April 07, 2023

EPA
Energy Star for EVSE

RE: Energy Star EVSE version 1.2 Draft specification comments

As requested from United States EPA in the email received March 27, 2023, here are the comments from AddEnergie /Flo in regard of Energy Star EVSE specification version 1.2.

1- We believe that the term *In-use* should be clarified.

We think that *In-use* could be interpreted two ways. For instance, RFID reader can be considered In-use while it is in idle mode waiting to be activated by customer with a card. That will be the used case for more than 95% of the time. Or it could be considered In-use only during the time it is activated with a card. However, that time is in the order of millisecond, once a while. The test method will need to be define.
Same situation is applicable for the credit card reader.
Similar consideration for the Occupancy sensing. It is In-use in idle mode, waiting for the proximity sensor to be activated. When activated, some additional electronics will be solicitated then the power consumption will increase.

2- Because OCPP version 1.6 and version 2.0.1 are not compatible and have different message structure, we advise to create two columns for OCPP; one for OCPP1.6 & one for OCPP2.0.1.

In appendix A, in the table below line 545

specific rows:

- The **Charge Now** subtype refers to the OCPP message "ReserveNow". However this message will not begin charging immediately, it will indicate the EVSE that only a specific Identifier is authorized to charge.
    - We believe the message RemoteStartTransaction.req in OCPP1.6J or RequestStartTransactionRequest in OCPP2.0.1 are more appropriate and would result in immediate charging.
- The **Run Normal** subtype refers to the OCPP message "Reset". This command will reboot the EVSE which is not a guarantee that curtailement command will be erased from the memory of the EVSE. It will also interrupt the charging session which does not seem to be the intended response result.
    - We believe the message ClearChargingProfile in OCPP1.6 and 2.0.1 will remove the curtailement command and bring the EVSE back to its normal state.

- The **Delay Charge** subtype refers to the OCPP message "NotifyEventRequest". This message is sent by the charging station to the CSMS and does not delay charging but inform of a changing variable/monitoring status.
    - We believe the message SetChargingProfile in OCPP1.6 and 2.0.1 with a limit set to 0 will delay the charging. A specific duration can also be set in the SetChargingProfile request to indicate when this delay expires.
- The **Off Mode** subtype refers to the OCPP message "CancelReservation". This message will not interrupt any charging session or prevent a new session to begin.
    - We believe the message SetChargingProfile as we propose for Delay Charge can be leverage.
    - Additionnally, the message RemoteStopTransaction in OCPP1.6 or RequestStopTransationRequest can be used to stop a charging session. Authorization requests can also be declined by the CSMS to prevent any new vehicle to begin charging.
- The **Real Time System Load** subtype refers to the OCPP message "GetChargingProfile". This message will not provide the real time current/power output of the EVSE.
    - We believe the message MeterValue in OCPP1.6 or TransactionEventRequest in OCPP2.0.1 with the measurand Current.Offered or Power.Offered provides what the EVSE can offer to the vehicle at this instant.
- The **Utility Peak Load Price Signal** subtype refers to the OCPP message "CostUpdated". In OCPP, the EVSE does not calculate the cost and the CSMS is responsible for cost calculation.
    - We believe there is no OCPP message available for this type of price signal.
- The **Consumer Override** subtype refers to the OCPP message "ChangeAvailability". This message will not have any impact on the behavior of the EVSE, it is purely status related.
    - We believe the user can override commands using the ChargingProfile commands, either ClearChargingProfile for opt-out or SetChargingProfile for opt-in.
- The **Power (instantaneous) & Energy (Cumulative)** subtypes refer to the OCPP message "MeterValue". This message is a OCPP1.6 whereas the rest of the table was stating OCPP2.0.1 messages.
    - We believe two columns should be created; one for OCPP1.6 and one for OCPP2.0.1
    - For OCPP1.6, MeterValue is the correct message.
    - For OCPP2.0.1, the appropriate message is TransactionEventRequest.

Thank you to for the opportunity to provide comments for this revision.

Clermond Marquis on behalf of AddEnergie / Flo