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*Comment Received From: WattEV, Inc.*
*Submitted On: 4/13/2023*
*Docket Number: 23-TRAN-01*

## WattEV Project Proposal Idea for the US DOT Charging and Fueling Infrastructure Discretionary Grant Program

*Additional submitted attachment is included below.*

WattEV

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April, 2023

# RFI Response

**California Energy Commission: Project Proposal Ideas and Considerations for U.S. Department of Transportation's Charging and Fueling Infrastructure Discretionary Grant Program**

April 13, 2023

Jim McKinney
Fuels and Transportation Division Outreach Coordinator
California Energy Commission
715 P Street, Sacramento, California 95814
docket@energy.ca.gov

To Whom It May Concern,

On behalf of WattEV, I am grateful for the opportunity to enclose our response to the California Energy Commission's (CEC) Charging and Fueling Infrastructure (CFI) Request for Information (RFI). Rapid, high-power charging placed at key intervals along the national freight network is essential to supporting the future of zero-emission trucking, and WattEV is uniquely positioned, through its business offerings, to support State and Federal initiatives to achieve this goal. Headquartered in Long Beach, WattEV has combined an innovative Truck-as-a-Service model, transport services for shippers and carriers, and charging infrastructure, to create a comprehensive solution to convert diesel users to battery-electric vehicle operators.

With the expected increase in demand for electric trucks throughout the nation—and especially in California—over the next ten years, an expansive high-power charging infrastructure network is essential and it must be developed quickly to ensure that the users adopting the vehicles have the security of access to electric "fuel" along their routes. WattEV's plan to develop a network of public charging stations throughout California's major shipping corridors will accelerate the adoption of zero-emission transportation and charging infrastructure to reduce criteria pollutant emissions.

We feel deeply connected to the future of California transportation and we offer our support to the CEC on this important project.

We look forward to hearing more information about the CEC's CFI application in the coming weeks.

Sincerely,

Salim Youssefzadeh
CEO

*WattEV Contact Information*

| | |
|---|---|
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## Summary of WattEV

WattEV's mission is to accelerate the transition to zero-emission (ZE) transportation within the heavy-duty trucking market. WattEV accomplishes this using a combination of business and technology innovation to create infrastructure and data-driven workflow that provides truckers and fleet operators with the lowest total cost of ownership (TCO). In short, WattEV is in the business of supporting companies and small fleets that are looking for a way to make electrification financially profitable.

As an industry leader and a "first-to-market" ZE infrastructure provider for public access, WattEV has spent the past three years launching the first corridor for medium-heavy duty electric vehicles (MHDEV) refueling in the nation. The team at WattEV has spent tens of millions of its own capital into developing public charging sites for MHDEVs throughout California and the greater West Coast, each of which are strategically located along highways and close to distribution centers, warehouses, and ports. Our network provides a dependable and reliable e-fueling source so drivers have confidence in their ability to refuel and deliver their load. In addition to offering quick, convenient, and publicly accessible charging stations to serve commercial vehicles, WattEV is implementing an innovative Truck-as-a-Service (TaaS) business model which provides access to battery electric trucks – inclusive of charging, maintenance and insurance that helps support small and mid-sized fleet operators transition to ZE technology in a way that is both convenient and cost-effective. Using the TaaS platform as the foundation for recurring revenue, WattEV brings a viable and innovative approach to building out and financing a strategic series of stations for the fast-charging of MHDEV's. These electric charging depots, all designed to accommodate megawatt charging based on future Megawatt Charging Standard (MCS) standard, are a unique approach to MHDEV charging that mimics the standard commercial truck stop experience including amenities, queuing, and rest areas.

Below is a list of WattEV's public charging depots currently under construction and in the development pipeline and their estimated time of operations:

- Bakersfield, CA; Located on SR-99 and opening to the public in Q3 2023
- Gardena, CA; located on I-110 and opening to the public in Q3 2023
- Port of Long Beach, CA; located at the port and on I-710 opening to the public in Q2 2023
- San Bernardino, CA: located on I-215 opening to the public in Q2 2023
- Sacramento, CA; located on I-5 and opening to the public in 2026
- Salem, OR; opening to the public in Q4 2024
- "Taft", CA; located at the intersection of I-5 and SR 119 in Kern County (CEC Project Proposal Site)
- "Gustine", CA; located at the intersection of I-5 and SR 140 in Merced County (CEC Project Proposal Site)
- Other locations in CA (cannot be disclosed publicly)

# California Energy Commission (CEC) Request for Information

## Questions, with Answers listed below ("A:")

1. **The initial proposals that the CEC is considering are the I-5, I-710, and I-8 for one to two applications.**
    a. **Are these the right corridors that should be considered for the first round of applications?**
    b. **What other corridors for battery electric and hydrogen refueling medium- and heavy-duty vehicle infrastructure projects should be considered?**

**A:** The future of California transportation will need an infrastructure supportive of complex, high usage routes for a variety of vehicle types/classes.

In this call for CEC recommendations, WattEV believes that the nodes, or junction points between major freeways provides the best possible impact for cohesive transportation refueling. Instead of focusing on isolated highway locations along the I-5, I-710, and I-8, we believe that it is a route-based network of public charging depots at the freight pickup and drop-off junction points that should be considered and prioritized. The juncture points along I-710, at the port, at I-405, SR-91, I-105, and I-5 should be thought of as paramount to that of a singular series of stations along the I-710. Similarly, on I-5 it must quickly become a possibility to haul freight from the ports of Los Angeles and Long Beach to Northern California. Each site will need to prioritize all-direction accessibility for charging, including consideration for different vehicle sizes and mobility requirements.

When thinking about longer, connective transportation routes, WattEV believes that the I-5, the SR-99, the I-10, and I-8 are prime candidates for CEC consideration. The I-5 and SR-99 are critical arterials running the length of California and should be considered in the same conversation while the I-10's connectivity to most of America's southern states provides immense value to California's current and future ZE operations. The same principles of the aforementioned shorter routes apply to these longer highway networks, namely that interchanges between these highways should receive priority consideration. With these longer routes, it is imperative that support for MCS technology be prioritized by the CEC. California's new transportation systems will require an efficient refueling network – one that is as competitive, both in fueling time and fuel price, with fueling time similar to that of current fossil fuel stations.

Please consult the work that the West Coast Clean Transit Corridor (WCCTC) team had conducted to find locations along the North/South axis, and see the corresponding images below which outlines the WCCTC study with overlay of WattEV depots (Figure 1).

Figure 1: *WWCTC Initiative Study Map*

**2. Are there any projects in the corridor(s) you have identified in Question 1 that could be submitted in an application to CFI, which is emphasizing project-ready applications?**

**a. What is the estimated cost of the project, and how will these costs be covered through a combination of grant funds and other sources of funding, such as private investment or other grant programs?**

**A:** WattEV is happy to present to the CEC a shovel ready project for expanded TaaS and charging services across the state of California. The project includes two large scale charging sites: one is located at the intersection of I-5 and SR 119 near Taft in Kern County and the other is located at the intersection of I-5 and SR 140 near Gustine in Merced County. These planned locations, already secured by WattEV, will greatly expand the service range of battery electric heavy duty vehicles (BEHDVs) along some of California's busiest and most heavily polluted trucking corridors; Interstate 5 in particular. Furthermore, by developing this infrastructure along a 400+ mile corridor connecting the Ports of Los Angeles and Long Beach to Sacramento, WattEV's project will result in a total of 4 high-capacity HD truck charging depots to demonstrate the viability of BEHDVs beyond regional, short-haul service, leading to increased adoption nationwide.

Project Summary:

WattEV's CEC proposed project will bring large, multi-class charging capabilities to two key intermediate locations on I-5 in California on a route starting at the ports in the south and ending at Sacramento in the north. These two locations are titled via our California network nomenclature but correspond to local areas. One Northern I-5 location is near Gustine, CA (named 'CA2') while the second is a Southern I-5 charging station on Taft Highway in Kern County (named 'CA3'). Shown in the map below (Figure 2), these locations lie at critical junctures where all forms of commercial trucking have the greatest flexibility in route planning via stable refueling stations. Please find the juncture points detailed here:

1. CA2 near Gustine, California is less than one (1) mile from I-5 and conveniently located on SR 140, which provides access to the N/S SR 99.
2. CA3 near Taft in Kern County, is located directly on the I-5 and SR 119, which provides direct access to the N/S SR 99.

At these two sites, WattEV will support massive solar and grid powered charging capabilities for a variety of vehicle classes. Each site will support MCS chargers for fast charging of heavy duty vehicles (HDVs), Combined Charging System (CCS) chargers for slow charging of HDVs, and a separate section for passenger vehicles chargers at completion of the buildout. WattEV recognizes the high demand for dependable MHDEV charging stations and therefore approaches construction in phases which can alleviate pent-up charging demand while final construction is completed.

Figure 2: *WattEV CEC sites located along corridors presented in the WCCTC Initiative Study*


Outline of sites: WattEV's CA2 and CA3 sites represent key station layouts within the WattEV network of charging stations, and some of the largest deployments in California for MHDEVs. When examining the sites, there are a few core tenants that all WattEV stations adhere to. First, 1 MW MCS technology is chief for utility driver and station design, and therefore has prime location upon entry into the site. The MCS pull-through design enables the most efficient use of a driver's time, while also clearing unnecessary congestion during peak hours of demand for fast-charging, delivering 80% charge in roughly 30 minutes.

Supporting this MCS rapid charging technology is a line of slow charging CCS chargers on separate lanes. These stations will require longer wait times but will support overnight charging and fleet optimized routing. WattEV plans to support these refueling points with longer-term truck parking accessible by easy egress, and designed for full maneuverability while around pedestrians, or other trucks completing charging operations. Lastly, each site will support a personal vehicle charging area separate from truck charging to further enable the transition to ZE travel in the state of California. Please find the complete renderings for the CA3, 'Taft' Site at the end of this document, and a select few images below (Figure 3,4).

Figure 3*: WattEV CA3 Site on Taft Highway in Kern County, CA. Note the pull through MCS chargers, and row of CCS chargers*.

Figure 4*: WattEV CA3 Site on Taft Highway in Bakersfield, CA. Note the Solar array supporting on-site power generation*.

Cost Ranges: For this project, WattEV expects to commit a 26% match share. With the total project estimated to fall somewhere within the range of $55-$65 million, WattEV would match ~$20 million via its own funds. Project costs include EVSE equipment, solar micro-grid, electrical

substation, site grading and paving, water and sewer, landscaping and signage, site lighting, electrical installations, engineering and permitting, and civil works. Although these are estimates, and would need a more detailed conversation with CEC project managers, WattEV has averaged a match of 20% across all sites. Despite being a startup, WattEV has always felt that providing a match represents the dedication to bring larger scale, critically needed ZE recharging facilities to operation in California as fast as possible.

3. **What are the most important considerations for battery storage and grid integration in battery electric and hydrogen refueling medium- and heavy-duty vehicle infrastructure projects, and how can these be addressed in project planning and implementation?**

**A:** The future of transportation refueling will likely not be singular. New vehicle fueling methods will likely range from battery electric vehicles (BEV) to hydrogen fuel cells, to hybrids, all of which will play important roles across vehicle classes and with intended drivers, routes, and plans in mind. To support this new transportation generation, grid capacity and fuel availability will require diverse solutions. For BEV charging in particular, grid capacity is unlikely to meet the demands of the currently planned charging growth, let alone the potential for compounding growth from a dynamic American market. This new network of charging sites will therefore require some level of extra-utility energy generation and storage. WattEV believes that Battery Electric Storage Systems (BESS) and on-site generation, namely solar, can alleviate and stabilize transportation corridor charging sites. By providing this underlying layer of energy generation and storage, as WattEV is already implementing at its depot in Bakersfield, site charging operators can mitigate the risk of demand spikes and peak time price increases, while providing affordable and sustainable fueling operations.

Despite the infancy of this current BEV transportation industry, charging site owners should expect to grow rapidly to match the demand of fleets who will be required to move into new fuel methods. WattEV places great focus on land selection and the technological capabilities - including utility connection, BESS systems, and on-site generation of each location - to provide a site that does not require post-construction alterations. Once the site is built, it has the capability to provide on-site generation and storage, and the capability to expand as demand increases. This focuses WattEV team members to look beyond the MW capacity that each location can provide in 1-3 years, and focus on the larger, more difficult MW upgrades earlier to alleviate future demand increases. CEC project partners should keep these complex situations top of mind when it comes to planning, ultimately allowing growth to come naturally and avoiding unnecessary additional construction and design changes that could styme ZE operations.

4. **Which classes of trucks and duty cycles are best suited for initial near-term use of new corridor charging or hydrogen refueling stations?**
    a. **Which corridors and station designs could best serve these initial technology-ready fleets?**

**A:** Although the market for BEV is developing rapidly, the current generation of BEVs supports limited range capabilities. These restraints mean that routes which service short and medium-length drayage, and especially those local delivery routes connecting regional logistics systems should receive priority consideration over long-haul. The defining variables to be considered should be any 1) dedicated routes which are 2) long established, and 3) lend themselves to immediate electrification – for example e-commerce delivery patterns, or manufacturing to

distribution trucking routes. In this current market, the only way battery electric trucks can charge is at their private depot, a necessary component but one which includes no public charging sites with MCS chargers and space for large scale trucks (effectively none exist for MD/HD trucks).

To mitigate this limited, private charging view of future transportation refueling, WattEV believes that public charging sites specifically constructed for MD/HD truck access would enable maximum benefit for range capabilities and transportation demand matching. With more access to this pollutive sector of the transportation system, the CEC could reduce more emissions, and service a larger transportation expansion via extended BEV miles, again increasing the impact across multiple aspects of the economy. With range concerns quickly quelled, cheaper land can be used to support elongated BEV routes on the outside of urban areas, thus further removing large refueling sites and providing better highway synergies. These public sites would then work in tandem with private charging depots, expanding network travel capabilities and empowering fleets to push for ZE goals with the same fervor as they approach their individual businesses.

As for the station design, the purpose of the facility will need to be tightly correlated to the demand each station is expected to receive. For smaller locations in urban areas where land is difficult to come by, charging location for MHDEVs, pull through MCS chargers will be critical to keep the flow of traffic and avoid spacing issues. On more rural highways, where land is cheaper, stations can support larger lanes and more space to access CCS and MCS chargers. Take the example of the WattEV's Bakersfield location, shown below (Figure 5,6). With a larger plot of land, WattEV was able to develop a site design that caters to driver amenities, such as a traditional truck-stop convenience store, while also enabling larger turn radiuses and long-term parking.

Figure 5: *WattEV Bakersfield Rendering. Note the solar energy generation and green space.*

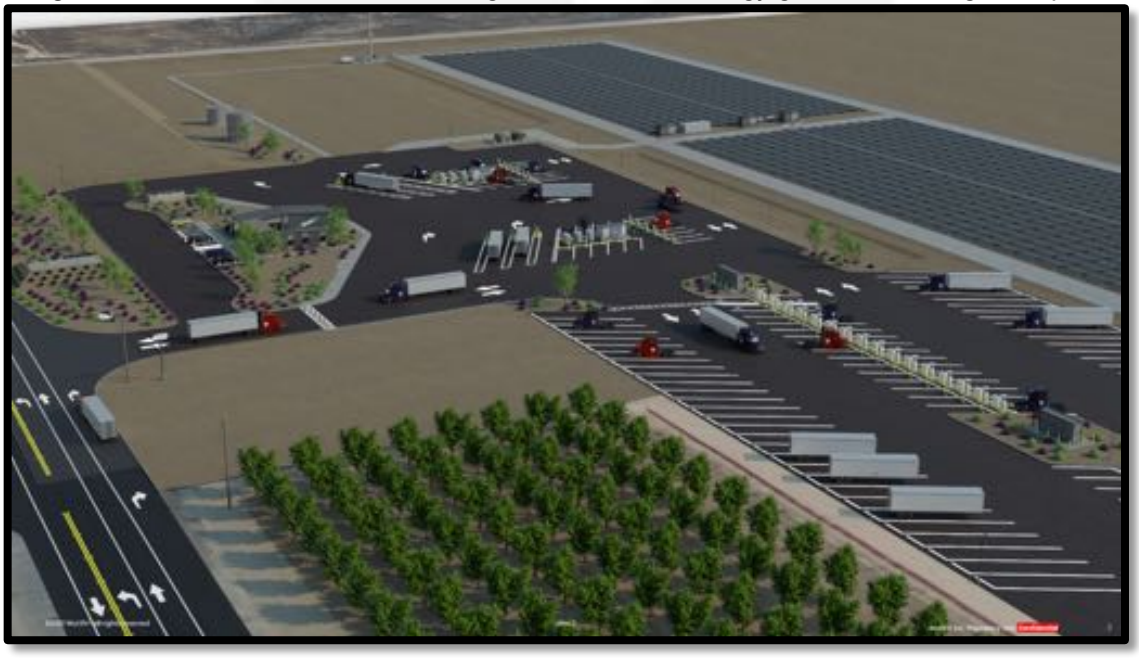


Figure 6: *WattEV Bakersfield Rendering. Note the solar energy generation and green space.*

5. **What types of public-private partnerships or collaboration would be most effective in supporting the development and deployment of charging battery electric and hydrogen medium- and heavy-duty vehicles in your region or industry sector?**

**A:** The trucking industry is woven together by a series of publicly accessible legacy fueling providers and a standardized refueling architecture. This shared language has, over time, developed a high level of comfort for drivers, specifically there is a shared affinity towards refueling providers, station layouts, and ease of access. The transition to electric will undoubtedly require some tension and bring new faces and ideas into traditional driver experiences. Alongside long-standing fueling providers in America, the industry will require new companies which can mimic established architecture (truck stop centers, pull through refueling) and provide a low-tension option for truck drivers to publicly charge on short, medium, and long-haul routes.

WattEV's unique combination of leading electric charging technology (MCS, BESS, on-site solar generation with energy and load management systems) and carefully designed sites will quickly establish a familiarity like those of legacy refuelers. Additionally, WattEV's truck leasing business (TaaS) provides another kind of public-private partnership that will become necessary for the transition to electric – accessibility. Very few small to medium sized fleets have the capital to convert their entire fleet towards zero-emission vehicles (ZEVs), so leasing from a company that operates publicly accessible charging stations, with assurance of charge availability on defined routes, represents a desperately needed deployment solution to the nascent industry.

On the private side of development, MD/HD charging locations collocated within individual, or larger warehouse districts could prove to be extremely useful for fleets transitioning to electric. These sites would mitigate the infrastructure cost and installation burden off the fleet operators, effectively providing a charging location that is synonymous with a delivery location. These charging sites could support multiple fleets that are already providing regular deliveries, and would

provide a real-time case study for fleets reluctant to convert to electric. With the objectively difficult task of infrastructure charging connection completed via the warehouse district's utility connection, prices and ease of operations would enable seamless operations.

6. **What distance should separate charging/fueling stations to support zero-emission trucks along freight corridors?**
    a. **Describe the vehicle class and vocation(s) considered when making this recommendation.**

**A:** For confirmed and pending alternate fueling corridors, it makes the most sense to space charging sites for MD/HD trucks at approximately 50 miles apart. This particular distance allows different routes and truck classes to be supported while new vehicles and charging technology evolve over the coming decade. As with all refueling network designs, special attention must also be given to topography, historic congestion on peak hours, and even utility presence and capabilities in rural areas. WattEV expects that as adoption of ZEVs gains traction, and demand increases, the distance between MCS charging station will need to decrease and the density of options will increase, as is currently the case with fossil fuel refueling stations.

However, with WattEV's end to end solution that bundles vehicles and charging, subscribers can reach distances more on par with the stated range of current generation BEVs. WattEV's proposed ZE corridor on I-5, linked by four (4) sites, will serve the dual purpose of servicing short-range regional hauling in their local metropolitan areas as well as forming the basis for an MHD EV corridor throughout California and the West Coast. The charging stations have been strategically placed within the operating ranges of current battery electric MHDs, allowing for ZE transport and refueling from the Port of Long Beach to Sacramento, with future expansions extending this capability throughout the West Coast. The Port of Long Beach site will have a particularly significant impact, as it will allow trucks starting their journey there to fully charge before heading inland and up through the Central Valley.

| Departure Station | Approx. Distance | Destination Station |
|---|---|---|
| Port of Long Beach | 133 miles | "Taft" (I-5/SR-119) |
| "Taft" (I-5/SR-119) | 174 miles | "Gustine" (I-5/SR-140) |
| "Gustine" (I-5/SR-140) | 111 miles | Sacramento |
| **Port of Long Beach** | **418 miles** | **Sacramento** |

*Table 1: WattEV Locations*

As shown in Table 1 above, all of WattEV's locations are within 175 driving miles of each other. This is well within the 275-mile range of the Volvo VNR Class 8 ZEV and 300-mile range of the Nikola TRE BEV Class 8 ZEV, which currently constitutes WattEV's initial TaaS fleet. This will allow ZEV fleets to travel from Long Beach to Sacramento and back without fear of insufficient charging opportunities. The Sacramento and Long Beach sites will service regional hauling throughout their metropolitan areas by WattEV's TaaS users, and the two proposed "project sites" along Interstate 5 near Taft and Gustine will serve as charging hubs that form the connection points for WattEV's HD electric corridor, empowering fleets to make the transition to ZEVs.

7. **Describe the desired characteristics of a charging and/or hydrogen refueling site to support zero-emission trucks along freight corridors, including parameters such as the desired number of charging ports, charger power, total site power, number of hydrogen dispensers, and total site hydrogen capacity.**
    a. **Describe the vehicle class and vocation(s) considered when making this recommendation.**

**A:** Refueling stations require a unique combination of technological accountability, driver accessibility, and shared maneuverability to provide best in class services. With the added caveat of charging, instead of fossil fuel refueling, stations of the next generation of California transportation have a very specific layout which can best support driver use cases. For MHDEVs, this deliberation over station layout begins with the vehicle itself. Most MHDEV truck models are not significantly larger than past models, nor are they carrying containers or other storage in entirely novel ways. The main difference is the time it takes to refuel the vehicles. With the current generation of trucks, standard CCS chargers at 240KW require a HD vehicle to remain stationary and charging for somewhere around two (2) hours, depending on shared usage. For MCS charging (1MW), the premier technology for MHDEV refueling stations, that time is reduced to around 30 minutes, effectively enabling the vehicle interchange and station design similar to that of a fossil fuels station.

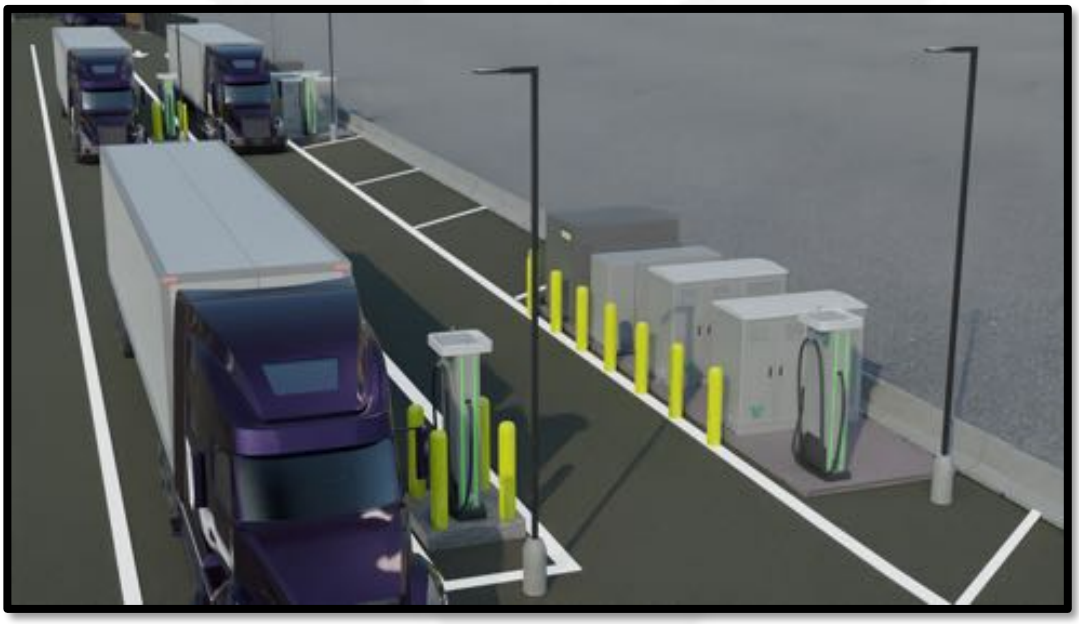
WattEV aims to install 20% of all chargers as MCS so as to provide the most efficient charging to customers, and the greatest optionality to route planners and fleets. This unique combination of MCS and CCS charging solutions enables technology accountability on behalf of WattEV as a provider in a complex refueling relationship with customers, while also enabling driver accessibility. We aim to become a trusted partner for fleets of all sizes throughout stations designed for optimal charging.

Lastly, shared maneuverability is a critical component of station design for Class 6, 7, and 8 charging infrastructure. It is difficult, if not impossible, to maneuver a large commercial truck into a charging site built to support light-duty vehicles. This does not mean that personal, light-duty vehicle charging must be alienated from truck charging stations. However, it does require thoughtfully designed stations that provide clearances to larger vehicles, and oftentimes, a degree of separation of the charging types to enable proper safety and efficient charging. As depicted in the renderings below (Figure 7,8), WattEV takes into account the numerous needs of large vehicles, such as their requirement for large parking spots, thicker pavement, tall overhang heights, and ease of ingress and egress, not to mention higher charging speeds addressed above. WattEV believes that all these unique criteria, and countless others must be considered when building MD/HD charging sites, especially those being considered for CEC partnership.

Please see some of WattEV's renderings below for the Long Beach site coming online in May, 2023 to see how the WattEV team is developing sites, and thinking about the correct 'model' stations to add to our network as we expand across the country (Figure 7, 8).

Figure 7: *WattEV Port of Long Beach Renderings*

Figure 8: *WattEV Port of Long Beach Renderings*



**8. For long-haul trucking applications, how many chargers and at what power is desired for overnight charging at a site?**

**A:** Long-haul, full recuperation charging will require electric vehicle (EV) charging stations that support a mixture of charger types, and spacing options to accommodate driver needs. Depending upon the nature of the station - whether private during evening hours, or public 24/7 - efficient charging operations could take multiple formats at varied kWh charging rates. That

charging range per hour could shift between 50kW to 150kW, depending on the size of the truck battery pack. Timing for charging rates will largely depend on the time of day, size of the station and total available chargers, with a rough estimate of 30 minutes for MCS charging. Therefore, each station developer will need to model current usage demand to calculate required chargers per station, while also forecasting year over year increases in fleet adoption.

For a medium sized charging station along a vital ACF, WattEV feels that 3-6 MCS 'fast charging' pull through chargers, and 15-30 CCS "slow chargers" will match early demand for ZE charging. The combination of these chargers for private depots will likely evolve differently, as spacing can be allocated at will, while public over-night charging will require specific developer education, information, privacy guarantees, and guidelines to enable efficient energy usage and spacing.

WattEV does intricate forecasting before any site is chosen, in addition to energy usage modelling between on-site generation, utility capacity (with incremental increases over time), and BESS contributions. Every WattEV site includes MCS charging, a staple of what WattEV feels the industry will rely upon in the coming years. With most larger highway accessible sites, WattEV employs precise design principles to enable internal station traffic, and overall enjoyable charging experience for drivers and route planners, no matter the charge time.

9. **For potential site developers, provide a range of public cost share as a percentage of total project cost that would be necessary to support charging/fueling stations to support zero-emission trucks along freight corridors.**
    a. **Describe the vehicle class and vocation(s) considered when making this recommendation.**

A: With the enormous costs surrounding utility upgrades, and the future focused design elements and charging equipment that developers are focused on providing to the industry, match share is imperative for any project.

The Biden administration, under the stewardship of Sectary Pete Buttigieg has provided the funding to enable unique public funding mixtures, depending on technology deployed, scope, and overall utility to support this transition's rapid growth. The larger the location, the more potential utility exists outside of MHDEV, such as buses and other large on- and off-road vehicles. In building these sites, consideration should also be given to providing public light-duty vehicle charging and basic amenities as well – alienating any one segment of this generation of vehicles could styme local, or even regional growth.

WattEV's focus on the publicly accessible market for electric vehicle (EV) charging enables our sites to work for a large combination of vehicle classes, including light-duty charging that is included at many of our sites. For sites closer to urban areas, or even rural city governments, WattEV makes sure to speak to agencies, or smaller companies that could provide critical input on their own fleet growth plans and how each unique WattEV site could help integrate into their plan.

10. **Are there any other thoughts or recommendations that you would like us to consider?**

**A:** The WattEV team feel strongly that the CEC should screen applicants based on their ability and track record to provide technology that can support the demands of California's complex

light, medium, and heavy-duty transportation infrastructure. Namely, if an applicant has little to no experience in MCS enabled projects, or the desire to work with innovative energy solutions such as BESS and solar or wind generation, they should be graded respectively compared to those that are, or have provided experience in those fields. There is no doubt that this new generation of American transportation more broadly, and California transportation more specifically, will require complex energy profiles and an acute technical ability to provide state of the art services. Creative station designs, innovative technology, and constant updates for facilities, fleet customers, and utilities are going to become much more complex than previous refueling networks. Simply, the demands of the previous fossil fuels refueling systems will not be as 'low lift' as those of the new zero emissions infrastructure. Therefore, if companies do not have the technical capabilities, or the interest in developing the most innovative kinds of solutions now, this should reflect on their ability to meet demand when adoption reaches historic heights in the decade to come.

With the amount of public funding being provided to support the development of refueling networks, it is also important for the CEC to consider applicant's past success with public funding awards. Each funding agency is unique, and the parameters, including reporting guidelines, are catered to each type of successful applicant. However, if a CEC CFI applicant has a negative history of CEC grant reporting, or other agency awards have been forfeited due to timeline changes, or contract breakage, these should be considered by the CEC. CFI funds will certainly be unique, especially considering project partners will need to remain transparent and timely with reporting guidelines, or the project could lose successfully awarded funds.

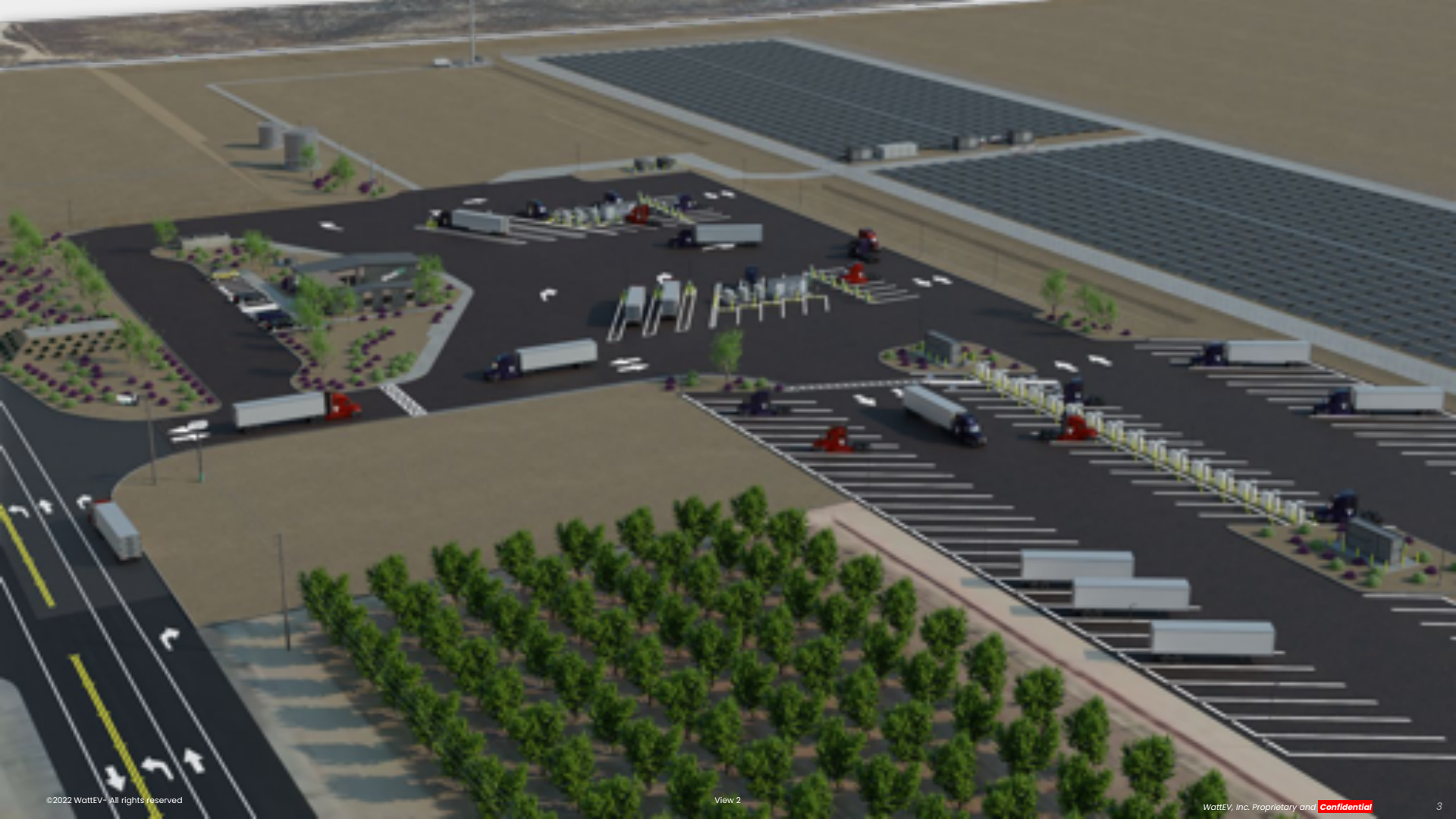
Additionally, the WattEV team suggest that the CEC measure fueling providers against their plans to grow outside of California. America's fueling providers has become successful by their ability to provide regional, and oftentimes national services via networks of stations. There is no evidence to show that drivers, and route planners will shy away from the stability that networks of stations provide to their fleets. Additionally, with a new kind of payments based refueling economy (mainly subscriptions and rewards based fueling) in which wait times for refueling may remain longer for a period of time, the CEC should understand and grade each applicant based on their unique ability to grow to provide a new stability for ZE transportation. If companies are not thinking about the corridors they can service, or the services they can offer customers, their ambition will likely not match the important goals the CEC seeks to achieve in its CFI application.

# Taft

## Site Plan Renderings

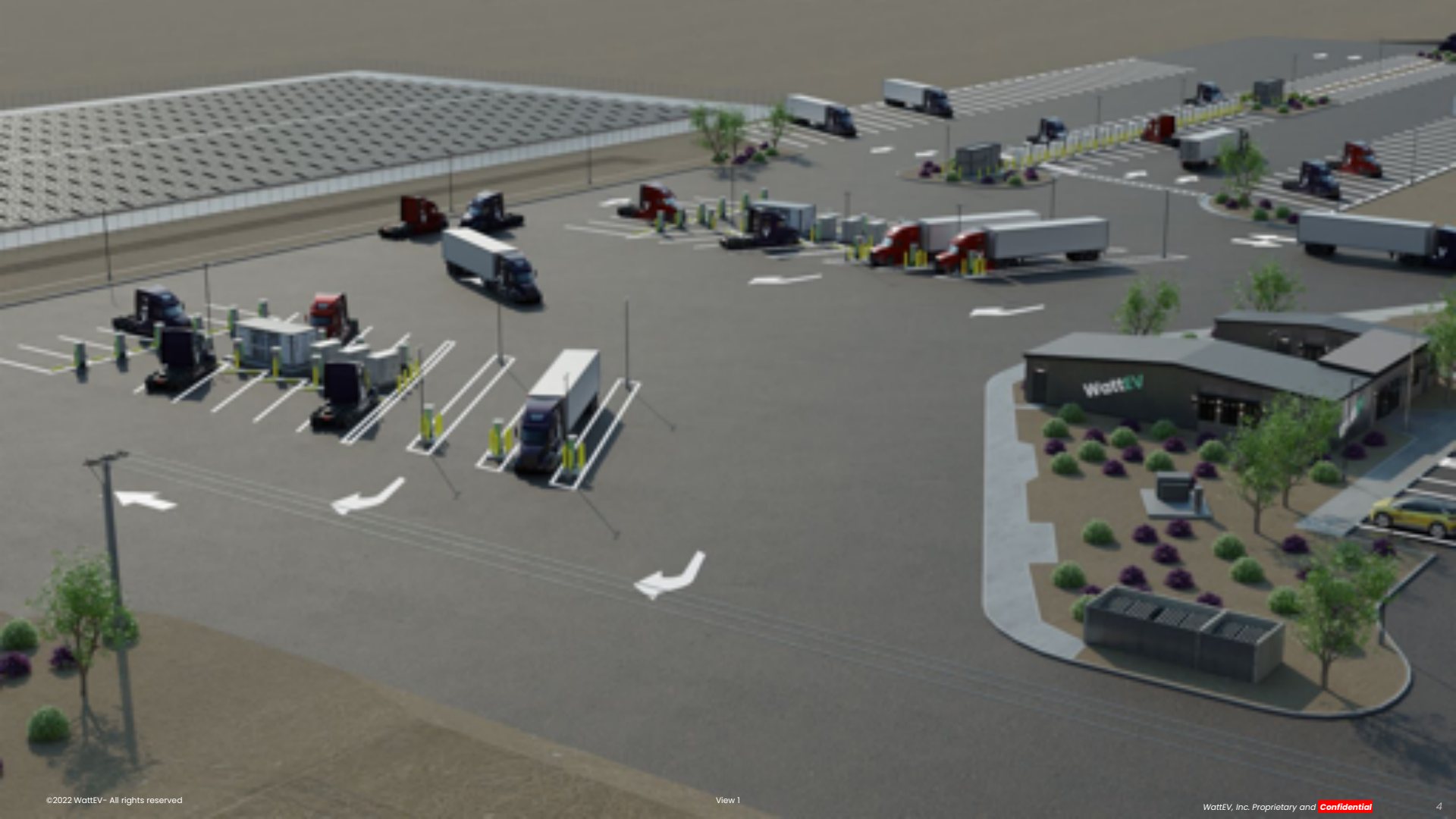
# Hwy-65 Bakersfield

Site Plan Overview





View 2





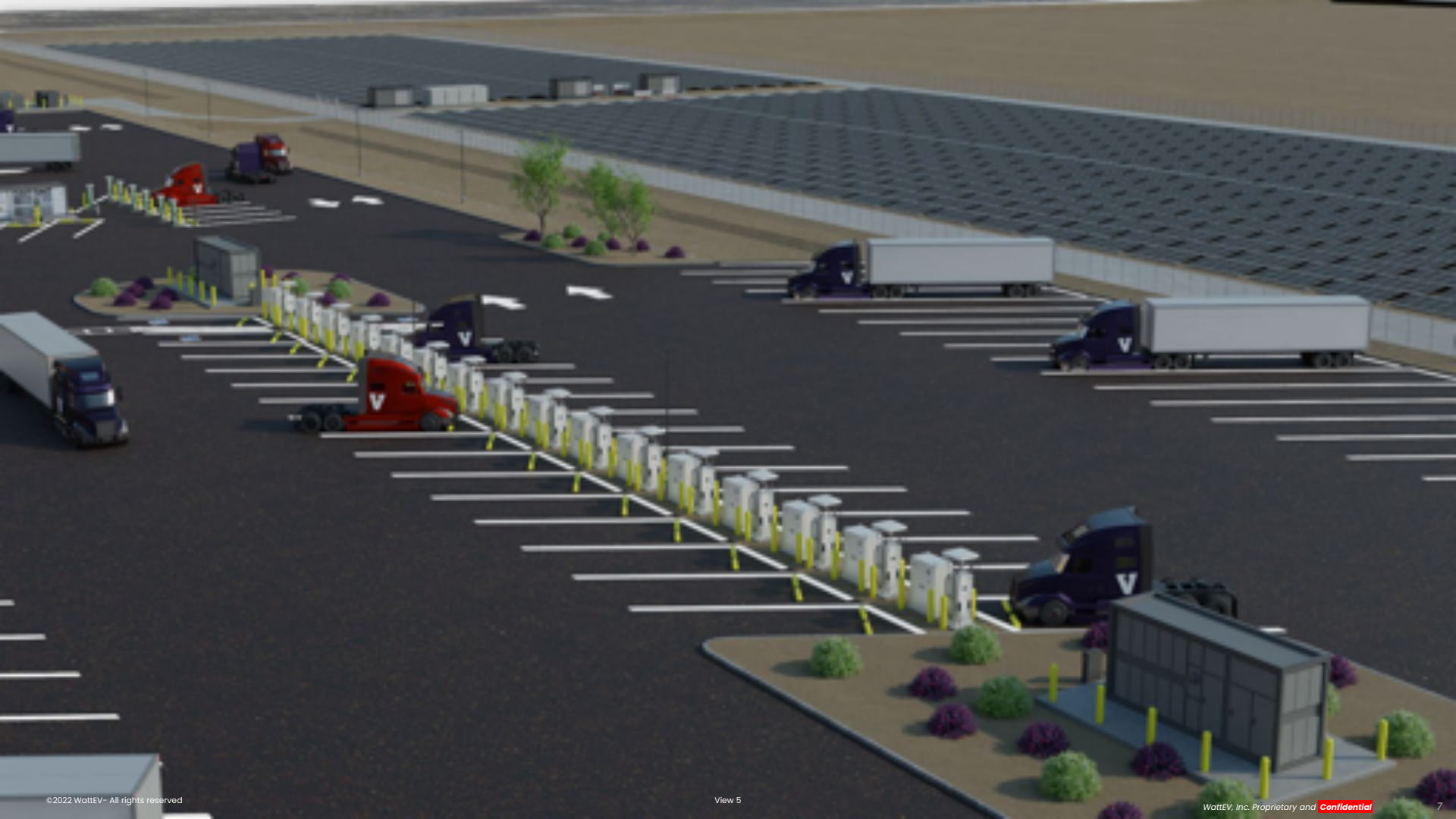

View 1



View 3



View 4





View 5



View 6



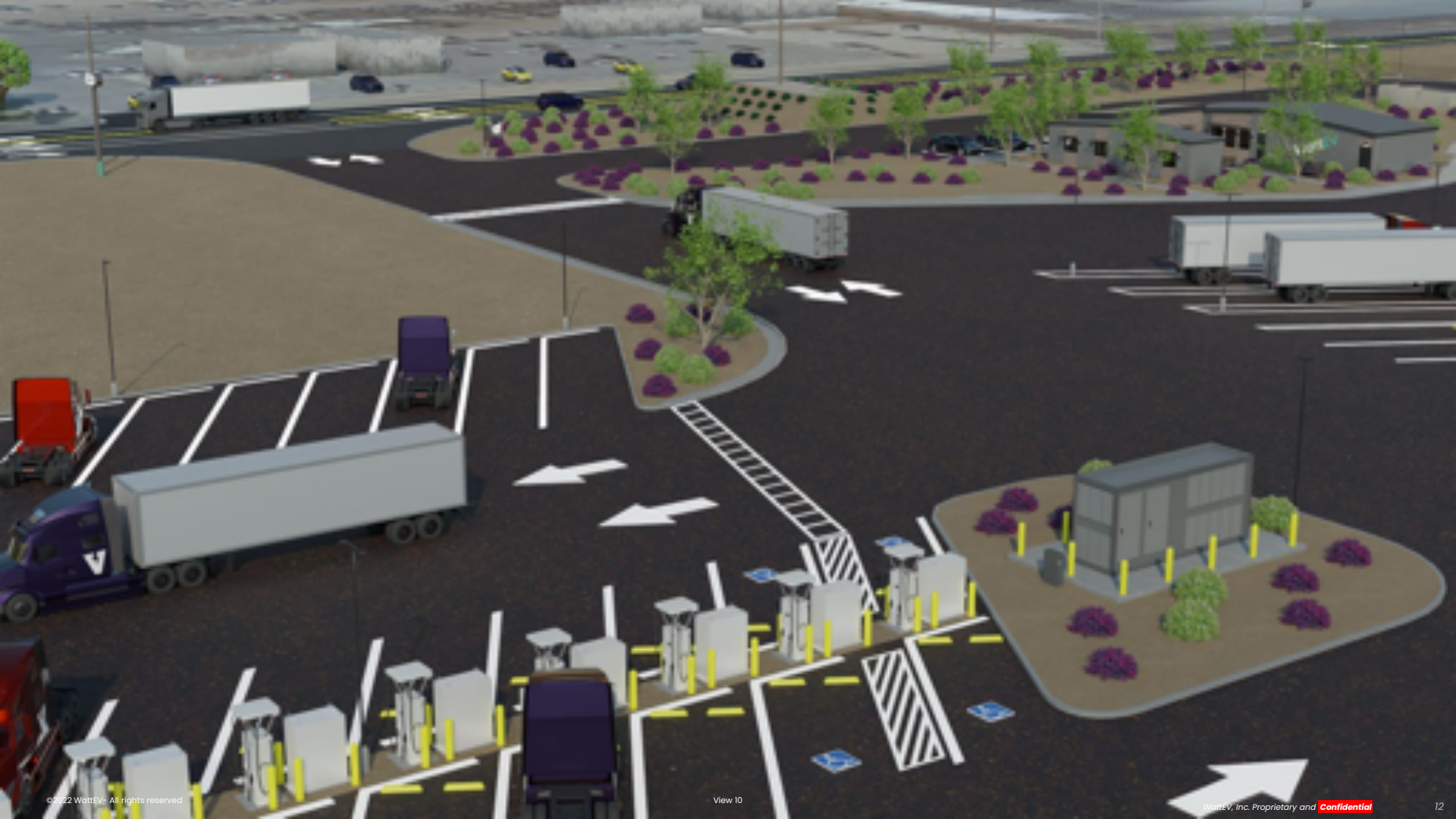
View 7



View 8

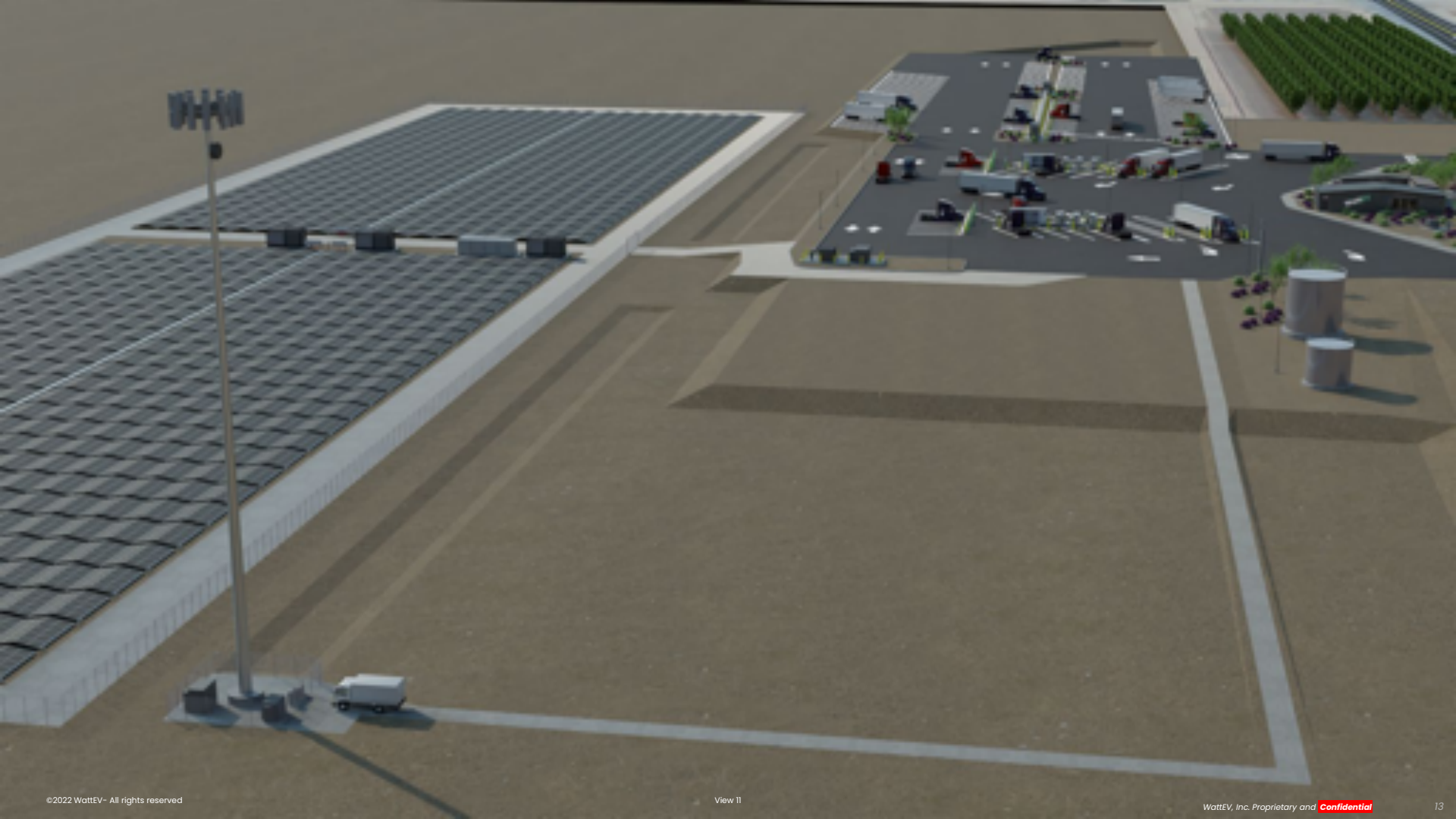


View 9





View 10

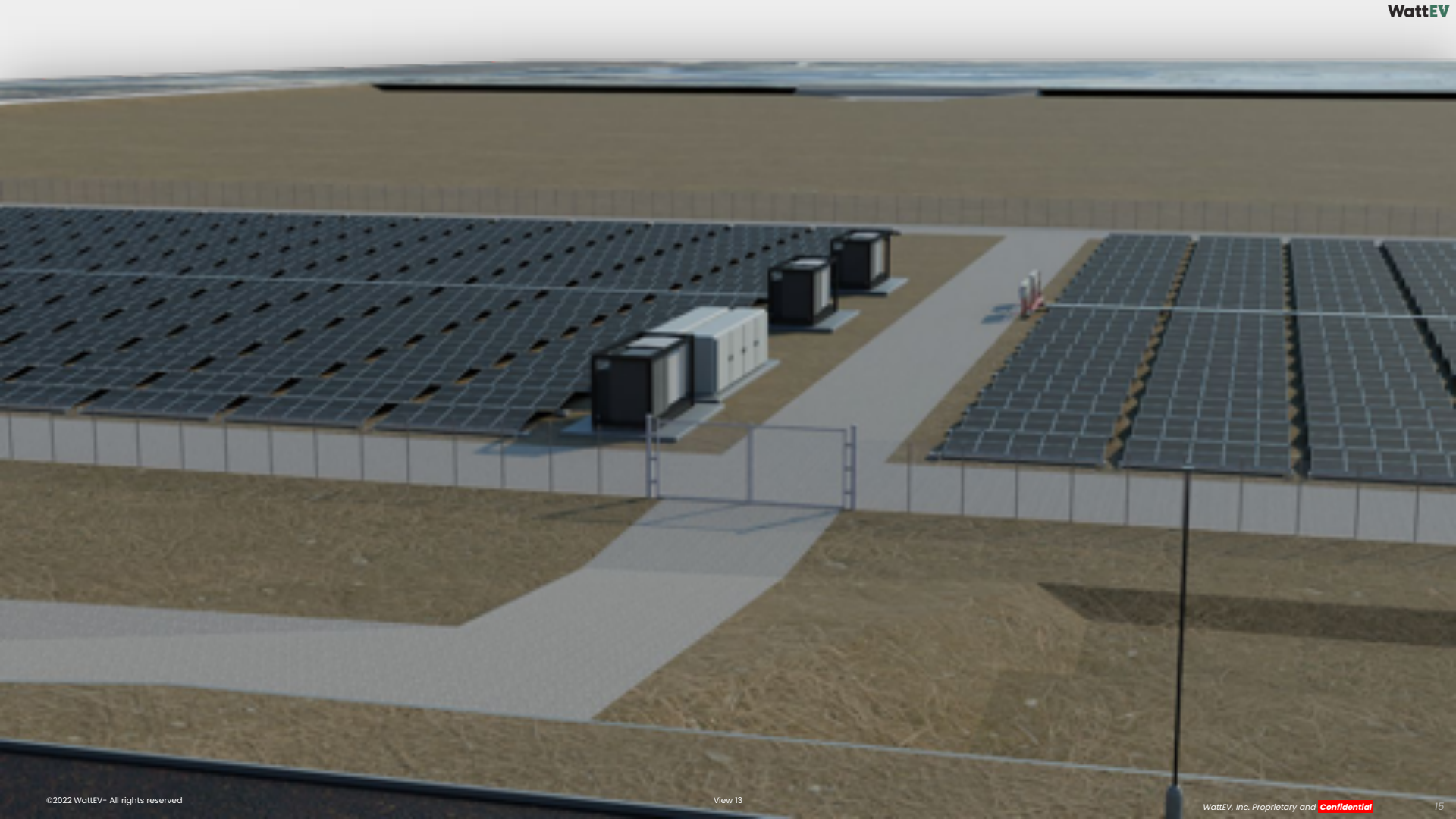




View 11




View 12



View 13



View 14

**Electrifying Heavy-Duty Transport**