Request for Information (RFI) – North American Charging Standard (NACS) -SAE J3400 Market Readiness and Standardization

The National Association of State Energy Officials (NASEO) and the American Association of State Highway and Transportation Officials (AASHTO) are requesting input on EV Service Providers (EVSPs) plans to incorporate North American Charging Standard (NACS) connectors – currently being standardized as J3400 – and related components in their product inventory and the associated timeline with the rollout. These responses will help inform State Departments of Transportations and State Energy Offices' Request for Proposals under the National Electric Vehicle Infrastructure (NEVI) program, covered by 23 CFR 680 minimum requirements, as well as advise states on how to plan and futureproof equipment for J3400 connectors. Responses from this Request for Information (RFI) will be posted on NASEO's publicly accessible website, distributed widely to any interested organization and will be posted to the EV States Clearinghouse. Therefore, proprietary information should <u>not</u> be included in your response.

Submission Requirement and NASEO's Use of Your RFI Response

Submissions must be in PDF format and must include the following statement signed by an authorized representative of the submitting organization: "[company/organization name] authorizes NASEO to publish and distribute this response to the NASEO-AASHTO RFI on its website and through other means to the states and general public. We have included no confidential or proprietary information in our response." Responses without this confirmation statement and without the signature (digital or otherwise) of an authorized company/organization representative will not be accepted.

Responses to this RFI are due on October 6, 2023. Responses must be submitted via email in one PDF file to Delaney Dixon (ddixon@naseo.org).

Company Characteristics

- 1. Name, contact information, company, or organization that you represent.
- 2. How long has your company been in business?
- 3. What role does your company play in the EV market? What is your company's business model?
- 4. Please provide details on where you operate geographically and the number and types of stations in your network.

Timeline for Product Availability

- 1. Do any of your DCFC products offer a NACS connector?
- 2. If your product does not currently offer the J3400 connector, what is the timeline on the commercial availability of the J3400 connector?
- 3. How will states receive updates on the progress of J3400 rollout?

- 4. What type of solution does your company envision to provide for adding J3400 connectors (e.g. permanently attached adapter, separate cable)? What safety standards do you expect it to conform to?
- 5. Will your company offer both J3400 and CCS ports at each EV charger unit? Please specify.
- 6. Is there a way existing equipment may be updated in the future to offer dual-connector capability? (e.g. one J3400 and one CCS connector per port)? What is the expected timeline? Could the update be UL listed?
- 7. Does your company plan to offer CHAdeMO, CCS, and J3400 in one port (one port can charge one vehicle)?
- 8. Does your company plan to offer to use adapters at existing stations that do not have a J3400 connector? What is the estimated timeline?
- 9. Are there any anticipated supply chain constraints for components necessary to provide J3400 connectors on your products? If so, what is your company's estimated timeline to fulfill J3400 orders?
- 10. Are there anticipated supply chain constraints for J3400 Connector and cable assembly due to Buy America requirements? If so, what is the estimated timeline for Buy America compliant equipment?
- 11. What, if any, opportunities or barriers not discussed above does your company see to commercial availability and use of J3400 connectors?

Costs Associated with NACS Adoption

- 12. What are expected costs for J3400 connectors relative to current products?
- 13. What is the expected cost to retrofit your company's charging stations to incorporate the J3400 connector?
- 14. What actions can states take to future proof existing charging stations to prepare them for the potential installation and/or retrofitting of J3400 connectors? What is the estimated cost?
- 15. Does your company plan to provide make-ready or future proof charging equipment to minimize costs associated with installing J3400 in the future?
- 16. What does your company view as key considerations that states should consider on the use of adapters vs. dedicated cables?
- 17. Does your equipment warranty include replacement of existing cables to allow for J3400 connectors to be added in the future?
- 18. How should integrating a J3400 connector be incorporated into the operation and maintenance budget allowed by states?

Technical Questions

- 19. What power levels will your charger support for the J3400 connector?
- 20. Will the update to J3400 require the use of liquid cooled cables in order to meet 150kW power levels?
 - a. If answered yes to the above question, what is the impact to the existing charger?

- b. If answered no, what is the maximum continuous power delivery for the charger?
- 21. Is your system able to accept over-the-air firmware or software updates for charging controllers, hardware security modules, etc. required for J3400 to keep up with future revisions to SAE, ISO or OCPP standards?

Standardization

- 22. What role does your company play in the J3400 standardization?
- 23. Does your company plan to wait for the J3400 standardization to be complete before installing J3400 equipment? Are there other critical steps that states should be aware of to ensure safety, performance, and a competitive market for J3400 connectors?
- 24. What actions does your company need to take to comply with SAE's J3400 standardization? How long until your company begins to produce equipment with J3400 connectors?
- 25. Are there examples of good future-proofing language that should be included in an RFP or grant program?

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