DSA Response to Industry Concerns - Proposed Electric Vehicle Charging Station Accessibility Regulations

First, DSA would like to acknowledge industry's participation and offer thanks for its contributions to the Electric Vehicle Charging Station Working Group process and discussions. Consideration of their observations, comments and concerns, along with those of other stakeholders, is critical to the development of effective and balanced regulations for this emerging technology.

DSA also welcomes industry's concurrence on the requirement for accessibility, even in the absence of specific regulations at the federal level.

While DSA does not agree that the level of accessibility provided by the proposed regulations is ". . . far in excess of those already in place for similar type services made available to the public," there may be opportunities for refinement of the regulations that should be evaluated.

Industry's concerns focus on four specific areas:

1. Scoping
2. Small Scale Installations
3. Dual Use of Accessible Parking
4. Space required for accessible EVCS, with a consequential loss of standard parking spaces.

The text of the Industry Position paper is provided as Attachment 1 to this document. A discussion of each area of concern follows.

1 Scoping

The hybrid nature of EVCS charging services poses a challenge for scoping, which sets requirements for the number of accessible EVCS in relation to the total number of EVCS provided at a site or within a facility.

a. The current level of technology requires an electric vehicle to spend significant amounts of time at an EVCS to receive a full charge. This is driven by both the technology in the vehicle (battery type, capacity, charge rate) and the type of charger (Level 1, Level 2, DC Fast Charge). In this context the vehicle operator should be afforded the opportunity to leave the vehicle and carry out other activities, similar to when a vehicle is parked. It was pointed out that charging or "refueling" an electric vehicle was a service that, when made available to the public, had requirements for higher levels of accessibility. While the "parking" aspects of EVCS charging suggest that the parking accessibility requirements should be appropriate, the services aspect argues for a greater level of accessibility.

b. During the EVCS Working Group discussions certain stakeholders argued for a universal design approach in which every EVCS would be fully accessible to individuals using mobility devices such as wheelchairs. This was in response to their view that EVCS charging was a primarily a service and that every service point should be fully accessible. The universal design option would require one five foot wide access aisle for each two EVCSs, with a resultant reduction in the amount of vehicle spaces. For example, under this approach provision of 4 EVCS at a location would require 49 feet of width. This represents space sufficient for 7 compact (7 foot wide) parking spaces or 6 standard (8 foot wide) parking spaces. It was suggested the counterbalance was that no EVCS would be designated for the sole use of disabled individuals. In the end it was judged by DSA as unviable due to the large amount of additional space required and the disincentive this would provide to the deployment of EVCS infrastructure through the state.

c. To reconcile the differences between the parking and service aspects of EVCS charging, DSA is proposing a scheme with higher levels of accessibility at small scale installations, similar to what industry observed as appropriate for checkout stands (25% accessible with none restricted). For larger installations the scoping requirements are more consistent with those for parking. While the current proposal calls for the second EVCS to also be accessible, DSA is willing to consider options to mitigate this as discussed in Response 2.c below.

2 Small Scale Installations

a. Industry contends the regulations as currently configured effectively prohibit the design concept of "sharing" a dual-charging system by an existing accessible parking space and the adjacent non-disabled spot. This is a result of the current proposal requiring the second EVCS to be provided as a standard accessible EVCS. Under this scenario even if the standard accessible EVCS shares the required access aisle with the van accessible EVCS, two service equipment pedestals or overhead cable management systems would be required to prevent the charging cord, when connected to an electric vehicle, from blocking the required accessible route. DSA has received similar comments from participants at the recent meeting of the Electric Power Research Institute's Electric Transportation Infrastructure Committee in southern California.

b. The requirement for the second EVCS to be accessible was intended to ensure a large percentage of the EVCS at small scale installations be accessible to and useable by individuals with disabilities while conserving space by sharing the access aisle with the van accessible EVCS. The higher percentage of accessible EVCS over that required for standard parking was justified by the hybrid nature of electric vehicle charging, which combines parking with vehicle refueling

as a service or program. Additionally EVCSs at small scale installations would be available to all on an equal basis and not restricted to vehicles with disabled license plates or placards.

c. Possible solutions would be for the second accessible EVCS to be required as the third or fourth EVCS. This would result in 66% or 50% of the EVCS being fully accessible, but not restricted for use by individuals with disabilities. Another option would be for the second accessible EVCS to be required when 5 or more EVCS were provided. In this scenario the first van accessible EVCS would be designated for individuals with disabilities while the second standard accessible EVCS would be available to all. For an installation of 8 EVCS 25% would be accessible and 12.5% would be designated for use only by vehicles with disabled license plates or placards.

3 Dual Use of Accessible Parking Spaces

a. DSA has identified several problems with using an existing required accessible parking space to meet the proposed requirements for accessible EVCS as a "dual use accessible parking / EVCS space."

b. Accessible parking is generally available only to vehicles with disabled license plates or placards without time limits. However the right to park for unlimited periods of time does not apply to a zone ". . . which the law or ordinance reserves for special types of vehicles" per Ca Vehicle Code § 22511.5 (a) 3. During the EVCS Working Group discussions the California Department of Motor Vehicles determined an EVCS space was such a zone and that charging limits could be enforced. This effectively precludes a dual use accessible parking / EVCS space from being used as accessible parking without time limitations.

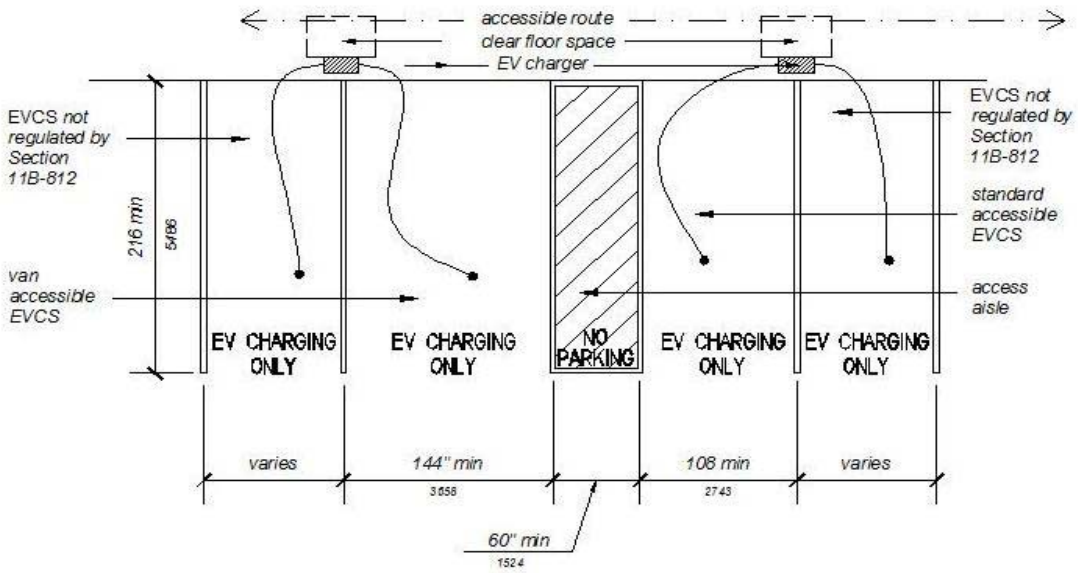
c. When the space is used as accessible parking, there will be a shortfall of required accessible EVCS; when used for electric vehicle charging, there will be a shortfall of accessible parking. DSA has discussed this approach with the U.S. Access Board staff, who concurred that under federal regulations dual use sharing would result in a shortfall of either accessible parking or accessible charging depending on how it was being used.

4 Space Requirements

a. DSA acknowledges that creating an accessible EVCS (or an accessible parking space) within an existing parking facility will most likely result in the loss of parking spaces. However, DSA does not agree that 7 feet is an appropriate parking space width for purposes of assessing the impact of the proposed regulations. DSA surveyed major jurisdictions as to their required parking space

dimensions; the results are listed in Attachment 2. The typical standard parking space width is 8 to 8.5 feet, although compact spaces with widths of 7.5 feet are allowed in some jurisdictions.

b. Generally, under DSA's current proposal, the creation of accessible EVCSs would impact parking much less than suggested by industry. For example, provision of 4 EVCSs could be accomplished as depicted below:



26 feet of width is required for the two accessible EVCS. If the two non-regulated EVCS are each provided at the 7 foot "compact" width, the total width required for four EVCS would be 40 feet or five 8 foot wide parking spaces.

c. Ambulatory EVCSs are now required when 26 or more EVCS are required and require a width of 10 feet. This increase over an 8 foot wide standard non-regulated charging station is less than 1% of the width required to provide 26 EVCS (220 feet versus 218 feet). Ambulatory EVCSs were judged by the majority of the EVCS Working Group as a viable option to increase accessibility for individuals with mobility issues who rely on mobility devices other than wheelchairs or scooters.

Attachment 1

DSA Proposal: Accessibility for EV Charging in Public Areas – Industry Concerns

Concern:
Lacking specific direction by the federal Department of Justice (DOJ) on this matter, the DSA proposal seeks to apply a level of application and construction specifications **far in excess** of what should be contained in an initial set of regulations governing accessibility at EV-charging stations in public areas. It is the opinion of industry that this proposal will effectively kill most EV charging **retrofit** jobs and will significantly reduce the number of EC charging stations installed in new construction.

Where Industry Agrees with DSA:

- EV-charging facilities located in a public area clearly provide a "service" to the public as defined by the DOJ. As such, regardless of whether the EV-charging facility is owned and operated by a public or private sector entity, there should be some level of accessibility required.

- At the present time, the federal government (DOJ) has issued **no** specific technical guidance regarding the provision of disabled accessibility at EV-charging facilities in public areas.

- A recent federal court ruling (*Fortyune vs City of Lomita*) found in favor of the plaintiff by ruling that "*normal governmental functions must be reasonably accessible to disabled persons, irrespective of whether the DOJ has adopted technical specification for the particular types of facilities involved.*"

  It should also be noted that while this case focused specifically on the provision of parallel on-street parking by a local government, the court could be expected to come to the same conclusion had this been a similar "service" offered to the public by a private-sector entity.

The take-away from this ruling is that DSA is on solid ground in attempting to develop technical specifications for accessibility at EV-charging facilities made available to the public.

Where Industry Disagrees with DSA:
The legal opinion cited above in no way suggests DSA should adopt application provisions or construction specifications **far in excess** of those already in place for similar type services made available to the public.

Accessibility Requirements at other "Services" to the Public:

- For several decades, federal and state accessibility provisions for parking have required 4% (1:25) of all public parking to be set aside for disabled use only, with the first space required to be the larger, "van-sized" space.

- Check-out stands in grocery stores are required to have 1-out-of-4 provide certain accessibility features (but no less than one). The accessible check-out stands are **not** restricted for disabled-use only.

- Public toilet stalls are required to have 5% provide certain accessibility features (but no less than one). The accessible bathroom stalls are **not** restricted for disabled-use only.

The Current DSA Proposal:
Application Provisions for EV-Charging Stations:

- The first EV charging station will have to meet the large, van-sized space reqs.

- 2 EV charging stations: both spaces (**100%**) will be required to meet accessibility regs*

The proposed requirement to have the first two EV charging spaces comply with disabled accessibility provisions seems to be extreme and unreasonable, particularly in absence of any federal DOJ technical guidance. It is highly unlikely that that the initial set of federal DOJ regulations will, if and when they are finally issued, suggest application levels this high given past practice.

*In addition, the proposed DSA requirement for both EV-charging stations to comply with accessibility regs when two EV stations are installed **effectively prohibits the design concept of "sharing" a dual-charging system by an existing accessible parking space and the adjacent non-disabled spot** as has been suggested by HCD. Embracing the design concept of sharing could significantly reduce the economic impact of the accessibility regs on small EV retrofit projects.

DSA's Proposed Width Requirements for accessible EV Charging Stations:
The DSA proposal would establish three separate types of Accessible EV-charging parking spaces, each having separate width requirements. The "van sized" accessible space would be 17-feet wide. The "standard size" accessible space would be 14-feet wide and the "ambulatory size" accessible space would be 10-feet wide. Industry understands why DSA has proposed the first two styles, however; the addition of the third "ambulatory" space will only add to complexity for both compliance design and enforcement and could easily become part of the growing problem of ADA drive-by litigation.

<u>Impact of DSA proposal on Parking Space Design:</u>

Given the assumption that the average, existing parking space is 7-feet wide, the DSA proposal will have the following impact:

Two EV charging stations:
Instead of 14 feet of space (7+7), you will now need 31 feet (17+14). This means that **five (5)** existing parking spaces will need to be taken out of service in order to accommodate **two (2)** EV stations.

Clearly, the DSA proposal will have a chilling effect on most EV station retrofit jobs due to the significant reduction in the total number of available parking spaces.

Industry Suggestion:
Lacking specific technical guidance from the federal DOJ on the issue of EV-charging stations, it would seem appropriate for DSA to initially propose accessibility standards which provide a reasonable level of access to those with severe mobility impairments yet balances that goal with the Governor's goal of encouraging the installation of the infrastructure needed to service 1.5 million ZEV's by 2025. **For the first 20 EV-charging spaces, we would suggest a level of application being set at 5% (1:20), but not less than one.**

The downside of this industry proposal:

- Advocates for the disabled community will definitely object to this approach. However, it should also be noted that the advocates for the disabled community are also in strong opposition to DSA's current proposal as it seeks an application level that is less than 100%.

The benefits of this industry proposal:

- The State of California (via DSA's regulations) would be providing specific technical guidance to public and private sector entities in absence of needed federal guidance. Doing so would establish a good faith effort by the state to address the legal issue resolved in *Fortyune vs. City of Lomita;* recognizing that it may be years before DOJ issues such guidance.

- By taking a reasoned and balanced approach for the initial roll-out of these regulations, we limit the potential of going significantly beyond DOJ guidance when they finally issue their first set of regulations at the federal level. Given past practice, it has been politically unacceptable for California to attempt to "roll back" the stringency of our state accessibility regulations when similar (but less stringent) regulations are issued by the federal DOJ.

- Along those same lines, by taking a reasoned and ballanced approach during the initial roll-out, the impact on California's aggressive EV goals can be minimized. If and when the DOJ issues more

stringent regulations at some later date, California can update its regulations accordingly, just as it has so many times in the past. Since California updates its building standards every 18 months, such an update to the state codes could be made relatively quickly.

Attachment 2

Sample of Parking Space Size Requirements

(Assume commercial facility, 90 degree stall arrangement):

- City and County of San Francisco (SF Planning Code Article 1.5, §154(a)(1)):
  - Standard: 144 square feet
    - DSA Comment – 8 feet x 18 feet = 144 square feet
  - Compact: 112.5 square feet
    - DSA Comment – 7.5 feet x 15 feet = 112.5 square feet

- City of Oakland (Oakland Planning Code Chapter 17.116, Article IV, §117.116.200(A)-(C))
  - Regular: 8.5 feet x 18 feet
  - Intermediate: 8 feet x 16.5 feet
  - Compact: 7.5 feet x 15 feet

- City of San Jose (San Jose Municipal Code, Title 20, Chapter 20.90, Part 2, Table 20-220)
  - Full-size: 9 feet x 18 feet
  - Small: 8 feet x 16 feet
  - Uniform: 8.5 feet x 17 feet

- City of Sacramento (Sacramento City Code, Title 17, Division VI, Chapter 17.608, §17.608.040)
  - Standard: 8.5 feet x 18 feet
  - Compact: 8 feet x 15 feet

- City of Los Angeles (LA City Zoning Code, Appendix, Parking Specifications, Chart No. 5 & Table No. 3)
    - Standard: 8.3-9.3 feet x 16 feet
    - Compact: 8.3-9.3 feet x 13 feet

- City of San Diego (San Diego Municipal Code, Chapter 14, Article 2, Division 5, Table 142.05K)
    - Unobstructed: 8-8.25 feet x 18 feet