water and Power NYC Electrical LLC, INF Associates LLC, Integra Energy, It's Electric Inc, Powerflex, Revel, Rivian, Storke LLC, Tesla, Woodhollow Energy Group (Commentor Group)

Commentor Group supports modifying the charger communication standards included in the Midpoint Review Order. Commentor Group acknowledges that chargers with ISO 15118 Part 2 and OCPP 2.0.1 provide an improved experience to users, but argues that the December 16, 2023 and November 16, 2024 compliance deadlines in the Midpoint Review Order outpace the ability of the market to provide conforming L2 equipment. Commentor Group asserts that requiring conformance to both ISO 15118 Part 2 and Part 20 does not align with the National Electric Vehicle Infrastructure (NEVI) program's communication standard requirements or the communication standard requirements of other state programs. Commentor Group also states that ISO 15118 Part 20 software conformance is not yet standardized across automakers and lacks testing protocols.

Commentor Group requests that the Commission adjust the communication standards in line with the Joint Utilities' proposal to clarify that ISO 15118 conformance apply to either ISO 15118 Part 2 or Part 20 and for the adjusted standards to apply only to projects committed after the effective dates. Commentor Group further requests that the Commission modify the

December 16, 2023 and November 16, 2024 compliance deadlines, with most supporting the Joint Utilities' proposal of June 1, 2025 for ISO hardware and software conformance and OCPP 2.0.1 hardware conformance.

Apex Energy Tek LLC and Blink Charging Co. request the December 16, 2023 deadline requiring L2 hardware be capable of ISO 15118 Part 2 and Part 20 be extended by 18 months to June 16, 2025 and the November 16, 2024 deadline requiring L2 and DCFC electric vehicle service equipment to support ISO 15118 Part 2 software and OCPP 2.0.1 hardware be extended six months to May 16, 2025.

The City of New York (The City) requests that the December 16, 2023 deadline requiring L2 hardware be capable of ISO 15118 Part 2 and Part 20 be extended 18 months to June 30, 2025 and the November 16, 2024 deadline requiring L2 and DCFC electric vehicle service equipment to support ISO 15118 Part 2 software and OCPP 2.0.1 hardware be extended eight months to June 30, 2025. The City additionally notes that the Department of Citywide Administrative Services expects to be compliant with OCCP and ISO requirements by June 30, 2025.

DVM Industries states that it has between 600-800 plugs it seeks to install in late 2024 but asserts that it is waiting for manufacturers to provide equipment that meets currently required ISO 15118 standards in the Midpoint Review Order.

FLO EV Charging requests that the December 16, 2023 deadline requiring L2 hardware be capable of ISO 15118 Part 2 and Part 20 be extended six months to June 16, 2025 and the November 16, 2024 deadline requiring L2 and DCFC electric vehicle service equipment to support ISO 15118 Part 2 software and OCPP 2.0.1 hardware be extended nine months to August 16, 2025.

Franklin Energy notes that it anticipates challenges in processing new applications and moving forward with existing projects due to the current communication standard requirements in the Midpoint Review Order. Franklin Energy also asserts that it foresees current in-flight projects losing Make-Ready Program funds despite previous approval.

INF Associates LLC states that it is witnessing an adjustment period of six to eight months for manufacturers to supply L2 equipment that can meet the communication standards required in the Midpoint Review Order. INF Associates LLC states that the current communication standards have delayed the installation of several thousand charging ports. INF Associates requests the Commission to immediately postpone or rescind these requirements for a minimum of 6 months.

It's Electric, Inc. notes that if the hardware and software conformance deadlines are moved in accordance with the Joint Utilities' petition, it would stand to regain eligibility of up to $30,000 for three chargers at Steiner Studios in the Brooklyn Navy Yard, which it notes is a community that currently has no chargers.

Alliance for Clean Energy New York (ACE NY) and Advanced Energy United (United)

ACE NY and United note that, while supportive of the inclusion of communication standards in the Midpoint Review Order, they continue to recommend the use of a phased in approach that is more closely aligned to other federal and state program requirements and matches the ability of the market to meet required standards.[2] ACE NY and United support the Joint Utilities' request that hardware and software communication standards only apply to newly committed projects, and not in-progress installations. ACE NY and United argue that due to

delays in hardware availability and software conformance, projects should be given a reasonable timeframe to comply with communication standards in order to avoid added delays in receiving compliant equipment or needing to replace equipment that has already been received but no longer meets newly required communication standards.

ACE NY and United state that they support the Joint Utilities' request for required hardware conformance to either ISO 15118 Part 2 or Part 20 over required conformance to both hardware standards. ACE NY and United state that since ISO 15118 Part 20 requires more processing power and memory than ISO 15118 Part 2, this results in larger chips that cannot be easily interchanged with ISO 15518 Part 2 conforming chips and, in some instances, require chargers to be redesigned to accommodate the larger chips. ACE NY and United note that some member companies are facing difficulty in sourcing enough ISO 15118 Part 2 and Part 20 conforming hardware to meet the needs of the Make-Ready program. While ACE NY and United acknowledge that the market is working to meet the current shortage of conforming hardware, they state that chip manufacturers at large are facing supply chain difficulties alongside increasing demands for hardware meeting ISO 15118 Part 20 standards due to NEVI and California state programs beginning to implement ISO 15118 Part 20 requirements. ACE NY and United argue that New York standards should align with standards in other states and cite the California Energy Commission requiring L2 and DCFC chargers in its incentive programs be able to communicate with either ISO 15118 Part 2 or ISO 15118 Part 20. ACE NY and United additionally highlight that ISO 15118 Part 20 is still in the testing phase and requires additional revisions to make it stable and interoperable and that ISO 15518 Part 2 and Part 20 utilize different computer codes and are not interchangeable.

ACE NY and United further note that the interoperability of ISO 15118 Part 20 requires vehicles to have the appropriate software to interact with the charger.

ACE NY and United support the proposed modifications to the MHD Pilot Program that would expand eligibility to parcels located partially within or adjacent to a disadvantaged community. ACE NY and United note the adverse effects of MHD vehicles on health and climate and the disproportionate impact faced by disadvantaged communities. ACE NY and United argue that fleets interested in being first adopters should not be deterred by the location of their depots and that MHD electrification will lead to decreased emissions and particulate matter.

ChargePoint, Inc. (ChargePoint)

ChargePoint is generally supportive of the Joint Utilities' petition and poses several recommendations that it states will strike a balance between equipment eligibility and standards readiness. ChargePoint supports clarifying that hardware and software conformance should apply to either ISO 15118 Part 2 or Part 20, rather than requiring conformance to both standards. ChargePoint argues that the conformance tests for ISO 15118 Part 20 are not yet finalized and that requiring conformance to either ISO 15118 Part 2 or Part 20 is more closely aligned with similar federal and state programs over requiring conformance to both communication standards.

ChargePoint also notes that it is supportive of delaying the timeline for ISO 15118 Part 2 or Part 20 software conformance for L2 charging stations and calls for the application of ISO 15118 conformance requirements only for projects committed after December 16, 2023. ChargePoint notes that testing for software conformance differs between AC and DC

products and supports the timelines in the petition for software conformance of AC chargers committed on or after June 1, 2025, and DC chargers installed on or after November 16, 2024.

ChargePoint notes that it is not supportive of delaying the hardware conformance requirements for L2 stations. ChargePoint states that, should the Commission clarify that conformance applies to either ISO 15118 Part 2 or Part 20, it will be unnecessary to change the dates for hardware conformance as it asserts the market can support these requirements. ChargePoint notes that by its count, 91 AC devices by 31 manufacturers are currently listed as ISO 15118 hardware ready in the Joint Utilities' Eligible Charging Equipment List. ChargePoint further notes that federal programs such as NEVI and the Charging and Fueling Infrastructure Grant Program require ISO 15118 hardware conformance, and Southern California Edison's list of eligible equipment for utility programs has required ISO 15118 Part 2 hardware readiness since June 2023.

ChargePoint notes that projects committed before December 16, 2023 but installed after November 16, 2024 are currently required to install ISO 15118 and OCPP 2.0.1 hardware-ready equipment which could put projects at risk of abandonment. ChargePoint finds retroactive applications of technical requirements to be impractical as projects can be delayed for a wide range of reasons outside the control of the incentive recipient. ChargePoint requests that new technical requirements for ISO 15118 hardware readiness only apply to plugs committed on or after December 16, 2023. ChargePoint also requests for the requirement to demonstrate software conformance for ISO 15118 only apply to DCFC that were both committed after December 16, 2023 and installed after November 16, 2024 to avoid applying ISO 15118 software requirements to chargers that are not capable.

Finally, ChargePoint asks for clarification on the requirements for OCPP 2.0.1 conformance. It notes that if chargers are only expected to be hardware ready for OCPP 2.0.1 by November 16, 2024, it will be unnecessary to delay the conformance requirement set in the Midpoint Review Order. ChargePoint states it is possible for manufacturers to self-certify hardware conformance by such date. However, ChargePoint asserts that it is still premature to set a date for OCPP 2.0.1 software conformance. ChargePoint states that if OCPP 2.0.1 software conformance is interpreted to be required by November 16, 2024 under the Midpoint Review Order, then the Commission should delay such conformance until no earlier than January 1, 2026.

Environmental Defense Fund (EDF)

EDF notes that it is supportive of the proposed postponement of L2 hardware and software compliance to June 1, 2025 but that the Joint Utilities' request to make the standards "subject to any further market supply constraints or considerations" should require a subsequent petition rather than act as a built-in extension clause. EDF is partly supportive of the Joint Utilities' request to base hardware and software compliance on date of project commitment rather than date of installation but notes that the current language would leave DCFC installed between December 16, 2023 and November 15, 2024 required to be hardware conforming to ISO 15118, but with no corresponding requirement for software conformance. Due to this, EDF recommends the Commission require all DCFC committed after December 16, 2023 to be ISO 15118 Part 2 software conformant and OCPP 2.0.1 hardware conformant by November 17, 2024.

Although EDF notes that the current lack of a conformance test for ISO 15118 Part 20 warrants a postponement of associated software conformance deadlines, it asserts that the changes proposed by the Joint Utilities would excuse associated parties from any requirements to implement ISO 15118 Part 20 altogether. EDF recommends the Commission to grant additional time to implement ISO 15118 Part 20 capabilities but still require conformance to ISO 15118 Part 20 as mandatory once feasible. EDF argues that ISO 15118 Part 20 conformance will ensure backwards compatibility between ISO 15118 Part 2 and Part 20, while avoiding communication incompatibilities in vehicles built around Part 20 and achieving an overall increase in reliability, convenience, and security.

EDF recommends the Commission maintain existing requirements for DCFC chargers to be hardware capable of ISO 15118 Part 2 and Part 20 for projects committed as of December 16, 2023 and to postpone the requirements for L2 chargers to be hardware capable of ISO 15118 Part 2 and Part 20 to June 1, 2025. EDF argues that the market for DCFC can currently support the deadlines in the Midpoint Review Order and notes that the Federal Highway Administration already has an existing requirement for ISO 15118 Part 20 hardware capable DCFCs. EDF agrees with the Joint Utilities that the existing software requirement for ISO 15118 Part 20 warrants postponement due to the lack of an available conformance test, but stresses that it does not support an indefinite postponement. Instead, EDF recommends the Commission to require ISO 15118 Part 2 software compliance by November 16, 2024 for DCFC projects committed on or after December 16, 2023, to adopt the Joint Utilities' June 1, 2025 deadline extension proposal for ISO 15118 Part 2 software compliance, and to postpone the date for ISO 15118 Part 20 software conformance to June 1, 2026. EDF recommends that

the ISO 15118 Part 20 software conformance requirement should apply to all chargers receiving Make-Ready incentives that were committed after the hardware-capable deadlines.

EDF supports the proposed changes to the Medium- and Heavy-Duty Pilot and states that it anticipates these changes could lead to more pilot supported fleet adoption to inform the development of future medium- and heavy-duty focused programs.

Livingston Energy Group (Livingston)

Livingston states that ISO 15118 compliant stations are more expensive, have lengthy lead times, and currently lack quality suppliers. Livingston states that projects have experienced increased timelines due to the ISO 15118 requirement. Livingston argues that more data is needed to support better experiences with ISO 15118 compliant stations, and it cautions against rushed implementation of communication standards. Livingston states that developers have deprioritized ISO 15118 development because there is not enough development on the vehicle side to warrant the investment. Livingston states there is no cohesive way to test vendors' capabilities and ensure ongoing compliance.

Rodney McGee, Ph.D., P.E.

Rodney McGee is the Chairman and Document Sponsor of the SAE J3400 and J3068 task forces and notes that ISO 15118 communication standards are incorporated into the J3400 and J3068 system level standards. Mr. McGee notes that he is concerned over the current ISO 15118 Part 20 requirement deadlines and cautions that reliable and vetted operation of EVSE using ISO 15118 Part 20 is currently unfeasible. He notes that the first testing of the standard has only occurred in

recent months and major interoperability challenges were observed, including for V2G.

While McGee notes that he advocates for the rapid advancement of standards enabling V2G integration, he argues that the technical immaturity of ISO 15118 Part 20 would hinder the deployment of EVSE and vehicles supporting grid integration. McGee notes that the industry's transition to a new plug type causes additional challenges. McGee instead recommends mandating hardware support for ISO 15118 Part 3 and software support for Transport Layer Security 1.3, which could ensure future compatibility with ISO 15118 Part 20 through software upgrades.

SWTCH Energy Inc. (SWTCH)

SWTCH notes that it is supportive of open communication standards and requiring conformance to standards as a condition to receiving incentives. However, SWTCH states that it shares the Joint Utilities' perspective that adhering to current deadlines would prevent chargers from being eligible for incentives and thus slow charging deployments. SWTCH notes that its core product is software, with a strong focus on interoperability enabled by open communication protocols and standards. For hardware, SWTCH partners with several manufacturers. SWTCH states that it is capable of providing OCPP- and ISO 15118-conforming chargers faster than the wider industry due its ability to mix and match chargers through its hardware partnerships. SWTCH states that it is capable of meeting OCPP 2.0.1 hardware and software conformance for projects committed on or after November 16, 2024.

SWTCH also notes that if the Commission adopts the Joint Utilities' request to require hardware and software conformance to either ISO 15118 Part 2 or Part 20 over

conformance to both standards, it would be able to conform to ISO 15118 hardware and software standards for projects committed on or after November 16, 2024. SWTCH supports basing software and hardware conformance on the date of project commitment, rather than installation.

Westchester Officials

Members of the Assembly representing Westchester County, including Amy Paulin (District 88), J. Gary Pretlow (District 89), Nader J. Sayegh (District 90), Steven Otis (District 91), MaryJane Shimsky (District 92), Chris Burdick (District 93), Matt Slater (District 94), and Dana Levenberg (District 95) alongside Joan McDonald, the Westchester County Director of Operations, support the Joint Utilities' petition to modify charger communication standards. The Westchester Officials note that up to 1,400 L2 charging stations are under contract to be deployed throughout Westchester County that they state will be at risk of significant delay if the charger communication standards are not modified as proposed in the Joint Utilities' petition. While appreciating the Commission's goal to futureproof investments in EVSE, the Westchester Officials argue that the current deadlines for compliance outpace the ability for the market to produce conforming chargers.

In addition, McDonald requests that contracts entered into before January 1, 2024 be grandfathered out of having to conform to communication standards in the Midpoint Review Order. McDonald states that this will allow Westchester County to move forward on existing contracts and allow the state to continue towards its vehicle electrification goals.

Appendix B – Communications Standards

Table 1 – Required Communications Standards by Commitment Date

	L2		**DCFC**		
	Committed before Jun 1, 2025	*Committed on or after Jun 1, 2025*	*Committed before Dec 16, 2023*	*Committed between Dec 16, 2023 and Nov 15, 2024*	*Committed on or after Nov 16, 2024*
ISO 15118 hardware conformance	No requirement	15118-3, capable of enabling 15118-2 or 15118-20	No requirement	15118-3, capable of enabling 15118-2 or 15118-20	15118-3, capable of enabling 15118-2 or 15118-20
ISO 15118 software conformance	No requirement	15118-2 or 15118-20	No requirement	15118-2 or 15118-20 by Nov 16, 2024	15118-2 or 15118-20
OCPP hardware conformance	No requirement	OCPP 2.0.1 or later	No requirement	No requirement	OCPP 2.0.1 or later