



**UTILITIES ADVISORY COMMISSION**  
**Regular Meeting**  
**Wednesday, February 07, 2024**  
**Council Chambers & Hybrid**  
**6:00 PM**

Utilities Advisory Commission meetings will be held as “hybrid” meetings with the option to attend by teleconference/video conference or in person. To maximize public safety while still maintaining transparency and public access, members of the public can choose to participate from home or attend in person. Information on how the public may observe and participate in the meeting is located at the end of the agenda. Masks are strongly encouraged if attending in person. The meeting will be broadcast on Cable TV Channel 26, live on YouTube <https://www.youtube.com/c/cityofpaloalto>, and streamed to Midpen Media Center <https://midpenmedia.org>.

**VIRTUAL PARTICIPATION [CLICK HERE TO JOIN](https://cityofpaloalto.zoom.us/j/96691297246) (https://cityofpaloalto.zoom.us/j/96691297246)**  
**Meeting ID: 966 9129 7246 Phone: 1(669)900-6833**

**PUBLIC COMMENTS**

Public comments will be accepted both in person and via Zoom for up to three minutes or an amount of time determined by the Chair. All requests to speak will be taken until 5 minutes after the staff’s presentation. Written public comments can be submitted in advance to [UACPublicMeetings@CityofPaloAlto.org](mailto:UACPublicMeetings@CityofPaloAlto.org) and will be provided to the Council and available for inspection on the City’s website. Please clearly indicate which agenda item you are referencing in your subject line.

PowerPoints, videos, or other media to be presented during public comment are accepted only by email to [UACPublicMeetings@CityofPaloAlto.org](mailto:UACPublicMeetings@CityofPaloAlto.org) at least 24 hours prior to the meeting. Once received, the Clerk will have them shared at public comment for the specified item. To uphold strong cybersecurity management practices, USB’s or other physical electronic storage devices are not accepted.

**TIME ESTIMATES**

Listed times are estimates only and are subject to change at any time, including while the meeting is in progress. The Commission reserves the right to use more or less time on any item, to change the order of items and/or to continue items to another meeting. Particular items may be heard before or after the time estimated on the agenda. This may occur in order to best manage the time at a meeting to adapt to the participation of the public, or for any other reason intended to facilitate the meeting.

CALL TO ORDER 6:00 PM - 6:05 PM

AGENDA CHANGES, ADDITIONS AND DELETIONS 6:05 PM - 6:10 PM

*The Chair or Board majority may modify the agenda order to improve meeting management.*

PUBLIC COMMENT 6:10 PM - 6:25 PM

*Members of the public may speak to any item NOT on the agenda.*

APPROVAL OF MINUTES 6:25 PM - 6:30 PM

- 1. Approval of the Minutes of the Utilities Advisory Commission Meeting Held on January 3, 2024

UTILITIES DIRECTOR REPORT 6:30 PM - 6:45 PM

NEW BUSINESS

- 2. Discussion of the Supervisory Control and Data Acquisition Cyber Security Update (**DISCUSSION 6:45 PM – 7:30 PM**) Staff: Darren Numoto
- 3. Discussion of the Residential Electric and Water Utility Customer Satisfaction Survey Results (**DISCUSSION 7:30 PM – 8:15 PM**) Staff: Catherine Elvert
- 4. Discussion of Electric Grid Modernization Plan (**DISCUSSION 8:15 PM – 9:15 PM**) Staff: Dean Batchelor

COMMISSIONER COMMENTS AND REPORTS FROM MEETINGS/EVENTS

FUTURE TOPICS FOR UPCOMMING MEETING

ADJOURNMENT

- 5. Informational Update on City Council-Approved Substation Improvement Agreement With Tesla Inc. to Install Improvements and Reserve Capacity at Hanover Substation, and Approval of a Fiscal Year 2024 Budget Amendment in the Electric Fund to Establish the Hanover Substation Upgrade Project (EL- 24001); CEQA Status – Exempt under CEQA Guideline Sections 15301 and 15302

SUPPLEMENTAL INFORMATION

*The materials below are provided for informational purposes, not for action or discussion during UAC Meetings (Govt. Code*

*Section 54954.2(a)(3).*

INFORMATIONAL REPORTS  
12-Month Rolling Calendar  
Public Letter(s) to the UAC

## PUBLIC COMMENT INSTRUCTIONS

Members of the Public may provide public comments to teleconference meetings via email, teleconference, or by phone.

1. **Written public comments** may be submitted by email to [UACPublicMeetings@cityofpaloalto.org](mailto:UACPublicMeetings@cityofpaloalto.org).
2. **Spoken public comments using a computer** will be accepted through the teleconference meeting. To address the Council, click on the link below to access a Zoom-based meeting. Please read the following instructions carefully.
  - You may download the Zoom client or connect to the meeting in- browser. If using your browser, make sure you are using a current, up-to-date browser: Chrome 30 , Firefox 27 , Microsoft Edge 12 , Safari 7 . Certain functionality may be disabled in older browsers including Internet Explorer.
  - You may be asked to enter an email address and name. We request that you identify yourself by name as this will be visible online and will be used to notify you that it is your turn to speak.
  - When you wish to speak on an Agenda Item, click on “raise hand.” The Clerk will activate and unmute speakers in turn. Speakers will be notified shortly before they are called to speak.
  - When called, please limit your remarks to the time limit allotted. A timer will be shown on the computer to help keep track of your comments.
3. **Spoken public comments using a smart phone** will be accepted through the teleconference meeting. To address the Council, download the Zoom application onto your phone from the Apple App Store or Google Play Store and enter the Meeting ID below. Please follow the instructions B-E above.
4. **Spoken public comments using a phone** use the telephone number listed below. When you wish to speak on an agenda item hit \*9 on your phone so we know that you wish to speak. You will be asked to provide your first and last name before addressing the Council. You will be advised how long you have to speak. When called please limit your remarks to the agenda item and time limit allotted.

**CLICK HERE TO JOIN Meeting ID: 966 9129 7246 Phone:1-669-900-6833**

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## Utilities Advisory Commission Staff Report

**From: Dean Batchelor, Director Utilities**  
**Lead Department: Utilities**

**Meeting Date: February 7, 2024**  
Staff Report: 2401-2517

### **TITLE**

Approval of the Minutes of the Utilities Advisory Commission Meeting Held on January 3, 2024

### **RECOMMENDATION**

Recommended Motion

Staff recommends that the UAC consider the following motion:

Commissioner \_\_\_\_\_ moved to approve the draft minutes of the January 3, 2024 meeting as submitted/amended.

Commissioner \_\_\_\_\_ seconded the motion.

### **ATTACHMENTS**

Attachment A: 01-03-2024 DRAFT Minutes

### **AUTHOR/TITLE:**

Jenelle Kamian, Program Assistant I





## UTILITIES ADVISORY COMMISSION MEETING MINUTES OF JANUARY 3, 2024 REGULAR MEETING

### CALL TO ORDER

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Chair Segal called the meeting of the Utilities Advisory Commission (UAC) to order at 6:00 p.m.

Present: Chair Segal and Commissioners Croft, Mauter, Metz and Phillips

Absent: Vice Chair Scharff and Commissioner Forssell

### AGENDA CHANGES, ADDITIONS AND DELETIONS

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None

### PUBLIC COMMENT

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None

### APPROVAL OF MINUTES

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**ITEM 1: ACTION:** Approval of the Minutes of the Utilities Advisory Commission Meeting Held on December 6, 2023

Chair Segal invited comments on the December 6, 2023 UAC draft meeting minutes.

**ACTION:** Commissioner Phillips moved to approve the draft minutes of the December 6, 2023 meeting as submitted.

Commissioner Croft seconded the motion.

The motion carried 5-0 with Chair Segal, Commissioners Croft, Mauter, Metz and Phillips voting yes.

Vice Chair Scharff and Commissioner Forssell absent.

### UTILITIES DIRECTOR REPORT

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Dean Batchelor, Utilities Director, delivered the Director's Report.

**Happy New Year!** Call customer service if you need to update your contact information.

**New! Text Messages for Power Outages:** CPAU's new Outage Management System (OMS) allows us to more quickly detect and respond to power outages. OMS can provide CPAU customers with information about power outages through text alerts. All mobile numbers on file in our utilities account records were automatically opted-in. To unsubscribe, you can reply STOP or QUIT when you receive an outage text.

Please ensure we have a current mobile number on file to receive text alerts. Visit [cityofpal Alto.org/outages](http://cityofpal Alto.org/outages) for more information.

**Fiber to the Premises and Grid Modernization Project:** The City is working to upgrade and increase its electric grid load to support higher grid demand for electrification. The City will install a fiber optic network to provide high-performance broadband internet service. These two projects will be constructed concurrently to reduce disruption and costs. Construction will begin in the pilot area in northeastern Palo Alto in the first quarter of 2024. It is anticipated that pilot customers could subscribe to fiber by mid-2024.

Public utility easements extend 2 to 5 feet behind the sidewalk. Contractors will clear vegetation and trim trees in public right-of-ways and public utility easements. They will have IDs and badges. The City will provide notice to customers prior to working on private property and if construction crews need access to backyards.

**Lead Service Line Inventory:** CPAU is performing an inventory to determine if there is any lead pipe in the water distribution system. The City will ask PAUSD and private schools to provide a plan for each school to designate locations of lines and faucets on school premises for testing.

**Water Supply and Hydro Conditions:** The El Niño season has resulted in warmer but not wetter weather. Water storage in the hydroelectric system and regional water system were in good shape going into the winter. Average or above average precipitation in the coming months is possible. Staff will provide an update in February.

The UAC Budget Subcommittee (Vice Chair Scharff and Commissioners Phillips and Croft) will meet in approximately one week to review preliminary numbers. Staff will present preliminary numbers to Finance in the first part of February. Staff will present final numbers to the UAC in March and to Finance in April. Staff will go to Council in the first part of June for budget adoption and approval by July 1.

## **NEW BUSINESS**

### **ITEM 2: DISCUSSION: Discussion and Update on the Fiscal Year 2025 Preliminary Utilities Financial Forecast and Rate Projections**

Public Comment: David Coale was surprised the report did not mention capital improvement projects or address how rates may be affected by the end of gas.

Lisa Bilir, Senior Resource Planner, presented slides on preliminary FY 2025 rate changes to be effective July 1, 2024. Staff will present full financial plans and details to the UAC in March. Staff projected a 5% electric utility increase for FY 2025. Based on a transfer of 11.9% to the General Fund, staff proposed a 9% gas utility increase. The wastewater utility 9% proposed increase would bring reserves up to guideline range and revenues in line with costs to sustain a rate of main replacement in the sewer utility. The water utility proposal for a 5% overall increase reflected a 9% distribution rate increase. Staff did not propose an increase to refuse this year but expected increases in future years. Storm drain fee increases were based on CPI. A 3% CPI increase was modeled but the rate is not finalized. Overall, the monthly utility bill would increase 5% or \$20.50 based on an FY 2023 monthly residential bill of \$369.



Chair Segal queried if the City had an in-house or consultant grant writer to obtain government funding. Dean Batchelor, Director of Utilities, replied that staff looked for federal or state grants for grid modernization, fiber, EVs and chargers. Fiber had a dedicated person looking for grant opportunities. Karla Dailey, Acting Assistant Director Resource Management, remarked there was an interdepartmental team of City staff who meet once a month to review a list of grant opportunities and identify the departments that might apply. Mr. Batchelor commented that the City used consultants and City staff to apply for grid modernization and fiber grant applications.

Ms. Dailey addressed Commissioner Phillips's questions regarding Slide 5. Staff goes to Council on January 16 to request their approval for the layoff of a transmission asset. Prepayment of renewable power purchase agreements is a project that staff is working on with the NCPA for the Calpine geothermal contract. Many municipal gas utilities use a prepay structure as an IRS-codified way to take advantage of the tax-exempt status of municipal utilities and is being used more frequently by electric utilities. It takes a lot of work to put the agreement together and Palo Alto is not large enough but Silicon Valley Power is large and has a large share of the project. This topic will be discussed at an NCPA commission meeting this month.

Commissioner Croft asked how the large reserve and capital costs of installing fiber were funded as well as the value proposition of fiber. She requested to review any documents or information presented at previous meetings about the strategic importance of fiber as well as a projected income statement balance sheet displaying the amounts we were investing and expected to receive in the future. Dave Yuan, Utilities Strategic Business Manager, replied that staff was putting together a source and use statement for dark fiber and fiber to the premises. In the 1990s, the fiber fund was created with a transfer from the electric fund, which the fiber fund repaid in the early 2000s. Fiber leasing provides funds for fiber reserves.

Jonathan Abendschein, Assistant Director Resource Management, addressed the UAC regarding the electric utility. Staff tentatively proposed a 5% electric rate increase for FY 2025. There was good hydroelectric generation in FY 2024 because of heavy rains in the winter of 2022/2023. There were opportunities to sell surplus Resource Adequacy at higher prices as well as surplus Renewable Energy Credits. There was a settlement related to the federal government lawsuit over hydroelectric power from the Central Valley project. Our reserves will be better than expected but offset by major costs for electrification and fiber, customer-related investments and general capital investment. Taking into account bond financing, staff thought the net effect was positive.

A cost-of-service study is underway to ensure fair cost allocation among customers. Staff hoped to keep increases to 5% or less for all customer classes. Staff would provide more information to the UAC in March. The expected increase in transmission costs and increased grid investment would likely result in yearly 5% rate increases. Electric distribution costs continue to rise steadily due to inflation as well as challenges with recruitment and retention.

Mr. Abendschein emphasized that forecasts in the electric utility were uncertain because of the City's investments, ups and downs in the energy markets and electrification load uncertainty. Rate forecasts of the California Independent System Operator (CAISO) unit cost the City pays for transmission have been uncertain in previous years. January 1, PG&E had a 22% primarily transmission-driven rate increase. CPAU uses a transmission consultant to track PG&E's transmission rate cases to generate our forecast.

Debt service for grid modernization will begin in FY 2025. Staff will provide more detail on the assumptions in their presentation of the financial plans to the UAC in March.

Operational costs were increasing steadily. In recent years, there were significant increases related to recruitment, retention and contracting, capital investment, construction inflation and shortages in the utility construction industry.

Staff regularly advocates reducing transmission cost increases. CPAU intervened in collaboration with other publicly owned utilities on transmission rate case resolution and expected reduced transmission costs or possibly a small refund in the future.

A geothermal project will come into our supply portfolio on January 1, 2025.

Many of the types of utility equipment we purchase are in high demand, which affects availability and costs as well as projects delays.

Commissioner Phillips asked why Slide 14 showed a 21% rate change but -5% on Packet Page 20. Mr. Abendschein replied there was an increase of 21% in the base rate and a reduction in the hydroelectric rate adjustor, resulting in customers seeing a net decrease of 5%. Staff will revise their materials when they make their presentation to the UAC in March.

Staff projected electric supply operating reserves to be below minimum but return to target over the forecast period due to a timing issue with the federal government settlement money.

The hydro stabilization reserve was \$8.5 million, below the minimum of \$11 million. The hydroelectric rate adjustor may be activated if we have a bad hydro year, although staff wanted to avoid that. When staff presents their proposal to the UAC in March, they will recommend using one-time revenues associated with better hydro generation and Resource Adequacy sales to replenish the hydro stabilization reserve. Staff desired a target level of at least \$17 million.

Commissioner Croft noted several reserves were below minimum and asked staff to provide an explanation to the UAC whenever that happened. Mr. Abendschein stated \$8.5 million was transferred to the hydroelectric stabilization reserve to raise it to a minimum acceptable level. \$10 million was used to repay loans from the electric special projects reserve during the pandemic and drought to stabilize the operations reserve. There were large one-time capital investments for fiber and electrification as well as expenses for major customers. The FY 24 financial plan projected below-minimum reserves due to last year's gas price spike. Council wanted a slower reserve recovery to avoid a larger rate increase.

The electric distribution fund was negative due to reappropriation for capital investments. The supply fund will fall below minimum to transfer funds to the distribution operating reserve to cover significant capital investments and bring that reserve above negative. The financial plan would build up the reserve within the target guideline range over the next few years. Staff projected the electric distribution CIP reserve to be low but remain within target over the forecast period.

Commissioner Mauter requested inclusion of past years' projections to see projection accuracy. Mr. Abendschein said it would be included in the financial plan.

Commissioner Mauter asked if the cost-of-service study included an assessment of time-of-use (TOU) and a rate for all-electric customers. Mr. Abendschein replied a TOU assessment was included in their internal analysis but there was a legal question of whether it was the right time to adopt TOU rates. CPAU's largest customer classes have TOU rates and seasonal differences were reflected in all rate classes. In two to three years, we would have equipment to reflect intra-day use. A rate for fully electric customers was challenging. As we transition to TOU rates over the next two to three years, tiered rates for residential electrification would go away.

Commissioner Metz suggested each utility have at least three reserve funds (commodity, operations, CIP, maybe debt service or things we do not control such as transmission). It was important not to transfer money between funds because it was very confusing and masked how we managed money and the activity represented by each fund. When a fund was high, he thought it was more appropriate to put money in treasury. When a fund was low, take money from treasury. Report at least on an annual basis the status of each fund. Mr. Abendschein said that while staff was able to do root cause analysis regardless of transfers between funds, he agreed the inter-fund transfers masked the visibility of those causes in reporting. After the cost-of-service study, staff would realign the supply and distribution components of rates for the electric utility. There were no interfund transfers for the electric utility projected in the financial forecast beyond FY 2024. The gas utility, on the other hand, was more complicated partly because of the way we set the commodity rate. Operational costs associated with managing the commodity rate were difficult to integrate into a monthly varying commodity rate without going to Council every month to change the rate. For administrative purposes, staff would likely continue inter-fund transfers for the gas utility.

Commissioner Metz remarked it was helpful in business management to see if every year we underestimated or overestimated costs. Trends were valuable in steering and managing the business.

Ms. Bilir presented the preliminary gas rate projections. Staff proposed a 16% distribution rate increase for FY 2025 equating to overall increases in the customer's gas bill of 9% in 2025, 7% in FY 2026 and FY 2027, 6% in FY 2028, and 5% in FY 2029. Gas utility revenues were below cost, so rates need to increase to bring reserves within guideline ranges and revenues in line with costs.

Voters approved Measure L in 2022. Staff requested UAC feedback on the FY 2025 transfer amount. Supply costs were expected to remain stable this winter. Council approved an insurance policy for this year's winter months to stabilize prices.

Gas distribution cost drivers include: Health, retirement and associated overhead costs continue to increase. Underground construction costs have increased substantially. Cross-bore investigation costs, although the UAC may recommend adjustments. Increase in transfers from the gas utility to the capital projects fund because staff did not forecast enough.

Under Measure L, the gas utility transfers up to 18% of its gross revenues to the General Fund, although Council may elect to transfer less. Last year, Council approved a transfer of 15.5% for FY 2024. Based upon Council's direction, staff recommended an 11.9% transfer for FY 2025 and gradually increase the transfer up to 18% by 2027. An 11.9% (\$9 million) transfer would result in a 9% overall rate increase in FY 2025 versus a 14% rate increase with an 18% transfer (\$13.6 million). Staff expected the gas operations reserve to fall below minimum at the end of FY 2024 and be within the guideline range for FY 2027 and the remainder of the forecast period. The reserve projections were similar with either Measure L transfer scenario.

The supply rate stabilization reserve was negative at the end of FY 2023. There were enough funds in the operations reserve to cover that amount but staff was unable to execute the transfer at the end of FY 2023. Staff will propose revised language in the reserve guidelines for staff to perform future transfers.

Chair Segal did not want to raise the transfer to 18%. The transfer amount went up as costs increased and she did not believe it was in the spirit of Measure L to add to the General Fund with increased gas utility rates. Commissioner Phillips agreed with the lower transfer amount and asked how staff chose 11.9%. Ms. Bilir replied it was Council's direction to increase the transfer gradually to the voter-approved level of 18%. Commissioner Phillips emphasized that voters approved a cap. Commissioner Croft supported the 11.9% transfer but the annual rate increases were higher than she wanted.

Commissioner Mauter inquired if reserve projections accounted for efforts to electrify Palo Alto and the expected changes in demand. Ms. Bilir responded that the preliminary projection included the capital budget amount in FY 2028 for gas decommissioning and had a placeholder for electrification costs but those costs were still unknown. Mr. Batchelor commented there was \$400,000 in the FY 2024 budget to start the study and hire a consultant to help us transition. There were dollars allocated in the S/CAP budget. Commissioner Mauter opined it was sometimes not clear how we factored in major structural changes. Mr. Abendschein explained that it was difficult to incorporate alternative projections within the financial plans because the changes were so large. He could forward to the UAC a preliminary analysis from a few years ago of various scenarios eliminating all single family residential gas use and greatly decreasing commercial gas use as well as different rate impacts. Staff budgeted money for a gas transition study. An S/CAP electrification funding study for the electric utility was going to Council on January 16. Staff will discuss those studies with the UAC. The integrated resource plan in December included a projection with high electrification loads.

Ms. Bilir presented preliminary water rate projections. Staff proposed a 9% distribution rate increase, which equated to an overall 5% increase on the water bill. Last year, funds were utilized from the rate stabilization reserve and capital reserve due to reduced revenues. Regionally, water sales have decreased due to the drought and have not rebounded. The preliminary forecast relied on SFPUC's rate projection last May where they did not anticipate increasing the SFPUC rate this July; however, staff expected to hear informally from SFPUC in January if they would increase our wholesale rate.

The water utility needed to raise a lot of money to pay for two tanks that need to be replaced and large main replacement projects that occur every other year. Last year, the distribution rate increase was limited to 2% because of the large commodity increase from SFPUC.

Chair Segal noted water main replacement acceleration was not included. Ms. Bilir responded that the preliminary projections only included the budget amounts for water main replacement projects at a typical level but not an acceleration of main replacement.

The One Water study would evaluate supply options but those were not included in the projections. Commissioner Mauter queried when One Water supply alternatives might come online, have capital expenditures or incur debt. Ms. Bilir replied it depended on the water supply option. Something taking 10 or 15 years of planning might be outside of this forecast timeframe whereas conservation could be done in 2025. Staff will present details to the UAC as soon as they can.

Water sales revenues, net of supply cost savings, were \$2.4 million lower than forecasted. Expenses were \$1.6 million higher than forecasted, including transfer to the capital projects fund, accounting adjustment to the beginning balance, and CIP costs were higher than anticipated. Staff projected the operations reserve to be close to the minimum guideline range and return to target in FY 2029. The sales forecast was lowered based upon recent reductions in sales due to drought and conservation. Cost drivers include drought-related water sales reductions; health, retirement and associated overhead cost increases; increased cost for generator rental, as well as cost for exposed pipeline in Arastradero for water, wastewater and gas.

Commissioner Mauter asked for a breakdown of distribution operation costs for labor and electricity for pumping. Ms. Bilir replied there was usually a chart with a breakdown of operation costs but she did not have those details.

In answer to Commissioner Phillips query on the amount of commercial water usage versus residential, Ms. Bilir replied it was about 63% residential and the rest was non-residential.

Commissioner Mauter wondered if rates were significantly different between commercial and residential per CCF and was surprised to see a big difference in commercial and residential rates in other cities. Ms. Bilir explained that the single family residential class had a tiered rate, meaning customers paid more per unit if they exceeded 6 CCF of water usage within a given month. Nonresidential classes do not have tiered rates. The irrigation charge was significantly higher. Other cities may use different rate structures and customer classes, so it was difficult to compare rates.

Ms. Bilir presented preliminary wastewater rate projections. Last year, staff presented to Council three years of 9% increases from FY 2024 through FY 2026. Increasing the rate of sewer main replacement from an average of 1 mile per year to 2.5 miles per year was very important to replace remaining mains within their approximately 100-year lifespan. That plan would have replaced all remaining mains within 108 years. Last year, Council also approved a large sewer main replacement a year early to coordinate with the Caltrans repaving project on El Camino, so those funds were moved to the reappropriations and commitments reserve. That main replacement project would fully utilize all of the capital reserve funding and draw down the rate stabilization reserve to zero. Achieving a sustainable rate of main replacement within the same time period would require more rate increases. Staff recommended deferring the first of a series of capital projects from 2026 to 2028 and looking for cost cutting opportunities this year. With this approach, all remaining mains would be replaced within 111 years.

Last year, staff projected the operations reserve would be at the minimum guideline level. However, revenue projections were higher than actual revenue and projected costs were lower than actual costs in FY 2023. The reserve dropped to negative \$700,000. The sewer service charge revenue was very close to staff's projections but the projection for other revenue was too high, particularly the capacity fee revenue for new development. In FY 2024, nonresidential sewer service charge revenue decreased mostly due to reductions in water usage from last winter. Charges for commercial customers are based upon their three lowest months of winter water usage, which was lower last winter.

CIP-related costs were higher than staff's projection because staff did not project administrative costs. A higher transfer out to capital projects impacted the reserve fund. Staff reconciled all costs in 2023 with the accounting costs listed in the City's financial statements to forecast more accurately next year. A group of staff from Engineering, Admin, Rates and Budget convened to examine each of the categories where projections were over or under to reach consensus on a better forecasting method.

Chair Segal expressed her concern with deferring sewer main replacement. CPAU was significantly lower than residential bills from other communities. Chair Segal thought there should be a discussion of the consequences. She did not want to confront dangers that could have been avoided. Her recollection of the discussion about accelerating main replacement was because they were so old. UAC chose the mid timing instead of the fastest because of budget constraints. A 9% increase may be a couple dollars but would have a big impact on when we start these projects. Ms. Bilir thanked Chair Segal for her input. Staff presented to Council a range of options between 108 years to 114 years, so this was within the range but not the expectation that was set.

Chair Segal wondered why staff recommended a rate increase that left wastewater reserves in a bad place and our sewage pipes older than we would prefer. Mr. Batchelor replied that staff evaluated a 13% increase compared to the 9% proposal and staff could send it to the UAC after this meeting. Commissioners could reply via individual emails if they agree to move it forward to Council. Staff could receive input during the budget subcommittee meeting before staff goes to Finance. Ms. Bilir stated the 9% increase was \$4.40 whereas a 15% increase was \$7.30 per residential customer per month.

Commissioner Metz felt more nervous about several of the reserve funds being at or below their minimum than bill increases. He thought staff should evaluate how to bring reserve funds into range within a year or two.

Commissioner Phillips commented that the combination of the following factors convinced him there was room to be more aggressive with rate increases. After a 9% increase, CPAU was substantially lower than our neighboring communities. Deferring important maintenance worried him. Reserves were low.

Commissioner Mauter asked if Public Works determined the prices for major treatment projects. Ms. Bilir replied that Karin North, Assistant Director Public Works, oversees the treatment plant. Public Works provides regular updates on their capital projects. Staff incorporated those projections into the forecast, but costs will continue to increase over the next five years and may not be fully captured. Public Works was pursuing grant funding from Valley Water to offset some treatment costs. Some grant funds are included in staff's forecast for the financial plan. Additionally, there is a team composed of staff from Public Works and Utilities that meets regularly regarding the ongoing work on the One Water Plan.

With the structural changes we might see over the next decade when water and wastewater facilities are more tightly integrated, Commissioner Mauter suggested thinking about reserve funds as complementary to one another and the need for adequacy. She strongly supported increasing wastewater and water reserve funds due to future increased wastewater treatment costs and the associated costs of a One Water Plan.

Commissioner Croft asked how expenses were calculated and shared with partner cities. Ms. North explained that CPAU provided two cost-of-service analyses for our partners. One is the fixed-rate capital cost based on capacity rights from the 1980s when communities requested their allocation of the 40 million gallons/day capacity of the wastewater treatment plant. Second, there was an operating (flow and load) cost share based on 34% flow, 22% ammonia, 22% total suspended solids and 22% oxygen demand. CPAU sends our partners quarterly bills based on monthly data from samples collected throughout the collection system for all partner agencies. CPAU met with partnering communities frequently, gave them projections and kept them apprised of sewage treatment plant upgrades. The

sewage treatment plant was being rebuilt. A \$193 million project to remove nutrients started this year. The sewage plant runs at 15 of the 40 million gallons/day capacity. Every partner city had more capacity than they need. CPAU provided partners a 10-year forecast so they can project their rates.

**ACTION:** None

The UAC took a break at 8:21 p.m. and resumed at 8:32 p.m.

**ITEM 3: DISCUSSION:** Discussion and Update on Utilities Department Five-Year Capital Improvement Program Progress and Projections

Public Comment: David Coale thought the City should plan for capital improvement projects to treat forever chemicals (PFAS). He opined that pyrolysis was one of the most effective ways to treat wastewater effluent. This was cost effective and energy neutral or energy positive in Redwood City.

Matt Zucca, Assistant Director WGW Engineering and Operations, discussed gas, water and wastewater capital projects from FY 2019 projecting forward five years.

Staff split GMR 24 into two projects. GMR 24A is a gas replacement project in the Stanford Mall area. Staff hoped to find out in the first part of 2024 if their application will be awarded a \$12 million grant for GMR 24B from the Pipeline and Hazardous Materials Safety Administration.

Of CPAU's eight reservoirs, all were replaced and within the first quarter of their anticipated useful life except for Park Reservoir and Dahl Reservoir. Reservoir projects cannot be performed at the same time because taking two tanks offline would affect the operation of the water system. Before reissuing the Park Reservoir RFP, staff had to determine why there were no responses in the first round. The Dahl Reservoir upgrade was planned for FY 26.

Mohammad Fattah, Manager Electric Engineering, addressed the UAC regarding the electric utility. The strategic focus was on grid modernization. The penetration of electric vehicles (EVs) in Palo Alto was about 30% to 35%. Capacity was probably 50% of where it needed to be. There was about a 25% compound annual growth rate (CAGR) on the annual increase of EVs. The fiber to the premise (FTTP) project is in the design stage. In the next two to three weeks, work will begin on placing and replacing poles. Grid modernization is a five-year program. The first segment of grid modernization services will come live in June/July 2024 with the fiber network following in the pilot area. The Hanover Substation upgrade project with Tesla was going through permitting and anticipated to break ground in the next three to four weeks.

Staff was making efforts to provide prospective tenants or owners of newly constructed apartments and condominiums the option to obtain communication services including dark fiber from the City.

SWOT analysis identified key threats of supply chain instability and labor shortage. Several engineering staff left CPAU. It was a challenge to recruit and hire new engineers because engineers were moving to more lucrative areas such as artificial intelligence (AI) and machine language (ML). CPAU created a two-year rotation program for engineers to design, build, support and maintain substations; rotate to transmission and distribution, new customer connections and customer services. The cost of transformers more than doubled in the past five years with lead-time up 300%. Cable, especially aerial cable because of California fires, was a very difficult commodity to obtain.

The Foothills underground project for fire prevention was delayed until next year to seek easements for electrical facilities. The AMI project was ongoing. Substation security systems will be updated, including cameras and raising the walls. Substation circuit breakers were about 50 years old and some do not have spare parts, so existing infrastructure would be reviewed for breaker replacement. Eighty percent of the engineering staff focused on grid modernization and FTTP.

In reply to Commissioner Phillips' question about AMI, Dave Yuan, Utilities Strategic Business Manager, responded that residential was on target to finish by December 2024 and commercial by mid-2025.

Commissioner Metz asked when the UAC could see details on the \$160 million for grid modernization over the next five years. Mr. Fattah replied it was a work in progress. Staff did not have a date to return to the UAC to present the program but first they will do an inventory of poles, miles of cable and wire and identify which ones needed replacement.

**ACTION:** None

#### **COMMISSIONER COMMENTS and REPORTS from MEETINGS/EVENTS**

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None

#### **FUTURE TOPICS FOR UPCOMING MEETINGS**

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Commissioner Croft wanted a long-term forecast on buyers of excess solar energy and who was using gas. She wanted to know staff's confidence level that there were buyers for our excess energy if we entered new solar contracts and the length of time that market would exist.

Commissioner Metz remarked that grid modernization was the biggest capital project but the UAC had not seen any details. Dean Batchelor, Utilities Director, stated that Jonathan Abendschein spoke about it in the resiliency study. Chair Segal pointed out that we had to issue a bond and voters need to be informed. Commissioner Metz would like to know the reason why ratepayers in Palo Alto should spend over \$300 million, what we will achieve with that money and when, what we will not spend it on and why. Commissioner Phillips wanted an explanation of what grid modernization entailed, what people would be able to do when grid modernization was complete, how personal or commercial life may be different and how will the environment be improved. If we do not modernize the grid in Palo Alto, he asked what we would not be able to do, such as not being able to support more than X number of homes installing solar or EVs. This construction project was building a capability and he wanted to understand what that capability was. Mr. Batchelor replied that Tom Marshall made the benefits clear in his prior presentation. Without grid modernization, there is not enough capacity to allow whole-home electrification. Mr. Batchelor will talk to staff about providing a report in the next couple of months to the UAC on this project and its values. He agreed that residents needed to start getting informed so they could understand the cost and the reasons we were asking for the bond.

Commissioner Metz requested staff to add calendared items on the rolling calendar. Chair Segal also noted the long list of items to add to the calendar. Mr. Batchelor stated they would schedule the items that needed discussion within the next 11 months. Mr. Batchelor could provide updates on some items on a quarterly basis. Staff will put together a presentation about solar and its advantages.

Commissioner Metz asked for a cybersecurity update. Mr. Batchelor needed to contact the Director of IT and Jonathan Lait about the permitting process and a timeline for presenting this topic to the UAC.



**NEXT SCHEDULED MEETING:** February 7, 2024

**ADJOURNMENT**

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Commissioner Phillips moved to adjourn.

Commissioner Mauter seconded the motion.

Motion carried 5-0 with Chair Segal and Commissioners Croft, Mauter, Metz and Phillips voting yes.

Vice Chair Scharff and Commissioner Forssell absent.

Meeting adjourned at 9:17 p.m.

Respectfully Submitted  
Jenelle Kamian  
City of Palo Alto Utilities





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## Utilities Advisory Commission Staff Report

**From: Dean Batchelor, Director Utilities**  
**Lead Department: Utilities**

**Meeting Date: February 7, 2024**  
**Staff Report: 2401-2509**

### **TITLE**

Discussion of the Supervisory Control and Data Acquisition Cyber Security Update

### **RECOMMENDATION**

Staff is informing UAC of SCADA (Supervisory control and data acquisition), Cyber Security Updates, and Advanced Metering Infrastructure (AMI).

### **ATTACHMENTS**

Attachment A: Presentation

### **AUTHOR/TITLE:**

Dean Batchelor, Director of Utilities

Darren Numoto, Director of Information Technology





# Scada Cyber Security Update Utilities Advisory Commission

February 7, 2024

- 1.) Cybersecurity Overview and Priorities
- 2.) Supervisory Control and Data Acquisition (SCADA)
- 3.) Advanced Metering Infrastructure (AMI)

# Cybersecurity Overview

## Human Layer

- Humans are the primary target.

## Perimeter Security

- Physical & digital security
- SCADA Access

## Network Security

- Secure access to the network
- SCADA

## User End point Security

- Computers & mobile devices

## Application Security

- Access to applications & digital infrastructure

## Data Security

- Protect & secure data at rest and in transit
- Utilities

## Critical Assets

- Sensitive data
- SCADA



- Organization wide approach
  - Interdepartmental dependencies
  - Cross functional teams
- Internal policies and procedures
- Data Governance
- Continual improvements



- Servers are on-premise
- Login requires VPN and 2 factor authentication
- Limited user access
- Multi-layer VPN, DMZ, and firewalls
- After hours laptop for Water/Gas SCADA access only, no internet access once connected to VPN.
- Utilities SCADA Cybersecurity Red Team.
- Manual override mode: Isolate SCADA from network access.
- Disaster recovery (within 48 hours)
- Planned: Perimeter Security Enhancements, SCADA device upgrades

- Enterprise DC – DMZ, VPN, Firewalls
- OS/App hardening, patching, EDR
- Remote access requires multifactor authentication
- Role based access control
- Intrusion detection/prevention, auditing/logging, SEIM
- Message encryption, HSM
- 256-bit encryption

# Q&A







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## Utilities Advisory Commission Staff Report

**From: Dean Batchelor, Director Utilities**  
**Lead Department: Utilities**

**Meeting Date: February 7, 2024**  
**Staff Report: 2401-2507**

### **TITLE**

Discussion of the Residential Electric and Water Utility Customer Satisfaction Survey Results

### **RECOMMENDATION**

This item is for discussion and no action is requested. Staff presents the results of the City of Palo Alto Utilities (CPAU) residential electric and water utility customer satisfaction surveys.

The attached presentation describes the goals, methodology, key findings, and considerations for CPAU based on customer feedback from the survey results. The primary goals of this research study were to assess customer satisfaction with CPAU, uncover customer perceptions of their utility, and explore customer interest in various utility-related products and services. The outcome of this research will enable CPAU to clearly understand customer expectations, act on near-term opportunities for improvement, and create a strategic roadmap to increase customer satisfaction.

### **ATTACHMENTS**

Attachment A: Presentation

### **AUTHOR/TITLE:**

Dean Batchelor, Director of Utilities  
Staff, Catherine Elvert, Utilities Communications Manager



A landscape photograph showing a wide river or wetland area with green grass and shrubs in the foreground. A wooden fence runs across the middle ground. In the background, there are rolling hills and mountains under a cloudy sky. A large green semi-transparent overlay covers the right side of the image, containing the title text.

**RESIDENTIAL  
ELECTRIC AND WATER  
UTILITY CUSTOMER  
SATISFACTION  
SURVEY RESULTS**

## PROJECT OVERVIEW AND RESEARCH OBJECTIVES

- Partnership with California Municipal Utilities Association (CMUA) and GreatBlue Research, Inc.
  - Statewide survey of municipal and investor-owned residential electric and water utility customers
  - Plus “oversample” survey in Palo Alto
- Conduct comprehensive research among residential customers to gain a deeper understanding into their perceptions of the utility and satisfaction with the services provided.
- Research outcomes will enable CPAU personnel to:
  - a) more clearly understand, and ultimately set, customer expectations,
  - b) act on near-term opportunities for improvement, and
  - c) create a strategic roadmap to increase customer satisfaction.





## AREAS OF INVESTIGATION IN 2023

- GreatBlue and CPAU developed a research study to learn about the following topics:
  - Organizational characteristic ratings
  - Customer expectations
  - Satisfaction with customer service and field personnel
  - Reliability, quality, and service ratings
  - Preferred methods of receiving information
  - Importance of and satisfaction with self-service digital options
  - Perception of CPAU's emergency preparedness
  - Interest in electric and water services and devices
  - Awareness and utilization of incentives and rebates
  - Demographic profiles of respondents

# Research Methodology Snapshot

Methodology  Digital	No. of Completes  400 each survey	No. of Questions  57* Water 64* Electric	Incentive  None	Sample  Provided by CPAU
Target  Residential Customers	Quality Assurance  Dual-level**	Margin of Error  +/- 4.8%	Confidence Level  95%	Research Dates  October 16 - October 30, 2023

\* This represents the total possible number of questions; not all respondents will answer all questions based on skip patterns and other instrument bias.

\*\* Data Quality personnel, in addition to computer-aided interviewing platform, ensure the integrity of the data is accurate.



# ELECTRIC CUSTOMER SURVEY

## Results and Analysis

FEBRUARY 7, 2024

# KEY STUDY FINDINGS



## Ratings

- CPAU received significantly higher ratings than the Northern California region and/or the State of California in the following areas:
  - average positive organizational characteristic rating,
  - trust,
  - meeting customer expectations,
  - and customer service ratings

## Notable Positive Ratings

- Average positive organizational characteristic rating of 70.9%
- Net Positive Score (NP+S) of 82.1%
  - $NPS = (\text{advocates} + \text{loyal} + \text{satisfied})$
- 85.6% of customers provided positive ratings for CPAU "providing consistent and reliable electric service to customers," which is higher than ratings provided by customers in Northern California, statewide, and nationwide
- 79.6% reported CPAU meets their expectations "all" or "most of the time"

# KEY STUDY FINDINGS

## Outage Preparedness

- One-quarter (24.6%) believe CPAU is prepared to handle an emergency, which is significantly less than the frequency of customers in Northern California and the State of California who reported the same.
  - Of note, nearly one-half (49.5%) indicated they “don’t know” if CPAU is prepared to handle an emergency.

## Electric Vehicles (EVs)

- Nearly one-half of customers (47.4%) have plans to buy an electric vehicle, and 30.0% already own an electric vehicle.
  - Over four-fifths (84.4%) are likely to charge their electric vehicle during off-peak hours
  - Over one-half (53.7%) are likely to install an L2 charger at their home rather than rely on CPAU to upgrade its infrastructure to a faster charging system.

## KEY STUDY FINDINGS

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### Electrification


- About two-thirds (67.0%) support CPAU investing in electrification
- Just over one-half of customers (51.0%) are considering purchasing an electrification product
- Nearly one-half (46.5%) are aware of CPAU's electrification program; however, customers under 55 years of age are significantly less aware than customers 55 years of age or older.
  - Despite this, significantly more customers under 65 years of age plan to participate in this program than customers 65 years of age or older.



# Organizational Characteristics Ratings


The top rated characteristics among CPAU customers are "providing consistent and reliable electric service to customers," followed by "being committed to green, renewable, or carbon-free energy," and "restoring power in a reasonable time after an outage."

CPAU customers provided higher ratings than customers across Northern California, California, and nationwide for ten (10) of the eleven (11) characteristics.

 Indicates top ratings among CPAU customers

 Indicates data leveraged from GreatBlue's proprietary Public Power Data Source

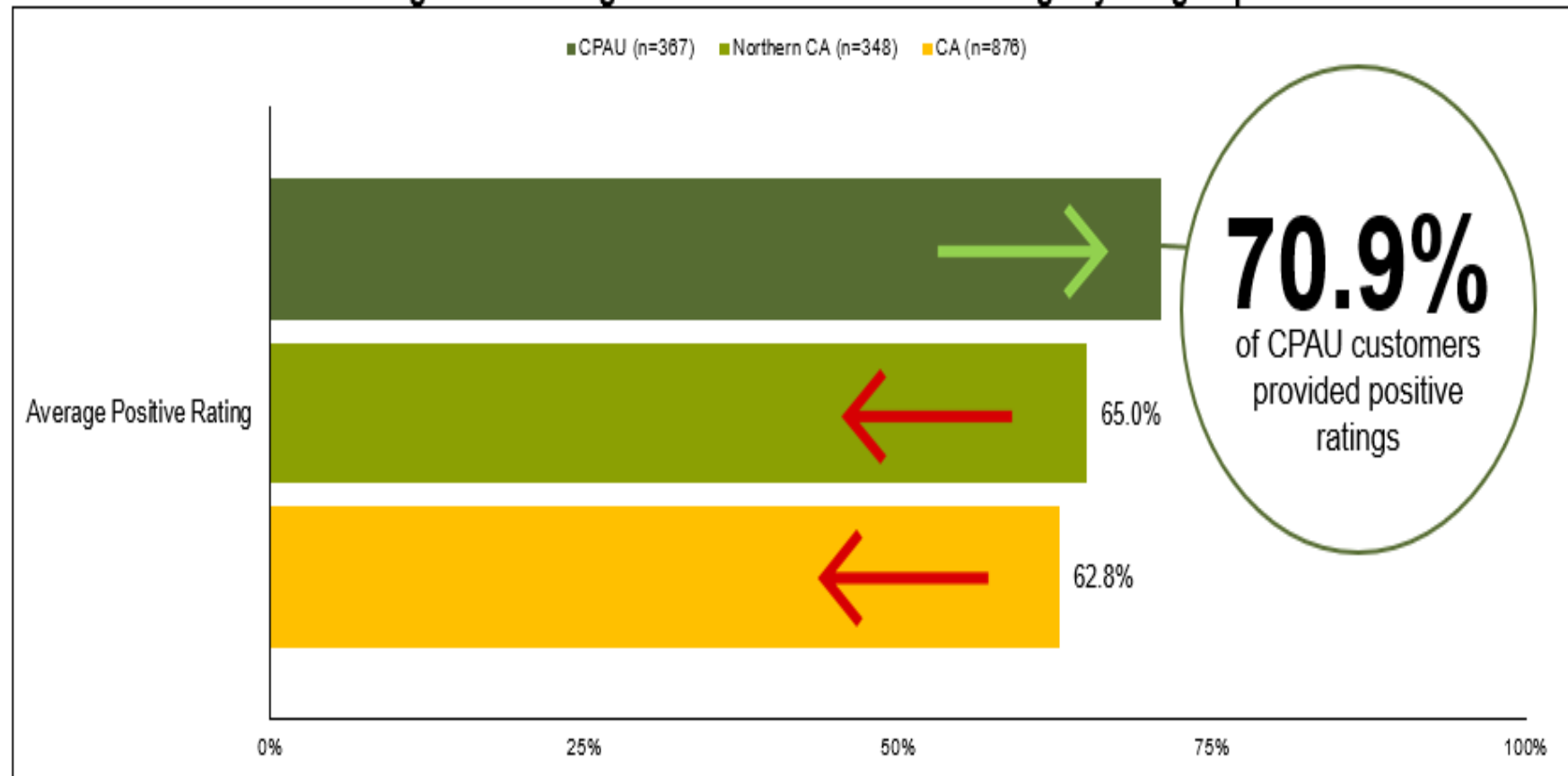
Aggregate of ratings 7-10 shown, w/o "don't know" responses

	Total Positive Ratings			
	CPAU	Northern CA	CA	
Providing consistent and reliable electric service to customers	85.6%	74.5%	72.1%	73.4%
Being committed to green, renewable, or carbon-free energy	83.1%	63.9%	60.1%	---
Restoring power in a reasonable amount of time after an outage	80.5%	68.7%	66.4%	70.9%
Responding promptly to customer questions and complaints	73.8%	68.8%	63.3%	67.7%
Communicating with customers	73.8%	66.0%	63.5%	67.9%
Helping customers use less electricity	66.6%	63.1%	62.3%	58.2%
Being open and honest about company operations and policies	66.4%	57.6%	58.4%	63.1%
Providing good service and value for the cost of electricity	66.0%	63.8%	61.6%	63.6%
Community involvement	65.5%	61.2%	58.4%	62.8%
Offering innovative programs and services	63.3%	60.5%	59.4%	61.2%
Maintaining modern and reliable infrastructure	55.5%	67.3%	65.4%	66.3%
Average	70.9%	65.0%	62.8%	65.5%

# Ratings by Subgroup

Customers provided an average positive rating of 70.9% when rating CPAU on a series of organizational characteristics, which is significantly higher than averages provided by municipal customers in Northern California and in the State of California as a whole.

**Average Positive Organizational Characteristic Ratings by Subgroup**



**70.9%**  
of CPAU customers  
provided positive  
ratings

Aggregate of ratings 7-10 shown

Arrows indicate statistical significance at a 95% confidence level, with the color and direction of the arrow denoting whether it is higher or lower than the compared subgroup



# CONSIDERATIONS

## Strategy to push electrification to younger customers.

- Most CPAU customers are familiar with the concept of electrification and support CPAU's investment in it
- About one-half of customers are considering purchasing an electrification product of some sort.
- Key differences based on demographics: under 55 years of age are less familiar with electrification and CPAU's program but show higher enthusiasm, are more likely to believe electrification will save money and are more interested in learning ways to lower their energy consumption.
- CPAU can use targeted email campaigns showing the difference in efficiency between electrification products and fossil-fuel alternatives to reinforce cost savings and reduced energy use from electrification.
- CPAU can present electrification program as an intro to transition to electric and drive higher participation among younger customers.
- Promote electrification and electric products during times of higher average energy consumption, showing energy and cost savings.

## **Consider implementing an off-peak electric vehicle charging rate in conjunction with L2 home-charger installation.**

- CPAU customers that own or plan to purchase an electric vehicle indicated they are very likely to charge their vehicle during off-peak hours. There was also a strong preference for Level 2 chargers over Level 1 chargers, and a little over one-half showed interest in installing a home Level 2 charger. This presents an opportunity for CPAU to promote Level 2 charger installations more effectively. Implementing an off-peak electric vehicle charging rate and presenting it as a bundle with home-chargers could increase the attractiveness of the offer, potentially resulting in more home-charger investments.

## CONSIDERATIONS

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**Consider implementing an off-peak electric vehicle charging rate in conjunction with L2 home-charger installation.**

- CPAU customers that own or plan to purchase an electric vehicle are very likely to charge their vehicle during off-peak hours.
  - Strong preference for Level 2 chargers over Level 1 chargers, and a little over one-half showed interest in installing a home Level 2 charger.
- This presents an opportunity for CPAU to promote Level 2 charger installations more effectively.
  - Implementing an off-peak electric vehicle charging rate and presenting it as a bundle with home chargers could increase the attractiveness of the offer, potentially resulting in more home charger investments.



# WATER CUSTOMER SURVEY

## Results and Analysis

FEBRUARY 7, 2024

# KEY STUDY FINDINGS

## Ratings

- CPAU received significantly higher ratings than the Northern California region and/or the State of California in the following areas:
  - maintaining an adequate supply of water
  - monitoring water quality
  - environmental responsibility
  - promoting the efficient use and conservation of water

## Notable Positive Ratings

- Average positive organizational characteristic rating of 78.9%
- Net Positive Score (NP+S) of 87.4% (advocates + loyal + satisfied)
- CPAU received the highest ratings for "maintaining an adequate supply of water," at 93.8% and received higher ratings than customers in Northern California and the State of California for all other characteristics.
- 85.0% of customers say CPAU meets their expectations all or most of the time.
- 80.7% report satisfaction with the most recent customer service experience.

# KEY STUDY FINDINGS

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## Water Quality and Conservation

- The majority of customers (95.5%) provided positive ratings for the "overall quality of water" provided by CPAU.
- One-half of customers (55.5%) reported concern over possible contaminants in CPAU's water supply. Significantly more customers reported concern compared to Northern region customers (46.9%).
- However, 83.3% of respondents indicated they trust CPAU to take immediate action to solve any issues with the water supply, which is significantly more than the frequency of customers from the Northern region and the State of California as a whole who reported the same.
- Over two-thirds of customers (68.3%) indicated they would support water infrastructure investments.

# KEY STUDY FINDINGS

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## Program Use and Interest

- Nearly one-half of customers indicated they try hard to use less water but could probably do a little more, compared to nearly two-fifths who indicated they are doing everything they possibly can to use less water.
- Over two-thirds of customers indicated water conservation materials would be useful, and nearly three-fifths reported a reading of their household's water use compared to others in the neighborhood would be useful.


## Communication

- Significantly more customers prefer receiving information through digital methods (website, email, social media) than traditional methods of communication (TV, radio, direct mail).

# Organizational Characteristics Ratings

The top-rated characteristics among CPAU customers are "maintaining an adequate supply of water," followed by "monitoring water quality," and being "environmentally responsible."

The characteristics that received the lowest ratings were "providing good service and value for the cost of water" and "being open and honest about company operations and policies."

 Indicates top ratings among CPAU customers

Aggregate of ratings 7-10 shown, w/o "don't know" responses

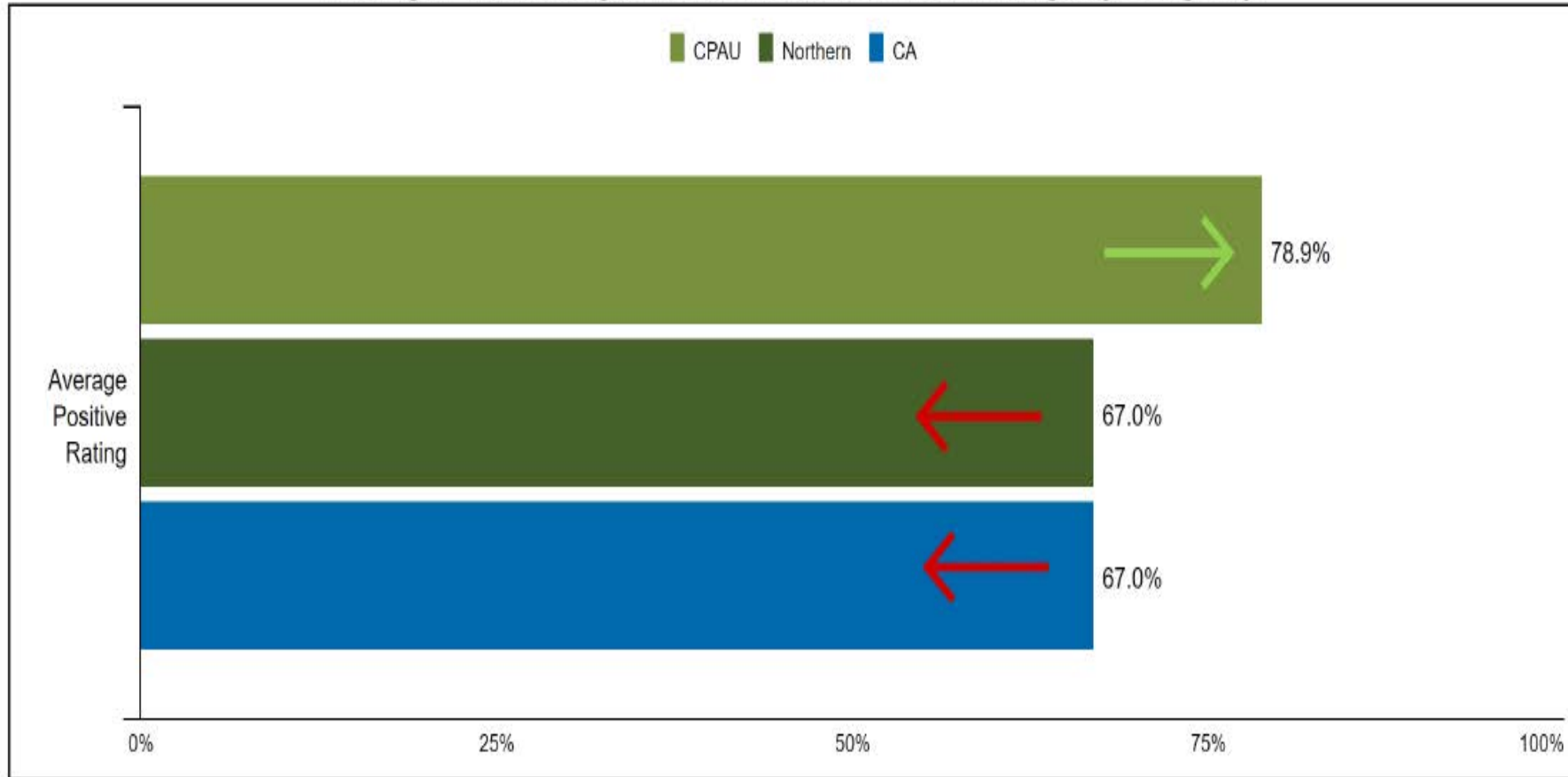
	Total Positive Ratings		
	CPAU	Northern	CA
Maintaining an adequate supply of water	93.8%	78.3%	80.0%
Monitoring water quality	88.9%	68.6%	68.4%
Environmentally responsible	85.5%	67.6%	67.8%
Promoting the efficient use and conservation of water	84.0%	72.0%	71.7%
Informing the public about water issues	79.9%	67.1%	66.6%
Valuing its customers and being committed to providing excellent customer service	76.5%	66.8%	66.1%
Communicating effectively with customers	74.4%	65.2%	64.7%
Community involvement	72.2%	58.9%	58.3%
Providing good service and value for the cost of water	67.6%	62.5%	64.2%
Being open and honest about company operations and policies	66.7%	62.9%	62.0%
Average	78.9%	67.0%	67.0%



# Ratings by Subgroup

Customers provided an average positive rating of 78.9% when rating CPAU on a series of organizational characteristics, which was significantly higher than the average positive ratings provided by customers from both the Northern region and throughout the State of California.

### Average Positive Organizational Characteristic Ratings by Subgroup



Aggregate of ratings 7-10 shown

Arrows indicate statistical significance at a 95% confidence level, with the color and direction of the arrow denoting whether it is higher or lower than the compared subgroups.

# Familiarity with CPAU Programs

Over two-fifths of customers indicated they are familiar with the "WaterSmart Home Water Report Program," the "Landscape Rebate Program" and the "Landscape Workshops." Fewer customers reported being familiar with "Project Pledge - One-time utility bill assistance." Of note, significantly more homeowners reported being familiar with the "Home Efficiency Genie" than renters.

*Aggregate of ratings 1-4 shown, w/o "don't know" responses*

	Total "Familiar"		
	CPAU	Rent	Own
WaterSmart Home Water Report Program	44.7%	52.2%	45.2%
Landscape Rebate Program	42.7%	33.3%	44.2%
Landscape Workshops	41.5%	29.2%	43.1%
Water Wise Outdoor Survey	39.2%	36.4%	40.3%
Home Efficiency Genie	38.8%	19.0% ↓	40.7% ↑
Project Pledge – One time utility bill assistance	15.3%	20.8%	15.2%

*Arrows indicate statistical significance at a 95% confidence level, with the color and direction of the arrow denoting whether it is higher or lower than the compared subgroups.*

# Usefulness of Water Conservation Materials

Over two-thirds of customers indicated they would find "materials on specific ways to reduce your household's water use at no cost to you" useful, while nearly three-fifths reported they would find it useful to have a reading of how much water their household is using compared to other households in the neighborhood. Of note, slightly more customers who own their residence indicated they would find materials on ways to reduce water use to be useful than those who rent their household.

Aggregate of ratings 7-10 shown, w/o "don't know" responses

	Total "Useful"		
	CPAU	Rent	Own
Materials on specific ways to reduce your household's water use at no cost to you	69.4%	70.6%	73.3%
A reading of how much water your household is using compared to other households in your neighborhood	58.5%	60.3%	59.3%

# CONSIDERATIONS

## **Leverage digital channels for effective communication.**

- Majority report preference to receive information through web, email, and social media for operations, efficiency, and programs.

## **Tailor water conservation resources to suit the needs of homeowners and renters.**

- Nearly one-half report being proactive about reducing water consumption, but also willing to do a little more to conserve water.
- Less than one-half is acquainted with CPAU's existing water programs and rebates = potential to inform and involve those who already expressed interest in water conservation efforts.
- Renters less focused on monitoring water usage compared to homeowners.
- CPAU can strategically target outreach efforts to ensure renters have access to resources tailored to their specific concerns about water usage and conservation.
- Over two-thirds of both renters and homeowners find it beneficial to receive effective strategies for reducing household water use.



# CONTACT US



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## Utilities Advisory Commission Staff Report

**From: Dean Batchelor, Director Utilities**  
**Lead Department: Utilities**

**Meeting Date: February 7, 2024**  
**Staff Report: 2401-2508**

### **TITLE**

Discussion of Electric Grid Modernization Plan

### **RECOMMENDATION**

This memorandum and presentation are for discussion purposes only; no action is requested at this time.

### **EXECUTIVE SUMMARY**

The City of Palo Alto's Electric Grid Modernization for Community-Wide Electrification Project (Grid Mod Project) was developed to enhance the distribution system's grid resiliency and reliability in a manner that will continue to accelerate the City's clean energy and decarbonization goals. Palo Alto's grid must be modernized to reach the capacity required to electrify all homes and cars. The modernized system will be designed to fully accommodate energy received from local generation such as rooftop solar and battery storage, an important element in decarbonization goals. There will be an upgrade to the distribution system to incorporate local generation, allow two-way power flow, meet projected capacity needs, enhance voltage regulation and system protection requirements, and provide a high level of resiliency and reliability.

The Project's three main objectives are:

- Increase capacity on the Electric Grid to allow for the addition of new electrical load from the electrification of heating load, electric vehicles, and battery storage.
- Enhance system reliability and resiliency by installing advanced distribution network protection schemes.
- Implement distribution system control technologies to allow for high levels of solar penetration, battery storage, distributed energy resources, and electric vehicles.

To meet the expected increase in demands, this Project will increase network capacity. Capacity increases will include the following work:

- Converting 4kV systems to 12kV.
- Installing more distribution transformers with greater capacity.

- Rebuilding secondary networks by increasing the conductor size and creating more secondary networks.
- Replacing four distribution substation transformers at two substations with larger transformers having greater capacity.

## **BACKGROUND**

The City established its first Climate Protection Plan in 2007, which is now the Sustainability and Climate Action Plan (S/CAP). This plan has been periodically updated and aligned with current conditions to provide a comprehensive roadmap to reducing greenhouse gas (GHG) emissions. In 2013, Palo Alto became one of the first cities in the nation to source 100% carbon-neutral electricity. In 2020, the City launched an update to reduce GHG emissions 80 percent below 1990 levels, i.e., reduce 624,095 metric tons of greenhouse gases by 2030 (the “80 x 30 goal”). This goal exceeds even the state of California's world-leading reduction goal of 80% by 2050; the California Global Warming Solutions Act of 2006 (AB32) requires the state to reduce its GHG emissions 40% below 1990 levels by 2030 and set an aspirational goal to reduce emissions 80% by 2050.

One major initiative in the S/CAP is to promote the transition to all-electric homes and electric vehicles (EVs) to reduce greenhouse gas emissions. A 2021 impact analysis showed to meet the “80 x 30 goal”, the City must electrify all of its roughly 15,000 single-family homes, replacing natural gas equipment with efficient electric alternatives. Also, currently, one in six Palo Altans drive an electric car, and EVs now account for more than 30% of new car sales in Palo Alto - the highest adoption rate in the country. One of three newly registered vehicles in Palo Alto is an EV. This transition, or “electrification,” will require an extensive upgrade to the electric distribution network due to a large increase in electrical energy needed to replace gas heating equipment with electrical equipment and support EVs.

As a result, the Grid Mod Project was developed to enhance the distribution system’s grid resiliency and reliability in a manner that will continue to accelerate the City’s clean energy and decarbonization goals. Palo Alto already supplies customers electricity from a 100% carbon neutral portfolio and has been in the forefront of efforts to design programs allowing customers to easily utilize clean energy through EVs and electric appliances.

Palo Alto’s grid must be modernized to reach the capacity required to electrify all homes and cars. The modernized system will be designed to fully accommodate energy received from local generation such as rooftop solar and battery storage, an important element in decarbonization goals. There will be an upgrade to the distribution system to incorporate local generation, allow two-way power flow, meet projected capacity needs, enhance voltage regulation and system protection requirements, and provide a high level of resiliency and reliability.

## **ANALYSIS**

The City conducted an electrification study to evaluate the impacts of projected electrification loads on Palo Alto’s distribution and substation transformers, primary/secondary distribution



circuits, and to propose upgrades needed to mitigate overloads. The estimated cost to construct the necessary electric system upgrades for a 100% electrification scenario is between \$220 million to \$306 million, depending on the approach. Of the nine substations in Palo Alto, the study recommends major design and equipment upgrades at two of the nine substations, and minor to moderate upgrades at four substations to meet projected loads to support 100% electrification.

The Grid Mod Project requires bringing online more transformers, replacing deteriorating wires and connectors, upgrading or replacing poles, and providing battery storage and solar system support to the interconnected grid. Specifically, the Project involves replacing the current 1,413 single phase pole top transformers rated less than 50kVA with the same type of transformers rated 50kVA or larger. Additionally, there are currently 261 single-phase pad mount transformers and 231 single-phase underground transformers installed on the distribution system. Based on the projected average peak load of 6kVA per customer, 341 of these transformers (including all 231 underground transformers) will need to be replaced with 75kVA or larger transformers to mitigate overloads. In order to limit the maximum number of customers per transformer to 15 (90kVA), an additional 83 transformers will need to be installed. Furthermore, 296,300 circuit feet of open wire secondary conductors in the distribution system will be replaced with aluminum aerial cable. These design aspects will accommodate 100% residential electrification of end uses in the Palo Alto community, aligning with the City's primary goal of decarbonization. For future housing development, the City will perform new analysis and make appropriate electric distribution network changes as needed for electrification.

Capacity increases on the network are needed to meet the additional load that will be placed on the distribution network. The estimated average diversified electric energy demand for households at the current time is approximately 2-3 kVA per home. When homes are electrified, the diversified electric demand is expected to increase to approximately 6 kVA per home. This increased load will exceed the capacity of the existing distribution network. Most of the impacts of the increased load will be on the distribution transformers and the secondary networks serving homes. In addition, some substation transformers will need to be replaced and upgraded to support the new distribution network.

Capacity increases included in this Project are comprised of the following work:

- Converting remaining 4kV systems to 12kV.
- Installing more distribution transformers with greater capacity.
- Rebuilding secondary networks by increasing the conductor size and creating more secondary networks.
- Replacing four distribution substation transformers at two substations with larger transformers having greater capacity.

Grid resiliency and reliability are key factors in delivering a service to meet customer needs. As electrification loads increase and customers become more dependent upon electricity to meet household and transportation needs, the grid will need to be more reliable and have limited downtime. To help facilitate meeting resiliency and reliability goals, the City's dark fiber network

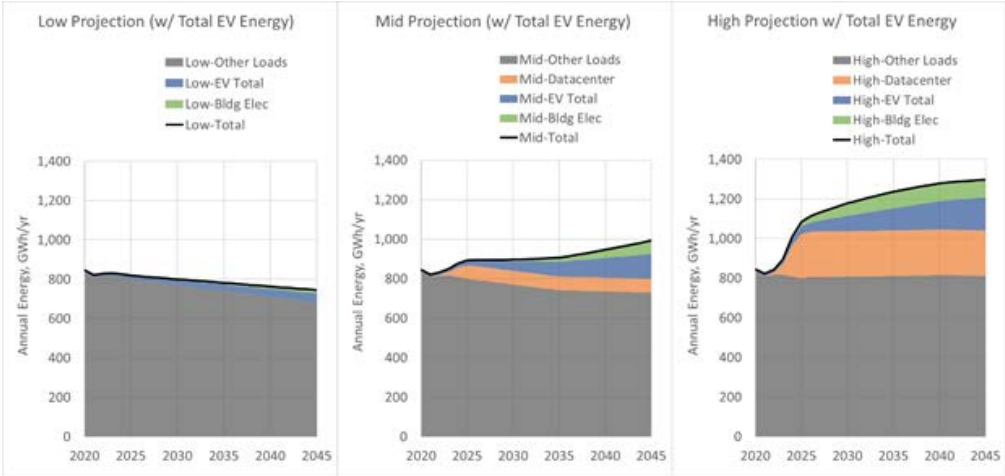
is currently being expanded to provide services to the community and connectivity to electric distribution switches and protection equipment.

To meet the need for greater reliability and resiliency, the Project includes the following:

- Additional circuit ties will be installed to improve the ability to pick up load during outages.
- Automated restoration schemes that can be used to isolate faults and restore customers will be installed where they are practical to deploy.
- Advanced distribution protection schemes will be installed to decrease the size of the outages on the feeders.

Due to the high penetration of solar generation, battery storage, and EVs in this community, there will be opportunities to test technologies to control input into the grid, maintain the voltage regulation of the system, and control customer behavior through price signals. Palo Alto is connected to the system operated by the California Independent System Operator (CAISO). Currently the state electricity grid is undergoing a transformation to a grid that relies on renewables. As a result, there are situations where the grid has too much supply, and at other times it is short on supply. Palo Alto will implement technologies that can support the two-way needs of the larger grid. These technologies include solar inverters that regulate power factor and load output, vehicle to grid power supply, and demand management technologies. Palo Alto developed low, mid, and high electric load forecasts through 2045 including the total expected additional data center load, EV load, and building electrification load.

**Low, Mid, and High Load Forecasts through 2045**



In addition to enhancing reliability and resiliency of the electric grid, electrification will benefit the community by saving money, improving quality of life, and helping the environment. While electrification will typically result in higher electric bills, significant savings can be achieved elsewhere, such as customers' vehicle fuel and natural gas bills. EV owners can save about \$1,000 per year on fuel and thousands of dollars more in maintenance over the life of an EV. As more

people switch from fossil fuel to electricity, there will be significant reduction in carbon emissions which helps Palo Alto reach the “80 x 30 goal” to ensure the quality of life for future generations. New electric-powered equipment and appliances are much more energy-efficient than the devices they replace. Heat pump efficiency has risen from 10 SEER (seasonal energy efficiency ratio) to close to 20 SEER — that’s 500% efficient — for cooling, and from 6 HSPF (heating seasonal performance factor) to 10 FSPF — 250% efficient — for heating in a couple of decades. Natural gas furnaces are 92% efficient.<sup>1</sup>

Customer benefits of grid modernization and electrification include:

- Reduced greenhouse gas emissions
- Grid-connected or smart appliances
- Reduced fire risk and avoid the risks of gas leaks
- Increased efficiency and lower energy costs from electric-powered equipment
- Reduced power outages
- Lower operating and maintenance costs for vehicles, equipment and appliances

## HIGH-LEVEL ESTIMATED TIMELINE

### Year 1 – 2024

#### **Task 1.0: Overhead Distribution System Upgrade Pilot Project**

Subtask 1.1 - Prepare design

Subtask 1.2 - Order and delivery of transformers

Subtask 1.3 - Material order and delivery

Subtask 1.4 - Construction

#### **Task 2.0: Design Resource Acquisition**

Subtask 2.1 - Prepare RFP for Design Services

Subtask 2.2 - Evaluate Proposals and Select Consultant

#### **Task 3.0: Phase 1 Overhead System Improvements**

##### ***Upgrade 10% of Overhead Distribution System***

Subtask 3.1 - System Design

Subtask 3.2 - Order and delivery of transformers

### Year 2 – 2025

#### **Task 3.0 (continued): Phase 1 Overhead System Improvements**

Subtask 3.3 - Material order and delivery

Subtask 3.4 - Construction

#### **Task 4.0: Phase 2 Overhead System Improvements**

##### ***Upgrade 40% of Overhead Distribution System***

Subtask 4.1 - System Design

Subtask 4.2 - Order and delivery of transformers

Subtask 4.3 - Material order and delivery

<sup>1</sup> <https://www.questline.com/blog/beneficial-electrification-energy-utility-customers/>

Subtask 4.4 - Construction

**Task 5.0: Transformer Upgrades – Colorado Substation**

Subtask 5.1 - Substation Transformer Expansion Design

Subtask 5.2 - Order long-lead time material

**Year 3 – 2026**

**Task 6.0: Phase 3 Overhead System Improvements**

***Upgrade 70% of Overhead Distribution System***

Subtask 6.1 - System Design

Subtask 6.2 - Order and delivery of transformers

Subtask 6.3 - Material order and delivery

**Task 7.0: Feeder Ties and Circuit Outlets – Colorado Substation**

Subtask 7.1 - Design Circuits

Subtask 7.2 - Order long-lead time material

**Task 8.0: Phase 4 Overhead System Improvements**

***Upgrade 100% of Overhead Distribution System***

Subtask 8.1 - System Design

**Year 4 – 2027**

**Task 5.0 (cont.): Transformer Upgrades – Colorado Substation (re-ordered)**

Subtask 5.3 - Substation Construction

**Task 6.0 (cont.): Phase 3 Overhead System Improvements**

Subtask 6.4 - Construction

**Task 7.0 (cont.): Feeder Ties and Circuit Outlets – Colorado Substation**

Subtask 7.3 - Construction

**Task 8.0 (cont.): Phase 4 Overhead System Improvements**

Subtask 8.2 - Order and delivery of transformers

Subtask 8.3 - Material order and delivery

**Task 9.0: Phase 1 Underground System Improvements**

***Upgrade 33% of Underground Distribution System***

Subtask 9.1 - System Design

**Task 10.0: Transformer Upgrades – Hopkins Substation**

Subtask 10.1 - Substation Transformer Expansion Design

Subtask 10.2 - Order long-lead time material

**Year 5 – 2028**

**Task 8.0 (cont.): Phase 4 Overhead System Improvements**

Subtask 8.4 - Construction

**Task 9.0 (cont.): Phase 1 Underground System Improvements**

Subtask 9.2 - Order and delivery of transformers

Subtask 9.3 - Material order and delivery

Subtask 9.4 - Construction

**Task 11.0: Phase 2 Underground System Improvements**

***Upgrade 66% of Underground Distribution System)***

Subtask 11.1 - System Design

**Year 6 – 2029**

**Task 10.0 (cont.): Transformer Upgrades – Hopkins Substation**

Subtask 10.3 - Substation Construction

**Task 11.0 (cont.): Phase 2 Underground System Improvements**

Subtask 11.2 - Order and delivery of transformers

Subtask 11.3 - Material order and delivery

**Task 12.0: Phase 3 Underground System Improvements**

***Upgrade 100% of Underground Distribution System)***

Subtask 12.1 - System Design

**Year 7 – 2030**

**Task 11.0 (cont.): Phase 2 Underground System Improvements**

Subtask 11.4 - Construction

**Task 12.0 (cont.): Phase 3 Underground System Improvements**

Subtask 12.2 - Order and delivery of transformers

Subtask 12.3 - Material order and delivery

Subtask 12.4 - Construction

**FISCAL/RESOURCE IMPACT**

High level estimated costs including labor and material by activity. The following unit costs are from the 2021 CPUC PG&E Unit Cost Guide, except for pole top transformer and substation transformer/switchgear costs which are provided by Utilities engineering staff. City will continue to pursue grant funding opportunities as they arise.

Description	Qty	Unit of Measure	Unit Cost	Extended Cost
60/12 kV substation transformer and switchgear	2	Unit	\$ 25,000,000	\$ 50,000,000
115/60 kV substation transformer and high side breaker	2	Unit	\$ 20,000,000	\$ 40,000,000
Single phase pole top transformer including pole make ready/replacement	1,400	Unit	\$ 20,000	\$ 28,000,000
Single phase pad mount transformer including substructure	424	Unit	\$ 40,000	\$ 16,960,000
Underground 12 kV circuit tie including cable, trench and substructures	30,900	Foot	\$ 800	\$ 24,720,000
Overhead 12 kV circuit tie/reconductor	11,000	Foot	\$ 220	\$ 2,420,000
Overhead secondary reconductor with AWAC	296,300	Foot	\$ 165	\$ 48,889,500
4 kV to 12 kV conversion including transformers	381	Unit	\$ 23,200	\$ 8,839,200
			<b>Total Estimate</b>	<b>\$ 219,828,700</b>

**STAKEHOLDER ENGAGEMENT**

December 7, 2022 – Utilities Advisory Commission Meeting – Electric Distribution Infrastructure Modernization Update <https://www.cityofpaloalto.org/files/assets/public/v/2/agendas-minutes-reports/agendas-minutes/utilities-advisory-commission/archived-agenda-and-minutes/agendas-and-minutes-2022/12-07-2022/12-07-2022-agenda-and-packet.pdf>

June 7, 2023 – Utilities Advisory Commission Meeting – Electric Distribution Infrastructure Modernization Update

<https://cityofpaloalto.primegov.com/meeting/attachment/1764.pdf?name=Electrification%20Modernization%20Plan%206-7-2023>

November 30, 2023 - Sustainability and Climate Action Plan Ad Hoc Committee Meeting – S/CAP Progress and 100% Renewable Energy

<https://www.cityofpaloalto.org/files/assets/public/v/1/sustainability/presentations/2023.11.30-scap-ad-hoc-committee-meeting.pdf>

### **ENVIRONMENTAL REVIEW**

This informational report is not a project under CEQA. The overhead distribution system upgrade pilot project currently in progress is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines 15301 (repair, maintenance, of existing facilities) and 15302 (replacement or reconstruction of existing facilities).

### **ATTACHMENTS**

Attachment A: Presentation

### **AUTHOR/TITLE:**

Dean Batchelor, Director of Utilities

Staff: Dave Yuan, Utilities Strategic Business Manager

A scenic landscape photograph showing a wide river or stream flowing through a lush, green valley. In the foreground, there are dense green bushes and a wooden fence. The background features rolling hills and mountains under a cloudy sky. A large, semi-transparent green triangle is overlaid on the right side of the image, containing the title text.

# Discussion of Electric Grid Modernization Plan

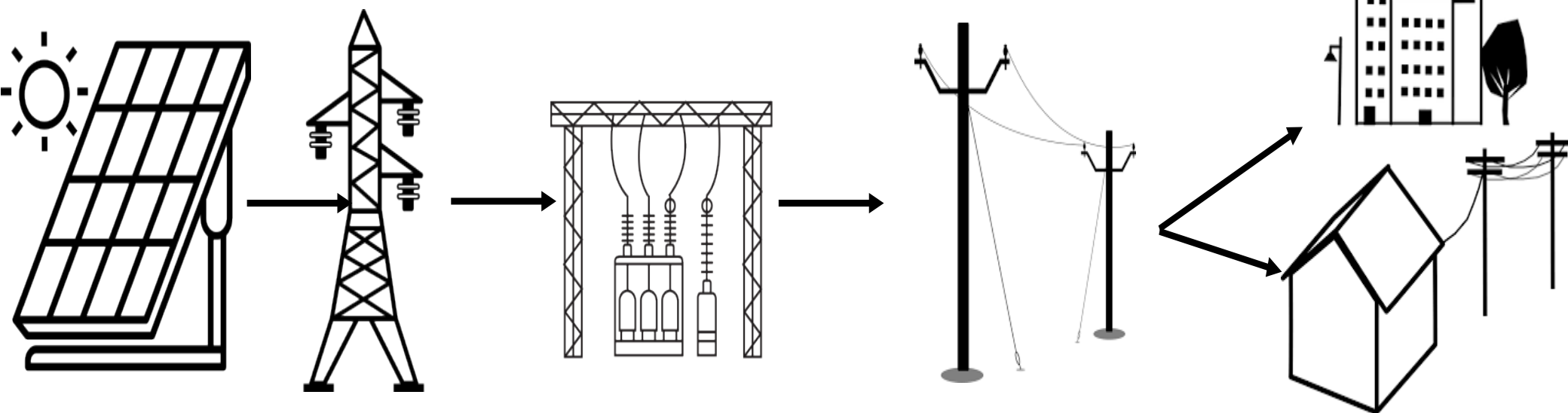
# Presentation Outline

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- Distribution System Topology
- Residential Customer Connections – Past & Future
- Major Projects
  - Upgrading Distribution System Hardware (Phase 1)
  - Complete 4 kV to 12 kV upgrade (2 substation)
  - Integrating new utility technologies
  - Integrating with new customer technologies
  - Fiber to the premise
- Timeline and Resources



# CPAU Topology



## Generation

## Transmission

- owned by PG&E
- 3 Transmission Lines, 115 kV rated

## Receiving Substations

- 8 distribution substation
- 1 transmission substation
- 60 kV sub transmission network

## Distribution System Network

- 12.47 kV primary circuit
- 4.16 kV primary circuit
- Transformers (TX) range: 5 kVA – 2.5 MVA

## CPAU Customers

- 120/240 V for residential
- 120/208/480V for commercial

## Existing Customer Connections

---

- 3 KVA Expected peak load demand from residential customer
- For new, relocated, or upgraded 200 A electrical services
  - Customer invoiced for standard fee
- For new, relocated, or upgraded >200 A electrical services
  - Customer invoiced advance engineering fee
  - Customer invoiced for additional expenses determined by estimators
- Customer is responsible for any substructure work, secondary cabling, and electric meter panel
- CPAU responsible for infrastructure upgrades & labor of connecting electrical services



## Updated Customer Connections - Future

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- 6 kVA expected peak load demand from residential customer  
– up from 3 kVA estimated allocation from the past
- Customers will still receive standard invoice for 200 A service
- In Development: standard connection fee for 400 A service

# CPAU Strategic Projects

## Grid Modernization for Electrification

- Upgrade current infrastructure (TXs, cable sizes, etc.)
- Integrating new technology (i.e., AMI, fault indicators, remote switching, fuse savers)
- Customer technologies (solar PV, ESS, EV, V2X, HPWHs)

## Fiber to the Premise (FTTP)

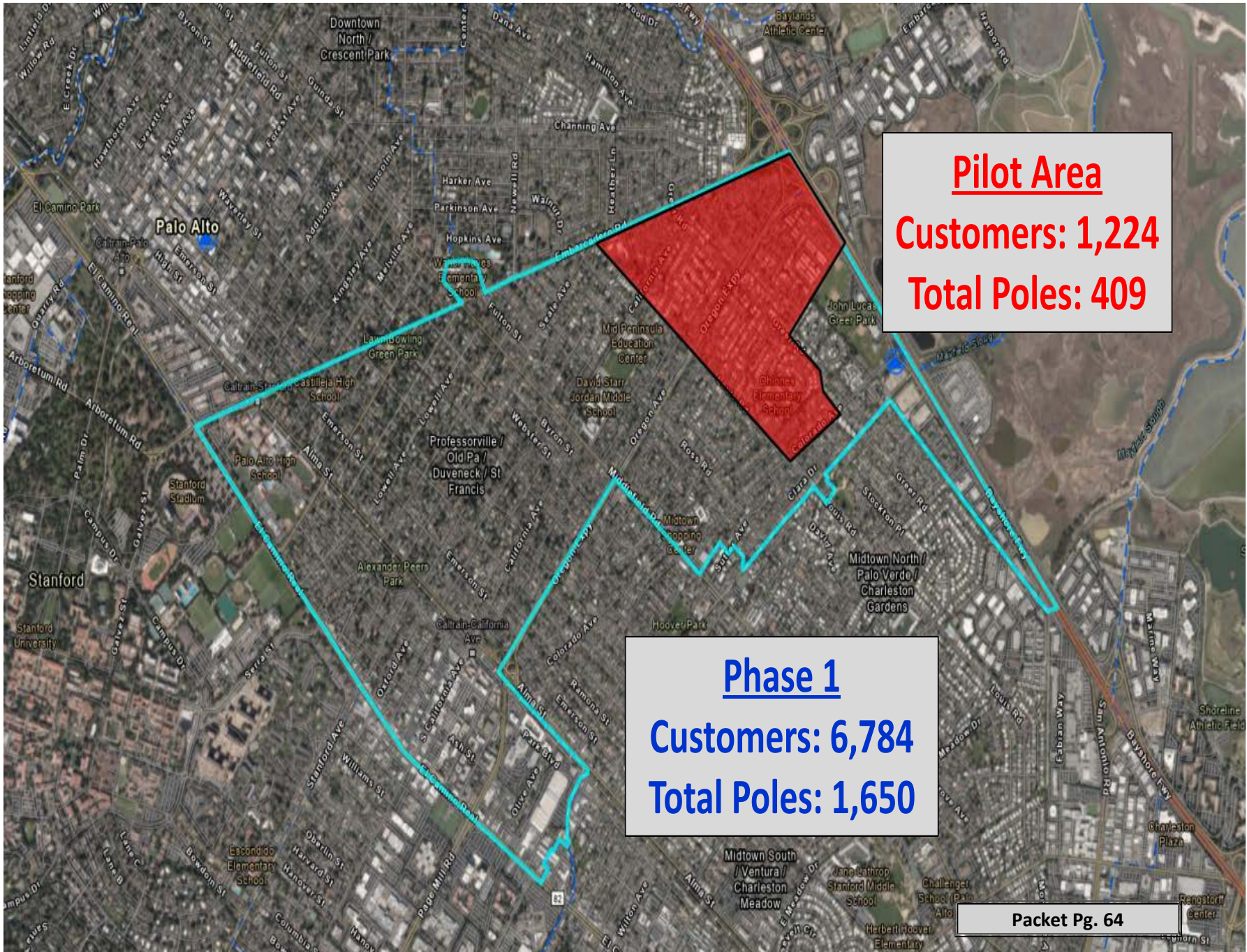
- CPA new internet service provider
- Goal: to upgrade and expand the existing fiber backbone and FTTP for all homes and businesses
- To build new fiber connections to support CPA Internet services to all Palo Alto homes

# Upgrading Existing Distribution System Elements

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- Overall System Upgrade
  - Upgrade 4 kV lines installed in 1967 to 12 kV lines
  - Upgrade 4 of 30 substation transformers
  - Upgrade 1741 of 3000 distribution system transformers
  - Upgrade 56 miles of secondary and 17 miles of primary distribution lines
- Phase 1
  - Complete system upgrades and improvements affecting 6,784 customers

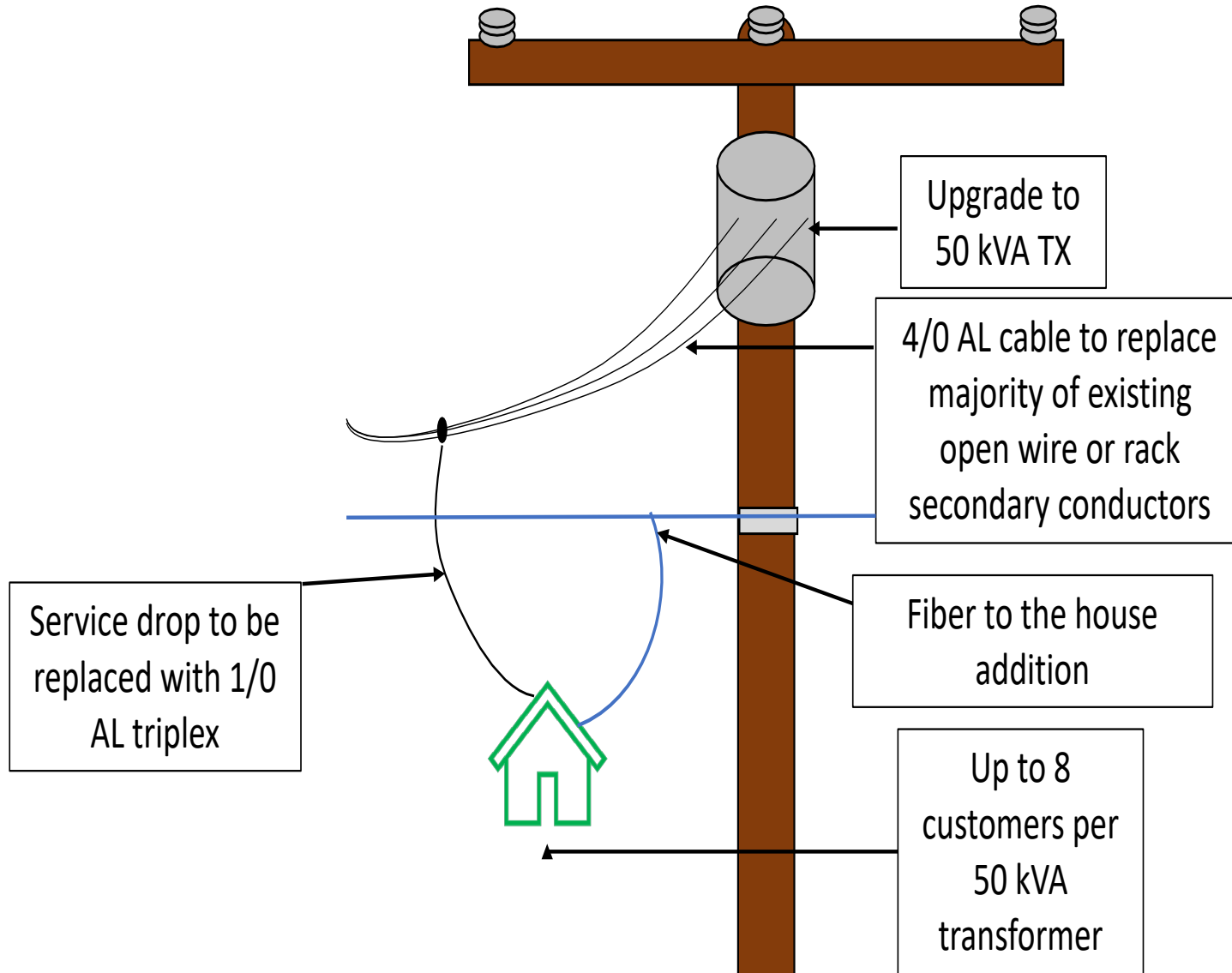
# Grid Modernization Phase 1



**Pilot Area**  
**Customers: 1,224**  
**Total Poles: 409**

**Phase 1**  
**Customers: 6,784**  
**Total Poles: 1,650**

# Overhead Secondary System Design



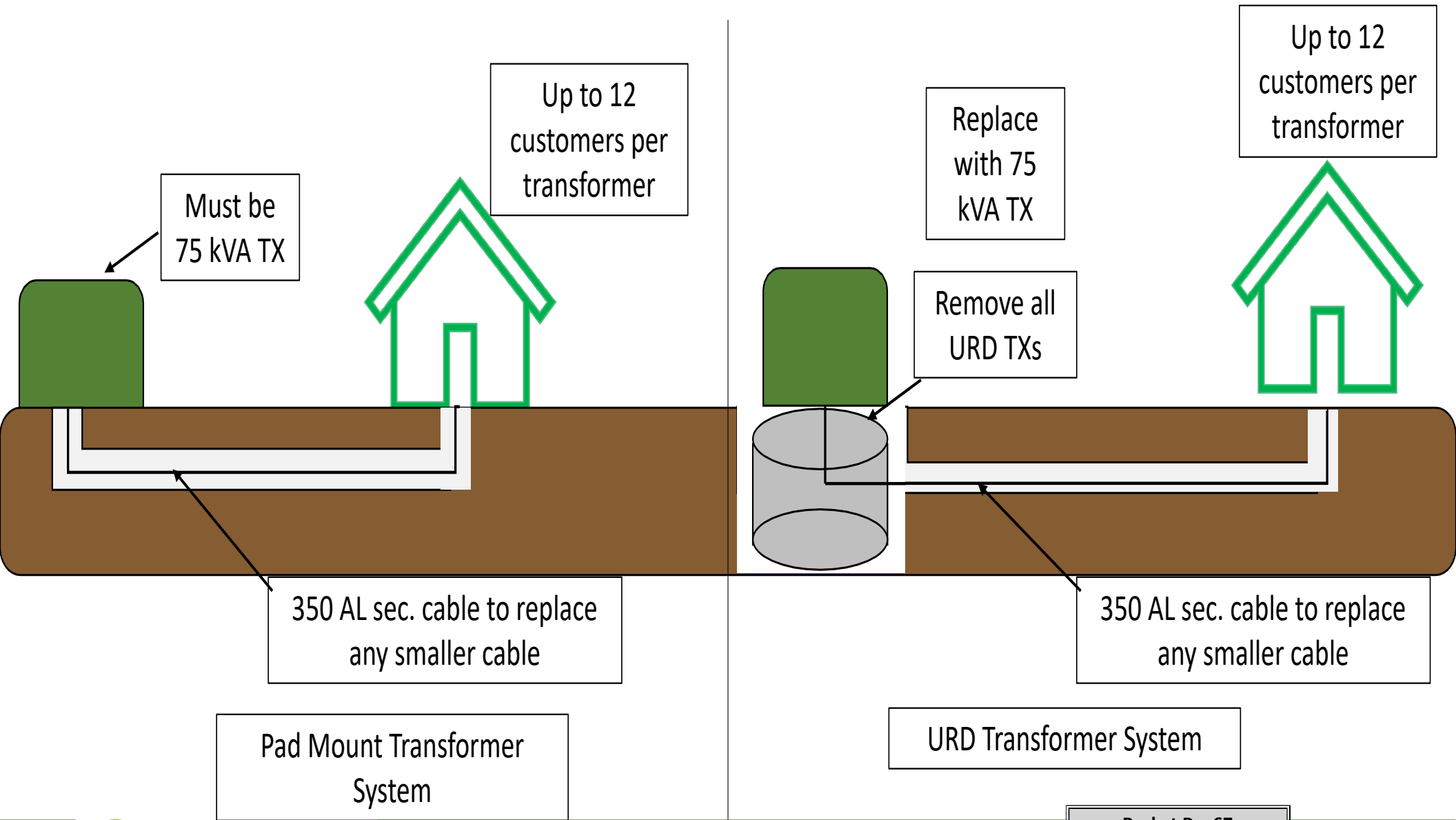
# Overhead Electrification Scope of Work

- Approximately 1400 single phase pole top TXs will need to be replaced with a 50 kVA or larger TX
- A total of 296,300 circuit feet (56 miles) of open wire and rack secondary conductors will need to be replaced with aerial cable (1/0 AL Or 4/0 AL) for the entire City





# Underground Secondary System Design

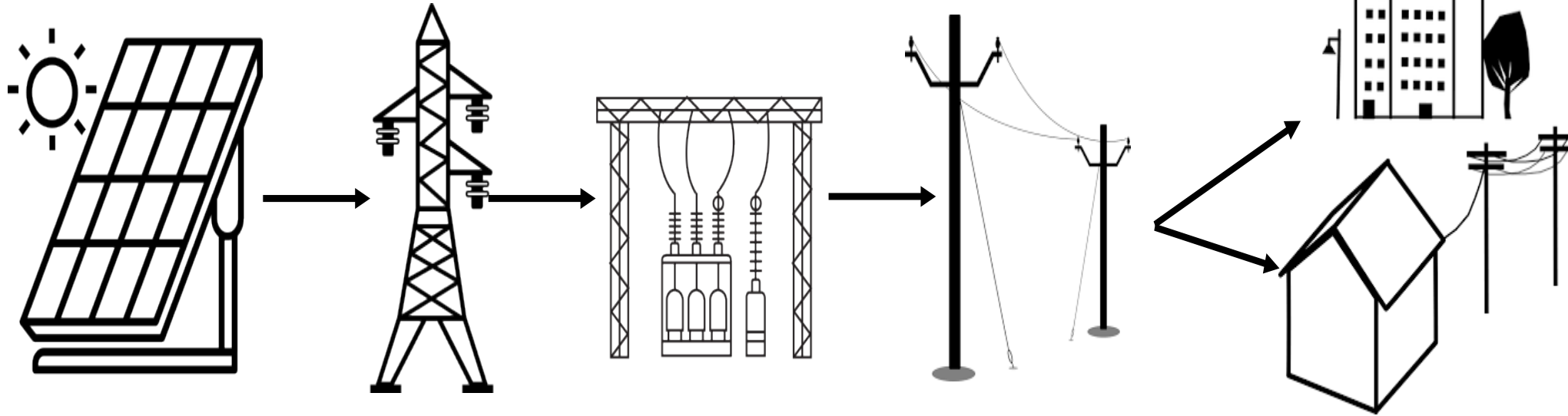


# Underground Electrification Scope of Work

- Of the 261 single phase padmount TX in CPA, 110 TX will need to be replaced with a 75kVA or larger TX
- An additional 52 TXs will need to be installed
- All 231 single phase URD TX in CPA will need to be replaced with a 75KVA or larger TX
- An additional 31 TXs will need to be installed



# Grid Modernization impact on CPAU Infrastructure



Supply/Resources

Transmission

Substations

- replace 4 of 30 substations TX with larger capacity

Distribution System

Network

- Replaced secondary cable
- 4.16 kV circuit to be replaced with 12.47 kV
- upgrade and add TX
- replace service laterals
- remove URD TX

CPAU Customers

- New service fees
- Integrate AMI and other customer technology

# Resource Necessities

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- Consultants
  - ENTRUST
  - Magellen
  - Soudi Inc
  
- Contractors
  - MP Next Level
  - VIP Powerline Corp
  - Davey Tree
  
- Funding
  - Est. Budget of \$220-\$306M
  - Bond Issuance / Debt Financing
  - CIP Funding



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# Proposed Timeline

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Fall 2024

Pilot Area Complete

Summer 2025

Phase 1 Complete

Winter 2030

All Phases Complete



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**THANK YOU!**

Dean Batchelor, Director of Utilities  
[Dean.batchelor@CityofPaloAlto.org](mailto:Dean.batchelor@CityofPaloAlto.org)



## Utilities Advisory Commission Staff Report

**From: Dean Batchelor, Director Utilities**  
**Lead Department: Utilities**

**Meeting Date: February 7, 2024**  
**Staff Report: 2303-1214**

### TITLE

Informational Update on City Council-Approved Substation Improvement Agreement With Tesla Inc. to Install Improvements and Reserve Capacity at Hanover Substation, and Approval of a Fiscal Year 2024 Budget Amendment in the Electric Fund to Establish the Hanover Substation Upgrade Project (EL- 24001); CEQA Status – Exempt under CEQA Guideline Sections 15301 and 15302

### RECOMMENDATION

On January 16, 2024 Council approved staff's recommendation to:

1. Approve and authorize the City Manager or their designee to execute the Substation Improvement Agreement (SIA) and attached Capacity Reservation Agreement between the City of Palo Alto and Tesla for the design and construction of a substation improvements at the City of Palo Alto's Hanover Substation (Attachment A).
2. Amend the Fiscal Year 2024 Budget Appropriation for the Electric Fund (requires a 2/3 vote) by:
  - a. Establish the Hanover Substation Upgrade Project (EL-24001) in the amount of \$15,000,000; and
  - b. Decrease the Electric Fund Operations Reserve by \$15,000,000.

### EXECUTIVE SUMMARY

Tesla is moving its engineering headquarters to the former HP Headquarters at 1501 Page Mill Road where it will perform advanced research and development to support the vehicles and products it produces. The City proposed to rebuild the existing Hanover Substation to replace the existing substation facilities, which are nearing the end of their useful life, and to accommodate Tesla's power needs, via improvements designed and installed by Tesla. To best meet the needs of Tesla and the City, a public private partnership was proposed and will be implemented through a Substation Improvement Agreement (SIA), including an associated Encroachment Permit, and Capacity Reservation Agreement.

The maximum cost of the Hanover Substation project is estimated to be \$24,000,000 with the cost being shared equally, subject to specified exceptions in the SIA (for an estimated \$12,000,000 by each party). To facilitate the transfer of existing feeders not serving Tesla to the

new transformers being installed and cover the costs of City inspections, the City will fund an additional \$3,000,000. The total initial cost to the City for this project is \$15,000,000. It should be noted that Tesla paid all costs to expedite materials needed for this project and the expediting fees have been excluded from the \$24,000,000 total cost of the project.

At the end of construction, all assets meeting City requirements as specified in the SIA will become City property. The assets to be transferred to City ownership and control will be general use assets that can be used to serve other City customers. Tesla will reserve capacity in exchange for additional demand-based charges as outlined in the Capacity Reservation Agreement, which is attached to the SIA. Tesla will receive monthly credits upon completion of the facilities for up to 7 years, based on Tesla's projected energy usage. Total credits will be no more than the estimated \$12,000,000 to be invested by Tesla.

### **BACKGROUND**

Tesla announced its engineering headquarters to 1501 Page Mill—formerly known as HP headquarters. It plans to install computers and charging facilities to support research into the electric vehicles it produces. The existing transformers at Hanover Substation, closest to the Tesla site, require upgrades to meet Tesla's anticipated needs and to continue to serve the City's other customers in the area. Tesla has indicated that it would like to be operational at the Page Mill site by the Spring of 2024.

The City's Electric Utility staff have also determined that the existing HV 20 and HV 21 transformers at Hanover Substation need replacement. These transformers are undersized relative to the needs of customers in the Stanford Business Park, require a higher-than-normal level of maintenance and are nearing or past their useful lives of 50 years.

### **ANALYSIS**

The project proposes to install two 12 kV 50 MVA transformers to replace two 4kV transformers that served 1501 Page Mill Road and make all substation improvements necessary to accommodate the installations. Generally, three to four years are spent on a substation upgrade. However, Tesla is requesting to finish all construction at the substation and energize their new building by April 2024. The City cannot meet this timeline under normal City processes due to insufficient staffing to coordinate the design and construction of all facilities and the time required to complete the City public procurement process. To meet the proposed installation timeline the use of a public private partnership<sup>1</sup> executed through a Substation Improvement Agreement (SIA) is recommended.

Pursuant to the SIA, Tesla will design, procure, install, and commission two-50MVA transformers, three 60Kv substation breakers, a Power Distribution Center (12kV Switchgear), two 12 kV feeders, and will reroute 12 kV feeders from existing transformers to the new transformers. These upgrades will serve Tesla, accommodate customers in the Stanford Research Park, replace outdated infrastructure, and modernize and reorganize the substation for greater efficiency. The design will be subject to CPAU approval and compliance with CPAU standards.



The SIA has been structured to provide infrastructure for the capacity needed by Tesla, replace City equipment at the end of its useful life, and limit the financial risk to the City and the electric rate payers. Since the work being done at Hanover Substation is a joint project with benefits for both parties the initial costs for the project have been split equally, subject to limited exceptions in the SIA. The total cost for the project is estimated to be \$27,000,000, not including any expediting fees. Costs for the work inside the substation (approximately \$24,000,000) will initially be split in half with each party providing approximately \$12,000,000. The City will fund another \$3,000,000 of improvements (separately from the SIA) to move feeder connections not related to service for Tesla from substation banks being retired to the new transformers in the Hanover Substation and to fund engineering review and inspection services that will occur prior to and during construction of the project. Tesla will be responsible for all additional costs associated with expediting of materials and services that resulted from the accelerated schedule it has proposed.

Tesla is providing the initial funding, design, and construction services for the improvements inside the substation, subject to partial City reimbursement. At the completion of the substation construction, the City will evaluate the installed systems for compliance with City-approved plans, specifications, and other requirements and providing the design and installation complies with the terms of the SIA, the City will accept the facilities. After acceptance, the actual costs for the project will be determined and the portion of the substation that was built solely for City distribution system use, (e.g., not related to the 1501 Page Mill Road project) will be reimbursed to Tesla.

The City will reserve up to 11,200 kVA of capacity to serve Tesla's facilities, in exchange for Tesla's payment of a monthly Capacity Reservation Fee calculated based on Tesla's monthly demand. The Monthly Capacity Reservation Fee is designed to compensate the City for reserving system capacity for Tesla's future use and corresponds to the operation and maintenance costs of the facilities providing the capacity. It applies only if Tesla's monthly demand falls below the levels specified in the Capacity Reservation Fee. Upon completion of the facilities, Tesla will receive a Monthly Capacity Usage Credit for up to 7 years based on Tesla's projected energy usage and ramp up rate. Total credits will be capped at \$12,000,000 and to protect the City against cost overruns, project costs subject to reimbursement under the SIA are limited to \$12,000,000, subject only to any mutual agreement to amend the SIA. The Monthly Capacity Usage Credit is intended to reimburse Tesla for its financial contribution to general use facilities, i.e., that portion that is not already reimbursed by the City under the terms of the SIA, while reducing the risk of the City investing in assets that end up being underutilized. This credit is based on the expected revenue from energy sales to Tesla over the term of the agreement. The calculations for these payments and credits are outlined the Capacity Reservation Agreement (Exhibit D).

Due to the timeline for completion of this project the engineering design and the procurement of long-lead time materials have already been completed by Tesla, acting at its own risk. The City supplied specifications for the materials to be ordered and was consulted on the acceptability of the engineering design firm being used to prepare the plans. Since the award of the design contract, the City has been reviewing design drawings and materials to ensure that they comply

with the City specifications and standards. Tesla has proceeded knowing that reimbursement for expenses from the City is contingent upon the completion of the SIA.

City staff also reviewed the construction bids for this project. Tesla received four bids for the construction of Hanover Substation and selected the lowest bid. Staff reviewed references for the selected contractor and agreed that the contractor had sufficient experience to construct the substation improvements.

### **FISCAL IMPACT**

To fund this project a new Capital Improvement Project, EL-24001 (Hanover Substation Upgrade) has been created. Staff recommended increasing the Fiscal Year 2024 Electric Fund CIP and establishing EL-24001 in the amount of \$15,000,000 to fund the \$12,000,000 contribution for the City's half of the substation rebuild and \$3,000,000 for the rearrangement of the distribution feeders and city costs for engineering review and inspection services and decreasing the Electric Fund Operating Reserve by \$15,000,000. The Electric Fund Distribution and Supply reserves has a balance of \$38.5 million. The Electric Fund reserves will continue to stay within the minimum and maximum reserve guidelines after the transfer.

Staffing for the engineering review and inspection services will be provided by internal staff and outside consultants that are under contract. The expected total cost of these services is \$400,000 and will be funded from the \$3,000,000 funding being allocated to this project for City work on the site.

### **RESOURCE IMPACT**

The approval of this agreement is consistent with existing City policies governing Public-Private Partnerships, and the Council approved 2018 Utilities Strategic Plan – Strategic Objectives, Priority 4 – Strategy 1 “Establish a proactive infrastructure replacement program, based on planned replacement before failure to support reliability and resiliency”. Facing an evolving utility business environment, aging infrastructure needs, and sustainability objectives, CPAU must maintain a competitive position in the market. Remaining financially sustainable and competitive in the market while optimizing our resources is key to maintaining and enhancing our value of City of Palo businesses and customers.

### **STAKEHOLDER ENGAGEMENT**

This project is located in an existing substation on Stanford lands. City staff has had discussions with Stanford informing them of the intention to upgrade Hanover Substation. Stanford indicated that they were supportive of this project to provide service to a lessee on their property. A City Encroachment Permit, which attaches and incorporates the Stanford lease terms, granting Tesla, its employees, and contractors a revocable privilege to enter and use the substation property during construction is attached as Exhibit B to the Substation Improvement Agreement.

### **ENVIRONMENTAL REVIEW**

This project is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines 15301 (repair, maintenance, of existing facilities) and 15302 (replacement or reconstruction of existing facilities).

**ATTACHMENTS**

Attachment A: Presentation

Attachment B: Tesla Substation Agreement

**AUTHOR/TITLE:**

Dean Batchelor, Director Utilities

Staff: Tomm Marshall, Assistance Director of Electric Utilities





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# Substation Improvement Agreement

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Hanover Substation (Tesla)

# Agenda

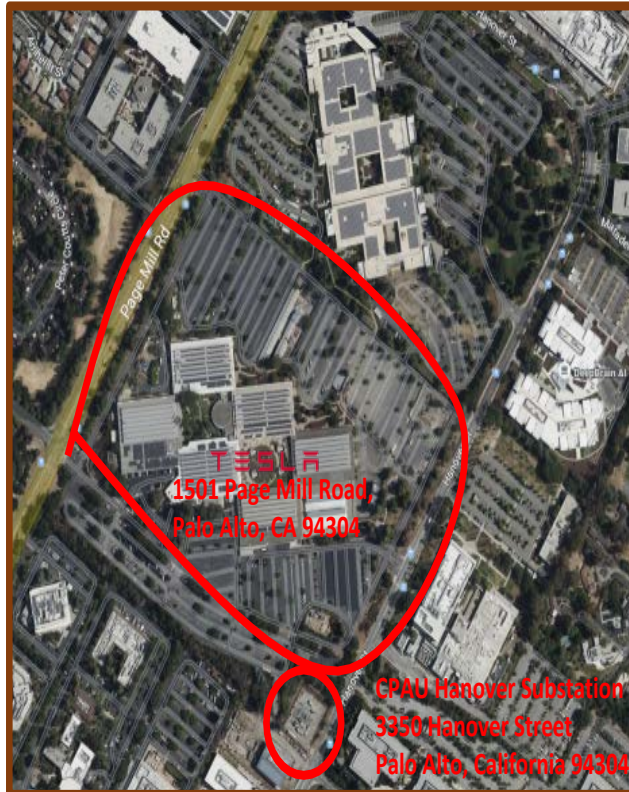
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- Background
- Project Summary
- Project Schedule
- Project Funding
- Contract Documents

# Background

## Tesla Advanced Compute Center in Palo Alto, California

- AI and High-Performance Compute Center
- Global Engineering and AI Headquarters
- Former HP Headquarters at 1501 Page Mill Road


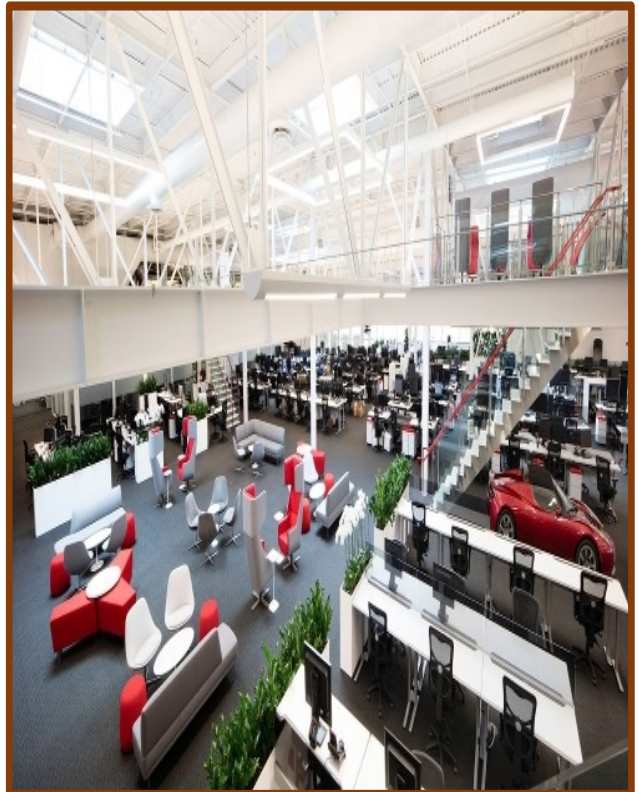


**Tesla Launches New \$300M AI Cluster for Advanced Computation**  
August 29, 2023

Aug. 29, 2023 — [Tesla](#) is poised to introduce its advanced supercomputer this week, a development [highlighted by Tom's Hardware](#) and informed by insights from [@SawyerMerritt](#).

Primarily tailored for artificial intelligence (AI) processes, the machine will also cater to high-performance computing (HPC) tasks. Based on the Nvidia H100 platform, it is expected to be a noteworthy addition in the industry. The system is equipped with 10,000 Nvidia H100 GPUs, enabling it to potentially reach a peak performance of 340 FP64 PFLOPS for technical computing and 39.58 INT8 ExaFLOPS for AI applications. Tesla's 340 FP64 PFLOPS is higher than 304 FP64 PFLOPS from CINECA's Leonardo supercomputer, the fourth fastest in the world.

A significant feature of this new cluster is its focus on bolstering Tesla's full self-driving (FSD) technology. However, with Nvidia currently facing supply limitations, Tesla's foresight is evident. They have diversified their approach with a strategic investment in a proprietary supercomputer named [Dojo](#), which is anticipated to work in tandem with the Nvidia H100 GPU cluster.

# Project Summary

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Design and build the following at Hanover Substation :

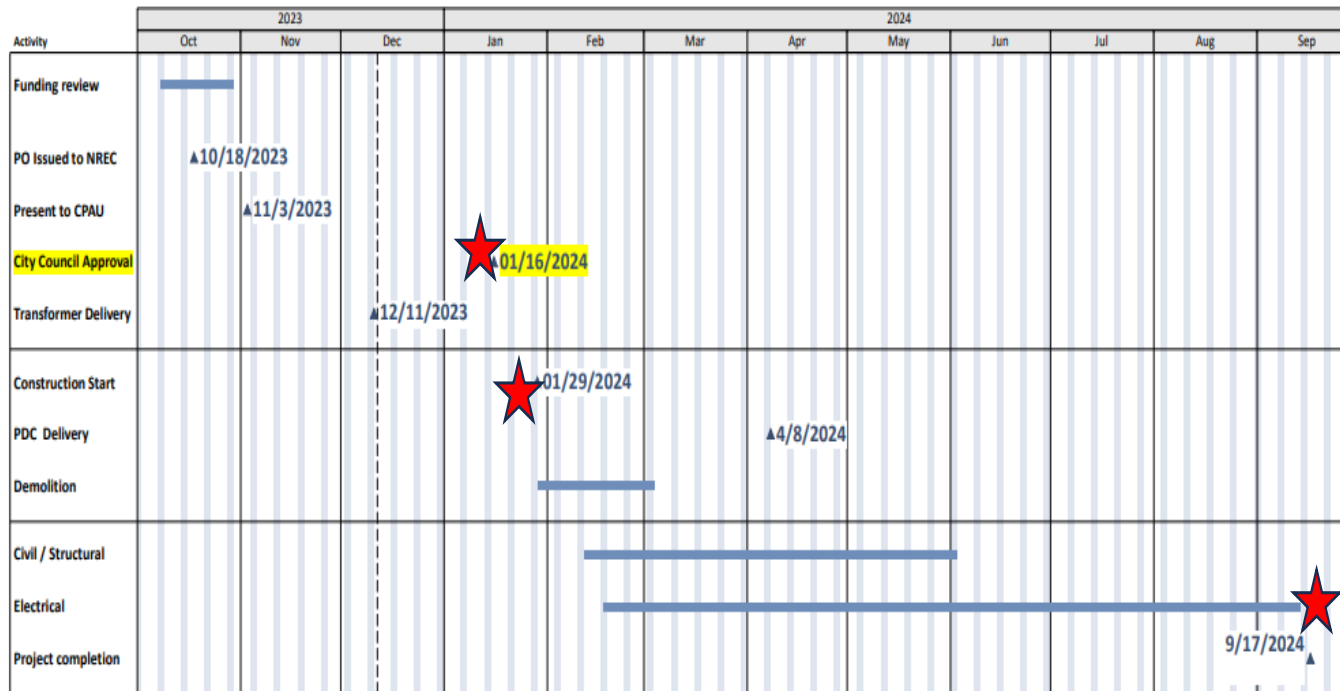
- Grading and structural site improvements
- Install (2) 60 kV circuit breakers
- Install (1) 60 kV bus tie breaker
- Install (2) 50 MVA 60kV/12kV transformers
- Install (1) 12kV power distribution center
- Install (2) 12kV feeders (to Tesla)
- Install bus switches, buswork, wiring, and feeder outlets to Tesla's onsite switchgear
- Test and commission all equipment and components



# Project Schedule

## Hanover Substation Upgrade Project Schedule

- Assumes a 40-hour work week
- Key milestones
  - City Council Approval – January 16, 2024
  - Construction Begins – January 29, 2024
  - PDC Delivery – April 8, 2024
  - Project Completion (Estimated) – September 17, 2024



# Project Funding Summary

## A Public/Private partnership to help in expediting the construction of needed facilities

Tesla requested additional distribution capacity at their Palo Alto facility

The date requested by Tesla for delivery of the new facilities was unachievable given the current City processes

Tesla agreed to pay all of the cost related to expediting fees (approx. \$3 Million)

Total project cost - \$24,000,000 (included construction costs \$15,000,000)

- Initial Project Funding
  - Tesla providing all initial costs for design and construction of the project.
- City’s Reimbursement to Tesla
  - City will reimburse 50% of the substation construction costs up to a maximum cap of \$12,000,000 at acceptance of the substation project.
- Tesla Costs
  - Construction of 12kV feeders to serve Tesla.
- City’s Costs
  - 12kV feeder extension from existing transformers to the new transformers.

Description	City Cost	Tesla Cost	Total
Major Equipment & Design	\$4.5M	\$4.5M	\$9M
Construction (Bulk material and labor)	\$5.5M	\$5.5M	\$11M
Expediting Fees & Feeder Scope	-	\$3M	\$3M
Tesla Cost Savings (Deferred feeder scope & 40-hour work schedule)	-	(\$1.7M)	(\$1.7M)
<b>Total Base Project Cost</b>	<b>\$10M</b>	<b>\$11.3M</b>	<b>\$21.3M</b>
Additional contingency for contaminated soil removal (RCS-2)	\$2M	\$2M	\$4M
<b>Estimated Worst-case Project Cost</b>	<b>-</b>	<b>-</b>	<b>\$25.3M</b>
City’s Contractual Limit	\$12M	-	-
Tesla Approved Budget	-	-	\$21.3M

# Contract Documents

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**Summary** - The City and Tesla have entered into an Improvement Agreement in which the Parties will jointly design, construct, install and fund improvements to increase the electrical capacity at the Hanover Substation to support Tesla's new electrical demand load at 1501 Page Mill Road, Palo Alto, California 94304. The Agreement consists of the following contract documents:

- **Substation Improvement Agreement**
  - Establishes terms for the Public-Private Partnership.
- **Encroachment Permit**
  - Allows Tesla to perform work at the Hanover Substation Site.
- **Capacity Reservation Agreement**
  - City reserves 11,200 kVA (9,000 kW demand) of electric capacity for Tesla.
  - Tesla pays a monthly Capacity Reservation Fee.
  - Tesla receives a Monthly Capacity Usage Credit to compensate them for their contribution of general use assets based on the amount of electricity used each month.

# Request

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- Staff requests Council's approval of a Substation Improvement Agreement With Tesla Inc. to Install Improvements and Reserve Capacity at Hanover Substation, and Approval of a Fiscal Year 2024 Budget Amendment in the Electric Fund to Allocate \$15,000,000 to the Hanover Substation Upgrade Project (EL-24001).

**SUBSTATION IMPROVEMENT AGREEMENT**

BETWEEN

**CITY OF PALO ALTO**

AND

**TESLA, INC.**

FOR THE HANOVER SUBSTATION

Dated January 16, 2024

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SUBSTATION IMPROVEMENT AGREEMENT  
BETWEEN  
THE CITY OF PALO ALTO  
AND TESLA, INC.  
FOR THE HANOVER SUBSTATION

This Substation Improvement Agreement (“**Agreement**”) is dated and effective as of January 16, 2024 (the “**Effective Date**”), and is made and entered into by and between the City of Palo Alto, a California chartered municipal corporation (“**City**”), and Tesla, Inc., a corporation organized under the laws of the State of Delaware (“**Tesla**”) (individually, a “**Party**” and, collectively, the “**Parties**”), in reference to the following facts and circumstances:

**RECITALS:**

A. The City owns and operates a municipal electrical utility operated by a division of the City known as City of Palo Alto Utilities (“**CPAU**”), which provides electricity to residential and commercial customers within the utility’s service area.

B. The City owns and CPAU operates the Hanover Street Substation (“**Substation**”), an electrical distribution substation located at 3350 Hanover Street, Palo Alto, California 94304.

C. The Substation is located on property that the City has leased from the Board of Trustees of the Leland Stanford Junior University since 1957 (the “**Leased Premises**”), subject to the terms of the 1957 Lease Agreement and subsequent amendments thereto (“**Lease**”).

D. The purpose of the Agreement is to establish a public-private partnership between the City and Tesla to expedite the installation of additional capacity on the CPAU’s distribution network for the expansion of Tesla’s electrical load at Tesla’s facilities at 1501 Page Mill Road, Palo Alto, California 94304 (the “**Tesla Facility**”)

E. The Parties seek to jointly effectuate the design, installation and funding of a project to expand load capacity at the Substation to provide up to 30 MVA of capacity for the Tesla Facility pursuant to the terms of a separate Capacity Reservation Agreement between the Parties, which may include reserved capacity for other Tesla facilities served by the Substation (“**Capacity Reservation Agreement**”), and to expand the Substation, including switch gear improvements, for future use by the CPAU (collectively, the “**Project**”).

F. The Parties have agreed to fund the Project through their respective contributions, as set forth in this Agreement.

G. The Parties have agreed that Tesla will take the lead in design and construction of the Project subject to the terms of this Agreement and in consideration for the terms of the Capacity Reservation Agreement.

IN CONSIDERATION OF the foregoing and the following covenants, terms and conditions, the Parties agree:

**AGREEMENT:**

**1. DEFINITIONS AND PURPOSES.**

**1.1 Recitals Incorporated.** The foregoing Recitals are expressly incorporated into this Agreement.

**1.2 Definitions.** The following terms used in this Agreement, including the Recitals, have the meanings set forth in this Section 1.2:

**“Agreement”** means this Agreement.

**“Capacity Reservation Agreement”** means the agreement to be entered into by the Parties, in substantially the form attached as Exhibit D (*Capacity Reservation Agreement*).

**“City”** means the City of Palo Alto, a California chartered municipal corporation, acting by and through its City Council.

**“City Agents”** means individuals or entities acting within their capacity as duly authorized agents of the City for the Project or for the Substation.

**“City Reimbursement”** means the City’s obligation to reimburse Tesla for Project costs as further specified in Section 5 and Exhibit C (*Project Budget*), the amount of which may be subject to adjustment as further specified in Section 5 and as expressly provided elsewhere in the Agreement.

**“City Improvements”** means that portion of the Project intended to expand the Substation capacity for future City use, but excluding the Tesla Improvements, as further described in Exhibit A (*Project Description*).

**“City Representative”** has the meaning set forth in Section 2.2.

**“Claims”** means any claim, action, suit, proceedings, demand, investigation, assessment or liability of whatsoever kind or character made or brought by any third party.

**“Construction Contract”** means the contract between Tesla and the General Contractor for construction of the Project in accordance with the Construction Documents, as further specified in Section 7.4.



**“Construction Cost”** means the amount to be paid to the General Contractor to construct the Project based on the Construction Contract price.

**“Construction Documents”** means the final Design Development Documents developed pursuant to Section 6, which have been approved by the City for construction of the Project and for which the City has issued a building permit, including any post-approval modifications pursuant to duly authorized change orders pursuant to this Agreement.

**“Construction Period”** means the period beginning from the commencement by the General Contractor of construction activities at the Site in accordance with the terms of the Construction Contract, and concluding upon the Project Acceptance Date.

**“CPAU”** means the City of Palo Alto’s Utilities division.

**“CPAU Rules and Regulations”** means the rules and regulations relating to utility service approved and adopted by resolution of the City of Palo Alto City Council pursuant to Chapter 12.20 of the Palo Alto Municipal Code, as may be amended from time to time, and accessible online via the City’s website.

**“Day”** means a calendar day, unless a “business day” is specified; for the purposes of this Agreement, “business day” excludes any “Regular Holiday” or “Other Special Day” referred to in PAMC Section 2.08.100 or any Friday that is considered a “9/80” day, when the City does not require employees, electing to work nine business days in a ten-business-days biweekly period, to work on such days.

**“Design Development Documents”** means the plans and specifications for the Project which are developed pursuant to Section 6 and prepared by the Engineer to become the Construction Documents upon mutual approval of the final design.

**“Effective Date”** means the date set forth in the preamble to this Agreement.

**“Encroachment Permit”** means the Encroachment Permit required pursuant to Section 4.1, in the form attached as Exhibit B (*Encroachment Permit*).

**“Engineer”** means either (i) the engineering firm identified in Section 6.2.A, or (ii) one or more Tesla employees who are fully licensed and qualified to design the Project.

**“Force Majeure Event”** has the meaning provided in Section 12.1.

**“General Contractor”** means New River Electrical Corporation, being a duly licensed and qualified general contractor, or any replacement general contractor retained by Tesla and approved by the City pursuant to Section 7.4.A.

**“Governmental Authority”** means any national, regional or local government, any political subdivision thereof, or any governmental, quasi-governmental, regulatory, judicial or administrative agency, authority, commission, board or similar entity having jurisdiction over the performance of the Project, the Substation Improvements, the Substation or their operations, or the Site or otherwise over any Party, including any applicable independent system operator or regional transmission organization, the Federal Energy Regulatory Commission, and the North American Electric Reliability Corporation.

**“Laws”** means all applicable local, state, and federal laws, regulations, rules, codes, ordinances, permits, orders, and the like enacted or imposed by or under the auspices of any Governmental Authority with jurisdiction over the Project, including labor, health and safety requirements, the PAMC, and the CPAU Rules and Regulations.

**“Lease”** has the meaning set forth in Recital C.

**“Leased Premises”** has the meaning set forth in Recital C.

**“PAMC”** means the Palo Alto Municipal Code.

**“Project”** has the same meaning provided in Recital B, as further described and depicted in Exhibit A (*Project Description*), and includes both the City Improvements and the Tesla Improvements.

**“Project Acceptance Date”** means the date on which the City accepts the Project according to City procedure.

**“Project Budget”** means the budget that the Parties have agreed upon for design and construction of the Project pursuant to this Agreement based on estimated costs as of the Effective Date, including funds expended for Project-related expenses before the Effective Date, as further detailed in Exhibit C (*Project Budget*), which may be updated by mutual agreement of the Parties.

**“Project Schedule”** means the most current schedule for completing the Project as set forth in Exhibit E (*Project Schedule*), which may be updated by mutual agreement of the Parties.

**“Retention”** has the meaning provided in Section 5.3 of this Agreement.

“**Site**” means the physical location for construction of the Project, as further described and depicted in the Encroachment Permit.

“**Substation Improvements**” means, collectively, all of the physical improvements to and in connection with the Substation pursuant to the Project, including the City Improvements and the Tesla Improvements.

“**Term**” has the meaning provided in Section 3 of this Agreement.

“**Tesla**” means Tesla, Inc., a corporation organized under the laws of the State of Delaware.

“**Tesla Facility**” has the meaning set forth in Recital D to this Agreement.

“**Tesla’s Agents**” means individuals or entities acting within their capacity as duly authorized agents of Tesla to provide services for the design or construction of the Project, which includes Tesla’s employees, its Engineer and the General Contractor and its subcontractors.

“**Tesla’s Contribution**” means Tesla’s funding obligation for design and construction of the Project, subject to offset by the City Reimbursement as further specified in Section 5 and Exhibit C (*Project Budget*), the amount of which may be subject to adjustment as further specified in Section 7 and as expressly provided elsewhere in the Agreement.

“**Tesla Improvements**” means that portion of the Project that includes design and installation of two 50 MVA transformers, two 60 kV circuit breakers, a power distribution center, bus switches, buswork, wiring, feeder outlets, and feeders to Tesla’s switchgear at the Tesla Facility, but excluding the City Improvements, as further described in Exhibit A (*Project Description*).

“**Tesla Representative**” has the meaning set forth in Section 2.3.

**1.3 Purposes of Agreement.** The purposes of this Agreement are to design and construct the Project as set forth in Recitals D and E, above, consistent with the Project Description attached hereto as **Exhibit A (*Project Description*)** and incorporated herein. The Substation Improvements are intended to provide 30 MVA of capacity during normal operation of the City’s electric system.

## **2. PARTY REPRESENTATIVES AND RELATIONS**

**2.1 Communication and Coordination.** In order to facilitate prompt communications and coordination between the Parties, each Party has designated a single point of contact with authority to make high level decisions and to coordinate approvals by each Party as needed for efficient design and construction of the Project.

**2.2 City Representative.** The City Representative is the individual authorized by the City to serve as the primary point of contact for routine communications with Tesla concerning the Project. The City's Representative will not have independent authority to accept, reject, direct, or stop work on the Project; to modify the approved design; or to approve change order requests on behalf of the City. The City Representative has the right, but not the obligation to attend the pre-construction conference and weekly progress meetings, and may be present at the Substation during construction of the Project, subject to compliance with generally applicable health and safety requirements. The City Representative for the Project is Tomm Marshall, and contact information for the City Representative will be provided to Tesla within 10 days after the Effective Date. City reserves the right to replace the City Representative with another qualified individual upon written notice to the Tesla Representative, which will include contact information for the new City Representative.

**2.3 Tesla Representative.** Tesla's authorized representative for administration and implementation of this Agreement, including coordination and direct communications with the Construction Liaison Team, is Andy Kim, and contact information for the Tesla Representative will be provided to the City within 3 days after the Effective Date. Tesla reserves the right to replace the Tesla Representative with another qualified individual upon written notice to the City Representative, which will include contact information for the new Tesla Representative.

**2.4 Monthly Meetings and Weekly Reports to City.** Designated representatives of each Party will meet monthly following the Effective Date, to ensure timely and effective communications on Project progress, including updates on design development, construction, schedule, budget, and other construction-related issues, such as changes in design, changed conditions, inspection, testing, and similar matters. In addition, Tesla will submit a weekly written report, sent by email to the City Representative, summarizing the progress made during the preceding week, providing schedule and budget updates, and identifying any significant issues or concerns relating to its performance relative to the Project.

### **3. TERM.**

Unless this Agreement is terminated pursuant to Section 14, the Term of this Agreement will begin upon the Effective Date and will remain in effect until each of the following has occurred:

**3.1** The Project has been completed, including all obligations set forth in Sections 8.11, 8.12, 8.13, and 8.14;

**3.2** City has accepted the Project; and

**3.3** City has paid the full amount of City Reimbursement, including any Retention, if any, pursuant to Section 5.3.

For the avoidance of doubt, the City Representative and the Tesla Representative will confirm in writing the date upon which each of the actions identified in Sections 3.1 through 3.3 have been completed for purposes of establishing the effective date of the Capacity Reservation Agreement. Notwithstanding the foregoing, the following provisions will survive termination of the Agreement or expiration of the Term: Section 10 (Indemnity; Limitations on Liability), Section 13 (Project Records), Section 15 (Notices), and Section 16 (Dispute Resolution).

**4. SITE ACCESS.** The Tesla Agents will have reasonable access to the Substation for design and construction of the Project pursuant to an Encroachment Permit, as set forth below.

**4.1 Encroachment Permit.** Prior to commencement of the Construction Period, Tesla will obtain an Encroachment Permit from the City, in conformance with the applicable requirements of the PAMC and this Agreement and pursuant to terms and conditions of the Encroachment Permit form attached hereto as **Exhibit B (Encroachment Permit)** and incorporated herein. No other right, title or interest, including, but not limited to, any estate, ownership, leasehold, easement or other property interest, in the Site is granted or intended to be granted by the City to Tesla by this Agreement except as may be specified in the Encroachment Permit. The City will not take any action to revoke the Encroachment Permit, or take any action to compel Tesla or the General Contractor to vacate the Leased Premises or remove property there from, unless and until the Encroachment Permit is revoked as specified in Section 7 of the Encroachment Permit. In the event of any conflict or inconsistency between the terms of this Agreement and the terms of the Encroachment Permit, the terms of this Agreement will take precedence.

**4.2 City Access.** Subject to compliance at all times with applicable Laws and the Site safety requirements agreed by the Parties for the Construction Period, the City Representative and City Agents, including City inspectors will have unrestricted access to the Site during construction of the Project in order to perform their duties subject to generally applicable health and safety rules for the Site. Nothing in this Agreement will be construed to limit the City's right to enforce contractual requirements or Laws protecting workers, the environment, or public or worker health, safety and welfare.

**4.3 Coordination and Site Security.** In order to avoid conflicts between the ongoing operations of the Substation and activities for the Project and to ensure Site security, before commencing work on the Project, the City Representative and Tesla Representative, or their respective authorized delegates, will meet with the General Contractor to identify which portion(s) of the "Permit Area" (as defined in the Encroachment Permit) will be designated for access and for other specified Project-related activities, and to establish mutually acceptable protocols for shared use of the single access gate for the Site. The areas designated for specified Project-related activities may be adjusted during the Project, if needed, to avoid interference with the operations, maintenance, or repair of the Substation.

These area designations and any adjustments thereto will be memorialized in writing by City and provided to the Tesla Representative for delivery to the General Contractor. The City Representative will also inform the Tesla Representative and the General Contractor of the currently applicable security requirements for the Site. Tesla will be solely responsible for ensuring that the General Contractor and its subcontractors are contractually obligated to comply with the terms of the Encroachment Permit, including use of the Permit Area as designated pursuant to this paragraph, and compliance with all security requirements for the Substation.

## **5. PROJECT FUNDING.**

**5.1 Project Budget.** The Project Budget is attached hereto as **Exhibit C (Project Budget)** and incorporated herein. The Project Budget is subject to further amendment by mutual agreement of the Parties following the conclusion of the design development process in Section 6, prior to commencement of construction pursuant to Section 7, and, as applicable, based on change orders pursuant to Section 8.

**5.2 Allocation of Project Costs.** Tesla will be responsible for funding design and construction of the Project in accordance with the Construction Documents developed pursuant to Section 6 (collectively, the "**Tesla Contribution**"), including procurement of equipment and materials, subject to partial reimbursement from the City for certain items as set forth below:

A. **Tesla Costs.** The Tesla Contribution includes 100% of the costs for the following items, with no contribution from the City Reimbursement:

1. Purchase, installation and connection of two 12 kV feeders which will be used to serve the Tesla Facilities;
2. Feeders and on-site switches installation needed to serve the Tesla 30 MVA load;
3. Costs that Tesla elected to pay to expedite delivery of equipment for the Project before the Effective Date;
4. Costs for generally required permits, including the building permit for the Project;
5. Costs to accelerate Project completion after construction has commenced if such acceleration is requested by Tesla for Tesla's convenience, including labor overtime costs and additional Project overhead costs, e.g., additional inspection costs related to the accelerated construction schedule.

In addition, Tesla will reimburse the City for 50% of the premium paid by the City for course of construction or builder's risk coverage pursuant to Section 9.3 ("**COC Reimbursement**"). The COC Reimbursement will be deducted from the City Reimbursement at the time of payment of the City Reimbursement pursuant to Section 5.3.

B. *City Costs.* The City will reimburse Tesla for 100% of the costs associated with the installation of substructure (conduit, vaults, pads, etc.) which are required solely for City Improvements outside of the Substation.

C. *Shared Costs.* Subject to a cumulative total cap of on the City's payment obligations under this Agreement as set forth in Exhibit C, in addition to the substructure costs in Section 5.2(B), the City will reimburse Tesla for 50% of the costs for the following, except for costs which are solely Tesla's responsibility, as stated in Section 5.1.A, above, or elsewhere in this Agreement (collectively, the "**City Reimbursement**"):

1. Grading and structural site improvements necessary for the new Substation improvements;
2. Design and installation of the two 50 MVA transformers, three 60 kV circuit breakers, a power distribution center, and related bus switches, buswork, wiring and feeder outlets;
3. Purchase, installation, and connection of two 60 kV transformer bank circuit breakers;
4. Purchase, installation, and connection of a 60 kV bus tie breaker;
5. Purchase, installation and connection of two 50 MVA, 60 to 12 kV transformers;
6. Purchase, installation and connection of a 12 kV distribution load center; and
7. Testing and commissioning of all equipment and components, minus
8. the COC Reimbursement.

D. *Change Order Costs.* Each Party will be responsible for additional costs due to any approved additive change order, which is approved and issued in accordance with the change order approval terms in Section 8.7, below, consistent with the cost allocation provisions set forth in subsections A-C, inclusive, above; except that if (i) costs for a betterment change is sought by only one Party after the





Construction Documents are subject to City approval to ensure compliance with the standards set forth in this Section 6.

**6.2 Design Professional.** All Design Development Documents for the Project will be signed by a qualified, registered, professional engineer, licensed in California, and with relevant substation design experience. City has the right to approve any other third-party engineer or engineering firm retained under contract with Tesla to serve as Engineer for the Project, including design development before construction and design consultation during construction. Tesla will work with and direct its Engineer, in consultation with City staff, to develop the Design Development Documents in order to complete the Project within the limits of the Project Budget, as set forth in Exhibit C.

A. *Approved Engineer.* The City hereby approves of Power Engineers, Inc., as the Engineer for the Project. If, for any reason, Tesla wish to substitute a different firm to serve as Engineer for the Project, the substitution will be subject to the City's prior written approval of the proposed firm. Tesla will require the Engineer to provide and maintain insurance coverage, including professional liability insurance, that meets the City's standard requirements for design professional insurance as further specified in Section 9, below.

**6.3 Compliance.** The Project will be designed and constructed in compliance with Laws, and in compliance with the most current version of the City Public Works Department's Standard Drawings and Specifications; the City Utility Department's Water, Gas, Wastewater, and Electric Utilities Standards, including City standard substation design layouts; current California General Safety Orders; and the current applicable National Electric Safety Code.

**6.4 Design Development.** The City will review and approve all Design Development Documents for conformance with City specifications and standards, including compliance with City-approved equipment specifications provided to Tesla for procurement of equipment to be incorporated into the Project. Tesla will seek the City's approval of the final Design Development Documents, coordinating submittals and responses with the City Representative. The City's Representative will promptly coordinate the City's internal review of the Design Development Documents among all of the City departments that will have responsibilities pertaining to the operation or maintenance of the Substation. The City may provide written comments and directions to Tesla and its Engineer to apply to design development. The Engineer will consider the City's comments and directions and if applicable will provide an updated estimate of the construction cost for the revised design for the Project. The Design Development Documents will include contractor submittal requirements for submittals that will be subject to City approval during the Construction Period, comparable to those submittal requirements required by the City's current standards and specifications, including shop drawings, purchase submittals, e.g., cut sheets, and the like, to ensure that the Project and its components, including, but not limited to the components listed in Exhibit A (Project Description) conform to the City-approved design for the Project. The process for review and approval of the Design Development Documents is as follows:

A. *Design Development Documents Review.*

1. The final Design Development Documents will be submitted to CPAU for City review and comment.
2. The City may either approve the Design Development Documents or may provide comments for further revisions necessary for the City's approval, in which case Tesla will resubmit the Design Development Documents with revisions as directed by the City's comments.
3. The City's Representative will promptly notify the Tesla Representative in writing once the City has approved the Design Development Documents.

B. *Cooperation.* The City will provide reasonable staff support and other assistance to Tesla without charge, upon reasonable request, in connection with review and development of the Design Development Documents and submittal reviews, including cost estimate updates. City staff support may include program expertise, design suggestions or recommendations, and information, including information on City standards and City requirements and procedures.

C. *Materials and Equipment Procurement.* All material and equipment to be incorporated into the Substation as part of the Project are to be approved as part of the City approval of the Design Development Documents. Any subsequent changes to the materials and equipment shall require approval by the City prior to installation. The following items are subject to prior factory inspection and approval by the City as a condition precedent to delivery to the Site:

1. The transformers; and
2. The power distribution center.

D. *Errors and Omissions.* Notwithstanding the City's assistance or the City's approvals of the Design Development Documents in accordance with this Agreement, the City will not be liable in any way for the Engineer's errors and omissions, nor any costs arising to correct such errors and omissions.

**6.5 Budget Update.** Subject to mutual agreement, the Parties may elect to update the Project Budget set forth in Exhibit C, including the estimated cost to construct the Project, upon conclusion of the design development process set forth in this Section 6.

## **7. CONDITIONS FOR COMMENCEMENT OF PROJECT CONSTRUCTION**

**7.1 Conditions Precedent to Construction.** Tesla will not permit construction to begin on the Project, and will not be obligated to commence construction of the Project, until

all of the conditions precedent to construction set forth in this Section 7 have been satisfied or waived.

A. *Notification.* Tesla's Representative will notify the City Representative in writing when all of the conditions precedent to construction set forth in this Section have been satisfied or waived. Within 14 days thereafter, the City Representative will either (1) confirm that all of the conditions have been satisfied or waived, or (2) identify which conditions have not yet been satisfied or waived.

B. *Commencement.* Tesla will cause construction to commence on the Project within 90 days following notification from the City Representative that all conditions precedent to Construction have been satisfied or waived. The Parties may mutually agree to extend this time if necessary due to provisions outside the control of the Parties, including adverse weather or site conditions or a Force Majeure Event.

C. *Deadline.* If all of the conditions precedent to commencement of construction set forth in this Section 7 are not satisfied or waived by the commencement deadline in 7.1.B, unless the Parties mutually agree to extend the deadline for satisfying any such outstanding condition, this Agreement will terminate without further liability to either Party and neither Party shall have any further rights or obligations under this Agreement.

**7.2 Design Development Documents.** Approval of the final Design Development Documents by each Party is a condition precedent to the commencement of Project construction.

**7.3 Permits and Authorizations.** As a condition precedent to commencement of construction, Tesla will provide written proof to the City that all necessary permits and approvals from any and all agencies having jurisdiction over the Project, including the City, have been authorized, including, as applicable, building permits, street opening permits, encroachment permit, utility encroachment permits, and health permits. Subject to compliance by Tesla with applicable permitting requirements, the City will provide reasonable support to Tesla in connection with the timely granting of any permits or approvals necessary for the Project and which are issued by the City or any of its agencies or departments.

**7.4 Construction Contract.** As a condition precedent to commencement of construction, Tesla will provide written proof to the City that Tesla has entered into the Construction Contract with a General Contractor that is reasonably acceptable to the City, based on the form of agreement attached as **Exhibit I, Construction Contract Form**, as meeting the requirements in this Section 7.4, and that the General Contractor has submitted all bonds and proof of insurance required by the Construction Contract as specified below.

A. *General Contractor.* Tesla's selection of any replacement General Contractor shall be subject to prior approval by the City, which shall not unreasonably delayed or withheld provided the proposed contractor (1) possesses the requisite

California contractor's license(s), and (2) is a "responsible bidder" as that term is defined PAMC section 2.30.440(c).

B. *Construction Contract.* The Construction Contract between Tesla and its General Contractor will include the following:

1. *General Compliance.* The Construction Contract will require that General Contractor and its subcontractors will not take any action or fail to take any action which would cause Tesla to be in default under this Agreement or the Encroachment Permit, including, but not limited to, compliance with requirements pertaining to Site security.

2. *Compliance with Construction Documents.* The Construction Contract will require the General Contractor to construct the Project as specified in the approved Construction Documents, which must be attached or incorporated therein, and in accordance with all applicable permits and authorizations. The Construction Contract must also include a traffic management plan, consistent with the City's current traffic control requirements, that has been approved by the City.

3. *Payment and Performance Bonds.* The Construction Contract will require the General Contractor to submit a payment and a performance bond prior to commencement of construction and to remain in effect throughout the Construction Period, each for 100% of the Construction Cost, using bond forms provided or approved by the City and in compliance with Laws, including Civil Code section 9550 and PAMC section 2.30.500.

4. *Insurance.* The Construction Contract will require the General Contractor to maintain insurance coverage throughout the Construction Period as specified in Section 9, below.

5. *As-Built Drawings.* The Construction Contract will require the General Contractor to prepare and maintain as-built drawings showing any changes from or details not shown in the Construction Documents, suitable for preparation of record drawings.

6. *Legal Compliance.* The Construction Contract will require the General Contractor and its subcontractors to construct the Project in compliance with applicable Laws, including prevailing wage and Labor Code requirements and any conditions of approval required to be obtained from any Governmental Authority, to the extent any such Laws or conditions of approval are applicable to the General Contractor's performance under the Construction Contract.

7. *Warranty.* The Construction Contract will require a one-year warranty guaranteeing the work performed by the General Contractor and its subcontractors, consistent with the City’s requirements in its standard specifications, with the warranty period commencing on the Project Acceptance Date.

**7.5 Condition Related to Project Costs.** As a condition precedent to commencement of Project construction, the Parties will further revise the Project Budget, if needed, based on the cost of the Construction Contract, and subject to mutual agreement of the Parties.

**7.6 Capacity Reservation Agreement.** As a condition precedent to commencement of Project construction, the Parties will execute the Capacity Reservation Agreement based substantially on the form attached as **Exhibit D (Capacity Reservation Agreement)**.

**8. PROJECT CONSTRUCTION**

**8.1 Responsibility.** Tesla will be responsible for construction of the Project and for directing its General Contractor to complete the Project within the Project Schedule, as set forth below.

**8.2 Project Schedule.** The Project will be completed within three years following commencement of construction (provided that such period shall be extended to account for any Force Majeure Event delaying completion of the Project, and/or any additional time granted pursuant to a change order under the Construction Contract which has been approved or deemed approved by the City). Unless the time for completion is extended by mutual agreement of the Parties. The Parties’ planned schedule for design and construction of the Project is set forth in the Project Schedule, attached as **Exhibit E (Project Schedule)** hereto. The Project Schedule will be refined by Tesla to reflect the as-planned construction schedule, within ten days following issuance of the building permit(s). Each Party will exercise its reasonable efforts to perform its respective obligations in a reasonably timely manner to complete the Project within the time set forth in the Project Schedule. Notwithstanding the foregoing, the Project Schedule may be amended at any time based on mutual agreement of the Parties.

**8.3 General Standards.** Construction of the Project will be executed so as to materially conform to the requirements of the approved Construction Documents, including the workmanship standards contained therein. The General Contractor and its subcontractors must be licensed in good standing as required by the State of California before performing any work on the Project.

A. *Inspection.* The Project will be subject to inspection during the Construction Period in the same manner as any substation improvement project

constructed under the City's jurisdiction in the City's role as a Governmental Authority responsible for compliance with applicable permit(s) and Laws. No construction may be performed at the Site without a City inspector onsite. The City shall be liable for reasonable, documented costs incurred under the Construction Documents in respect of delays in the performance by Tesla or the General Contractor which is caused by the failure by or delay in such City inspector(s) to attend construction activities at the Site, when required during normal hours for Project construction and following reasonable notice for work to be performed outside of those hours, with the exception of failure or delay due to a Force Majeure Event for which relief is granted under the Construction Documents. At all times during the Construction Period, one or more City inspectors may be onsite to monitor and review construction of the Project to ensure compliance with the Construction Documents, the building permit, and applicable Laws. City inspection services will be scheduled based on the Project Schedule and approved working hours for the Project.

B. *Special Inspections.* Tesla will notify the City Representative in advance of any special inspection needs so that the City has the opportunity to have a qualified inspector available on a timely basis.

C. *Submittals and Substitutions.* The City reserves the right to review and approve any submittal or substitution request relating to the Project components listed in Exhibit A (*Project Description*).

D. *Remedies.* Subject to Section 8.7, the City will not bear the cost for unapproved deviations from the approved Construction Documents that negatively impact the City's future operation of or the future capacity of the Substation. Remedies for installation of Substation Improvements that do not comply with the approved Construction Documents may include one or more of the following, at the City's election:

1. Removal and reinstallation of the deviating or defectively installed component;
2. Modifications to mitigate the deviation from the Construction Documents; or
3. Adjustment to the City Reimbursement obligation commensurate with the City's estimated cost to remedy the deviation, negative impacts on the City's future operational costs, or negative impacts on the Substation capacity.

**8.4 Project Commencement.** The General Contractor will be required to commence construction of the Project in accordance with the Construction Documents within

90 days after the City has confirmed, pursuant to Section 7.1, that all of the conditions precedent to construction of the Project have been satisfied or waived.

#### **8.5 Construction Meetings.**

A. *Pre-Construction Conference.* The Parties will schedule a pre-construction conference to take place before any work begins on the Site the General Contractor's designated project manager and superintendent(s); the Engineer; the designated inspector(s); and any other individuals whom the Parties mutually agree should be in attendance. The pre-construction conference will address relevant Project objectives and constraints, including communication protocols to ensure efficient and effective communications throughout the construction process; safety requirements; environmental considerations; scheduling; submittals; change order procedures; substitution procedures; the City-approved traffic control plan; noise management; City's Site security requirements; parking; and compliance with the Encroachment Permit, including area designations established pursuant to Section 4.3.

B. *Weekly Meetings.* In addition, Tesla will schedule weekly meetings for the duration of the Construction Period, which will be attended by the General Contractor, the Engineer, and other individuals whose participation is important to help ensure efficient construction of the Project consistent with the Construction Documents, the Encroachment Permit, and the terms of this Agreement. The City Representative and City officials with direct responsibility for the Project have the right, but not the obligation, to attend these weekly meetings.

C. *Agendas and Minutes.* Tesla will be responsible for preparing and distributing agendas and minutes for the pre-construction conference and the weekly meeting to all meeting participants with copies to the City Representative.

**8.6 Prevailing Wages.** Work on the Project will constitute a "public works" project as defined under Labor Code section 1720 set seq.

A. *Prevailing Wage Requirements.* All contractors and subcontractors performing work on the Project are required to pay general prevailing wages as defined in Subchapter 3, Title 8 of the California Code of Regulations and Section 16000 et seq. and Labor Code Section 1773.1. Before entering into the Construction Contract to perform work on the Project and at all times while performing work on the Project, the General Contractor and its subcontractors must be registered with the California Department of Industrial Relations ("**DIR**") to perform public work under Labor Code Section 1725.5. Pursuant to Labor Code Section 1773, the general prevailing rate of per diem wages and the general rate for holiday and overtime work in this locality for each craft, classification, or type of worker needed to perform the work may be obtained at the Purchasing Office of the City of Palo Alto. All contractors and subcontractors for the Project must comply with the provisions of Labor Code

Sections 1775, 1776, 1777.5, 1810, and 1813. The General Contractor must also comply with the provisions of Labor Code sections 1776 and 1812 and all implementing regulations, which are fully incorporated by this reference, including requirements for electronic submission of payroll records. The Construction Contract will be subject to compliance monitoring and enforcement by the DIR, pursuant to Labor Code section 1771.4.

B. *Construction Contract.* The Construction Contract must include the prevailing wage requirements set forth above, or as otherwise required by Labor Code provisions currently in effect when the Construction Contract is executed.

**8.7 Change Orders.** Any proposed changes to the City-approved Construction Documents are subject to prior mutual agreement between the Parties, except as set forth herein. Any change orders proposed by the City will be subject to prior approval by Tesla and subject to the City's commitment to pay for any increased cost resulting from its proposed change order. Tesla may authorize change orders to the Construction Contract without prior approval from the City, except under any of the following circumstances, each of which requires prior written approval by the City Representative:

A. *Cost Impact.* The City's share of the additional cost for a proposed change or its share of the costs for cumulative changes would increase the total of the City Reimbursement obligations by more than \$50,000.00.

B. *Scope Alteration.* The proposed change would materially alter the Project scope or purposes of this Agreement, including, but not limited to adverse impacts on normal operations and use of the Substation, including the City's planned expansion of the Substation capacity.

C. *Adverse Impacts.* The proposed change would significantly reduce the quality, functionality, or life-expectancy of the improvements or constituent components.

D. *Maintenance Impacts.* The proposed change would materially increase the City's costs to operate, repair, or maintain the improvements or constituent components of the Substation.

E. *Conflict.* The proposed change would conflict with or be inconsistent with the provisions or objectives of this Agreement.

F. *Governmental Approval.* The proposed change would require new or amended approval by a Governmental Authority, including amendments to any permit(s).

Provided that in no event shall the City have approval rights for change orders providing time or cost relief to the General Contractor in accordance with the Construction Documents



where the General Contractor has an entitlement to relief (and Tesla does not have discretion in terms of relief awarded) for (i) Force Majeure Events or changes in Laws after the effective date of the Construction Contract, or (ii) delays to performance under the Construction Documents which are not caused by the General Contractor or its subcontractors. Tesla shall keep the City informed as to the relief determinations respect of such change orders, and shall consult the City and use its reasonable efforts to minimize the relief granted to the General Contractor in respect of item (ii) above.

**8.8 Site Maintenance.** During the Construction Period, Tesla and Tesla's Agents, at their sole cost, will maintain the Site and the Project in a commercially reasonable, clean and safe manner and in compliance with the Agreement, the Encroachment Permit and Laws. Tesla or Tesla's Agents will provide approved containers for trash and garbage generated at the Site and arrange for their disposal. The City reserves the right, to enter and inspect the Site for compliance with this maintenance requirement and applicable safety requirements. Tesla's Site maintenance obligations will terminate upon City's acceptance of the Project.

**8.9 Utility Service.** Tesla will be responsible for timely payment of all utility services required for the Project during the Construction Period, pursuant to applicable City and utility provider requirements, including electric, water, wastewater and garbage services, and fiber, and timely payment of all applicable utility connection charges, required to perform and complete the Project.

**8.10 [Not Used]**

**8.11 Record Drawings.** Upon completion of the Project, the Engineer will prepare the record drawings based on the General Contractor's as-built drawings and provide the City Representative with a complete set of electronic AutoCAD drawings of the Design Documents, and one PDF of a red-lined set (i.e., not electronic AutoCAD drawings) reflecting the actual construction of the Project based on the Contractor's as-built drawings. Submission of provisional copies of such complete and accurate record drawings and the as-built drawings is a condition precedent to City acceptance of the Project, with final versions of such record drawings and as-builts to be submitted within ninety (90) days of acceptance.

**8.12 Completion and Acceptance.** Tesla will use reasonable efforts to achieve completion of the Project within three (3) years of the commencement of construction (provided that such period shall be extended to account for any Force Majeure Event delaying completion of the Project, and/or any additional time granted pursuant to a change order under the Construction Contract which has been approved or deemed approved by the City).

A. *Conditions for Acceptance.* Once the Project has been completed in accordance with the Construction Documents, the Construction Contract, and the terms of this Agreement, the City will accept the Project as complete in accordance with standard City procedure, and will notify the Tesla of acceptance of the Project, subject to Tesla's satisfaction of each of the following conditions 1 to 4 below for City

acceptance (except to the extent that one or more of these conditions precedent to acceptance is expressly waived by the City, in whole or in part):

1. *Project Completion.* Substantial Completion of the Project is achieved pursuant to the Construction Documents and approved change orders.
2. *As-Built and Record Drawings.* City receipt of provisional as-builts and the record drawings pursuant to Section 8.11.
3. *Manuals.* City receipt of provisional equipment maintenance and operating manuals for the Substation Improvements.
4. *Inspection.* The City Representative has been provided with written confirmation that the Project has passed inspection for permit and code compliance.
5. *Punch List Completion.* Completion of all punch list items in accordance with the requirements of the Construction Contract, unless the City agrees to accept the Project subject to exceptions for any specified incomplete punch list item.
6. *Contractor Certification.* City receipt of the General Contractor's signed certification that all subcontractors and suppliers have been paid and that there are no pending claims (including stop payment noticed or payment bond claims) against the General Contractor in relation to the Project.
7. *Site Restoration.* Tesla has caused all trash and garbage to be removed from the Site and those portions of the Site that have not been modified in connection with the Substation Improvements in accordance with the requirements of the Construction Documents have been restored to their pre-construction condition.
8. *Warranty.* Tesla has caused warranty rights and guarantees to be assigned (by direct or collateral assignment) or otherwise transferred to the City in accordance with Section 8.13.

For the avoidance of doubt, Tesla shall be obligated to complete all of the conditions 1-8 above, with conditions 4 to 8 to be completed (and the final as-built drawings and operation and maintenance manuals delivered to the City) as soon as reasonably possible following acceptance by the City.

B. *Notice of Completion.* Following acceptance, the City will record a notice of completion pursuant to Civil Code section 9204, within 15 days following the City's acceptance of the Project.

**8.13 Transfer Following Acceptance.** Tesla covenants that the Project will transfer to the City free and clear of all liens, claims (including stop payment or payment bond claims), or liability for labor or materials upon acceptance of the Project by the City on the Project Acceptance Date, so that the City is the sole owner of all of the Substation Improvements. Subject to payment in full by the City of its reimbursement obligations under Section 5 of this Agreement, Tesla will execute a deed or other document reasonably acceptable to the City quitclaiming any and all right, title and interest in and to the Substation Improvements installed pursuant to the Project, effective as of the Project Acceptance Date. Tesla will assign any remaining third-party warranties and workmanship guarantees in the Construction Contract, including the General Contractor's minimum warranty therein, to the City effective as of the Project Acceptance Date. If City terminates this Agreement for Tesla's default, Tesla will assign to City all third-party product warranties applicable to materials and equipment installed prior to termination, in each case to the extent such warranties are capable of being assigned.

**8.14 Operation and Maintenance of the Substation Improvements.** Following the Project Acceptance Date, the City shall be responsible for the maintenance and operation of the Substation Improvements and all other equipment located within the Leased Premises and all other cables and connections up to the point of service to Tesla. The City will bear all risk of loss associated with the Substation (including the Site) and Substation Improvements up to the Point of Delivery to Tesla (as defined in Rule and Regulation 2 of the CPAU Rules and Regulations) from and after the Project Acceptance Date.

**8.15 Capacity Reservation Agreement.** The Capacity Reservation Agreement will become effective in accordance with its terms.

## 9. **INSURANCE.**

### 9.1 **Coverage Requirements.**

A. Tesla will insure its obligations under this Agreement as specified in **Exhibit F, Insurance Requirements (Tesla)**, either by (i) maintaining in effect with responsible insurance carriers with a Best Insurance Reports rating of "A-" or better or (ii) through a formal self-insurance mechanism that has both: (a) a Best Insurance Reports rating of "A-" or better; or (b) a financial size category of "VI" or higher; *provided*, that if such self-insurance program does not meet (a) and (b), then

the Party's use of self-insurance for the coverages herein shall be subject to the City's approval, not to be unreasonably withheld, conditioned, or delayed.

B. Tesla must require its Engineer to obtain and maintain during the Term the insurance coverage described in **Exhibit G, Insurance Requirements (Engineer)**.

C. Tesla must require the General Contractor to obtain prior to beginning and to maintain throughout construction of the Project, up to the date of Project acceptance, the insurance coverage described in **Exhibit H, Insurance Requirements (General Contractor)**.

**9.2 General Requirements.** The insurance must remain in full force and effect during the Term, commencing on the Effective Date, except as otherwise specified for the General Contractor in Section 9.1, above.

**9.3 COC Policy.** City may obtain course of construction or builder's risk coverage ("**COC Insurance**") for the Construction Period, covering the Site and the Project pursuant to this Section 9.3 and the terms of Section 5.3. The terms of such COC Insurance shall be subject to the reasonable advance approval of Tesla. Tesla and the General Contractor shall be named additional loss payees under the COC Insurance. The City will provide Tesla with a copy of the COC Insurance, together with a copy of the paid premium invoice, promptly following issuance of the policy. For any insured loss covered by the COC Insurance, the deductibles shall be borne equally by the Parties.

## **10. INDEMNITY; LIMITATIONS ON LIABILITY.**

**10.1 Indemnity.** To the fullest extent permitted by law, Tesla will protect, defend, indemnify and hold harmless the City, its elected and appointed officials, officers, employees, City Agents and representatives, from any and all Claims for death of or injury to persons, property damage or any other loss, to the extent caused by or arising out of the negligent acts or omissions, or willful misconduct, of Tesla, Tesla's Agents (individually or collectively), its employees, officers, agents, engineers, contractors or design professionals, in the performance of or failure to perform Tesla's obligations under this Agreement.

### **10.2 Indemnification Procedures.**

A. *Notice.* The City will give the Tesla prompt notice of any Claim for which indemnification is sought under this Section 10. Failure to give prompt notice will not diminish the Tesla's obligations under this Section 10 to the extent such failure does not materially prejudice the Tesla's ability to defend the Claim.

B. *Defense.* Tesla shall control the defense of the Claim, and the City may participate in the defense at its own expense with legal representation of its choice. If

the Claim is one that cannot by its nature be defended solely by Tesla, then the City will make available information and assistance as Tesla may reasonably request, at Tesla's expense.

C. *Consent.* Tesla may not, without the prior written consent of the City, consent to the entry of any judgment or enter into any settlement:

1. that provides for injunctive or other non-monetary relief affecting the City; and

2. unless such judgment or settlement provides for an unconditional and full release of the City and does not diminish any rights of the City under this Agreement or result in additional fees or charges to the City.

D. *Remedies.* If Tesla fails to take reasonable steps to defend the City against a Claim in accordance with this Agreement within a reasonable time after receipt of a request for indemnification, the City may undertake the defense of such Claim without waiving its rights and remedies under this Agreement.

E. *Limitation.* Notwithstanding anything to the contrary, in no event will Tesla be obligated to the City, except on a proportionate basis, to the extent a Claim arises out of or is due to the negligence or willful misconduct of the City, the City's Agents, or its employees, officers, agents, inspectors, engineers or contractors.

**10.3 Waiver of Certain Damages.** In no event shall either Party be liable to the other Party for any consequential, indirect, incidental, special, exemplary or punitive damages (including without limitation damages incurred by a financing) arising out of or relating to any breach of this Agreement, whether or not the possibility of such damages has been disclosed in advance or could have been reasonably foreseen and regardless of the legal or equitable theory (contract, tort or otherwise) upon which the Claim is based.

**10.4 No Individual Liability.** The City acknowledges and agrees that the liability of Tesla under this Agreement is limited to the assets of Tesla, and no officer, director, employee, agent or contractor of Tesla or other individual affiliated with Tesla will be responsible or liable for the obligations of Tesla under this Agreement.

## **11. ASSIGNMENT.**

**11.1 No Assignment Without Consent.** Except as set forth in Section 11.2, neither Party will assign, transfer, encumber or convey this Agreement without the express written approval of the other Party, which such Party may give or withhold in its sole discretion, and any such assignment, transfer or conveyance without the approval of the other Party will be void and, in such event at the other Party's option, this Agreement may be terminated upon thirty (30) days' prior written notice to Party making such assignment,

transfer or conveyance in breach of this provision. All of the terms and conditions of this Agreement will be binding on the assignee or transferee, its assigns, transferees, and successors in interest.

**11.2 Collateral Assignment.** Tesla may with prior written notice to the City, and with the City's prior written consent, collaterally assign this Agreement as security to, or as part of any factoring arrangement with, any financing party, provided that financing party agrees, in an enforceable written instrument, to be fully bound by Tesla's legal obligations under the terms of this Agreement, but no assignment of this Agreement under this Section 11.2 will release Tesla from its obligations and liabilities under this Agreement. A permitted assignee under this Section 11.2 will be bound by the obligations of this Agreement upon a foreclosure and upon the City's request will deliver a written assumption of assignor's rights and obligations under this Agreement to the City. Any written instrument used to effectuate the terms of this Section 11.2 is subject to prior approval by City, which approval will not be unreasonably withheld or delayed, with respect to conforming with the terms herein.

**12. FORCE MAJEURE.** A Party will be temporarily excused from the performance or further performance of any of its covenants or agreements or any terms or conditions that it is obligated to fulfill hereunder, and such Party's nonperformance will not be deemed an event of default under this Agreement for any period, to the extent that such Party is reasonably unavoidably prevented, hindered or delayed for any period of time from performing any of its covenants or agreements, in whole or in part, or any term or condition it is required to perform or satisfy, as a result of a Force Majeure Event. The Parties agree to use reasonable efforts to avoid and mitigate the effects caused by the occurrence of the relevant Force Majeure Event.

**12.1 Definition.** "Force Majeure Event" means any act or circumstance beyond the reasonable control and not attributable to the fault or negligence of the Party seeking relief, including acts of God, epidemic, pandemic, flood, fire, earthquake, climatic conditions at the Site that are unusual for the time of year, explosion, action or inaction of a public authority (including delays caused by permitting authorities) for reasons other than the claiming Party's fault, war, terrorist threats or acts or other civil unrest, piracy, lock-outs, strikes or other labor disputes, restraints or delays affecting carriers, and shall include the inability or delay in obtaining supplies of adequate or suitable materials to the extent caused by a Force Majeure Event. Force Majeure Events include any emergencies declarations by any Governmental Authority requiring shutdown or forced curtailment of the Project or the Substation, or imposing delays or other impacts on a Party's performance (including those arising from shut-in, social distancing or other orders by Governmental Authorities, delays or non-availability of labor or materials, enhanced safety or monitoring requirements, or due to any epidemic or pandemic). However, financial cost alone or as the principal factor shall not constitute grounds for a claim of force majeure.

**12.2 Notice.** A Party will provide written notice promptly to the other Party to the extent that Party relies on the provisions of this Section to temporarily excuse its failure to

perform any of its covenants or agreements or any duties under this Agreement due to a Force Majeure Event.

### **12.3 Damage to Project.**

A. *Responsibility for Damage.* Tesla will be responsible for any damage to the Site or the Substation Improvements (other than damage expressly contemplated in the performance of the work under the Construction Contract) that arises due to acts or omissions of Tesla, Tesla's Agents or the General Contractor during the Construction Period. Except as expressly set forth in this Agreement, including, but not limited to, the indemnity and insurance requirements set forth herein, the City will be responsible for any other loss or damage to the Site or the Substation Improvements that is not covered by the insurance required under this Agreement.

B. *Damage Prior to Acceptance.* If any part of the Project is damaged by fire, other peril, or any other cause, before the Project has been accepted by the City, Tesla will promptly direct its General Contractor to take appropriate measures to secure the Site to avoid further damage or unsafe conditions. Tesla will make reasonable efforts to complete the Project on schedule, if reasonably possible depending on the scope and nature of the damage. Construction of the Project will be suspended, in whole or in part, only to the extent necessary to ensure worker and public safety or to limit the cost to repair and complete the Project.

C. *Insurance Claim.* Tesla may, at its sole option prepare and submit a claim to its insurer(s) or rely on self-insurance, if applicable, for funds to repair and rebuild all insured loss pursuant to the applicable insurance coverage required under Section 9 and exhibits thereto. Both Parties will cooperate to expedite recovery of insurance proceeds for which Tesla elects to make submit a claim to cover the insured loss.

## **13. PROJECT RECORDS.**

**13.1 Maintenance of Project Records.** Tesla will maintain or caused to be maintained by its Engineer, General Contractor and subcontractors, if any, in accordance with their respective standard practices books and records relating directly to design and construction of the Project (excluding for the avoidance of doubt any documents which are subject to confidentiality obligations to third parties, which are subject to attorney-client privilege or which constitute privileged work product) until the earlier of three (3) years from the Project Acceptance Date or any earlier termination of this Agreement. Tesla will retain such books and records at accessible locations during the record retention period.

**13.2 Inspection of Records.** The City may inspect and copy such books and records upon thirty (30) days' prior written notice from the City at any reasonable time during the above-referenced record retention period.

**13.3 Survival.** This Section will survive the termination of this Agreement.

**14. DEFAULT.**

**14.1 Choice of Remedies.**

A. *Remedies for Tesla Default.* Except as otherwise provided under this Agreement and subject to the dispute resolution provisions of Section 16, if Tesla defaults in the performance of any covenant, term or condition contained in this Agreement and such default is not corrected within 30 days of receipt of a written notice of default from the City, the City may elect to enforce any of the following rights and remedies:

1. In the case of a material default, such as abandonment of the work; uncorrected or repeated material violation of any Laws; or refusal or repeated, unexcused failure to construct the Project in material conformance with the requirements of the Construction Documents, City may elect to terminate this Agreement upon 30 days prior notice to Tesla.

2. The City may cure any default of Tesla by performance of any act, including payment of money, and the cost and expense thereof, plus all reasonable administrative costs actually incurred by the City in so curing, will become immediately due and payable by Tesla to the City.

3. The City may initiate an action or suit in law or equity to enjoin any acts which may be unlawful or in violation of the rights of the City hereunder.

4. The City may pursue any other right or remedy as may be provided at law or in this Agreement.

B. *Remedies for City Default.* Except as otherwise provided under this Agreement and subject to the dispute resolution provisions of Section 16, if the City defaults in the performance of any covenant, term or condition contained in this Agreement and such default is not corrected within 30 days of receipt of a written notice of default from Tesla, Tesla may elect to enforce any of the following rights and remedies:

1. In the case of a material default, Tesla may elect to terminate this Agreement upon 30 days prior notice to the City.



2. Subject to the provisions of Section 16.3, Tesla may initiate an action or suit in law or equity to enjoin any acts which may be unlawful or in violation of the rights of Tesla hereunder.

3. Subject to the provisions of Section 16.3, Tesla may pursue any other right or remedy as may be provided at law or in this Agreement.

C. *Wrongful Stoppage or Suspension of Project.* If either Party wrongfully stops or suspends work on the Project, other than as authorized herein or pursuant to the lawful exercise of the City's police powers; actions necessary to operate, maintain, or repair the Substation; or to comply with Laws, that Party will be responsible for all additional costs, reasonably incurred by the other Party to complete the Project as a result of such wrongful stoppage or suspension, provided the Party claiming entitlement to additional costs transmitted a timely notice objecting to the stoppage or suspension, and stating the grounds for such objections, and provided the Parties engage in the dispute resolution procedures in Section 16. As used in this paragraph, "wrongful" and "wrongfully" refer to actions that constitute a material breach of this Agreement but exclude City's reasonable exercise of its police powers in accordance with Laws; actions necessary to operate, maintain, or repair the Substation; or to comply with Laws.

D. *Additional Time for Cure.* Except as otherwise provided in this Agreement, in the event of any material default by either Party that is not cured within 30 days of written notice of default from the aggrieved Party, or such additional period of time as is reasonably necessary to cure the default, not to exceed 60 additional days, the aggrieved Party may pursue any rights or remedies provided by law or equity to enforce the Agreement, subject to prior compliance with the dispute resolution procedures in Section 16.

#### **14.2 Termination.**

A. *Failure to Timely Commence the Project.* If Tesla fails to cause construction on the Project to commence within 90 days after City's notification pursuant to Section 7.1 that all conditions precedent to construction have been met or waived, City may terminate this Agreement. If the Agreement is terminated pursuant to this paragraph, each Party will bear its own loss with respect to expenditures it has incurred for design and construction of the Project, and neither Party will be entitled to further contribution from the other Party for such expenditures.

B. *Termination after Project Commencement.* If this Agreement is terminated by either Party after work on the Project has already commenced by delivery of written notice of termination at least thirty (30) days prior to the effective date of the termination, Tesla is responsible for prompt removal of the personal property of Tesla or any Tesla Agents from the Site, including temporary facilities for Project construction, and restoring the Site back to its pre-construction condition, with

the exception of Substation Improvements that have already been fully installed at the Site, or as otherwise specified by the City, no later than thirty (30) days after the notice of the termination, unless a longer period is specified in the notice of termination. City will have the right to dispose of any such personal property that is not timely removed, and the right to recover any costs it incurs to remedy any failure by Tesla to timely remove such personal property and restore the Site. Otherwise, each Party will bear its own loss with respect to expenditures it has incurred for design and construction of the Project, except that:

1. The City will compensate Tesla for Substation Improvements that have been fully installed and incorporated into the Substation, provided those Substation Improvements (a) have been installed in accordance with the Construction Documents to the City's reasonable satisfaction, and (b) function as intended based on specified inspection, testing, or commissioning.

2. With respect to materials or equipment which are on Site, but which have not yet been fully installed or incorporated into the Substation, City will have the right, but not the obligation, to retain such materials or equipment for subsequent installation or incorporation, subject to payment to Tesla of an amount equal to the cost of such materials or equipment retained by the City. The Parties mutually intend that disposition of and compensation for improvements, equipment, or materials upon termination after Project commencement should be fair and equitable in relation to the circumstances, and should not result in any unfair enrichment nor an unfair burden to pay for improvements, equipment, or materials that offer little or no benefit without a completed Project.

**14.3 Enforcement.** The remedies given to the Parties hereunder, or by any Laws now or hereafter enacted, are cumulative and the exercise of one right or remedy will not impair the right of a Party to exercise any or all other remedies. In case any suit, action or proceeding to enforce any right or exercise any remedy is brought or taken and then discontinued or abandoned, then, and in every such case, the Parties will be restored to their former positions, rights and remedies as if no such suit, action or proceedings had been brought or taken.

**15. NOTICES.** All notices, requests and approvals by a Party will be given, in writing, and delivered by personal service, the United States Postal Service, express delivery service, or electronic mail transmission, as follows:

To City: City of Palo Alto  
City Clerk  
P.O. Box 10250  
250 Hamilton Avenue  
Palo Alto, CA 94303

With copies to each of:

Utilities Department  
250 Hamilton Avenue  
Palo Alto, CA 94303  
ATTN: Tomm Marshall

To Tesla: Tesla, Inc.  
1 Tesla Road  
Austin, TX 78725  
E-Mail: energynotices@tesla.com  
ATTN: Andy Kim

Any notice hereunder will be deemed to have been given upon receipt at the designated address, except that a notification delivered on a weekend, holiday, or other day that the recipient Party is not open for business, will be deemed received on the recipient Party's first business day thereafter. For convenience of the Parties, copies of notices may also be given by email; however, neither Party may give official or binding notice by email.

**16. DISPUTE RESOLUTION.** Except as expressly provided in this Agreement, good faith compliance with the dispute resolution procedures herein, is a condition precedent to either Party initiating a legal action against the other Party.

**16.1 Informal Resolution.** If a dispute arises between the Parties from or in connection with this Agreement or any Exhibit hereto (a "**Dispute**"), the following procedure will govern the resolution of any such Dispute:

A. *Informal Negotiation.* Each Party will nominate a representative to be responsible for engaging in good faith efforts to resolve the Dispute on behalf of that Party for a 14-day resolution period, beginning with either Party's written notice requesting Dispute resolution pursuant to this provision. Notwithstanding the foregoing, it is understood that under the terms of the PAMC, final authority to approve proposed resolution of a dispute on behalf of the City may be vested in the City Council, in which case the 14-day resolution period will be extended so that City Council approval may be requested in accordance with standard procedures for such matters.

B. *Further Negotiations.* If the Dispute remains unresolved within the 14-day period or due to failure to secure City Council approval, as applicable, before either Party initiates mediation under Section 16.2 and 16.3, either Party may refer the Dispute, in writing, for final settlement to Tesla's General Counsel and the City Manager, or designee, who will jointly convene within ten days of receipt of the referral request and use reasonable efforts to consider and resolve the Dispute. The Parties will ensure that their respective representatives confer for a period of 14 days from the date of referral by either Party. Notwithstanding the foregoing, it is

understood that under the terms of the PAMC, final authority to approve proposed resolution of a dispute on behalf of the City may be vested in the City Council, in which case the 14-day resolution period will be extended so that City Council approval may be requested in accordance with standard procedures for such matters.

C. *Impasse.* If final resolution cannot be achieved, the Parties may follow the procedures described in Sections 16.2 and 16.3.

**16.2 Mediation.** In the event of an unresolved Dispute between the Parties with respect to this Agreement or the enforcement of rights hereunder, after reaching impasse pursuant to Section 16.1, either Party may, by notice to the other Party (the "**Mediation Notice**"), require such dispute to be submitted to non-binding mediation in Palo Alto, California, with a single mediator who is mutually acceptable to the Parties. The Parties will use reasonable efforts to cause such mediation to be convened, conducted and completed within a reasonable period of time, from the date of the Mediation Notice, subject to the availability of a mutually acceptable mediator and commensurate availability of the individuals that each Party, respectively, requires to represent it at mediation, including legal counsel, percipient witnesses, expert witnesses, sureties, and individuals authorized to negotiate a settlement. If such mediation does not result in a settlement of the Dispute or if one or more of the Parties does not in good faith participate in such mediation, either Party may pursue other available legal or equitable remedies. The cost of mediation, including the mediator's fee, will be shared equally by the Parties, but each Party is solely responsible for its own legal costs and its own legal representation.

**16.3 Remedies for Default.** Subject to good faith compliance with the dispute resolution procedures in this Section, nothing contained in this Agreement will prevent or otherwise restrict either Party from pursuing its legal or equitable rights, including injunctive relief and specific performance, in the event of a default by the other Party. Notwithstanding the foregoing, Tesla must comply with the applicable provisions of the Government Claims Act and the PAMC, as a condition precedent to filing any lawsuit or claim relating to this Agreement.

**16.4 Limitations.** Notwithstanding anything to the contrary set forth herein, prior to any termination of this Agreement and for so long as the City does not default under this Agreement, Tesla will not terminate its construction of the Substation Improvements, unless authority to do so is granted by the City or conferred by a court of competent jurisdiction, or this Agreement has been validly terminated. To the full extent practicable, work on the Project will not be unilaterally suspended, delayed, or stopped by either Party solely because the Parties are engaged in dispute resolution pursuant to this Section 16.

## **17. MISCELLANEOUS PROVISIONS.**

**17.1 Governing Law.** This Agreement will be governed by and construed in accordance with the laws of the State of California. The Parties will comply with all applicable

federal, state and local laws in the exercise of their rights and the performance of their obligations under this Agreement.

**17.2 Covenants and Conditions.** All provisions of this Agreement, whether covenants or conditions, will be deemed to be both covenants and conditions.

**17.3 Entire Agreement; Amendment.** This Agreement represents the entire agreement between the Parties and supersedes all prior negotiations, representations and contracts, whether written or oral. This Agreement may be amended by an instrument, in writing, signed by the Parties. This Agreement may be executed in any number of counterparts, each of which will be an original, but all of which together will constitute one and the same instrument.

**17.4 Waiver.** The waiver by either Party of any breach or violation of any covenant, term, or condition of this Agreement or of the provisions of any permit, approval, ordinance or other City Laws will not be deemed to be a waiver of any such covenant, term, or condition, or of any subsequent breach or violation of the same or any other covenant, term, or condition. The subsequent acceptance by either Party of any consideration which may become due or payable hereunder will not be deemed to be a waiver of any preceding breach or violation by the other Party of any other covenant, term, or condition of this Agreement. No waiver or consent will constitute a continuing waiver or consent.

**17.5 Nondiscrimination.** The PAMC prohibits discrimination in the employment of any individual under this Agreement because of race, skin color, gender, age, religion, disability, national origin, ancestry, sexual orientation, housing status, marital status, familial status, weight or height of that person. Tesla acknowledges that it has read and understands the provisions of PAMC Chapter 2.30 relating to nondiscrimination in employment and the penalties for violations thereof, and it agrees to comply with all requirements of PAMC Chapter 2.30 pertaining to nondiscrimination in employment.

**17.6 Independent Contractor.** In the construction of the Project or other duties imposed upon it by this Agreement, Tesla will act at all times as an independent contractor and not as an employee of the City. Nothing in this Agreement will be construed to establish a partnership, joint venture, group, pool, syndicate or agency between the Parties. No provision contained herein will be construed as authorizing or empowering either Party to assume or create any obligation or responsibility whatsoever, express or implied, on behalf, or in the name of, the other Party in any manner, or to make any representation, warranty or commitment on behalf of the other Party. In no event will either Party be liable for: (1) any loss caused by the other Party in the course of its performance hereunder, except as expressly provided herein; or (2) any debts, obligations or liabilities of the other Party, whether due or to become due.

**17.7 Representations and Warranties.** On the Effective Date, each Party represents and warrants to the other Party that: (1) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation; (2) to the best of the Party's

knowledge, the execution, delivery and performance of this Agreement, the exhibits incorporated herein and the Encroachment Permit are within its powers, have been duly authorized by all necessary action and do not violate any of its governing documents, any contracts to which it is a party or any law, rule, regulation, or order; (3) it has not filed and it is not now contemplating the filing for bankruptcy protection or, to its knowledge, threatened against it which would result in it being or becoming bankrupt; (4) there is not pending or, to its knowledge, threatened against it or any of its affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement and the exhibits incorporated herein; and (5) it is unaware of any events or circumstances, currently existing or likely to arise, that would prevent it from performing its obligations under this Agreement.

**17.8 Exhibits; Order of Priority.** All exhibits referred to in this Agreement are by such references incorporated in this Agreement and made a part hereof. The following exhibits are made a part of this Agreement:

Exhibit A	Project Description
Exhibit B	Encroachment Permit
Exhibit C	Project Budget
Exhibit D	Capacity Reservation Agreement
Exhibit E	Project Schedule
Exhibit F	Insurance Requirements (Tesla)
Exhibit G	Insurance Requirements (General Contractor)
Exhibit H	Insurance Requirements (Engineer)
Exhibit I	Construction Contract Form

A. *Order of Precedence.* If any inconsistencies between this Agreement and the exhibits exist, the following order of precedence (in declining order of priority) in the interpretation hereof or resolution of such conflict hereunder shall prevail:

1. The body of this Agreement;
2. Exhibit D;
3. Exhibit B;
3. Exhibit A;
3. Exhibit C;
4. Exhibit E; and
5. All other exhibits.

**17.9 Organizational Documents.** Upon request of the City, Tesla will furnish to the City for its records copies of its articles of incorporation and bylaws and any other information reasonably requested by the City and relating to its organization status.

**17.10 Publicity.** The Parties acknowledge that the City is subject to California Laws governing charter cities, including public disclosure requirements which include, but are not

limited to, open meeting requirements pursuant to Government Code section 54950 et seq. and public record disclosure requirements pursuant to Government Code section 7920 et seq. Except as required for compliance with applicable Laws, neither Party shall advertise or issue any public announcement regarding the execution of this Agreement or its contents, or use the other Party's mark, name or logo in any marketing literature, web sites, articles, press releases (including interviews with representatives of media organizations of any form), or any other document or electronic communication, without the prior written consent of the other Party. The foregoing shall not prohibit a Party from making any public disclosure or filing that it determines in good faith is required by Laws, including, but not limited to, in respect of Tesla, the rules of the stock exchange on which its shares, or the shares of its parent company, are listed.

**17.11 Interpretation.** The Parties agree that the normal rule of construction to the effect that any ambiguity is to be resolved against the drafting party will not be employed in the interpretation of this Agreement or any amendment or Exhibit hereto.

**17.12 Consent.** When either Party is required to give its consent to the other Party, the Party whose consent is required will not unreasonably withhold or delay that consent, unless it is specifically stated that it is within the Party's sole discretion to give or withhold its consent.

**17.13 Venue.** In the event that an action is brought, the Parties agree that trial of such action will be vested exclusively in the state courts of California or in the United States District Court for the Northern District of California in the County of Santa Clara, State of California. Each Party hereby waives any right it may have pursuant to Code of Civil Procedure Code section 394 to file a motion to transfer any action arising from or relating to this Agreement to a venue outside of Santa Clara County, California, without the prior express written consent of the other Party.

**17.14 Attorney's Fees.** The prevailing Party in any action brought to enforce the provisions of this Agreement may recover its reasonable costs and attorney's fees expended in connection with that action.

**17.15 Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement, the exhibits, or any amendment thereto, is void or unenforceable, the unaffected provisions of this Agreement, the exhibits, or any amendment thereto, will remain in full force and effect.

*[Signature page follows.]*

IN WITNESS WHEREOF, the Parties by their duly authorized representatives have executed this Agreement on the Effective Date.

APPROVED AS TO FORM:

CITY OF PALO ALTO

\_\_\_\_\_  
Molly Stump, City Attorney

\_\_\_\_\_  
Ed Shikada, City Manager

APPROVED:

\_\_\_\_\_  
Dean Batchelor, Director of Utilities

TESLA, INC., a Delaware corporation  
  
16AE36ED3BB7438...

\_\_\_\_\_  
Vaibhav Taneja, Chief Financial Officer



**EXHIBIT A  
PROJECT DESCRIPTION**

The Project will consist of design, construction, installation and/or connection of the following elements at Substation and in the area surrounding Substation:

1. Grading and structural site improvements for the new Substation Improvements;
2. Two 60 kV transformer bank circuit breakers;
3. One 60 kV bus tie breaker;
4. Two 50 MVA, 60 to 12 kV transformers;
5. One 12 kV power distribution center;
6. Two 12 kV feeders to serve the Tesla Facilities.
7. Bus switches, buswork, wiring, and feeder outlets to Tesla's onsite switchgear; and
8. Testing and commissioning of all equipment and components.

**Item #5**

**EXHIBIT B  
ENCROACHMENT PERMIT**

This document is recorded for the benefit of the City of Palo Alto and is entitled to be recorded free of charge in accordance with Section 6103 of the Government Code. After recordation, mail to:

CITY OF PALO ALTO/REAL ESTATE DIVISION  
250 Hamilton Avenue  
P.O. Box 10250  
Palo Alto, CA 94301

SPACE ABOVE THIS LINE FOR RECORDER'S USE

A.P. No.: \_\_\_\_\_

Permit No.: \_\_\_\_\_

Project: \_\_\_\_\_

**CITY OF PALO ALTO  
ENCROACHMENT PERMIT  
(# \_\_\_\_\_)**

THIS ENCROACHMENT PERMIT (“Permit”) dated as of January 16, 2024, is made by and between the CITY OF PALO ALTO, a California chartered municipal corporation (“City”), and TESLA, INC., a Delaware corporation (“Permittee”), individually, a “Party” and collectively, the “Parties.”

RECITALS

A. This Permit is required by and issued in conjunction with the Parties’ Hanover Substation Improvement Agreement (“Improvement Agreement”), effective January 16, 2024.

B. The Improvement Agreement involves improvements to the City’s Hanover Substation (“Substation”) on certain real property (“Property”) which the City has leased from the Board of Trustees for the Leland Stanford Junior University (“Lessor”), pursuant a lease effective on July 1, 1957, and the 1962 amendment thereto (“Stanford Lease”, attached hereto as Exhibit B) for the purposes of constructing, maintaining and operating an electric power substation.

C. The Stanford Lease as amended expired on its terms on or about June 30, 2007, the Lease has not been amended to extend the original term, and no rent has ever been due under the Lease besides the City's payment of applicable taxes. Stanford and the City have continued to conduct themselves in their dealings in respect to the Hanover Substation in accord with the amended Lease, notwithstanding the expiration.

#### TERMS AND CONDITIONS

City and Permittee agree as follows:

1. **Encroachment Permit.** City confers to Permittee and the employees, contractors and agents of Permittee ("**Permittee's Agents**") a revocable (pursuant to Section 7 hereof), non-exclusive and non-possessory privilege to enter upon, use, and encroach into the Property, which is situated in the County of Santa Clara, State of California, and more particularly described in Exhibit A attached hereto (the "**Permit Area**"), for the limited purpose and subject to the terms, conditions and restrictions set forth below. This Permit gives Permittee a license only and notwithstanding anything to the contrary herein, this Permit does not constitute a grant by City of any ownership, leasehold, easement or other property interest or estate whatsoever in the Permit Area, or any portion thereof.
2. **Use of Permit Area.** Permittee and Permittee's Agents may enter and use the Permit Area for the sole purpose of the design, construction, installation, and commissioning of the "Substation Improvements" as defined in the Improvement Agreement ( "**Substation Improvements**") and ingress and egress thereto, and for no other purpose whatsoever.
3. **Term of Permit.** The privilege conferred to Permittee pursuant to this Permit shall apply for a term ("**Term**") which will commence on the date on which this Permit is executed and delivered by City, and shall expire upon the earlier of: (a) City acceptance of the "Project" as defined and specified in the Improvement Agreement ("**Project**"), (b) thirty (30) days written notice from City revoking this Permit pursuant to Section 7 hereof or, (c) ten (10) days written notice of termination from Permittee.
4. **Subject to City Uses.** Notwithstanding anything to the contrary in this Permit, any and all of Permittee's activities hereunder shall be subject and subordinate at all times to City's existing and future use of the Permit Area for public utility or other public purposes. City shall in no way be liable for any damage or destruction to Permittee's property and/or Improvements resulting from any repair or maintenance activities by City. Permittee shall, at City's request, immediately remove or relocate any personal property of Permittee or Permittee's Agents, including temporary facilities or equipment, on or in the Permit Area to allow City access to the utilities or other City owned facilities. In the event City deems

it necessary, in City's sole discretion, City shall have the right to remove or relocate any such property and City shall not be responsible for restoring or returning same to its prior condition.

5. **Responsibility for Maintenance of Improvements.** During the Term, and as further specified in the Improvement Agreement, Permittee shall be solely responsible for repairing and maintaining all Substation Improvements placed by Permittee in or on the Permit Area pursuant hereto in good and safe condition prior to the date of the transfer of ownership of the Substation Improvements to the City and the City's acceptance thereof in accordance with the terms of the Improvement Agreement.

6. **Covenant to Maintain Permit Area.** In connection with its use, Permittee shall at all times during the Term, at its sole cost, maintain the Permit Area in a good, clean, safe, secure, sanitary and sightly condition, so far as the Permit Area may be affected by Permittee's activities under this Permit.

7. **Revocability.** This Permit is subject to revocation if the Improvement Agreement is terminated pursuant to Section 14 of the Improvement Agreement or if the City is unable to proceed with the Project due to any third party legal action preventing use of the Permit Area for the Project. Revocation of this Permit in accordance with the terms hereof shall be effected by the City sending written notice to Permittee as specified in Sections 3 and 9. If the Permit is revoked after work has commenced on installation of the Substation Improvements pursuant to the Improvement Agreement, the provisions of Section 14.2.B of the Improvement Agreement will apply, including, but not limited to, those provisions addressing removal of personal property, restoration, disposition of materials and equipment, and responsibility for expenditures and loss.

8. **Damage.** Permittee shall not do anything in, on, under or about the Permit Area that could cause damage or interference to any City utilities or other property located in, on, under or about the Permit Area. As used in this Section 8 and Section 13, below, "damage" expressly excludes alterations to the Permit Area which are authorized by the "Construction Documents" as that term is defined in Section 1.2 of the Improvement Agreement. Permittee agrees to reimburse City for any damage caused by Permittee to City owned property or facilities by virtue of Permittee's construction of Substation Improvements or other activities of Permittee or Permittee's Agents within the Permit Area within thirty (30) calendar days of City's demand.

9. **Notice.** If any notice given pursuant to this Permit is not personally delivered to Permittee, the notice shall be deemed to be delivered five (5) days after deposit of the notice in a sealed envelope, postage fully prepaid, in a mailing facility regularly maintained by the United States Post Office Department, or the next business day after deposit of the notice with a nationally recognized overnight courier, addressed to as the Party to be notified as follows:

To Permittee:

1 Tesla Road, Austin, TX 78725  
Attn: General Counsel / Legal  
Phone: +1. 512.516.8177  
Email: [legal@tesla.com](mailto:legal@tesla.com);  
cc : [energynotices@tesla.com](mailto:energynotices@tesla.com)

To City:

City of Palo Alto  
City Clerk  
250 Hamilton Avenue  
Palo Alto, CA 94303  
Email: [City.Clerk@cityofpaloalto.org](mailto:City.Clerk@cityofpaloalto.org)  
cc: [tomm.marshall@cityofpaloalto.org](mailto:tomm.marshall@cityofpaloalto.org)  
cc: [amy.bartell@cityofpaloalto.org](mailto:amy.bartell@cityofpaloalto.org)

10. **Compliance with Laws.** During the Term, Permittee shall, at its expense, conduct and cause to be conducted its activities on the Permit Area in a safe and reasonable manner and in compliance with all applicable laws of any governmental or other regulatory entity (including, without limitation, the Americans with Disabilities Act) and all covenants, restrictions and provisions of record, whether presently in effect or subsequently adopted and whether or not in the contemplation of the Parties, including any applicable terms of the Stanford Lease, attached hereto as Exhibit B, including the original 1957 lease agreement and the 1962 amendment.

11. **Removal of Property.** Without limiting City's rights under this Permit, if during the Term, Permittee or Permittee's Agents fail to comply with the terms of this Permit or the Improvement Agreement with respect to placement or storage of personal property on the Property, including materials, tools, or equipment, Permittee shall promptly, at City's written request, remove or relocate at its sole expense any and all such personal property of Permittee or Permittee's Agents, including temporary facilities or equipment, installed or placed in, on, under or about the Property by Permittee or Permittee's Agents (excluding, however, the Substation Improvements, which shall not be altered, removed and/or relocated except as otherwise may be permitted under the Improvement Agreement), under any of the following circumstances:

(a) as may be necessary to avoid any actual or reasonably likely interference with the Substation or any of City's utilities or other structures now or later constructed or with the maintenance thereof;

(b) to avoid or remedy any potential violation of the Stanford Lease; or

(c) to avoid unauthorized interference with any other operations or land uses by City.

In the request, City shall specify reasonable time limits for removal or relocation of the property. If after such written notice Permittee fails to complete the removal or relocation within the prescribed time limits, City shall notify Permittee of same and have the right to perform the requested removal or relocation and charge Permittee all reasonable, direct and documented out of pocket costs and expenses (excluding overhead and salaries for the City's personnel) incurred by City in performing the work. Undisputed portions of such amount shall be due and payable within thirty (30) days after the City's demand therefor. In the event of an emergency, City may, at its sole option and without notice, remove, relocate, or protect at Permittee's sole expense, any and all property installed or placed in, on, under or about the Property by Permittee (excluding, however, the Substation Improvements, which shall not be altered, removed and/or relocated except as otherwise may be permitted under the Improvement Agreement).

12. **Surrender.** Upon the expiration of the Term, Permittee shall immediately surrender the Permit Area, including the Substation Improvements located thereon, broom cleaned, and free from hazards created by Permittee or Permittee's Agents and clear of all of Permittee's debris. At such time, Permittee shall remove all of its personal property and equipment from the Permit Area, and shall repair, at its cost, any damage to the Permit Area caused by such removal, reasonable wear and tear excepted. Permittee's obligations under this Section shall survive any termination of this Permit.

13. **Repair of Damage.** If any portion of the Permit Area or any property of City located on or about the Permit Area is damaged or threatened by any of the activities conducted by Permittee or Permittee's Agents, in a manner not contemplated nor authorized under the terms of the Improvement Agreement or Construction Documents, Permittee shall, at its sole cost, immediately notify City in writing of such damage or threat after becoming aware of same. City may remedy, but shall not be obligated to remedy, such damage or threat at Permittee's sole cost, based on the City's reasonable, direct and documented out of pocket costs, but excluding regular salary and benefit costs for salaried City employees. In the event City elects not to remedy such damage or threat, Permittee shall repair any and all such damage and restore the Permit Area or property to its previous condition subject to City's inspection, review and approval (excluding, however, the Substation Improvements, which shall remain in the Permit Area and not be subject to alteration, removal and/or relocation except as may otherwise be provided under the Improvement Agreement).

14. **Defaults by Permittee.** Permittee's failure to perform any of its obligations under this Permit, or Permittee's default in the performance of any of its other obligations under this Permit, will be governed by the terms in Section 14 of the Improvement Agreement

pertaining to default and cure. Permittee's obligations under this Section shall survive the expiration or termination of this Permit.

15. **Indemnity; Limitations on Liability.** The respective indemnification obligations of the City and Permittee during the Term shall be as set forth under the terms of the Improvement Agreement, such obligations to survive the expiration or other termination of the Permit.

16. **Insurance Requirements.** During the term of this Permit, Permittee, and each of its contractors and agents which enter onto the Property to carry out permitted activities, shall each maintain in full force and effect the insurance coverage specified in Section 9 of the Improvement Agreement and corresponding Exhibits thereto.

17. **Assignment.** This Permit is personal to Permittee and Permittee shall not assign, transfer, or encumber its interest in this Permit and/or the Substation Improvements, except as authorized in Section 11 of the Improvement Agreement.

18. **General Provisions.** (a) This Permit may be amended or modified only by a writing signed by City and Permittee. (b) This instrument (including the exhibit(s) hereto) contains the entire agreement between the parties and all prior written or oral negotiations, discussions, understandings and agreements are merged herein. (c) If Permittee consists of more than one person then the obligations of each person shall be joint and several. (d) Permittee may not record this Permit or any memorandum hereof without the prior consent of City. (e) City will promptly notify Permittee of any action or steps by Lessor that may affect the rights granted pursuant to this Permit, whereupon City and Permittee will meet and confer to consider available options with reference to the purpose of the Improvement Agreement.

[SIGNATURES APPEAR ON FOLLOWING PAGE]



The Parties agree to the foregoing as witnessed by the following signatures:

**"OWNER"**

**"PERMITTEE"**

**CITY OF PALO ALTO**

**TESLA, INC.**

DocuSigned by:  
*Vaibhav Taneja*  
16AE36ED3BB7438...

\_\_\_\_\_  
City Manager

By: \_\_\_\_\_  
Vaibhav Taneja  
Chief Financial Officer  
1 Tesla Road  
Austin, TX 78725  
1.512.516.8177

APPROVED AS TO FORM:

\_\_\_\_\_  
Asst. City Attorney

APPROVED AS TO CONTENT:

\_\_\_\_\_  
Director of Utilities

Attachments:

EXHIBIT "A": DESCRIPTION OF PERMIT AREA

EXHIBIT "B": STANFORD LEASE

EXHIBIT A

DESCRIPTION OF PERMIT AREA

The Permit Area is located at 3350 Hanover Street, Palo Alto, California, 94304, shown on the map below, and is coextensive with the leased premises as described in Exhibit B.

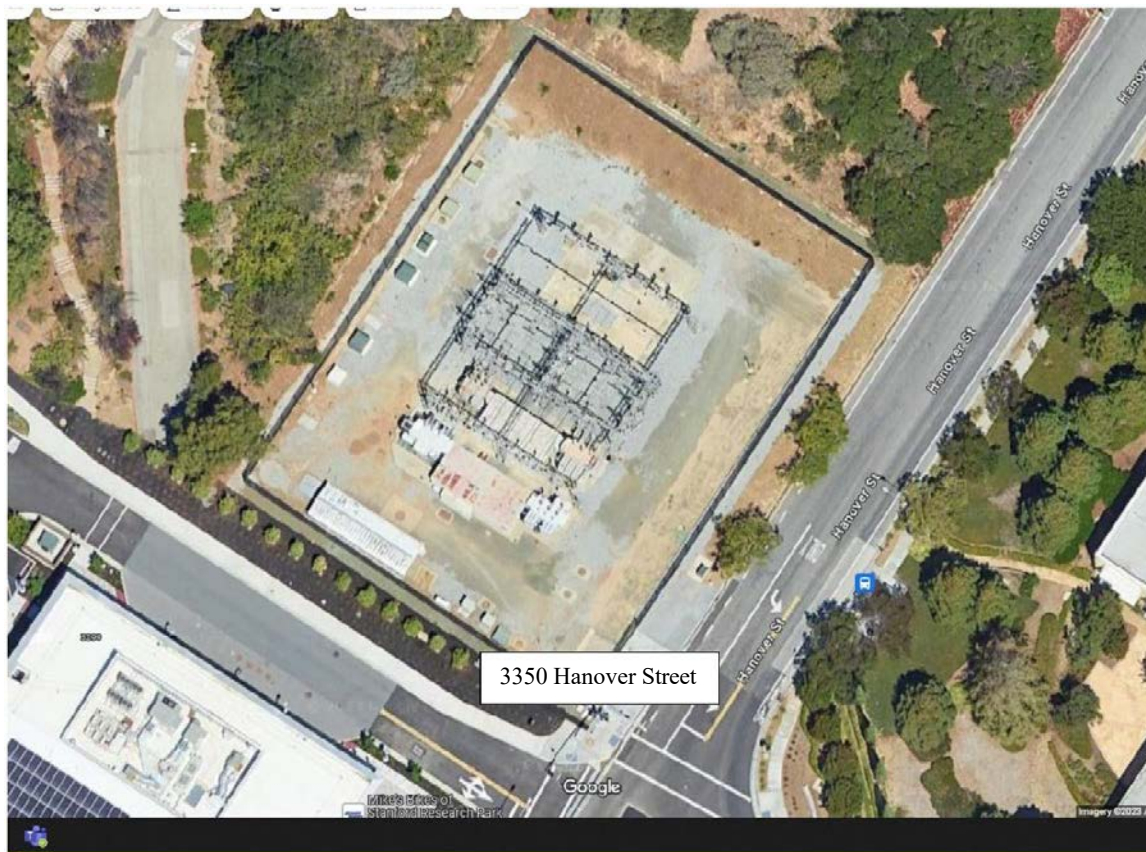


EXHIBIT B  
STANFORD LEASE

L E A S E

THIS LEASE, made and entered into as of the 1st day of July, 1957, by and between THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, a body having corporate powers under the laws of the State of California; Party of the First Part, hereinafter referred to as "Lessor," and CITY OF PALO ALTO, a municipal corporation organized and existing under the laws of the State of California, Party of the Second Part, hereinafter referred to as the "Lessee,"

W I T N E S S E T H:

WHEREAS, Lessor is the owner of the hereinafter described property located in the County of Santa Clara, State of California, which Lessee is desirous of leasing;

NOW, THEREFORE, it is mutually agreed by and between the parties as follows:

1. Description of Property and Term.

For and in consideration of the faithful performance by the Lessee of the terms, covenants, agreements and conditions herein contained on the part of the Lessee to be kept and performed, Lessor hereby leases unto the Lessee and the Lessee does hereby hire from Lessor that certain parcel of land being a portion of the lands of The Leland Stanford Junior University located within the boundaries of the County of Santa Clara, State of California, and more particularly described as follows:

BEGINNING at a Concrete Highway Monument situate on the southwesterly line of El Camino Real (State Highway) opposite Engineer's Station 144+27.00, as surveyed by the California Division of Highways, as said southwesterly line was established by that Decree in Condemnation, a certified copy of which Decree was filed for record in the office of the Recorder of the County of Santa Clara, State of California, on July 7, 1930, in Book 520 of Official Records at Page 571; said monument also marks the point of intersection of said southwesterly line with the southeasterly line of that certain 1289 acre tract of land described in the deed from Evelyn C. Crosby, et al, to Leland Stanford, dated September 8, 1885, recorded September 8, 1885, in Book 80 of Deeds at Page 382, Santa Clara County Records; running thence along said line of that certain 1289 acre tract and its southwesterly prolongation, South 33° 14' 40" West 4494.10 feet; THENCE leaving said prolongation, North 71° 50' 13" West 652.47 feet to a point on the northwesterly line of Hanover Street; THENCE South 33° 14' 40" West along the northwesterly line of Hanover Street 163.38 feet to the true point of beginning of the parcel to be described; THENCE from said true point of beginning, continuing along said northwesterly line of Hanover Street (60 feet wide), South 33° 14' 40" West 190.00 feet; THENCE leaving said line, North 56° 45' 20" West 160.00 feet; THENCE North 33° 14' 40" East 190.00 feet; THENCE South 56° 45' 20" East 160.00 feet to the true point of beginning, and containing 0.698 acres more or less.

TOGETHER with an easement 3 feet in width, measured at right angles for the purpose of installing and maintaining power lines and appurtenances contiguous with and lying southwesterly from the southwesterly line of the hereinabove described parcel.

The term of this lease shall be fifty (50) years, commencing on the 1st day of July, 1957, and ending on the 31st day of June, 2007.

2. Payment of Taxes.

As a part of the consideration of this lease and as rent hereunder, Lessee covenants and agrees to bear, pay and discharge promptly as the same become due and before delinquency all taxes, assessments, rates, charges, license fees, levies, excises or imposts, whether general or special, or ordinary or extraordinary, of every name, nature and kind whatsoever which may be levied, assessed, charged or imposed or may be or become

Certified to be a true and correct copy of the original as shown to me by the undersigned.

*Accepted and approved*  
*J.H. Eckhard*  
 10/23/57

a lien or charge upon the property hereby leased or any part thereof or upon any of the buildings or improvements upon the leased premises or upon the leasehold of Lessee or upon the estate hereby created or upon Lessor by reason of its ownership of the fee underlying this lease, during the term of this lease.

3. Use.

The herein described premises are leased to Lessee for the purpose of constructing, maintaining and operating thereon an electric power sub-station together with all structures and appurtenances necessary and incidental thereto. Lessee may at any time during the term hereof remove said electric power sub-station and use the leased premises for any other municipal purpose which is in harmony with existing land use in the Stanford Industrial Park. In such event Lessee shall first give thirty (30) days written notice to Lessor, and shall further comply with the provision of paragraph 4, hereafter set forth, relating to the construction of improvements.

4. Construction of Improvements.

Lessee shall submit to Lessor the general plans and specifications for development of the leased premises, including all buildings, structures, appurtenances and landscaping incidental thereto, prior to commencement of any construction on or alteration or landscaping of the leased premises, and Lessor shall have thirty (30) days thereafter within which to notify Lessee in writing that it disapproves said plans and specifications because the proposed exterior construction or alteration or landscaping is not deemed appropriate for the leased premises in design or construction and, if such notice is so given, Lessee shall not proceed with

construction or landscaping until the objection of Lessor is remedied, but, unless such notice of disapproval is so given, or if Lessor gives its earlier approval in writing of said plans and specifications, Lessee may proceed with construction or landscaping. Lessor agrees that it will not unreasonably withhold its approval hereunder.

5. Repairs, Governmental Regulations, Waste, Signs.

(a) Lessee shall, during the term of this lease, at its own cost and expense, and without cost or expense to Lessor,

(1) Keep and maintain all structures and improvements which may be erected on the leased premises and all appurtenances thereto and all landscaped areas of the premises in good and neat order and repair and in substantial conformity with said plans and specifications and shall allow no nuisances to exist or to be maintained thereon. Lessor shall not be called upon to make any repairs, replacements or renewals of any kind to the demised premises and Lessee hereby expressly waives all right to make repairs at the expense of Lessor under Sections 1941 and 1942 of the California Civil Code.

(11) Comply and abide by all federal, state, county, municipal and other governmental statutes, ordinances, laws and regulations affecting the leased premises, the improvements thereon or any activity or condition on or in said premises.

(b) Lessee shall not commit, or suffer to be committed any waste upon the leased premises. Lessee agrees

that it will not remove any dirt, earth, rocks, gravel or the like from the premises except upon the written instruction of the Lessor as to where the same may be deposited at Lessee's expense, and Lessor agrees that it will make available a site where same may be deposited within 1 mile of the leased premises.

(c) Lessee agrees not to place any sign upon the leased premises without having first obtained the consent in writing of Lessor.

6. Mechanics' and Other Liens.

Lessee covenants and agrees to keep all of the leased premises and every part thereof and all buildings and other improvements thereon free and clear of and from any and all mechanics', materialmen's and other liens for work or labor done, services performed, materials or appliances contributed, used or furnished to be used in or about said premises for or in connection with any operations of Lessee, any alteration, improvement or repairs or additions which Lessee may make or permit or cause to be made, or any work or construction, by, for or permitted by Lessee on or about the leased premises, and at all times promptly and fully to pay and discharge any and all claims upon which any such lien may or could be based, and to save and hold Lessor and all of the leased premises and all buildings and improvements thereon free and harmless of and from any and all liens and claims of liens and suits or other proceedings pertaining thereto. Lessee covenants and agrees to give Lessor written notice not less than ten (10) days in advance of the commencement of any construction, alteration, addition, improvement or repair costing in excess of Five Thousand Dollars (\$5,000) in order that Lessor may post appropriate notices of Lessor's non-responsibility.



7. Liability.

Lessee covenants and agrees that Lessor shall not at any time or to any extent whatsoever be liable, responsible or in anywise accountable for any loss, injury, death or damage to persons or property which at any time may be suffered or sustained by Lessee or by any person whosoever may at any time be using or occupying or visiting the leased premises or be in, on or about the same, whether such loss, injury, death or damage shall be caused by or in anywise result from or arise out of any act, omission or negligence of Lessee or of any occupant, subtenant, visitor or user of any portion of the leased premises, or shall result from or be caused by any other matter or thing whether of the same kind as or of a different kind than the matters or things above set forth, and Lessee shall forever indemnify, defend, hold and save Lessor free and harmless of, from and against any and all claims, liability, loss or damage whatsoever on account of any such loss, injury, death or damage.

8. Insurance.

During the term of this lease Lessee shall procure in its name and maintain in full force and effect bodily injury liability insurance, with maximum limits of not less than Five Hundred Thousand Dollars (\$500,000) and One Million Dollars (\$1,000,000) per accident and property damage liability insurance with a limit of not less than Five Hundred Thousand Dollars (\$500,000) per accident, insuring against any and all liability of Lessee with respect to said premises or arising out of the maintenance, use or occupancy thereof and specifically insuring the performance by Lessee of the indemnity agreement

in paragraph 7 contained, provided that Lessee may be self-insured as to the first Ten Thousand Dollars (\$10,000) of such liability.

9. Assignment - Successors and Assigns.

(a) Subleasing - Assignment.

Lessee agrees not to sublet the whole or any part of the leased premises without the prior written consent of Lessor. This lease shall not be assignable, in whole or in part, without the prior written consent of Lessor.

(b) Successors and Assigns.

Subject to the foregoing provisions of this paragraph 9, this lease shall be binding upon and shall inure to the benefit of and shall apply to the respective successors and assigns of Lessor and Lessee, and all references in this lease to "Lessee" shall be deemed to refer to and include successors and assigns of Lessee without specific mention of such successors or assigns.

10. Termination for a Default.

In the event that Lessee shall fail or neglect to observe, keep or perform any of the covenants, terms or conditions herein contained on its part to be observed, kept or performed and such default shall continue for a period of one hundred and eighty (180) days after written notice from Lessor setting forth the nature of Lessee's default, then and in any such event, Lessor shall have the right at its option, upon written notice to Lessee, forthwith to terminate this lease, and all rights of Lessee hereunder shall thereupon cease, and Lessor without further notice to Lessee shall have the right immediately to enter into and upon the leased premises and

take possession thereof with or without process of law and to remove all persons occupying the said premises, including all personal property therefrom, and to use all necessary force therefor and in all respects to take the actual, full and exclusive possession of the leased premises and every part thereof as of Lessor's original estate, without incurring any liability to Lessee or to any persons occupying or using the leased premises for any damage caused or sustained by reason of such entry upon the leased premises or such removal of such persons or property therefrom; and Lessee hereby covenants and agrees to indemnify and save harmless Lessor from all cost, loss or damage whatsoever arising or occasioned thereby.

11. Waiver.

None of the covenants, terms or conditions of this lease can be waived except by instrument in writing signed by the waiving party.

12. Inspection of Premises.

Lessor shall be entitled, at all reasonable times, to go upon and into the leased premises for the purpose of posting and keeping posted thereon notices of non-responsibility for any construction, alteration or repair thereof, as required or permitted by any law or ordinance, or for any purpose reasonably related to its rights as Lessor.

13. Covenants of Parties.

(a) Lessor covenants and agrees to keep and perform all the terms and conditions hereof on its part to be kept and performed, and that Lessee, keeping and performing all the terms and conditions hereof on its part to be kept and performed, may, subject to the terms and conditions hereof, have

and hold the property hereby leased, for the term hereof, without let or hindrance by Lessor.

(b) Lessee covenants and agrees to keep and perform all the terms and conditions hereof on its part to be kept and performed and, at the expiration or sooner termination of this lease, peaceably and quietly to quit and surrender to Lessor the property hereby leased in good order and condition, subject to the other provisions of this lease. The performance of each and every covenant of Lessee hereunder shall be a condition for non-performance of which this lease may be terminated, as provided herein.

14. Rights Reserved by Lessor.

Lessor expressly reserves all rights in and with respect to the land hereby leased not inconsistent with Lessee's use of the leased premises as in this lease provided.

15. Attorney's Fees.

If any action at law or in equity shall be brought to recover any rent under this lease, or for or on account of any breach of or to enforce or interpret any of the covenants, terms or conditions of this lease, or for the recovery of the possession of the leased premises, the prevailing party shall be entitled to recover from the other party as a part of prevailing party's costs a reasonable attorney's fee, the amount of which shall be fixed by the court and shall be made a part of any judgment rendered.

16. Ownership of Buildings.

All buildings and improvements placed upon the land hereby leased by Lessee during the term hereof shall become and remain the property of Lessee, and Lessee shall remove the same from the leased premises upon expiration or sooner termination of this

lease and shall leave the leased premises in good, clean and sanitary condition after such removal. Whenever Lessee shall repair, reconstruct, alter or rebuild or restore any building or improvement, as in this lease required or permitted, the material and salvage therefrom may be used or sold by Lessee.

17. Remedies Cumulative.

All remedies hereinbefore and hereafter conferred upon Lessor shall be deemed cumulative and no one exclusive of the other, or any other remedy conferred by law.

18. Lease Construed as a Whole.

The language in all parts of this lease shall in all cases be construed as a whole according to its fair meaning and not strictly for nor against either Lessor or Lessee.

19. Time of the Essence.

Time is hereby expressly declared to be of the essence of this lease and of each and every covenant, term, condition and provision hereof.

20. Notices.

All notices or other writings in this lease provided to be given or made or sent, or which may be given or made or sent, by either party hereto to the other, shall be deemed to be fully given or made or sent when made in writing and deposited in the United States mail, registered or certified, postage prepaid, and addressed as follows:

To Lessor:                   Stanford University  
                                  Stanford, California

To Lessee:                   City of Palo Alto  
                                  Palo Alto, California

The address to which any notice or any writing may be given or made or sent to any party may be changed upon written notice given by such party as above provided.

21. Public Utilities.

All water, gas, electricity or other public utilities used upon or furnished to the leased premises during the term hereof shall be paid for by Lessee, and all service lines of such utilities shall be installed beneath the surface of the premises and connected to existing public utilities at no cost or expense to Lessor.

22. Paragraph Headings.

Paragraph headings in this lease are for convenience only and are not to be construed as a part of this lease or in any way limiting or amplifying the provisions hereof.

23. Rent Nominal Only.

It is the understanding of the parties hereto that the rent payable by Lessee under paragraph 2 hereof is only nominal in nature and is not based upon the fair market value of the premises, and, should it become necessary to determine the fair market value of all or any portion of the premises during the term hereof, it shall be recognized that the rent so payable by Lessee hereunder is a nominal rent only.

IN WITNESS WHEREOF, the parties hereto have executed this instrument in duplicate by proper persons thereunto duly authorized, the day and year first above written.

Approved as to form:

Robert Minge Brown

Approved as to content:

[Signature]  
[Signature]  
[Signature]  
[Signature]

(SEAL)  
ATTEST:

Winifred Kidd  
City Clerk

Approved as to form:

Robert E. Michalski  
City Attorney

(SEAL)

THE BOARD OF TRUSTEES OF THE  
LELAND STANFORD JUNIOR UNIVERSITY

By [Signature]  
Its President

By [Signature]  
Its Secretary LESSOR

CITY OF PALO ALTO

By [Signature]  
Its Mayor

LESSEE

RESOLUTION OF THE CITY COUNCIL

RESOLVED, by the Council of the City of Palo Alto,  
 that the Lease attached hereto between the City  
 of Palo Alto and The Board of Trustees of the Leland Stanford  
 Junior University dated July 1, 1957 covering the leasing  
 of certain lands for the purpose of constructing, maintaining  
 and operating thereon an electric power sub-station.

be and the same hereby is approved, that the Mayor be  
 and he hereby is authorized to execute the same for and in  
 behalf of the City, and the City Clerk is authorized and  
 directed to attest his signature.

The above and foregoing resolution was duly and  
 regularly introduced and passed at a regular meeting of the  
 Council of the City of Palo Alto on Monday, the 14th day  
 of October, 1957, by the following vote:

AYES: **Bishop, Byxbee, Corcoran, Cresap, Davis, Evans, Giffin,  
 Marshall, Mitchell, Porter, Rodgers, Ruppenthal, Stephens,  
 Woodward.**

NOES: **None.**

ABSENT: **Navis.**

APPROVED

*Paul E. Porter*  
 Mayor

ATTEST:

*Winifred Tidd*  
 City Clerk

APPROVED AS TO FORM:

*Robert E. Zychalski*  
 City Attorney

Amendment to Lease of Land  
for Substation F

The Assistant City Manager presented a proposed amendment to the lease entered into on July 1, 1957, between the City and Stanford University for the site of Substation F at Hillview Avenue and Porter Drive, adding a parcel of 0.029 acre.

**CITY COUNCIL**

SEP 24 1962

It was moved by Rohrs, seconded and carried by unanimous voice vote, that the Mayor be authorized to execute the amendment, being an agreement adding additional lands to the lease.



Substalew

Lease 98

AGREEMENT ADDING ADDITIONAL LANDS TO LEASE

THIS AGREEMENT made and entered into as of the First day of JULY, 1962, by and between THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, a body having corporate powers under the laws of the State of California, hereinafter referred to as "Lessor", and the CITY OF PALO ALTO, a municipal corporation organized and existing under the laws of the State of California, hereinafter referred to as "Lessee",

W I T N E S S E T H :

WHEREAS, the parties hereto entered into a Lease, dated as of July 1, 1957, (hereinafter referred to as the "Lease"), whereby Lessor leased to Lessee approximately 0.593 acres of land in the City of Palo Alto, County of Santa Clara, State of California, for a term of fifty (50) years commencing July 1, 1957; and

WHEREAS, the parties hereto have agreed to add additional lands to the Lease, as hereinafter provided;

NOW, THEREFORE, it is mutually agreed by and between the parties as follows:

For and in consideration of the faithful performance by the Lessee of the terms, covenants, agreements and conditions herein contained on the part of the Lessor to be kept and performed, and for other valuable consideration, receipt whereof is herby acknowledged, an additional parcel of land is hereby made subject to the

Lease, and Lessor hereby leases unto Lessee and Lessee does hereby  
 hire and lease from Lessor that certain parcel of land, being a  
 portion of the lands of The Leland Stanford Junior University situate  
 in the City of Palo Alto, County of Santa Clara, State of California,  
 more particularly described in Exhibit A attached hereto and by this  
 reference made a part hereof, upon and subject in all respects to  
 all of the terms and provisions of the lease; provided, however, that  
 the requirement for the payment of taxes on said additional parcel,  
 as provided in paragraph 2 of the Lease, shall commence as of the  
 date hereof; provided, further, that Lessee agrees to maintain land-  
 scaping upon the leased premises, including the additional parcel, in  
 accordance with the landscaping plans entitled "Substation F Proposed  
 Enlargement Planting Plan" Drawing Number 15040, dated February 14,  
 1962.

IN WITNESS WHEREOF, the parties hereunto have executed this  
 instrument in duplicate by proper persons thereunto duly authorized  
 as of the day and year first hereinabove written.

Approved as to form:

*Seamus L. Lidy*  
 (SEAL)

THE BOARD OF TRUSTEES OF THE  
 LELAND STANFORD JUNIOR UNIVERSITY

*W. B. ...*  
 (SEAL)

Its Vice Pres. for Business Affairs

LESSOR

ATTEST:

*Michael ...*  
 City Clerk

CITY OF PALO ALTO

Approved as to form:

*Robert ...*  
 City Attorney

*David ...*  
 Its Mayor

Its Mayor

LESSEE

(SEAL)

ALL that certain real property situate in the City of Palo Alto, County of Santa Clara, State of California, described as follows:

BEGINNING at a point in the Northwesterly line of Hanover Street (50 feet in width), at the Southwesterly corner of Parcel "B", as said parcel is described in that certain Deed of Easement from Stanford University to the City of Palo Alto, Serial Number 1274560, filed for record November 14, 1956 in Book 3656 of Official Records, at Page 424, Santa Clara County Records, said point being the most Southerly corner of that certain 40.00 acre parcel of land leased by Stanford University to Hewlett-Packard Corporation by lease recorded February 27, 1958 in Book 4016 of Official Records, at page 306, Santa Clara County Records; thence along the Northwesterly line of the said Hanover Street South 33° 14' 40" West 353.38 feet to the true point of beginning; said point also being the Southerly corner of that certain parcel of land leased to the City of Palo Alto for a power station; thence continuing along said Northwesterly line of Hanover Street South 33° 14' 40" West 8.00 feet to the centerline of a 10 foot P.U.E. (60 K.V. Power line); thence leaving said Northwesterly line of Hanover Street and running along the centerline of said 10 foot P.U.E. North 56° 45' 20" West 160.00 feet to the most Southerly corner of that certain 6.761 acre parcel of land leased by Stanford University to Hewlett-Packard Corporation by lease recorded August 26, 1960, Serial Number 1867536, in Book 4899, Official Records of Santa Clara County, at page 429; thence leaving said easement centerline North 33° 14' 40" East 8.00 feet to the Westerly corner of said parcel of land leased to the City of Palo Alto; thence along the Southwesterly line of said parcel South 56° 45' 20" East 160.00 feet to the true point of beginning.

Containing 0.029 ± Acres.

Reserving therefrom an easement for power poles and appurtenances 5 feet in width measured at right angles, contiguous with and lying North-easterly from the Southwesterly line of the hereinabove described parcel.

Certified to be a true and correct description.

*[Handwritten Signature]*  
Superintendent

Hereby Approved  
CITY OF PALO ALTO  
Department Of Engineering

*[Handwritten Signature]*

EXHIBIT A

I. CERTIFICATE OF ACKNOWLEDGMENT

(Civil Code § 1189)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

\_\_\_\_\_

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ )

On \_\_\_\_\_, before me, \_\_\_\_\_  
(insert name and title of the officer)

personally appeared \_\_\_\_\_ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

\_\_\_\_\_

## EXHIBIT C PROJECT BUDGET

**1. Estimated Project Cost.** The estimated cost to design and construct the Project is \$24,000,000, including the estimated Construction Cost of \$15,000,000 (subject to modification by subsequent change orders).

**2. Tesla's Contribution.** Tesla is responsible for all costs to design and construct the Project, including design and procurement costs incurred prior to approval of the Construction Documents, subject to reimbursement from the City, as set forth in Section 5 of the Agreement, and as further specified below. Tesla's Contribution includes the following cost components:

A. All Project-related costs incurred by Tesla prior to the Effective Date of the Agreement.

B. 100% of the costs associated with feeders and any switches installation at the Tesla Facility needed to serve a 30MVA load.

C. All permit fees that are not waived by the City.

D. The cost for insurance policies required pursuant to Section 9 of the Agreement.

I. The cost of all other items specified as Tesla's obligation under the Agreement and the Encroachment Permit.

**2. City Reimbursement.** Subject to a cumulative total cap of \$12 million, the City is responsible for reimbursing Tesla as specified in Section 5 of the Agreement. Tesla will timely provide City with documents evidencing the costs subject to the City Reimbursement, such as paid invoices and the like, sufficient to establish the actual expenditures which are subject to reimbursement herein.

**EXHIBIT D  
CAPACITY RESERVATION AGREEMENT**

**DATED JANUARY 16, 2024**

**CITY OF PALO ALTO**

**-and-**

**TESLA, INC.**

**CAPACITY RESERVATION AGREEMENT**  
relating to  
the Hanover Substation

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**SCHEDULE 1: CAPACITY RESERVATION AND USAGE CALCULATIONS..... SCHEDULE 1**

**SCHEDULE 2: MONTHLY CAPACITY USAGE REPORT ..... SCHEDULE 2**



**THIS CAPACITY RESERVATION AGREEMENT** is made on January 16, 2024

**BETWEEN:**

- (1) **CITY OF PALO**, a California chartered municipal corporation "**City**"); and
- (2) **TESLA, INC.**, a corporation organized under the laws of Delaware, whose principal place of business is at Giga Texas, 1 Tesla Road, Austin, TX 78725 ("**Tesla**").

**RECITALS:**

- A The City and Tesla have entered into the Improvement Agreement pursuant to which the Parties shall jointly design, construct, install and fund improvements to the Hanover Substation to increase the Capacity of the Hanover Substation, on the terms and subject to the conditions therein.
- B Following completion of the improvements to the Hanover Substation contemplated under the Improvement Agreement, the City is willing to allocate and reserve, in respect of the Hanover Substation, the Reserved Capacity to serve the electricity needs of the Tesla Facilities, on the terms and subject to the conditions set forth in this Agreement.
- C In addition to the terms that apply to Tesla as a CPAU Electric Service customer pursuant to the CPAU Rules and Regulations, the City and Tesla have agreed that in consideration for the City making the Reserved Capacity available for Tesla, Tesla will pay the City a Monthly Capacity Reservation Fee as further specified in this Agreement.
- D The City and Tesla have further agreed that in addition to the consideration paid by the City under the terms of the Improvement Agreement for the Hanover Substation improvements designed and installed by Tesla, Tesla will be afforded a Monthly Capacity Usage Credit as a credit against the Monthly Capacity Reservation Fee, if applicable, subject to a Capacity Usage Credit Maximum.
- E It is a condition precedent to the effectiveness of the Improvement Agreement that the City and Tesla shall have executed and delivered this Agreement.

**IT IS AGREED:**

**1. INTERPRETATION**

**1.1 Definitions**

In this Agreement:

**"Agreement"** means this Capacity Reservation Agreement.

**"Billing Period"** has the meaning provided in Rule and Regulation 2 of the CPAU Rules and Regulations as may be amended from time to time.

**"Business Day"** means any day other than a Saturday, Sunday or any other day observed as a legal holiday by the City.

**"Capacity"** means the maximum instantaneous power (expressed and measured in kVA) that can be delivered by CPAU in compliance with its operating practices, to Electric Service customers served by the Hanover Substation.

**"Capacity Reservation Fee Start Date"** means the earlier of (i) the date falling 18 months from the Effective Date, or (ii) the date on which the monthly Demand for the Tesla Facilities has reached 9.00 MW.

**"Capacity Reservation Modification"** has the meaning given in Clause 3.5(a).

**"Capacity Reservation Period"** means the period commencing on the Effective Date and ending on the date that is seven (7) years from the Effective Date.

**"Capacity Usage Credit Maximum"** has the meaning given in paragraph (a) of Schedule 2.

**"Capacity Usage Credit Period"** means the period commencing on the Capacity Reservation Fee Start Date and ending on the date that is seven (7) years from the Capacity Reservation Fee Start Date.

**"Consultation Period"** has the meaning given in Clause 6.3(c).

**"Contracted Peak Demand"** has the meaning given in paragraph (a) of Schedule 1.

**"CPAU"** means the City's Utilities Department, which operates the City's electrical utility system, including the Hanover Substation, to provide Electric Service.

**"CPAU Event of Default"** has the meaning given in Clause 6.2.

**"CPAU Rules and Regulations"** means the rules and regulations relating to utility service approved and adopted by resolution of the City of Palo Alto City Council, pursuant to Chapter 12.20 of the Palo Alto Municipal Code, as may be amended from time to time, and accessible online via the City's website.

**"Default"** means any CPAU Event of Default or Tesla Event of Default, as the context requires.

**"Defaulting Party"** means:

- (a) the City, in respect of a CPAU Event of Default; and
- (b) Tesla, in respect of a Tesla Event of Default.

**"Delivered Energy"** means the energy delivered to a Tesla Facility at a Point of Delivery.

**"Demand"** means the highest rate of metered Delivered Energy, expressed and measured in kW, registered within a specific time interval (normally fifteen minutes within a monthly Billing Period unless otherwise specified).

**"Distribution Demand Charge"** means the Distribution component of a Demand charge listed in a rate schedule established by the City for provision of Electric Service, often varying based on season and time period, and with the possibility of multiple demand charges applying to a specific time period, all of which are charged based on the metered Demand for that time period.

**"Dispute"** means any dispute, disagreement or claim between the Parties concerning, relating to or arising from this Agreement, excluding any dispute, disagreement or claim concerning billing for Electric Service that is subject to the provisions of the CPAU Rules and Regulations.

**"Due Date"** means, in relation to any Monthly Invoice, the date on which payment is due in accordance with Clause 5.3(a).

**"Effective Date"** means the date determined in accordance with Clause 2.1, on which this Agreement comes into full force and effect.

**"Electric Service"** means the generation, transmission, and distribution of electrical power by CPAU for retail use.

**"Expiration Date"** means the date on which the Term ends and this Agreement expires in accordance with its terms.

**"General Use Utility Asset Costs"** has the meaning given in paragraph (a) of Schedule 2.

**"Governmental Agency"** means any national, regional or local government, any political subdivision thereof, or any governmental, quasi-governmental, regulatory, judicial or administrative agency, authority, commission, board or similar entity having jurisdiction over operation of the Substation or CPAU operations, or either Party, including any applicable independent system operator or regional transmission organization, the California Public Utilities Commission, the Federal Energy Regulatory Commission, and the North American Electric Reliability Corporation.

**"Hanover Substation"** means the substation owned and operated by the City, including any facilities ancillary thereto, located at 3350 Hanover Avenue, Palo Alto, California 94304.

**"Hanover Substation Improvement Completion Date"** means the date on which the City accepts the installation of the improvements to the Hanover Substation as complete in accordance with the Improvement Agreement.

**"Improvement Agreement"** means the Substation Improvement Agreement relating to the Hanover Substation dated on or about the date of this Agreement and entered into between the City and Tesla.

**"JAMS"** has the meaning given in Clause 7.2(a).

**"kVA"** means kilo-volt-amperes, which is a measure of apparent power.

**"kW"** means kilowatts, a unit of power equal to 1,000 watts.

**"kWh"** means kilowatt-hours, the amount of energy delivered in one hour where delivery is at a constant rate of one kilowatt.

**"Law"** means all applicable local, state, and federal laws, regulations, rules, codes, ordinances, permits, orders, and the like enacted or imposed by or under the auspices of any Governmental Agency with jurisdiction over the Hanover Substation or either Party, including labor, health and safety requirements, the Palo Alto City Charter, the Palo Alto Municipal Code, and the CPAU Rules and Regulations.

**"MW"** means megawatts, a unit of power equal to 1,000 kW.

**"Monthly Capacity Reservation Fee"** has the meaning given in paragraph (b) of Schedule 1 as a payment due from Tesla to the City as consideration for the Reserved Capacity.

**"Monthly Capacity Usage Credit"** has the meaning given in paragraph (b) of Part 2 of Schedule 1.

**"Monthly Capacity Usage Credit Rate"** has the meaning given in paragraph (b) of Schedule 2.

**"Monthly Invoice"** means an invoice in respect of Monthly Capacity Reservation Fees and Monthly Capacity Usage Credits in any Billing Period.

**"Monthly Payment"** means the sum of the Monthly Capacity Reservation Fee (*less* any Monthly Capacity Usage Credit).

**"Monthly Statement"** means a statement provided with the Monthly Invoice giving the information set out in Clause 5.2(b).

**"Non-Defaulting Party"** has the meaning given in Clause 6.3(a).

**"Party"** means a party to this Agreement, and shall include its successors in title, permitted assignees and permitted transferees.

**"Point of Delivery"** has the meaning provided in Rule and Regulation 2 of the CPAU Rules and Regulations, as applied to electricity delivered to a Tesla Facility pursuant to this Agreement.

**"Reserved Capacity"** means the portion of Capacity that is reserved by CPAU to provide Electric Services to the Tesla Facilities, measured in kVA, as further set forth in Schedule 1 (as such schedule may be amended from time to time).

**"Signature Date"** means the date on which both the City and Tesla have executed this Agreement.

**"Subsequent Period"** means the period commencing on the expiration of the Capacity Reservation Period and ending on the Expiration Date or upon early termination of this Agreement, whichever occurs first.

**"Term"** means ten years from the Effective Date as stated in Clause 2.1.

**"Termination Notice"** has the meaning given in Clause 6.3(h).

**"Tesla Event of Default"** has the meaning given in Clause 6.1.

**"Tesla Facility"** means the Tesla site located at 1501 Page Mill Road in the City of Palo Alto, and subject to mutual agreement of the Parties memorialized in an amendment to this Agreement, may also include additional Tesla facilities located on other sites that are connected to and served by the Hanover Substation.

**"US Dollars"** or **"USD"** means United States Dollars, the lawful currency of the United States of America.

## 1.2 Headings

Clause headings used in this Agreement and the table of contents are for convenience only and will have no effect on the interpretation or construction of any of the terms of this Agreement.

## 1.3 Interpretation

### (a) Wording

In this Agreement, unless provided otherwise:

- (i) the use of the singular form of a word includes the plural form and the use of the plural form includes the singular;
- (ii) a word of any gender includes the corresponding words of each other gender and a reference to one sex includes a reference to all sexes;
- (iii) any cognate with respect to a word or expression defined in this Agreement shall bear a corresponding meaning;
- (iv) the words "include" and "including" are to be construed without limitation; and
- (v) wherever provision is made for the giving or issuing of any notice, decision, consent, acceptance, agreement, expression of satisfaction, endorsement, approval, certificate, instruction or determination by any person, unless otherwise specified, such notice, decision, consent, acceptance, agreement, expression of satisfaction, endorsement, approval, certificate, instruction or determination shall be in writing (and writing shall be inclusive of mail transmitted electronically) and the words "notify", "decide", "consent", "accept", "agree", "endorse", "approve", "certify", "instruct" or "determine" and other cognate expressions shall be construed accordingly.

(b) Dates & Times

In this Agreement, unless provided otherwise:

- (i) a time of day shall be construed as a reference to the current Pacific time zone;
- (ii) a "month" shall be construed as a calendar month according to the Gregorian calendar beginning at 24:00 hours on the last day of the preceding month and ending at 24:00 hours on the last day of that month;
- (iii) a "day" shall be construed as a twenty-four (24) hour period ending at 24:00 hours;
- (iv) where a period of time is specified to run from or after a given day or the day of an act or event, it is to be calculated exclusive of that day; and
- (v) where a period of time is specified as commencing on a given day or the day of an act or event, it is to be calculated inclusive of that day.

(c) References

In this Agreement, unless provided otherwise, a reference to:

- (i) a statute or enactment shall be construed as a reference to such statute as it may have been, or may from time to time be, amended or re-enacted;
- (ii) an obligation includes a liability and a duty and a reference to performance includes observance;
- (iii) materials, information, data and other records shall be to materials, information, data and other records whether stored in electronic, written or other form; and

(iv) a clause or a Schedule shall be reference to a clause or Schedule of this Agreement. References to this Agreement or any other document shall be construed as a reference to this Agreement or that other document as it may have been, or may from time to time be, amended, varied, novated, replaced or supplemented.

(d) General Terminology

In this Agreement, unless provided otherwise, "average" for any calculation shall, subject to any contrary indication, be construed as meaning an arithmetic mean.

#### 1.4 Construction

(a) Force of Definitions

If any provision in a definition in this Agreement is a substantive provision conferring rights or imposing obligations on either Party, then, notwithstanding that it is in a definition, effect shall be given to it as a substantive provision of this Agreement.

(b) Force of Recitals

The recitals are not intended to create any legally binding rights or obligations for the Parties, but may be used to evidence the intention of the Parties in entering into this Agreement wherever any such intention is relevant in interpreting any particular term of this Agreement.

(c) Persons and Corporations

(i) A reference to a "person" includes any individual, company, corporation, firm, partnership, joint venture, undertaking, organisation, trust, government authority or government department (in each case whether or not having separate legal personality).

(ii) A reference to a person includes that person's successors and permitted assigns and, in the case of a natural person, that person's legal personal representatives.

(iii) Where any person to whom reference is made ceases to exist or is reconstituted, renamed or replaced, or its functions or powers are transferred to another person, that reference shall (unless the context requires otherwise) be taken to be to the person so established or constituted in its place or succeeding to its powers or functions.

(d) Laws

Save where the contrary is indicated, in this Agreement any reference to an act of a Governmental Agency, code, rules, regulations or any Law or any section of, or schedule to, or other provisions thereof, shall be construed, at the particular time, as including a reference to any modification, extension or re-enactment thereof then in force and to all instruments, orders, rules or regulations then in force and made under or deriving validity from the relevant act of a Governmental Agency, code, or Law.

## 2. TERM

### 2.1 Effectiveness and Term

This Agreement shall take effect on the Hanover Substation Improvement Completion Date (the "**Effective Date**") and shall continue until ten (10) years from the Effective Date (the "**Term**"), unless terminated sooner pursuant to Clause 6 herein.

## 3. CAPACITY RESERVATION

### 3.1 Determination of payments for Reserved Capacity

- (a) The Monthly Capacity Reservation Fee for the Reserved Capacity provided by the City to Tesla pursuant to Clause 3 of this Agreement will be calculated in accordance with the provisions of Schedule 1.
- (b) Tesla's payment of the Monthly Capacity Reservation Fee will apply for each month that Reserved Capacity is made available for Tesla until expiration of the Term or termination of the Agreement, including the Capacity Reservation Period and the Subsequent Period.

### 3.2 Reservation of Capacity during the Capacity Reservation Period

- (a) Commencing on the Effective Date, the City shall reserve and make available not less than the amount of Reserved Capacity for Electrical Service provided to the Tesla Facilities for the Capacity Reservation Period.
- (b) In consideration for the Reserved Capacity made available in any Billing Period during the Capacity Reservation Period, beginning with the first full Billing Period after the Capacity Reservation Fee Start Date Tesla shall pay to the City a Monthly Capacity Reservation Fee calculated in accordance with paragraph (b) of Part 1 of Schedule 1.
- (c) For the avoidance of doubt, following the Capacity Reservation Fee Start Date Tesla shall pay the Monthly Capacity Reservation Fee to the City during the Capacity Reservation Period irrespective of whether Tesla's aggregate 12-month average monthly peak demand in respect to the Tesla Facilities drops below the Reserved Capacity.
- (d) The Monthly Capacity Reservation Fee applies solely as consideration for the Reserved Capacity and does not apply to payment for Electric Services billed pursuant to the CPAU Rules and Regulations.
- (e) The City reserves the right but not the obligation to meet its obligations with respect to the Reserved Capacity in whole or in part at any given point in time from CPAU facilities other than the Hanover Substation without affecting Tesla's obligations with respect to the Monthly Capacity Reservation Fee or the City's obligations with respect to the Monthly Capacity Usage Credit.

### 3.3 Reservation of Capacity during the Subsequent Period

- (a) During the Subsequent Period, the City shall, in respect of the Hanover Substation, continue to reserve and make available not less than the Reserved Capacity to serve the electricity needs of the Tesla Facilities, *provided that* if Tesla's aggregate 12-month average monthly peak electricity demand in respect to the Tesla Facilities drops below the Reserved Capacity, the City shall:

- (i) promptly notify Tesla in writing of such event; and
  - (ii) if Tesla fails to increase its aggregate twelve (12)-month average monthly peak electricity demand in respect to the Tesla Facilities to at least the Reserved Capacity within six (6) months of receipt of such written notice from the City, the City will have the right to divert any of the Capacity originally reserved for Tesla to other Electric Service customers.
- (b) In consideration for the Reserved Capacity made available during any Billing Period during the Subsequent Period, Tesla shall pay to the City a Monthly Capacity Reservation Fee, calculated in accordance with Schedule 1.
- (c) No Monthly Capacity Reservation Fee shall be payable by Tesla to the City if the City fails to make available to Tesla the Reserved Capacity at any time during that Billing Period.

### 3.4 Sale and Purchase of Electric Service

In addition to the Capacity Reservation Fee, if any, Tesla shall pay the City on a monthly basis for Electric Service provided to the Tesla Facilities in accordance with the CPAU Rules and Regulations. In addition to the rights and obligations conferred by this Agreement in respect to the Reserved Capacity, the City will provide Electric Service to the Tesla Facilities in accordance with the CPAU Rules and Regulations.

### 3.5 Capacity Reservation Modification

- (a) Tesla may request a change to the amount of Reserved Capacity provided by the City to Tesla, including a corresponding adjustment to the amount of the Monthly Capacity Reservation Fee, during the Term pursuant to this Agreement (a "**Capacity Reservation Modification**"), subject to approval by the CPAU Director or his or her authorized delegee.
- (b) To initiate a Capacity Reservation Modification, Tesla must send a written notice to the City requesting the modification. If Tesla's requested modification seeks an increase in the amount of Reserved Capacity, City approval of the request will be subject to a determination by the CPAU Director that the CPAU system can accommodate the requested increase at that time. The approved changes to the amount of Reserved Capacity, the corresponding Monthly Capacity Reservation Fee, and Contracted Peak Demand in Schedule 1 will go into effect in the Billing Period no sooner than 90 days from receipt of the notice and approval by the City. The Parties shall determine the revised Reserved Capacity, Monthly Capacity Reservation Fee, and Contracted Peak Demand promptly following Tesla's request for a Capacity Reservation Modification in accordance with the provisions of Schedule 1. For purposes of a Capacity Reservation Modification, the CPAU Director is authorized to modify Schedule 1, consistent with the terms and conditions of this Agreement, without City Council approval.
- (c) Once the Capacity Reservation Modification is initiated the revised Monthly Capacity Reservation Fee will apply for each month that the revised Reserved Capacity is made available for Tesla until expiration of the Term or termination of the Agreement, including the Capacity Reservation Period and the Subsequent Period, unless the amount of Reserved Capacity is subsequently changed pursuant to a later Capacity Reservation Modification, in which case the most recent approved version of Schedule 1 will control.



#### 4. CAPACITY USAGE CREDITING

##### 4.1 Monthly Capacity Usage Credit

- (a) In respect to each Billing Period from the Capacity Reservation Fee Start Date until either the Capacity Usage Credit Period expires or the Capacity Usage Credit Maximum has been reached, whichever occurs first, Tesla shall receive from the City a Monthly Capacity Usage Credit, calculated in accordance with Schedule 2.
- (b) In no event shall the aggregate of all Monthly Capacity Usage Credits accrued during the Term exceed the Capacity Usage Credit Maximum.
- (c) Any Monthly Capacity Usage Credit accrued during any Billing Period shall be set-off against the Monthly Capacity Reservation Fee payable in that Billing Period, if applicable, and only the balance shall be paid by Tesla to the City pursuant to Clause 5 below.

#### 5. BILLING AND INVOICING

##### 5.1 Currency of Monthly Invoices and payments

Except as otherwise expressly provided in this Agreement, each Monthly Invoice shall be for amounts in USD and all payments shall be made in USD in accordance with the CPAU Rules and Regulations.

##### 5.2 Delivery of Monthly Invoices

- (a) Commencing with the Billing Period following the month in which the Effective Date occurs, the City shall submit to Tesla, in accordance with the CPAU Rules and Regulations, a Monthly Invoice setting out the City's computation of the Monthly Payment for that Billing Period in respect to the Monthly Capacity Reservation Fee, if applicable, and the Monthly Capacity Usage Credit.
- (b) Each Monthly Invoice shall include a Monthly Statement setting out:
  - (i) a calculation of:
    - (A) the Monthly Capacity Reservation Fee, if applicable; and
    - (B) the Monthly Capacity Usage Credit; and
  - (ii) such further supporting documentation and information as Tesla may reasonably request, provided that no such request shall prejudice or delay payment of the amount due in respect of the relevant Monthly Invoice.

##### 5.3 Payment of Monthly Invoices

- (a) An amount payable under a Monthly Invoice shall be paid in immediately available and freely transferable cleared funds for value on or before the due date specified therein (the "**Due Date**") to such account of the City as shall have been previously notified to Tesla.
- (b) Tesla shall pay to the City any amount referred to in a Monthly Invoice on or before the Due Date.

#### 5.4 Set off rights

- (a) Where in any Billing Period there is both a Monthly Capacity Reservation Fee and a Monthly Capacity Usage Credit, the two amounts shall be set-off against each other and only the balance shall be paid by Tesla to the City in lieu of each such payment in respect of that Billing Period. Any payment shall be made to the appropriate account of the City.
- (b) Save insofar as permitted by the provisions of Clause 5.4(a) above, all payments by Tesla to the City under this Agreement shall be made free of any restriction or condition, whether by way of set-off or otherwise, but the making of payments shall be without prejudice to the other rights of Tesla.

#### 5.5 Application of payments

Payments due from Tesla to the City pursuant to this Agreement, including payments for Electric Service and Monthly Capacity Reservation Fees, will be subject to the provisions of Rule and Regulation 11 of the CPAU Rules and Regulations.

#### 5.6 Disputed Monthly Invoices

If Tesla wishes to dispute a Monthly Invoice, it shall do so in accordance with the CPAU Rules and Regulations.

### 6. TERMINATION

#### 6.1 Termination for Tesla Events of Default

The City may give notice to Tesla of its intention to terminate this Agreement before the Expiration Date upon the occurrence of any of the following events (each, a "**Tesla Event of Default**"), except where such event arises as a result of a material breach by the City of this Agreement or a CPAU Event of Default:

- (a) Tesla commits a material breach of any of its material obligations under this Agreement and does not remedy the breach within thirty (30) Business Days of receiving notice from the City of such breach, provided that if such failure cannot be remedied by Tesla within such period of thirty (30) Business Days with the exercise of reasonable diligence, then such cure period shall be extended for an additional reasonable period of time (not to exceed thirty (30) Business Days), so long as such breach is capable of being remedied with the exercise of reasonable diligence and Tesla is exercising reasonable diligence to remedy such breach; or
- (b) a representation or warranty made or repeated by Tesla in accordance with Clause 8.1 proves to have been incorrect or misleading in any material respect when made or repeated.

#### 6.2 Termination for CPAU Events of Default

Tesla may give notice to the City of its intention to terminate this Agreement before the Expiration Date upon the occurrence of any of the following events (each, a "**CPAU Event of Default**"), except where such event arises as a result of a material breach by Tesla of this Agreement or a Tesla Event of Default:

- (a) the City commits a material breach of any of its material obligations under this Agreement and does not remedy the breach within thirty (30) Business Days of

receiving notice from Tesla of such breach, provided that if such failure cannot be remedied by the City within such period of thirty (30) Business Days with the exercise of reasonable diligence, then such cure period shall be extended for an additional reasonable period of time (not to exceed thirty (30) Business Days), so long as such breach is capable of being remedied with the exercise of reasonable diligence and the City is exercising reasonable diligence to remedy such breach; or

- (b) a representation or warranty made or repeated by the City in accordance with Clause 8.1 proves to have been incorrect or misleading in any material respect when made or repeated.

### 6.3 Termination Procedure

Upon the occurrence of Tesla Event of Default or a CPAU Event of Default, the following procedures shall be followed by the Parties:

- (a) Upon the occurrence of a Tesla Event of Default or a CPAU Event of Default, as the case may be, which is not cured by the Defaulting Party within the applicable grace period, if any, the other Party (the "**Non-Defaulting Party**") may, at its option, initiate termination of this Agreement by delivering a notice of its intention to terminate this Agreement (a "**Notice of Intention to Terminate**") to the Defaulting Party. The Notice of Intention to Terminate shall specify in reasonable detail the Tesla Event of Default or CPAU Event of Default, as the case may be, giving rise to such notice.
- (b) A Notice of Intention to Terminate given pursuant to Clauses 6.3(a) shall be specified as such, and shall specify in reasonable detail the event giving rise to such notice. Service of a Notice of Intention to Terminate by one Party shall not at any time preclude service of a Notice of Intention to Terminate by the other Party.
- (c) Following the delivery of a Notice of Intention to Terminate, the Parties shall, consult for a period ("**Consultation Period**") of thirty (30) days commencing on such delivery date with respect to any such Tesla Event of Default or CPAU Event of Default (or such longer period as the Parties may mutually agree), as to what steps shall be taken with a view to mitigating the consequences of the relevant Tesla Event of Default or CPAU Event of Default, as applicable, taking into account all the circumstances.
- (d) During the Consultation Period:
  - (i) the Defaulting Party may continue to undertake efforts to cure the Default, and if the Default is cured at any time prior to the delivery of a Termination Notice in accordance with Clause 6.3(e), then the Non-Defaulting Party shall have no right to terminate this Agreement in respect of such cured Default (but without prejudice to any rights in respect of any future breach of this Agreement);
  - (ii) each Party shall not impede or otherwise interfere with the other Party's efforts to remedy the Tesla Event of Default or CPAU Event of Default, as the case may be, which gave rise to the issuance of the Notice of Intention to Terminate; and
  - (iii) both Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations under this Agreement.
- (e) If, during the Consultation Period, the Defaulting Party has diligently pursued the cure of the Default but the Default could not, with the exercise of reasonable diligence, be cured within such Consultation Period, then the Defaulting Party shall have the further

period of time which is reasonably necessary to cure that Default, which, further period shall, subject to Clause 6.3(g), not exceed thirty (30) days, and the Consultation Period shall be extended in accordance with such extension.

- (f) An extension to the Consultation Period of greater than the thirty (30) days referred to in Clause 6.3(e) may be established if agreed by the Non-Defaulting Party.
- (g) If a Defaulting Party determines that it requires the benefit of a further period to cure the Default as provided for under Clause 6.3(e), it shall, as soon as reasonably practicable thereafter (but not later than the expiration of the thirty (30) day period established in accordance with Clause 6.3(e)) give notice to the Non-Defaulting Party that more time is required to rectify the Default, giving a reasonable explanation as to why more time is required and requesting that the Consultation Period be extended by the further period referred to in the notice.
- (h) Within fifteen (15) days of the expiration of the Consultation Period (as it may be extended in accordance with the foregoing clauses), or, if there is no Consultation Period, within fifteen (15) days of the date of the Notice of Intention to Terminate, or unless, in the case of a Tesla Event of Default or a CPAU Event of Default giving rise to the Notice of Intention to Terminate such Default shall have been remedied, the Party having given the Notice of Intention to Terminate may terminate this Agreement by delivering a notice to the other Party terminating this Agreement ("**Termination Notice**"), whereupon this Agreement shall terminate on the date of the Termination Notice.

## 7. DISPUTE RESOLUTION

### 7.1 Negotiation and Mediation

- (a) Any Dispute arising from or relating to this Agreement shall first be promptly referred to the Parties' respective senior level management for resolution.
- (b) If the Parties' senior level management are unable to resolve any such Dispute within twenty (20) days after referral, or within any mutually agreed upon extension thereof, either Party may, by notice to the other Party (the "**Mediation Notice**"), require such Dispute to be submitted to non-binding mediation in Palo Alto, California, with a single mediator who is mutually acceptable to the Parties. The Parties will use reasonable efforts to cause such mediation to be convened, conducted and completed within a reasonable period of time, from the date of the Mediation Notice, subject to the availability of a mutually acceptable mediator and commensurate availability of the individuals that each Party, respectively, requires to represent it at mediation, including legal counsel, percipient witnesses, expert witnesses, sureties, and individuals authorized to negotiate a settlement. The cost of mediation, including the mediator's fee, will be shared equally by the Parties, but each Party is solely responsible for its own legal costs and its own legal representation.

### 7.2 Arbitration

- (a) If and to the extent the Parties are unable to resolve the Dispute through mediation, then either Party may take the unresolved portion of a Dispute to arbitration in accordance with the then-current Streamlined Arbitration Rules of the Judicial Arbitration and Mediation Services ("**JAMS**"). The existence, content and result of the arbitration shall be held in confidence by the Parties, their representatives, any other

participants and the arbitrator, subject to the limits of Law governing the City's public disclosure obligations.

- (b) The arbitration will be conducted by a single arbitrator selected by agreement of the Parties or, failing such agreement, appointed in accordance with JAMS, in either case, in San Francisco County, California.
- (c) The arbitration award shall be final and binding on the Parties and the Parties shall not have the right to appeal any such award, except to the extent expressly required by California Law.
- (d) Each Party will bear its own expenses in the arbitration and will share equally the costs of the arbitration; provided, however, that the arbitrator may, in their discretion, award reasonable costs and fees to the prevailing Party.

### **7.3 Performance of Obligations to Continue**

- (a) Pending final resolution of each Dispute hereunder, the Parties shall each continue to fulfil their respective obligations hereunder, irrespective of whether any Dispute has been noticed, submitted, or is under negotiation or consideration by either Party.
- (b) Upon resolution of each Dispute, whether by agreement of the Parties or through a Dispute proceeding, any amounts found to be owing by either Party shall be promptly paid by the Party owing payment to the other Party from the day following the date of the overpayment or underpayment, as applicable, until the date of repayment in full.

### **7.4 Specific Performance**

Notwithstanding anything to the contrary contained in this Clause 7, if, due to a material breach or threatened material breach a Party is suffering irreparable harm for which monetary damages are inadequate, or if a Party is seeking to enforce an arbitration award obtained pursuant to this Clause 7, such Party may petition a court of competent jurisdiction for injunctive relief, specific performance or other equitable relief.

## **8. REPRESENTATIONS, WARRANTIES AND COVENANTS**

### **8.1 General Representations and Warranties**

Each Party represents and warrants to the other Party on the Signature Date and the Effective Date that:

- (a) it is a legal entity, duly organized, validly existing and in good standing under the Law of jurisdiction of incorporation or formation, as applicable;
- (b) this Agreement constitutes a legal, valid and binding obligation of such Party enforceable in accordance with its terms; and
- (c) the execution, delivery and performance of this Agreement (i) is within its powers; (ii) has been duly authorized by all requisite action; and (iii) to the best of the Party's knowledge will not violate any agreement, commitment, certificate or other document to which it is a party or by which any of its assets may be bound or affected.

## 8.2 Covenants

Each Party shall comply with all applicable Law required for the performance of its obligations under this Agreement.

## 9. ASSIGNMENT AND NOVATION

### 9.1 General

Subject to Clause 9.2, neither Party shall assign or transfer its rights or obligations under this Agreement without the prior written consent of the other Party. Any purported assignment, novation or transfer without such consent, whether voluntary or involuntary, by operation of Law, under legal process or proceedings, by receivership, in bankruptcy or otherwise, is void.

### 9.2 Unauthorized Assignments

Any attempted assignment of this Agreement (or any part thereof) or any of the rights, duties and obligations under this Agreement other than in strict conformance with this Clause 9 is null and void and of no force or effect.

## 10. NOTICES

### 10.1 Notices

- (a) All notices allowed or required under this Agreement shall be in writing, sent to the address for notices given for the City and Tesla on the signature page to this Agreement, or such other address as either Party may notify the other Party in writing from time to time, and shall be deemed given:
  - (i) if sent by courier, on the date when left at the address of the recipient if such date is a Business Day or on the next Business Day if such date is not a Business Day; and
  - (ii) if sent by email, upon receipt by the sender of an email confirming receipt (or otherwise evidencing receipt) of the notice by the recipient (in which case the email will be deemed received on the date it was received by the recipient if such date is a Business Day, or on the next Business Day if such date is not a Business Day). An automatic "read receipt" shall not constitute confirmation of receipt for purposes of this Clause 10.1.
- (b) Notices shall be sent to the notice address given for the City and Tesla on the signature page to this Agreement, or such other address as either Party may notify the other Party in writing from time to time. Nothing in this Clause 10.1 shall be construed to restrict the transmission of routine communications between representatives of the City and Tesla.

## 11. CONFIDENTIALITY AND ANNOUNCEMENTS

The Parties acknowledge that the City is subject to California Law governing charter cities, including public disclosure requirements which include, but are not limited to, open meeting requirements pursuant to Government Code section 54950 et seq. and public record disclosure requirements pursuant to Government Code section 7920 et seq. Except as required for compliance with applicable Law, neither Party shall advertise or issue any public announcement regarding the execution of this Agreement or its contents, disclose the existence of this Agreement or otherwise disclose its contents, or use the other Party's mark, name or logo in

any marketing literature, web sites, articles, press releases (including interviews with representatives of media organizations of any form), or any other document or electronic communication, without the prior written consent of the other Party. The foregoing shall not prohibit a Party from making any public disclosure or filing that it determines in good faith is required by Law, including, but not limited to, in respect of Tesla, the rules of the stock exchange on which its shares, or the shares of its parent company, are listed.

## **12. MISCELLANEOUS**

### **12.1 Governing Law**

This Agreement and all claims arising out of or relating to this Agreement and the transactions contemplated hereby shall in all respects be governed by and interpreted in accordance with the Law of the state of California, without regard to the conflicts of Law principles that would result in the application of any Law other than the Law of such state.

### **12.2 No Waiver**

- (a) No waiver by either Party of any default or defaults by the other Party in the performance of any of the provisions of this Agreement:
  - (i) shall operate or be construed as a waiver of any other or further default or defaults whether of a like or different character; or
  - (ii) shall be effective unless in writing duly executed by a duly authorised representative of such Party.
- (b) Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions, and provisions of this Agreement nor time or other indulgence granted by one Party to the other shall act as a waiver of such breach or acceptance of any variation or the relinquishment of any such right or any other right under this Agreement, which shall remain in full force and effect.

### **12.3 Entire Agreement; Severability**

This Agreement constitutes the entire agreement between the Parties regarding the subject matter hereof and supersedes all prior agreements, representations and understandings, oral or written, between the Parties regarding the subject matter hereof. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, such term shall be severable from the remainder of this Agreement and the remainder of this Agreement or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected and each term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by the Law.

### **12.4 Costs**

Each Party will be solely responsible for its own costs and expenses incurred in connection with the preparation, negotiation, execution, delivery and performance of, and compliance with, this Agreement.

**12.5 Amendment; Modification; Waiver**

No amendment or modification of this Agreement is effective unless it is in writing and signed by each Party. No waiver by either Party of any provision of this Agreement is effective unless explicitly set forth in writing and signed by such Party. No failure to exercise, or delay in exercising, any right or remedy arising from this Agreement operates or may be construed as a waiver thereof. No single or partial exercise of any right or remedy hereunder precludes any other or further exercise thereof or the exercise of any other right or remedy.

**12.6 Relationship of the Parties**

The relationship between the Parties is that of independent contractors. Nothing contained in this Agreement shall be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between the Parties, and neither Party shall have authority to contract for or bind the other Party in any manner whatsoever.

**12.7 Further Assurances**

Each Party agrees to execute and deliver all further instruments and documents, and take all further action, as may be reasonably necessary to complete performance by the Parties hereunder and to effectuate the purposes and intent of this Agreement.

**12.8 No Third-Party Beneficiaries**

This Agreement and all rights hereunder are intended for the sole benefit of the Parties and shall not imply or create any rights on the part of, or obligations to, any other person. Claims by non-Parties indemnified pursuant to this Agreement may only be brought by a Party to this Agreement.

**12.9 Survival**

Provisions of this Agreement which by their nature contemplate or govern performance or observance subsequent to the termination or expiration of this Agreement or any transactions contemplated herein shall survive such termination or expiration. Except as otherwise set forth in this Agreement, the expiration or termination of this Agreement will not affect any liabilities of the Parties that accrued prior to such expiration or termination.

**12.10 Good Faith and Fair Dealing**

Each Party's actions in connection with this Agreement (including in the performance of its obligations and enjoyment of its rights hereunder), will be undertaken in accordance with the principles of good faith and fair dealing. Such obligation shall be interpreted to mean that a Party must act honestly and reasonably, but shall not be required to otherwise act contrary to its legitimate commercial interests.

**12.11 Successors and Assigns**

This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns.

**12.12 Counterparts**

This Agreement may be executed by each Party on a separate counterpart, each of which when executed and delivered shall constitute an original, but both counterparts shall together constitute one and the same instrument.



**12.13 Mutuality of drafting**

The Parties hereby stipulate and agree that each of them fully participated and was adequately represented by counsel in the negotiation and preparation of this Agreement and the Parties further stipulate and agree that in the event of an ambiguity or other necessity for interpretation to be made of the content of this Agreement, this Agreement shall not be construed in favour of or against either Party as a consequence of such Party having had a greater role in the preparation of this Agreement, but shall be construed as if the language were mutually drafted by both Parties with full assistance of counsel.

*[Remainder of Page Intentionally Left Blank]*

In witness whereof the Parties, intending to be legally bound, have caused this Agreement to be executed by their duly authorised officers as of the date first above written.

**CITY OF PALO ALTO**

By: \_\_\_\_\_

Name: Ed Shikada

Title: City Manager

**APPROVED AS TO FORM:**

By: \_\_\_\_\_

Name: Molly Stump

Title: City Attorney

**APPROVED:**

By: \_\_\_\_\_

Name: Dean Batchelor

Title: Director of Utilities

**ADDRESS:**

City of Palo Alto

City Clerk

P.O. Box 10250

250 Hamilton Avenue

Palo Alto, CA 94303

With copies to:

Utilities Department

250 Hamilton Avenue

Palo Alto, CA 94303

**Item #5**

ATTN: Tomm Marshall

**TESLA, INC.**

DocuSigned by:  
*Vaibhav Taneja*  
16AE36ED3BB7438...

By: \_\_\_\_\_

Name: Vaibhav Taneja

Title: Chief Financial Officer

Address: 1 Tesla Road, Austin, TX 78725

Attn: General Counsel / Legal

Phone: +1.512.516.8177

Email: legal@tesla.com

cc: energynotices@tesla.com

## SCHEDULE 1: CAPACITY RESERVATION AND USAGE CALCULATIONS

The Reserved Capacity for the Tesla Facilities is 11,200 kVA unless modified by a Capacity Reservation Modification.

### Determination of the Monthly Capacity Reservation Fee

The Monthly Capacity Reservation Fee for the Reserved Capacity listed above is calculated in kW rather than kVA. This is because the City meters peak energy Demand based on kW rather than kVA. To calculate a Monthly Capacity Reservation Fee based on kW for a Reserved Capacity based on kVA, a conversion from kVA to kW is required. In actual day-to-day operation of the CPAU electric system, a capacity of 1 kVA might be able to transmit a range of kW quantities depending on the characteristics of the electric load. For the purpose of the Monthly Capacity Reservation Fee this Agreement assumes that 11,200 kVA Reserved Capacity corresponds to 9,000 kW Demand. Because the Monthly Capacity Reservation Fee is intended to reimburse the City for the opportunity cost of reserving unused capacity for Tesla rather than marketing it to other customers, it is indexed to the Distribution Demand Charge for the applicable rate schedule. However, because the Distribution Demand Charges are designed to recover costs based on a month-varying metered peak Demand, the Capacity Reservation Fee includes a month-varying Contracted Peak Demand below that corresponds to a monthly load shape that the City and Tesla have agreed is reflective of what the Parties expect Tesla's eventual actual load shape will be.

(a) For the purposes of this Schedule 1, the following term has the following meaning:

**"Contracted Peak Demand"** means, for each Billing Period corresponding with the relevant month:

- (i) January: 7,500 kW;
- (ii) February: 7,500 kW;
- (iii) March: 7,500 kW;
- (iv) April: 7,500 kW;
- (v) May: 7,500 kW;
- (vi) June: 9,000 kW;
- (vii) July: 9,000 kW;
- (viii) August: 9,000 kW;
- (ix) September: 9,000 kW;
- (x) October: 7,500 kW;
- (xi) November: 7,500 kW; and
- (xii) December: 7,500 kW.

(b) Determination of the Monthly Capacity Reservation Fee

The "**Monthly Capacity Reservation Fee**" for any Billing Period shall be an amount in USD equal to:

$$(B - A)*C$$

where:

- A is the highest fifteen (15) minute peak Demand measured by CPAU meter(s) in relation to the Tesla Facilities during that Billing Period;
- B is the Contracted Peak Demand for that Billing Period; and
- C is the Distribution Demand Charge(s) applicable to the peak time period for the season corresponding to the Billing Period defined in the applicable rate schedule set by the City and selected by Tesla (if multiple rate schedules apply) pursuant to the CPAU Rules and Regulations.

Notwithstanding the foregoing, if application of the formula set forth hereinabove for determining the Monthly Capacity Reservation Fee results in a negative number sum for any Billing Period, for purposes of this Agreement, that negative number sum will be deemed to equal zero for that Billing Period.

**SCHEDULE 2: MONTHLY CAPACITY USAGE CREDIT****Determination of the Monthly Capacity Usage Credit**

- (a) For the purposes of paragraph (b) of this Schedule 2, the following terms have the following meaning:

**"Capacity Usage Credit Maximum"** means an amount in USD equal to the aggregate amount of the General Use Utility Asset Costs incurred by Tesla pursuant to the Improvement Agreement, excluding therefrom those amounts that have reimbursed to Tesla by the City under the terms of the Improvement Agreement. The Parties will amend this Schedule 2 to include the amount of the Capacity Usage Credit Maximum within 14 Business Days following payment of the "City Reimbursement" pursuant to the Improvement Agreement, as that term is defined therein.

**"General Use Utility Asset Costs"** means, in relation to the improvements installed by Tesla and accepted by the City pursuant to the Improvement Agreement, the aggregate documented cost in USD incurred by each Party associated with the material cost, but excluding the design and construction costs, of all equipment and fixed assets that can be used for any CPAU customer (and not restricted to serving a Tesla Facility), as determined by CPAU, including, but not limited to, transformers, switchgear, protection equipment, and cables, *but expressly excluding* any costs associated with the acceleration of production or accelerated delivery of such equipment.

- (b) Determination of the Monthly Capacity Usage Credit

The **"Monthly Capacity Usage Credit Rate"** for any Billing Period during the Capacity Reservation Period shall be an amount specified on a USD per kWh basis equal to:

$$A / (B * C)$$

where:

- A is the Capacity Usage Credit Maximum;
- B is the estimated annual electrical consumption of the Tesla Facilities expressed in units of kWh, being 75,000,000 kWh; and
- C is the Capacity Usage Credit Period expressed in years, being seven (7) years.

The **"Monthly Capacity Usage Credit"** for any Billing Period shall be an amount specified in USD equal to the Monthly Capacity Usage Credit Rate multiplied by the Delivered Energy for the Billing Period.

## **EXHIBIT E PROJECT SCHEDULE**

Pursuant to Section 8.2, the below schedule, dated December 14, 2024, constitutes the planned schedule for design and construction of the Project as of the Effective Date of the Agreement.

Project completion is expected to occur 245 days after the latter of the issuance of the Notice to Proceed, applicable permits, or execution of this Agreement.

- City Council Approval: January 16, 2024
- Construction begins: January 29, 2024
- Demolition: January 29, 2024 – March 2024
- Power Distribution Center delivery: April 2024
- Project Completion: September 17, 2024

## EXHIBIT F INSURANCE REQUIREMENTS (TESLA)

### 1.1. Commercial General Liability Insurance.

- 1.1.1. USD \$5,000,000 each occurrence or per claim, combined single limit for third party bodily injury or property damage.
- 1.1.2. USD \$10,000,000 general aggregate
- 1.1.3. Coverages.
  - 1.1.3.1. The total of required limits for liability coverage required herein may be met by combination of Primary and Umbrella or Excess Liability policies.
  - 1.1.3.2. Include the City as additional insured where required by written contract.

### 1.2. Business Automobile Liability Insurance.

- 1.2.1. USD \$1,000,000 combined single limit for third party bodily injury or third party property damage,
- 1.2.2. Coverages.
  - 1.2.2.1. Coverage with respect to any I vehicles of Tesla used in connection with the work performed under this Agreement.
  - 1.2.2.2. Include the City as additional insured where required by written contract.

### 1.3. Workers Compensation and Employers Liability Insurance.

- 1.3.1. Workers Compensation
  - 1.3.1.1. Coverages.
    - 1.3.1.1.1. As required by state or federal laws.
    - 1.3.1.1.2. Tesla may waive Workers' Compensation Insurance requirement if it is a qualified self-insured in the state in which the work under this Agreement is performed.
- 1.3.2. Employer Liability
  - 1.3.2.1. USD \$1,000,000 bodily injury for each accident.
  - 1.3.2.2. USD \$1,000,000 bodily injury by disease for each employee.
  - 1.3.2.3. USD \$1,000,000 bodily injury by disease policy limit.

**Waiver of Subrogation.** Where permitted by law, all insurances required in Exhibit F shall include a waiver of subrogation. This release and waiver shall be null and void if such loss or damage may have been caused by the sole or gross negligence of the other party.

**Notice of Cancellation.** Tesla shall give the other party prior written notice in the event of cancellation of any policy required to be obtained under Exhibit F.

**Deductibles and Self-Insured Retentions.** Tesla may select their own insurance deductibles or self-insured retentions for insurances required under Exhibit F, to the extent



such deductibles or self-insured retentions are reasonable. Tesla's self-insured retentions and deductibles are the sole responsibility of Tesla.

**Certificates of Insurance.** Prior to commencing any work, and upon each renewal of insurance during the Term, Tesla shall provide certificates of insurance to the other party evidencing the required insurance in Exhibit F.

**Subcontractor Insurance.** Tesla shall require each of its subcontractors performing work during the Term to maintain insurance coverage in accordance with the insurance requirements of Tesla's standard subcontract, supplier or designer agreements, as applicable.

**EXHIBIT G  
INSURANCE REQUIREMENTS (ENGINEER)**

**1.1. Commercial General Liability Insurance.**

- 1.1.1. USD \$2,000,000 each occurrence or per claim, combined single limit for third party bodily injury or property damage.
- 1.1.2. USD \$2,000,000 general aggregate
- 1.1.3. Coverages.
  - 1.1.3.1. The total of required limits for liability coverage required herein may be met by combination of Primary and Umbrella or Excess Liability policies.
  - 1.1.3.2. Include the City and Tesla as additional insured.
  - 1.1.3.3. Separation of insureds/severability of interests.

**1.2. Business Automobile Liability Insurance.**

- 1.2.1. USD \$1,000,000 combined single limit for third party bodily injury or property damage.
- 1.2.2. Coverages.
  - 1.2.2.1. Coverage with respect to any and all vehicles of the General Contractor whether owned, hired, leased, borrowed, or non-owned, assigned to or used in connection with the work performed under this Agreement.
  - 1.2.2.2. Include the City and Tesla as additional insured.
  - 1.2.2.3. Separation of insureds/severability of interests.

**1.3. Workers Compensation and Employers Liability Insurance.**

- 1.3.1. Workers Compensation
  - 1.3.1.1. Coverages.
    - 1.3.1.1.1. As required by state or federal laws.
    - 1.3.1.1.2. The General Contractor may waive Workers' Compensation Insurance requirement if it is a qualified self-insured in the state in which the work under this Agreement is performed.
- 1.3.2. Employer Liability
  - 1.3.2.1. USD \$1,000,000 bodily injury for each accident.
  - 1.3.2.2. USD \$1,000,000 bodily injury by disease for each employee.
  - 1.3.2.3. USD \$1,000,000 bodily injury by disease policy limit.

**1.4. Professional Liability or Errors and Omissions Insurance.**

- 1.4.1. USD \$5,000,000 each claim.
- 1.4.2. USD \$5,000,000 in aggregate.
- 1.4.3. Coverages.
  - 1.4.3.1. Written on a Claims-made basis
  - 1.4.3.2. The retroactive date shall be not later than the Effective Date.

**Waiver of Subrogation.** Where permitted by law, all insurances required in Exhibit G shall include a waiver of subrogation. This release and waiver shall be null and void if such loss or damage may have been caused by the sole or gross negligence of the other party.

**Notice of Cancellation.** The Engineer shall give the City prior written notice in the event of cancellation of any policy required to be obtained under Exhibit F.

**Certificates of Insurance.** Prior to commencing any work, and upon each renewal of insurance during the Term, Tesla shall provide certificates of insurance to the City evidencing the required insurance in Exhibit G.

**EXHIBIT H**  
**INSURANCE REQUIREMENTS (GENERAL CONTRACTOR)**

**1.1. Commercial General Liability Insurance.**

- 1.1.1. USD \$5,000,000 each occurrence or per claim, combined single limit for third party bodily injury or property damage.
- 1.1.2. USD \$5,000,000 general aggregate
- 1.1.3. USD \$5,000,000 products/completed operations aggregate.
- 1.1.4. Coverages.
  - 1.1.4.1. The total of required limits for liability coverage required herein may be met by combination of Primary and Umbrella or Excess Liability policies.
  - 1.1.4.2. Include the City and Tesla as additional insured.
  - 1.1.4.3. Separation of insureds/severability of interests.

**1.2. Business Automobile Liability Insurance.**

- 1.2.1. USD \$5,000,000 combined single limit for third party bodily injury or property damage,
- 1.2.2. Coverages.
  - 1.2.2.1. Coverage with respect to any and all vehicles of the General Contractor whether owned, hired, leased, borrowed, or non-owned, assigned to or used in connection with the work performed under this Agreement.
  - 1.2.2.2. Include the City and Tesla as additional insured.
  - 1.2.2.3. Separation of insureds/severability of interests.

**1.3. Workers Compensation and Employers Liability Insurance.**

- 1.3.1. Workers Compensation
  - 1.3.1.1. Coverages.
    - 1.3.1.1.1. As required by state or federal laws.
    - 1.3.1.1.2. The General Contractor may waive Workers' Compensation Insurance requirement if it is a qualified self-insured in the state in which the work under this Agreement is performed.
- 1.3.2. Employer Liability
  - 1.3.2.1. USD \$1,000,000 bodily injury for each accident.
  - 1.3.2.2. USD \$1,000,000 bodily injury by disease for each employee.
  - 1.3.2.3. USD \$1,000,000 bodily injury by disease policy limit.

**1.4. Contractor's Pollution Liability Insurance.**

- 1.4.1. USD \$1,000,000 each claim.
- 1.4.2. USD \$2,000,000 in aggregate.
- 1.4.3. Coverages.
  - 1.4.3.1. Written on a Claims-made basis.
  - 1.4.3.2. The retroactive date shall be not later than the Effective Date.

**Waiver of Subrogation.** Where permitted by law, all insurances required in Exhibit H shall include a waiver of subrogation. This release and waiver shall be null and void if such loss or damage may have been caused by the sole or gross negligence of the other party.

**Notice of Cancellation.** The General Contractor shall give the City prior written notice in the event of cancellation of any policy required to be obtained under Exhibit H.

**Certificates of Insurance.** Prior to commencing any work, and upon each renewal of insurance during the Term, Tesla shall provide certificates of insurance to the City evidencing the required insurance in Exhibit H.



## EXHIBIT I

## CONSTRUCTION CONTRACT FORM

## Master Services Agreement (Construction)

This Master Services Agreement (“*MSA*” or “*Agreement*”) is entered into by and between Tesla Inc., a Delaware corporation with offices at 13101 Tesla Road, Austin, Texas 78725 (“*Tesla*” or “*Owner*”) and the service provider identified below (“*Contractor*”) effective as of the date signed below by Tesla (“*Effective Date*”) and govern Contractor’s performance, and Tesla’s purchase, of services.

## 1. THE SERVICES

1.1 Obligation to Provide the Services, Generally. The parties intend through this Agreement to create a master contract setting forth the terms and conditions under which the Contractor will perform the Work and/or specified services, which make up the whole or a portion of particular Project or Projects. Individual work orders (“*Work Authorization*” or “*Work Authorizations*”) will be executed in the form attached hereto as Exhibit A, setting forth the agreement regarding Project-specific terms. This Agreement does not obligate Owner to engage Contractor to perform any work or Contractor to perform any work, until both parties have signed a Work Authorization, and then only for the Project specified in the Work Authorization. Any affiliate of Owner (the “*Service Recipient*”) will have the right to enter into a Work Authorization pursuant to this Agreement, and with respect to such Work Authorization, such affiliate becomes a party to this Agreement and references to Owner in this Agreement are deemed to be references to such affiliate.

1.2 Authorization of Services through Work Authorization. Contractor shall provide, and Tesla may purchase, Services pursuant to a Work Authorization. Both parties must sign a Work Authorization for it to be effective. If Contractor commences services for Owner or any affiliate of Owner in the absence of a Work Authorization, this Agreement will nevertheless apply, unless the parties agree otherwise in a writing signed by both parties. If there is a conflict between this Agreement and an Work Authorization, the terms of this Agreement will prevail; except that an Work Authorization may amend or override the terms of this Agreement if and to the extent that the Work Authorization identifies the provision(s) of the Agreement the Work Authorization is intended to amend or override and expressly states that the Parties intend to amend or override such provision(s) for purposes of that Work Authorization. The execution of a Work Authorization by the Owner and the Contractor creates a separate and distinct standalone construction contract that is applicable only to the Project identified in the Work Authorization, even though such Project-specific construction contract incorporates and makes reference to this Agreement, and other Project-specific construction contracts may also incorporate and refer to this Agreement. In no event shall the rights and obligations of the Owner and Contractor under one Project-specific construction contract affect the rights and obligations of Owner and Contractor under a different Project-specific construction contract.

1.3 Work; Scope of the Services. For each Project, the term “*Work*” means all reasonably necessary and inferable construction and services required of the Contractor by the Contract Documents (including, without limitation, all work, labor, materials, tools, equipment, transportation, procedures, techniques, and supplies), whether completed or partially completed, and whether completed by Contractor, Subcontractors, Sub-subcontractors, Suppliers or any other entity for whom the Contractor is responsible under or pursuant to the Contract Documents, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor’s obligations, including final completion of the construction in accordance with the Drawings and Specifications to achieve a complete and functioning Project in compliance with the Contract Documents. The Work may constitute the whole or a part of the Project, as described in the applicable Work Authorization. The “*Services*” are the following, as they may be supplemented, modified or replaced during the Term: (a) the functions described in this Agreement or in an Work Authorization as functions for which Contractor is responsible; and (b) any functions related to the foregoing that are not specifically described in this Agreement or in an Work Authorization but are required for the provision of the Services and the completion of the Work in accordance with this Contract Documents.

1.4 Services Not Exclusive. Contractor is a non-exclusive provider of Services. Tesla and its Affiliates have no obligation to order or purchase any Services. The extent and quantity of Services purchased shall be



determined by Tesla. Tesla may purchase from any third party services that are identical or similar to the Services described in this Agreement. Contractor will cooperate and coordinate with Tesla or any other service providers selected by Tesla as reasonably required for Tesla or the service provider to perform services for which it is responsible.

1.5 Relationship of the Parties. The Contractor accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Owner and all of the Owner's consultants, and exercise the Contractor's skill and judgment in furthering the interests of the Owner; to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests. The Owner agrees to furnish and approve, in a timely manner, information required by the Contractor and to make payments to the Contractor in accordance with the requirements of the Contract Documents. Nothing in this Agreement shall be deemed to create a joint venture or partnership between Contractor and Tesla or any of Tesla's Affiliates.

1.6 The Contract Documents. The Contract Documents form the "Contract for Construction" or the "Contract". The Contract represents the entire and integrated agreement between the Owner and Contractor and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Work Authorization or Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Owner and a Subcontractor or a Sub-subcontractor, or (2) between any persons or entities, other than the Owner and the Contractor. For each Project, the Contract Documents consist of this Agreement, any Supplementary Conditions of the Agreement as set forth in the applicable Work Authorization, Drawings, Specifications, Addenda issued prior to execution of this Agreement, the applicable Work Authorization, other documents listed in the Work Authorization and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. Except as provided to the contrary in any Work Authorization or Modification, the Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral, including, without limitation the terms of any purchase order now or hereafter accepted (or deemed accepted) by Contractor.

## 2. PERFORMANCE

### 2.1 Time of Performance.

(a) Contract Time. The Commencement Date shall be the date of the notice to proceed with construction on the Project site ("*Notice to Proceed*") sent by Owner to Contractor with respect to the Project or such other date as set forth in the Work Authorization. No Work on site shall be commenced by Contractor until receipt of a Notice to Proceed from Owner. However, during the period between the date the Agreement is executed and the date the Notice to Proceed is issued, certain elements of the Work may be authorized by the Owner. During such period all of the terms of the Agreement shall apply. The Contract Time shall be measured from the Commencement Date as specified in the applicable Work Authorization or Notice to Proceed. The Contractor shall achieve Substantial Completion of the Work within the Contract Time(s) specified in the applicable Work Authorization, subject to adjustments of the Contract Time as provided in the Contract Documents. Contractor will provide the resources necessary to, and will, complete all Services diligently, in a timely manner, and in accordance with the time schedules set forth in this Agreement (or applicable Work Authorization). Time is of the essence with respect to the provision of Services under this Agreement. Contractor will promptly notify Tesla in writing upon becoming aware of any circumstances that may reasonably be expected to jeopardize the timely completion of any Services. Contractor will use Commercially Reasonable Efforts to avoid or minimize any delays in performance and will inform Tesla of (a) the steps Contractor is taking or will take to do so and (b) the projected completion time. Within thirty days after the Effective Date, Contractor shall prepare and submit to Owner for Owner's approval a schedule for performance of the Work in a format and with a level of detail acceptable to Owner (the "Construction Schedule"). The Construction Schedule shall be of a critical path method type, acceptable to the Owner, that shall also (i) provide a graphic representation of all activities and events that will occur during the performance of the Work; (ii) identify each phase of construction and occupancy; (iii) set forth dates that are critical in ensuring the timely and orderly completion of the Work in accordance with the requirements of the Contract Documents ("Project Milestones"); and (iv) include time loss for normal adverse weather conditions whether shown in the



Contractor's logic and durations or not. The schedule shall be regularly updated by Contractor to reflect Project progress and conditions and any such updates shall be promptly provided to Owner in electronic and hard copy.

(b) Substantial Completion.

- (i) *Unless otherwise defined in an applicable Work Authorization, Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use, subject only to a list ("Punchlist") of minor items that do not adversely affect such use ("Punchlist Items"), provided, in addition, that as a condition precedent to Substantial Completion, the Contractor shall provide the Owner with a schedule of all permits required for the Work and occupancy of the Project and, attached to such schedule, a copy of each such permit.*
- (ii) *When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor and Owner will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Owner's inspection discloses any item, including a Punchlist Item, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Owner. In such case, the Contractor shall then submit a request for another inspection by the Owner to determine Substantial Completion.*
- (iii) *When the Work or designated portion thereof is substantially complete, the Contractor will prepare a "Certificate of Substantial Completion" that shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish any and all items on the Punch List accompanying the Certificate of Substantial Completion. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Contractor shall complete all items within 30 days after issuance of the Certificate of Substantial Completion, provided, however, if certain items cannot be completed due to the unavailability of necessary labor or materials, the Contractor shall have such additional time as is reasonably required to complete such items. All Work to be performed by the Contractor after Substantial Completion, including but not limited to Punch List work, shall be coordinated with the Owner and shall be performed after-hours unless otherwise agreed to by the Owner.*
- (iv) *The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents*

(c) Late Delivery Damages. Without limiting the foregoing and subject to the limitations, if any, set forth in the Work Authorization, Owner shall have the right to recover its damages incurred for actual, out-of-pocket costs either, in Owner's sole discretion, (i) to expedite Owner's vendors' work to avoid having to hold over in existing premises or to find replacement premises due to a delay caused by Contractor; or (ii) to hold over in existing premises or to find and occupy replacement premises, including, but not limited to, increased rent, moving, storage, transportation, fit-out and temporary occupancy costs due to a delay caused by Contractor.

(d) Delays and Extensions of Times. If the Contractor is delayed at any time in the commencement or progress of the Work by (i) an act or neglect of the Owner or of an employee or of separate contractor employed by the Owner; or by changes ordered in the Work by Owner (collectively "Compensable Delays"); or by (ii) labor disputes beyond the Contractor's control, fire, or unavoidable casualties (collectively "Excusable Delays"), then in either case, the Contract Time shall be extended by Change Order to the extent such delay will prevent





the Contractor from achieving Substantial Completion within the Contract Time, taking into consideration, without limitation, any float in the critical path Project schedule. The Contractor acknowledges and agrees that equitable adjustments in the Contract Time and equitable adjustments to the Contractor's General Conditions will be permitted for a delay only to the extent such delay (i) is not caused by the Contractor or its Subcontractors of any tier or its Suppliers, (ii) could not be limited or avoided by the Contractor's timely notice to the Owner of the delay or reasonable likelihood that a delay will occur, or (iii) could not be avoided or mitigated by reasonable work-around or precautionary measures. If there is a concurrent delay to the critical path attributable to Contractor and Owner, it will be proportionately allocated between Owner and Contractor based on the percent of impact caused by each party. The part of a concurrent delay allocated to the Owner is an Excusable Delay. Any adjustment in the Contract Time shall be limited to the impact of a delay on the critical path of the Project schedule. The Contractor further agrees that its right to receive an extension of time pursuant to the provisions of this Section shall be Contractor's sole and exclusive remedy with regard to any delays or interferences with the Contractor's schedule for completion of the Work, and Contractor hereby waives any and all claims for monetary damages arising out of or related to any such delay or interference, including, without limitation, claims for delay damages, and any other form of time-related damages, or any other claimed direct or consequential damages of any type or nature whatsoever.

(e) Change Orders

- (i) *Change Orders Generally. Changes in the Services may be accomplished after execution of the Work Authorization by written agreement (including via email) of Contractor and Tesla (each a "Change Order") using the change order form set forth in Exhibit B. Tesla will not be responsible for any change to the Contract Price unless Tesla approves or directs additional or changed Services through a Change Order before such additional or changed Services are commenced. Upon mutual execution of a Change Order, Contractor will promptly comply with such Change Order and all the terms and conditions of the Agreement apply to any Change Order. The Contract Price or Contract Time shall not be increased or extended by a Change Order except as specifically set forth in the Change Order. The adjustment to Contract Price, if any, for any change agreed to by the Contractor and Tesla in a particular Change Order shall constitute full and total payment for such change and for the impact (direct or indirect) to the remainder of the Services, and no other claim for any additional cost, damage, loss or expenses of any kind may be made by Contractor as a result of such Change Order.*
- (ii) *Change Order Requests by Contractor. Contractor may request changes to a Work Authorization by delivering a written request to Tesla (a "Change Order Request"). Any Change Order Request made by Contractor will include the following information: (a) a clear and concise explanation of the proposed changes; (b) validation of the requirements of the changes; (c) the exact amount and explanation of methods used to calculate any adjustments in the Contract Price and/or Work Schedule resulting from the Changes; and (d) a proposal for an updated Contract Price, Contract Time and Project Milestones, as applicable. A Change Order Request will not modify any Order until Tesla executes a Change Order expressly accepting the Change Order Request. Contractor will continue to perform obligations under the Agreement and Order regardless of the status or outcome of Change Order Requests.*

2.2 Manner of Performance. The Contractor agrees to provide the Work in accordance with the requirements of the Contract Documents and in accordance with the construction industry standards and practices. For each Project, the Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention in accordance with the Contract Documents, all Laws, and the construction standards and practices for the industry. The Contractor shall be solely responsible for, and have control over, initiating, maintaining, and supervising all safety precautions and programs to insure the safe provision or performance of the Work, and will control, supervise and direct the construction means, methods, techniques, sequences and procedures and coordinate all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as



stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and shall not proceed with that portion of the Work without further written instructions from the Owner. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Contractor shall not be responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures. Except with respect to third-party vendors performing work at the Project site pursuant to separate contracts between the Owner and such vendors, Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work. Contractor shall give Contractor's personal supervision to the Work using Contractor's best skill and attention. Contractor agrees to cooperate and coordinate with any third-party vendors performing work at the Project site pursuant to separate contracts between the Owner and such vendors, including reasonable cooperation in scheduling the use of shared items such as freight elevators, cranes and loading areas

2.3 Review of Project Site and Contract Documents. Execution of the Agreement by Contractor constitutes a representation by Contractor that it has visited the Project Site and reviewed the Contract Documents, and is familiar with the requirements of the Work and the conditions under which the Work will be performed. In particular, Contractor represents that it has satisfied itself with regard to the geotechnical and underground conditions related to the Work, and has performed all of the investigation of such conditions the Contractor has determined is necessary. The Contractor shall promptly send written notice to the Owner if the Contractor encounters any differing site conditions, or if the Drawings and Specifications are incomplete or if there are any errors or omissions in the Drawings. In addition, as part of the Work, the Contractor must satisfy all applicable federal and local laws, codes, regulations, ordinances and orders, as well as applicable regulations of any other body with jurisdiction over the Project and requirements of public or private utilities with no increases in the Contract Price or Contract Time. The Contractor acknowledges that (a) the Contractor has included the Contract Price to cover all costs which may result from the risks assumed by the Contractor in this Agreement, (b) the Contractor waives all rights to claim additional costs above the Contract Price as a result of the assumption of these risks, and (c) the provisions of this paragraph 2.3 apply notwithstanding any provisions to the contrary contained in the Contract Documents.

2.4 Responsibility for Supplying Certain Resources. Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated into the Work. Contractor shall be responsible for the proper delivery, handling, application, storage, removal and disposal of all materials and substances brought to the Project Site by Contractor. The Contractor shall have the responsibility to coordinate the Contractor's work with the utility service providers, municipal and/or off-site Contractors related to the Project and in the absence of other special provision of Contract Documents to the contrary, shall be required to coordinate with said entities the physical street/right-of-way work and connection to the structures and/or extensions from the structures to the off-site and/or on-site utilities so that the Work constructed by the Contractor is properly sequenced, and functional for the intended use and purpose thereof. Such coordination and supervision costs incidental thereto, are incidental to the Work and part of the Contract Price. Contractor shall plan and lay out all Work in advance of operations so as to coordinate all Work without delay or revision. Contractor shall establish and maintain existing lot lines, restrictions and benchmarks. Contractor shall establish and maintain all other lines, levels and benchmarks necessary for execution of the Work and take necessary steps to prevent dislocation or destruction.

2.5 Compliance with Laws and Tesla Policies.

(a) Except for permits and fees that are specifically made the responsibility of Tesla by this Agreement or any Work Authorization, Contractor will, at its cost and expense, obtain all necessary regulatory approvals, licenses, and permits (collectively, "Permits") applicable to its business and comply with all Laws applicable to its business or the performance of its obligations under this Agreement, as such Laws may be revised from time to time. Contractor shall provide copies of any such Permits at Tesla's request.

(b) Contractor will comply with, and perform the Services in compliance with, all Laws pertaining to: (i) occupational safety and health; (ii) protection of persons and property from death, injury or damage; (iii) the environment and the use, handling, storage, labeling and disposal of toxic or hazardous materials;



(iv) labor and employment conditions; (v) wages and hours; (vi) workmen's compensation and unemployment insurance, (vii) affirmative action and equal employment opportunity; and (viii) to the extent relevant to Contractor's performance of Services, Laws with respect to data privacy, data protection, and consumer privacy.

(c) To the extent not prohibited by Law, Contractor will promptly notify Tesla in writing of any investigation or inquiry into whether Contractor (or any of its Subcontractors) is charged with failing to comply with any Laws that may or will impact, or are otherwise applicable to, Contractor's performance under this Agreement.

(d) If the Project site is a site that Owner leases from the underlying owner of the site (the "Landlord") and Owner is making improvements to the site for purposes of occupancy as a tenant in connection with the use and occupancy of the Project site, Contractor will comply with the requirements of the use, license, or lease agreement to which Owner and Landlord are a party, together with any rules and regulations of the Project site put in place by the Landlord. Contractor acknowledges that disputes between Owner and Landlord (if any) may become subject to arbitration under the provisions of lease between Owner and Landlord, and if requested in writing by Owner to do so, Contractor shall participate in and become a party to any such arbitration proceeding and agrees to be bound by any final and binding arbitration decision rendered therein. This Section shall apply only to issues and claims directly relating to Contractor and only so long as Contractor has the opportunity and rights to fully participate in any arbitration, including, but not limited to, selection of arbitrators.

(e) Contractor will comply with any Tesla policies, standards, rules, and procedures (collectively, "*Tesla Policies*") applicable to performance of the Services or the Tesla Facility that are disclosed to Contractor in writing, as such Tesla Policies may be revised from time to time.

2.6 Suspension of Performance. The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine. The Contract Price and Contract Time shall be adjusted for increases and decreases in the cost and time caused by suspension, delay or interruption as described in Section 2.1(d). No adjustment shall be made to the extent: (1) that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or (2) that an equitable adjustment is made or denied under another provision of the Contract.

2.7 Warranty. In addition to any other warranty provisions contained in the Agreement, Contractor warrants to Tesla that Materials and equipment furnished under the Agreement will be of good quality and new unless otherwise required or permitted, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved, shall be considered defective. Contractor's warranty excludes damage or defect caused by abuse, modifications not executed by Tesla, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. The minimum warranty provided by Contractor shall be 1 year from the date of Substantial Completion. Contractor will promptly correct any Work that are defective or that do not otherwise comply with the Work Authorization at Contractor's sole expense without causing unreasonable interruption to Customer's business operations in the Project. All warranties shall survive completion, acceptance and final payment. In the event that damage or defect is caused by abuse, improper modification, or lack of maintenance on Tesla's part, the warranty shall only exclude any such specific damage or defect and shall continue to cover the rest of the assembly, provided that in the event the defect relates to material or equipment that has been specified by Tesla by brand name, the manufacturer's warranty shall apply in the event of conflict between the manufacturer's warranty and this sentence. To the extent the Work consist of equipment or other movable or functional components manufactured by other companies, Contractor will obtain warranties for such equipment or components for a period of no less than the manufacturer's standard warranty period and Contractor will manage administration of the warranties issued by those companies. Contractor will not be liable for defects in these components or damages resulting from these defects, unless due to Contractor's negligent procurement or installation.

2.8 Hazardous Materials. Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents, Contractor shall, upon recognizing the condition,



immediately stop Work in the affected area and report the condition to the Owner in writing. Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be removed or rendered harmless. The Owner shall not be responsible under this Article 5.8 for materials Contractor brings to the Project Site. Except to the extent of the Contractor, Contractor's employees and agents, or subcontractor's negligence, or Contractor's failure to immediately provide notice to Owner regarding the hazardous materials (other than hazardous materials to which Contractor was already aware prior to the Effective Date herein referred to as "Known Environmental Conditions") as set forth above, the Owner shall indemnify and hold harmless the Contractor, subcontractors, and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the area affected by hazardous materials (other than Known Environmental Conditions) if in fact the material or substance presents the risk of bodily injury or death and has not been rendered harmless within a reasonable period of time after its discovery, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity.

2.9 Clean Project. Contractor shall keep the Project site and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Agreement. At completion of the Work, Contractor shall remove waste materials, rubbish, Contractor's tools, equipment, machinery and excess materials from the Project Site.

2.10 Progress Reports. By 2:00 p.m. (PST) each Friday during the Contract Time, Contractor will deliver to Tesla in electronic format a weekly progress report, which report shall include, without limitation, (1) pictures of the Project site detailing progress made during the week, (2) a Change Order log, detailing any Change Orders that have been agreed to by the parties in the previous week, or have been proposed by either party during the previous week. Tesla's acceptance of Contractor's weekly progress report shall in no way serve as Tesla's acceptance of any Change Order that has not been otherwise agreed to by the parties.

### 3. CONTRACTOR PERSONNEL AND SUBCONTRACTING

#### 3.1 General Requirements for Contractor Personnel.

(a) "*Contractor Personnel*" means any personnel furnished by Contractor to perform any part of the Services, including employees and independent contractors of Contractor, its Affiliates and Subcontractors.

(b) Contractor will assign an adequate number of Contractor Personnel to perform the Services who are properly educated, trained, familiar with and fully qualified for the Services they are assigned to perform (including, without limitation, licensed in the relevant regions to provide work that requires a license). Contractor will assign sufficient supervisory personnel to provide adequate liaison with Tesla. Contractor will manage, supervise and provide direction to Contractor Personnel and cause them to comply with the obligations and restrictions applicable to Contractor under this Agreement. Contractor is responsible for the acts and omissions of Contractor Personnel under or relating to this Agreement. Contractor is responsible for validating the identity of and ensuring that Contractor Personnel assigned to perform Services (i) have the legal right to work in the country(ies) in which they are assigned to work, and (ii) conform to all applicable Tesla Policies with respect to personal and professional conduct (including the wearing of an identification badge and adhering to general safety, dress, behavior, and security practices).

(c) Prior to assigning any Contractor Personnel to perform any Services, Contractor shall perform background checks of the personnel. Such background checks may have been performed as part of Contractor's standard pre-employment screening process and will include the following, at a minimum: (i) education verification; (ii) prior employment verification for all employees; (iii) social security verification; and (iv) felony and misdemeanor criminal checks. Tesla may require Contractor to provide written evidence of successful background checks on Contractor Personnel at any time. Unless prohibited by law, Contractor may not assign any person to perform Services for Tesla who was convicted of any criminal offense involving extortion, embezzlement, money laundering, or who has been convicted of a felony crime without Tesla's prior written consent.



3.2 Key Contractor Positions. “Key Contractor Positions” means those positions designated as such in Exhibit A or the applicable Work Authorization. Contractor will cause each of the Contractor Personnel filling the Key Contractor Positions to devote substantially full time and effort to the provision of the Services during the period of assignment. The appointment, removal and replacement of any person to a Key Contractor Position may only be made with Tesla’s prior written approval, such approval not to be unreasonably withheld.

3.3 Subcontracting.

(a) Work not performed by Contractor with its own forces shall be performed by Subcontractors (“Subcontractors”). Subject to Section 3.3(b), Contractor may not subcontract or delegate the performance of any part of the Services without Tesla’s prior written consent, which Tesla may withhold in its sole discretion. If Tesla approves a Subcontractor that is an Affiliate of Contractor, such approval is subject to the Subcontractor remaining an Affiliate of Contractor. Tesla may require Contractor to replace any previously approved Subcontractor whose performance, in the reasonable judgment of Tesla, has been unacceptable. Contractor is responsible for managing all Subcontractors and is responsible for all Subcontractors to the same extent as if the subcontracted Services were retained by Contractor. Contractor will be Tesla’s sole point of contact regarding the Services and all subcontracted Services, including for payment. Contracts entered into between Contractor and Subcontractors and Suppliers shall bind the Subcontractors and Suppliers to all the provisions of this Agreement as they apply to the Subcontractors’ and Suppliers’ portions of the Work,

(b) Contractor may, in the ordinary course of business, utilize third party services or products that are not dedicated to performance of Services for Tesla and that are not material to any particular function constituting a part of the Work. Contractor may also engage individual independent contractors to supplement its employee workforce. Such arrangements do not constitute Subcontracting for the purposes of this Section. Contractor will nevertheless be responsible for such parties. The Contractor shall be responsible to the Owner for acts and omissions of the Contractor Parties, the Contractor’s employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.



#### 4. CHARGES

4.1 Contract Price. For each Project, the Owner shall pay the Contractor in current funds the Contract Price in the applicable Work Authorization, as adjusted for additions or deductions made by Change Order in accordance with the Contract Documents. For clarification, Owner will make no payments to Contractor apart from those it makes for Work Authorization and shall not exceed the Contract Price.

4.2 Schedule of Values. Owner shall pay Contractor for successfully carrying out the Work according to the agreed schedule of values defined in the relevant Work Order unless specified therein that Contractor will only be entitled to request payment of amounts associated with a Construction Milestone upon completion of the applicable Construction Milestone conditions precedent.

4.3 Progress Payment. Subject to the terms of this Section 4.3, on or before the 25th day of each month after the Effective Date, Contractor shall submit to Owner an application for payment ("Application for Payment") in a form acceptable to Owner, for payment of the portion of the Work actually completed in the period covered by the Application for Payment. Based upon Applications for Payment submitted to the Owner by the Contractor with all necessary supporting documentation required by this Agreement, the Owner shall make progress payments for Work completed in accordance with the Contract Documents. Such payments shall be made to the Contractor as provided below and elsewhere in the Contract Documents. The period covered by each Application for Payment shall be one calendar month ending on the last day of the month or as set forth in the applicable Work Authorization. Owner shall make payment to the Contractor sixty (60) days after receipt of an Application for Payment that complies with this Agreement. Contractor shall submit Applications for payment for the labor and materials furnished the prior month, on a monthly basis.

(a) Each Application for Payment submitted by Contractor shall contain sufficient detail for Owner to discern how the amount requested in such application is broken out among Contractor's costs of supplies, materials, Subcontractors (identified individually with specificity), taxes, fee, overhead and any other costs, and any other details which Owner may request. Each such Application for Payment shall be accompanied by (i) conditional lien releases from all Subcontractors and material Contractors who performed and were paid for any Work or provided and were paid for any materials for the Work through the date of the Application for Payment and (ii) unconditional lien releases from all Subcontractors and material Contractors who performed and were paid for Work or provided and were paid for any materials for the Work through the date of the prior Application for Payment, such that at the time of an Application for Payment the unconditional and conditional lien releases for the Project shall be current for all materials provided to and Work performed on the Project through the respective Application for Payment. Owner's obligation to pay Contractor the amount requested in the correct Application for Payment shall be subject to Owner's receipt of both such lien releases, which must be reasonably satisfactory to Owner. All lien waivers and releases and all stop payment documents shall comply with all Laws of the state in which the Project is located.

(b) Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The Contractor shall update the schedule of values as reasonably requested by Owner, but no less than every three months, to show changes therein. The schedule of values shall allocate the entire Contract Price among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Owner may require. This schedule, unless objected to by the Owner, shall be used as a basis for reviewing the Contractor's Applications for Payment.

(c) Each Application for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage of completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed; or (2) the percentage obtained by dividing (a) the expense that has actually been incurred by the Contractor on account of that portion of the Work for which the Contractor has made or intends to make actual payment prior to the next Application

(d) Each Application for Payment made by the Contractor to the Owner shall constitute a warranty to Owner that the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents. In taking action on the Contractor's Applications for payment or by making payments upon any Application for Payment, the Owner shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor and shall not be deemed to represent that the



Owner has made a detailed examination, audit or arithmetic verification of the documentation or other supporting data; that the Owner has made exhaustive or continuous on-site inspections, or that the Owner has made any on-site inspections; or that the Owner has made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Contract. Such examinations, audits and verifications, if required by the Owner, will be performed by the Owner's auditors or other personnel acting in the sole interest of the Owner.

(e) Charges, if any, that Contractor fails to invoice to Tesla within 120 days of the date that such charges should have been billed to Tesla will not be payable by Tesla. In the case of third party charges for which Tesla is responsible for paying or reimbursing Contractor, the 120-day period will not begin to run until Contractor has been invoiced for such charges by the applicable third party.

(f) The amount to be paid on an Application for Payment shall be calculated by:

(i) *Take that portion of the Contract Price properly allocable to completed Work as determined by multiplying the percentage of completion of each part of the schedule of values less retainage. Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute may be included;*

(ii) *Add that part of the schedule of values allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work, or if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing, less retainage;*

(iii) *Subtract the aggregate of previous payments made by the Owner;*

(iv) *Subtract the shortfall, if any, indicated by the Contractor in the documentation required by Section 4.3(a) to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and*

(v) *Subtract amounts, if any, for which the Owner has withheld payment as provided in Section 4.4.*

4.4 **Owner Withholding.** Owner shall be permitted to withhold progress payments from Contractor for any of the reasons identified below until the reasons giving rise to the withholding are removed:

(a) defective Work not remedied;

(b) third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;

(c) failure of the Contractor to make payments properly to Subcontractors and/or Suppliers or for labor, materials or equipment;

(d) reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;

(e) damage to the Owner or a separate contractor;

(f) reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;

(g) failure to carry out the Work in accordance with the Contract Documents;

(h) any claims which Owner has against Contractor under or in connection with the Contract Documents or Contractor's work; or

(i) failure of the Contractor to provide updated weekly status reports and progress schedules.



When the reasons giving rise to the withholding are removed, Owner shall pay the withheld amounts within thirty (30) days.

4.5 Retention. Except with the Owner's prior approval, payments to Subcontractors and Contractors at all tiers (including all major fabricators and manufacturers) and to the Contractor for self-performed work shall be subject to retainage of not less than ten percent (10%) unless stated otherwise in the applicable Work Authorization. The Owner and the Contractor shall agree upon a (1) mutually acceptable procedure for review and approval of payments to Subcontractors and (2) the percentage of retainage held on Subcontracts, and the Contractor shall execute subcontracts in accordance with those agreements. Payments to Contractor shall be subject to a retainage of 10% of the Contract Price with the final 10% of Contract Price payable upon Final Completion unless stated otherwise in the applicable Work Authorization.

4.6 Contractor Payment of Subcontractors. Within seven days after receipt of any progress payment by Contractor, Contractor shall pay (and secure the discharge of any liens asserted by) all persons furnishing labor, equipment, materials or other items in connection with the performance of the Work (including, but not limited to, any Subcontractors, Sub-subcontractors or Suppliers). Contractor agrees that provided Owner has paid Contractor in accordance with the Contract, Owner has the right to a lien free Project. Owner may, at its discretion, make joint payments to Contractor and its creditors. Owner reserves the right, in the event a claim is made against Owner arising out of any obligation incurred by Contractor under the Contract or in connection with performance of the Work, to withhold payments due to or become due to Contractor in such amounts as are necessary to cover the claim and any costs or expenses arising in connection with the legal settlement thereof. Contractor further agrees that if any lien or claim is filed or made against the Project site, Project or Owner as a result of Contractor's failure to meet its obligations, Owner upon fourteen (14) days prior written notice shall have the right to settle said lien or claim directly and deduct the cost of the settlement from payments due Contractor, provided that Contractor within such fourteen (14) day period has not settled such lien or claim or bonded around such lien claim in a manner satisfactory to Owner.

4.7 Final Payment. Provided that the Contract Price is not exceeded, final payment, constituting the entire unpaid balance of the Work (which shall include the retention withheld), shall be made by the Owner to the Contractor when

- (a) the Contractor has fully performed the Contract (including completing work on Punch Lists) except for the Contractor's responsibility to correct Work, and to satisfy other requirements, if any, which extend beyond final payment;
- (b) the Contractor has submitted a final accounting for the Work and a final Application for Payment;
- (c) Contractor has submitted to Tesla both a physical copy (to be left at the Project site) and a digital copy of the final as-built record Drawings and Specifications in both of physical copy
- (d) Contractor has submitted to Tesla all warranties and all operation and maintenance manuals;
- (e) Completion of Punch List items;
- (f) Appropriate final lien releases have been delivered to the Owner for Contractor, all Subcontractors, and all Contractors; and
- (g) the Contractor has recorded a certificate of completion with the applicable governmental authority in accordance with the Laws.

As used herein, the term "Final Completion" and words of similar impact shall mean that all of the requirements set forth above have been fully performed, and "Final Completion Date" shall mean the date on which Final Completion occurs. The Owner's final payment to the Contractor shall be made no later than sixty (60) days after receipt by Owner of a final Application for Payment containing confirmation of the items set forth above and such other terms as a required pursuant to the terms of the Contract Documents.





#### 4.8 Incidental and Out-of-Pocket Expenses.

(a) Unless expressly provided otherwise in a Work Authorization, Tesla is not responsible for any additional costs or expenses of any nature incurred by Contractor in connection with the provisions of the Services, including travel expenses, clerical or administrative personnel, long distance telephone charges, etc. ("*Incidental Expenses*"). To the extent that an Work Authorization requires Tesla to reimburse Contractor for Incidental Expenses, Tesla is not responsible for any such reimbursement unless the expenses are (i) approved, in each instance, in advance by Tesla; (ii) substantiated by appropriate receipts and related documentation; and (iii) in compliance with Tesla's corporate travel policies and procedures, as amended from time to time in Tesla's sole discretion. In no event will Tesla be liable for payment of any Incidental Expenses that exceed Contract Price under a Work Authorization by 10% or more.

(b) "*Out-of-Pocket Supply Expenses*" are the reasonable, demonstrable and actual out-of-pocket expenses incurred by Contractor for equipment, materials, or supplies required for performance of the Services and specified in writing by Tesla as reimbursable, and "*Out-of-Pocket Service Expenses*" are the reasonable, demonstrable and actual out-of-pocket expenses incurred by Contractor for services (such as with tier 2 service providers) required for performance of the Services and specified in writing by Tesla as reimbursable ("*Out-of-Pocket Expenses*" refers collectively to Out-of-Pocket Supply Expenses and Out-of-Pocket Service Expenses). Out-of-Pocket Expenses are to be determined net of all rebates, discounts and allowances received by Contractor, and shall not include Contractor's actual or allocated overhead costs, administrative expenses or other mark-ups; provided, however, that Contractor may charge Tesla a five percent (5%) markup on Out-of-Pocket Supply Expenses.

#### 4.9 Taxes.

(a) Contractor may charge, and Owner will pay, applicable federal, state or local sales or use taxes or value added taxes that Contractor is legally obligated to charge with respect to the Work ("*Taxes*"), provided that the Contractor shall identify the amount of Taxes due on each payment as a separate line item on its Application for Payment and shall be responsible for remitting to the appropriate office of the State in which the Project is located, the amount received from the Owner for payment of Taxes. Although not included as part of the Contract Price, the Contractor shall show Taxes for the Contract Price on the schedule of values as a separate line item. Owner may provide Contractor an exemption certificate acceptable to the relevant taxing authority, in which case Contractor shall not collect the Taxes covered by such certificate, and if the Contract Price assumed that such Taxes would be collected, the Contract Price shall be reduced by the amount of such Taxes. Contractor will be solely responsible for all other taxes or fees (including penalties, interest, and other additions thereto) arising from the Contract and Work.

(b) Withholding Taxes. Owner shall maintain the right to deduct or withhold any taxes that Owner determines it is obligated to withhold from any amounts payable to Contractor under this Agreement, and payment to Contractor as reduced by such deductions or withholdings will constitute full payment and settlement to Contractor of such amounts. Tesla shall not be obligated to pay for any Taxes (i) that are assessed on any goods or services used or consumed by Contractor (or its Subcontractors) in providing the Services where the tax is imposed on Contractor's (or its Subcontractor's) acquisition or use of the goods or services in its provision of the Services; or (ii) that are assessed by taxing authorities in countries other than the United States or the country in which Tesla receives the Services. If laws, rules or regulations require the withholding of income taxes or other taxes imposed upon payments set forth in this Section 4, Tesla shall make such withholding payments as required and subtract such withholding payments from the payments. Tesla shall submit appropriate proof of payment of the withholding taxes to the Contractor within a reasonable period of time. At the request of Contractor, Tesla shall give Contractor such reasonable assistance, which shall include the provision of appropriate certificates of such deductions made together with other supporting documentation as may be required by the relevant tax authority, to enable Contractor to claim exemption from such withholding or other tax imposed or obtain a repayment thereof or reduction thereof and shall upon request provide such additional documentation from time to time as is reasonably required to confirm the payment of tax.

4.10 Failure of Payment. If the Owner, through no fault of the Contractor, does not pay the Contractor within thirty (30) days after the date established in the Contract Documents the undisputed portion of any Application for Payment or the amount awarded by binding dispute resolution, then the Contractor may, upon five (5) additional business days' written notice to the Owner, stop the Work until payment of the amount owing has



been received. The Contract Time shall be extended appropriately and the Contract Price shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Contract Documents.

## 5. OWNER

5.1 **General.** The Owner is the person or entity identified as such in the Agreement or applicable Work Authorization and is referred to throughout the Contract Documents as if singular in number. The Owner shall appoint an individual named in the Work Authorization as its representative for the Project ("Owner's Representative"). Notwithstanding anything to the contrary in this Agreement, no person or entity may bind Owner in any manner with respect to this Agreement other than (i) Owner's Representative; (ii) the president or a vice president of Owner, and (iii) any other representative of Owner that is expressly granted such authority in a Work Authorization or other document executed by Owner (and then only to the extent of such grant). The term "Owner" refers to the entity or individual named in the Work Authorization as such, or its successors in interest. Neither the presence of, nor the monitoring or observations of the Owner's Representative shall limit or reduce the Contractor's liability for defects in the Work, and it is understood that the Contractor will be solely and completely responsible for its Work, compliance with the Contract Documents, and the working conditions on the job site, including safety, during the performance of the Work. The day-to-day communications between the Owner and Contractor, including all written authorizations and written communications shall be directed to the Owner and, if one is designated in the Work Authorization, the Owner's Representative.

5.2 **Information and Services Required of the Owner.** Except for Permits that are the responsibility of the Contractor under the Contract Documents, including those required under Section 2.6, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for Owner's use or occupancy of permanent structures or for permanent changes in existing facilities. If the Contractor becomes aware of any such approvals or permits that are the Owner's responsibility, Contractor shall promptly, in writing, notify the Owner of the requirement. The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and reasonably required for the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

5.3 **Savings Clause.** Tesla's failure to perform, or cause to be performed, any of its responsibilities (other than payment as required under Article 4) will not constitute grounds for termination by Contractor except as provided in Section 8.4 (Termination by Contractor); provided, however, that Contractor's nonperformance of its obligations under this Agreement will be excused if and to the extent (i) such nonperformance results from Tesla's failure to perform any of its responsibilities, and (ii) Contractor provides Tesla with reasonable notice of such nonperformance and, if requested by Tesla, uses Commercially Reasonable Efforts to perform notwithstanding Tesla's failure to perform. If Contractor's use of Commercially Reasonable Efforts to perform in such a circumstance would cause Contractor to incur significant uncompensated expenses, Contractor may notify Tesla. In that case, Contractor's obligation to continue its efforts to work around Tesla's failure to perform will be subject to Tesla agreeing to reimburse Contractor for its incremental uncompensated expenses.

### 5.4 Access to Tesla Systems and Facilities.

(a) From time to time, Tesla may provide Contractor with access to proprietary computer systems and technologies owned and operated by Tesla and/or its affiliates to facilitate the Services (the "Systems"). Contractor will only use the Systems for the business purposes of Tesla. Tesla may periodically monitor all uses of the Systems as allowed by law and review user access records maintained by Contractor. Contractor's users will have no expectation of privacy when using the Systems. Contractor shall be solely responsible for obtaining and maintaining the hardware and software it uses which are necessary to properly access the Systems and perform the Services.

(b) Tesla will provide to Contractor Personnel assigned to work at a Tesla Facility the reasonable use of the facility. Contractor will use the Tesla Facility for the sole purpose of providing the Services. Contractor will be responsible for any damage to the Tesla Facility caused by Contractor Personnel. Contractor will permit Tesla and its agents and representatives to enter into those portions of Tesla Facility that are occupied by Contractor Personnel at any time and, when those portions of the Tesla Facility are no longer required for performance of the Services, Contractor will return them to Tesla in substantially the same condition as they were in when Contractor began use of them, subject to reasonable wear and tear.



## 6. CONFIDENTIALITY

6.1 Confidentiality. Tesla's mutual non-disclosure agreement as of the Effective Date or, if applicable, the signed non-disclosure agreement then in effect between the Parties ("*NDA*") sets forth the Parties' respective confidentiality obligations hereunder. The NDA is hereby incorporated by reference in this Agreement, and the terms and conditions of the NDA will continue in force throughout the Term. Tesla's Confidential Information shall be deemed, for purposes of this Agreement, to include all Intellectual Property Rights owned or separately licensed by Tesla.

6.2 Data Security. Contractor will: (i) establish, implement and maintain commercially reasonable safeguards against the destruction, loss, alteration and unauthorized access and use of Tesla Data in the possession or control of Contractor (or its Subcontractors) that are no less rigorous than those maintained by Tesla as of the Effective Date and are no less rigorous than those maintained by Contractor for its own data of a similar nature; and (ii) comply with Tesla's information and data security policies as disclosed to Contractor from time to time. Upon written request by Owner, Contractor will deliver to Tesla a copy of all Tesla Data in its possession or control in the form and format requested by Tesla.

## 7. Intellectual Property Rights

7.1 Tesla Material. "*Tesla Material*" means all information systems and technology, software, tools, methods, forms, processes, workflows, data, compilations, designs, manuals and other material owned, licensed to, or developed by Tesla (or its Affiliates) that is made available to Contractor Personnel for use in rendering the Services. Subject to any limitations or restrictions set forth in agreements between Tesla (or its Affiliate) and third party licensors of Tesla Material, Tesla grants Contractor a limited, nonexclusive, non-transferable, no-charge license during the Term to Use the Tesla Material in the location(s) approved by Tesla as set forth in Work Authorizations in accordance with this Agreement for the sole purpose of providing the Services. When Tesla Material is no longer required for performance of the Services, or in any event upon expiration or termination of the Agreement, Contractor will return it to Tesla in an agreed format or, at Tesla's election, destroy it and certify the destruction of all copies in Contractor's (and any Subcontractor's) possession or control.

7.2 Developed Material. Subject to Section 7.3, Tesla will own all Intellectual Property Rights in and have the sole right to use all Deliverables and other work product created by Contractor Personnel for Tesla under this Agreement (collectively, "*Developed Material*"). Developed Material will be deemed to be works made for hire owned by Tesla upon their creation. To the extent that any such Developed Material is not deemed to be a work made for hire and the property of Tesla by operation of Law, Contractor irrevocably assigns, transfers and conveys to Tesla, without further consideration, all of its right, title and interest (including all Intellectual Property Rights) in and to such Developed Material. Contractor shall execute (and cause its employees to execute) such documents or take such actions as Tesla may reasonably request to perfect Tesla's ownership of Developed Material. Contractor will promptly disclose the creation of Developed Material to Tesla. Tesla grants to Contractor a fully paid-up, royalty-free, nonexclusive license during the Term to Use such Developed Material solely as necessary to perform the Services, and to sublicense Subcontractors involved in rendering the applicable Services to do the same on Contractor's behalf.

7.3 Contractor Material. Tesla's ownership of Developed Material that incorporates any material created and owned by Contractor (or its Subcontractor) outside the performance of Services hereunder ("*Contractor Material*") will be subject to Contractor's (or its applicable Subcontractor's) ownership of such Contractor Material. Unless otherwise agreed in a separate written license agreement executed by the Parties, Contractor grants to Tesla (and its Affiliates) a non-exclusive, royalty-free, perpetual, irrevocable, transferable, fully paid-up, world-wide license to Use, sublicense and distribute Contractor Material that is incorporated into any Developed Material or is reasonably required to Use any Developed Material in a cost-effective manner (*e.g.*, tools). Contractor shall obtain Tesla's written approval prior to incorporating any Contractor Material into any Developed Material.

7.4 Third Party Material. Contractor will not incorporate any third party proprietary materials, information or intellectual property ("*Third Party Material*") into Developed Material, including all Deliverables or other work product to be delivered to Tesla, unless Contractor has obtained for Tesla a perpetual, worldwide, fully paid-up, royalty-free, non-exclusive license permitting Tesla and its Affiliates to use, sublicense and distribute such Third Party Material in the conduct of their normal business operations.



7.5 Open Source Code. Contractor represents and warrants that it will not incorporate any Open Source Code into a Deliverable or other work product to be delivered to Tesla without Tesla's express, prior written consent.

7.6 Intellectual Property Rights Agreements with Contractor Personnel. Contractor is responsible for having in place with all Contractor Personnel (either directly or indirectly through their respective employers) such agreements respecting Intellectual Property Rights as are necessary to comply with this Section 7 (Intellectual Property Rights).

7.7 Licenses and Rights Survive Bankruptcy. All licenses and rights of Use granted under or pursuant to this Agreement shall be deemed to be licenses to rights in "intellectual property" for the purposes of Section 365(n) of the United States Bankruptcy Code.

7.8 No Interference. Nothing in this Agreement will be deemed to prevent Contractor from carrying on its business or developing for itself or others materials that are similar to or competitive with those produced as a result of the Services provided they do not contain or disclose any Confidential Information or proprietary information of Tesla or otherwise infringe or constitute a misappropriation of Tesla's Intellectual Property Rights.

## 8. TERM AND TERMINATION

8.1 Initial Term. Unless terminated earlier as provided below, the term of the Agreement will be from the Effective Date until the first anniversary of the Effective Date (the "**Term**"). Thereafter, this Agreement will be automatically extended on a month-to-month basis until either party terminates this Agreement pursuant to this Section 8 or by providing at least 180 days prior written notice of termination to the other party.

8.2 Termination, Generally. This Agreement or a Work Authorization may only be terminated as provided in this Section 8. Termination by a Party will be without prejudice to any other rights and remedies available to a Party. Tesla will not be obliged to pay any termination charges or demobilization fees in connection with the termination of this Agreement.

### 8.3 Termination by Tesla.

(a) For Convenience. Owner may, at any time and for any reason or for no reason, terminate the Agreement or any Work Authorization. Following a termination for convenience, Contractor shall be entitled to receive payment for Work executed, and the reasonable costs incurred by reason of such termination, but shall not be entitled to any recovery for lost profits or lost business opportunity.

(b) For Cause.

- (i) *Tesla may terminate this Agreement, a Work Authorization or a Project, for cause, as follows: (a) for default without affording Contractor any additional time or opportunity to cure: (i) if Contractor commits a breach of Section 6 (Confidentiality) of this MSA; (ii) if Tesla is not able to perform under this Agreement by a reason outside of its reasonable control, including without limitation, by reason of a casualty or other destruction of the Project site; (iii) if Contractor violates any Tesla Policies of which Contractor has been given notice or applicable Laws; (iv) if Contractor breaches Section 9.6 (Debarment) of this MSA; or (v) if Contractor commits multiple breaches of this Agreement, none of which is necessarily a material breach, but which Tesla determines have had an aggregate effect comparable to that of a material breach; or (b) if Contractor has breached any material obligation under this Agreement and does not cure the breach within 15 days after receiving notice of it from Tesla, including, without limitation, (i) refusal or failure to supply enough properly skilled workers or proper materials, (ii) fails to make payment to Subcontractors or Suppliers for materials or labor in accordance with this Agreement; (iii) fails to provide Owner with a construction schedule, construction schedule updates, weekly progress reports, certificates of insurance or any required payment or performance bond in the form and within the time required under the Contract Documents, (iv) failure to achieve Substantial Completion or Final Completion on or before the dates specified in the Contract Documents or otherwise fails to adhere to the Construction Schedule in performing the Work, or (v) fails to timely remove Mechanic's Liens, provided, in each case, Contractor shall not be entitled to a grace period if it has breached the same obligation more than once.*



- (ii) *Upon termination of this Agreement for cause by Owner, Contractor will discontinue the Work, and Owner will be entitled to take possession of the Work and the Project Site and all or any part of the equipment and materials delivered or en route to the Project Site for incorporation into the Work. If requested by Owner, Contractor will make every reasonable effort to cancel any existing orders, subcontracts, and other contracts specified by Owner upon terms satisfactory to Owner, and Contractor will not place any further orders or enter into further subcontracts for Equipment and Materials, labor, services or facilities for the terminated Work. Contractor, upon request, will also deliver and assign to Owner, and Owner may assume, any and all contracts, subcontracts, purchase orders, and options made by Contractor in performance of the terminated Work. In addition to any other remedies and damages to which Owner may be entitled to pursue, Owner shall be permitted to seek enforcement of the provisions of this Section by means of specific enforcement or injunction. Notwithstanding any termination, Contractor will take such steps as are reasonably necessary to preserve and protect Work completed and in progress and to protect materials, supplies, plant and equipment at the Work Site or in transit.*
- (iii) *Upon termination by Owner for cause, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price ultimately exceeds the Owner's cost of completing the Work, such excess shall be paid to Contractor. If the costs of completing the Work exceed Contractor's unpaid Contract Price, Contractor shall pay the difference to Owner.*

8.4 Termination by Contractor. The Contractor may terminate the Contract if the Work is stopped for a period of 90 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons only: (1) Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped; (2) An act of government, such as a declaration of national emergency that requires all Work to be stopped; or (3) Owner has not delivered payment pursuant to an Application for Payment for two (2) consecutive months without providing notice of any withholding.

8.5 Operational Transition. Upon termination or expiration of this Agreement, Contractor will deliver to Tesla and/or a subsequent supplier any remaining property of Tesla in Contractor's possession, including reports, data, work product, and Confidential Information (alternatively, as requested by Tesla, Contractor will destroy such property), and certify that all such Tesla property has been removed from Contractor's systems, premises and control and either returned or destroyed. All materials in electronic form shall be delivered to Tesla on such media and in such file format as Tesla may direct.

## 9. REPRESENTATIONS AND WARRANTIES OF CONTRACTOR

9.1 Performance of Services. Contractor represents and warrants that it will perform all Services (i) in accordance with this Agreement and the Work Authorizations; (ii) in a good, professional and workmanlike manner, free from defects in material and workmanship and in accordance with industry standards; (iii) in strict accordance with Contractor's specifications, samples or other descriptions provided to Tesla or approved or adopted by Tesla; (iv) in compliance with all applicable Laws; (v) efficiently and in a cost-effective manner subject to the requirements of this Agreement; and (vi) using qualified personnel with suitable training, education, experience and skill to perform the Services in accordance with timing and other requirements of the Agreement.

9.2 Contractor Registration. The Contractor hereby warrants and represents that it is a duly licensed Contractor under the laws of the state in which the Project is located and that its Contractor's license number is as set forth in the Work Authorization.

9.3 Sufficient Information. Execution of a Work Authorization by the Contractor is a representation that the Contract Documents are sufficient to have enabled the Contractor to determine the cost of the Work therein, to enter into the Work Authorization, and to accomplish the Work for an amount not in excess of the Contract Price within the Contract Time provided for in the Contract Documents. The Contractor further represents and warrants that prior to execution of the applicable Work Authorization it has visited and examined the Project site, examined all physical, legal, and other conditions affecting the Work and is fully familiar with all of the conditions thereon and thereunder affecting the same, including (1) the nature, location and character of the Project site, including all structures and obstructions thereon, both natural and man-made; (2) the nature,



location, and character of the general area in which the Project is located, including without limitation, its climatic conditions, available labor supply and labor costs, and available equipment supply and equipment costs; and (3) the quality and quantity of all materials, supplies, tools, equipment, labor and professional services necessary to complete the Work in the manner and within the cost and time frame required by the Contract Documents. THE FAILURE OF THE CONTRACTOR TO FULLY ACQUAINT ITSELF WITH ANY PROVISION OF THE CONTRACT DOCUMENTS OR OTHER MATTER SHALL NOT IN ANY WAY RELIEVE IT FROM THE RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND WITHIN THE GUARANTEED MAXIMUM PRICE AND THE CONTRACT TIME AS PROVIDED FOR IN THE CONTRACT DOCUMENTS.

9.4 Non-Infringement. Contractor represents and warrants that: (a) the Services will not infringe or misappropriate any Intellectual Property Rights of any third party; (b) Contractor has all rights and licenses necessary to convey to Tesla the ownership of (or license rights to Use) as required under this Agreement or the Work Authorization, all Intellectual Property Rights in Deliverables, Developed Materials and other materials provided to Tesla; and (c) no Deliverables or other materials provided to Tesla, nor their use by Tesla will infringe or constitute an infringement or misappropriation of any Intellectual Property Rights of any third party.

9.5 Malware. Contractor represents and warrants that it will not introduce Malware into Tesla's or any of its Affiliates' systems and that Contractor will exercise Commercially Reasonable Efforts to prevent Malware from being so introduced. If Malware is found to have been introduced into Tesla's or any of its Affiliates' systems as a result of a breach of the foregoing warranty, Contractor will, at no additional charge, assist Tesla in eradicating the Malware and reversing its effects and, if the Malware causes a loss of data or operational efficiency, to assist Tesla in mitigating and reversing such losses.

9.6 Debarment. For the full Term of the Agreement, Contractor represents and warrants that it shall not: (a) be debarred, suspended, excluded or disqualified from doing business with the United States Government; or (b) be listed on the Excluded Parties List System maintained by the General Services Administration of the United States Government (found at [www.sam.gov/SAM](http://www.sam.gov/SAM)); or (c) be an entity with which U.S. entities are prohibited from transacting business of the type contemplated by the Agreement or with which U.S. entities must limit their interactions to types approved by the Office of Foreign Assets Control, Department of the Treasury ("**OFAC**"), such as by Law, executive order, trade embargo, economic sanction, or lists published by OFAC. Contractor agrees to immediately notify Tesla in writing in the event Contractor breaches any of its representations and warranties or has reason to believe that it will become in breach of any of such representations and warranties.

## 10. INSURANCE

10.1 Types of Insurance. During the Term of this Agreement, unless otherwise set forth in a Work Authorization, Contractor shall obtain and maintain at its own cost and expense (and shall cause each Subcontractor to maintain) policies for the following insurance coverages:

(a) Commercial general liability insurance with minimum coverage of at least One Million Dollars (\$1,000,000) combined single limit per occurrence and Two Million Dollars (\$2,000,000) general aggregate, naming Tesla as an additional insured. This will include coverage for: bodily injury; property damage; premises and operations; products and completed operations; broad form property damage including completed operations; explosion, collapse, underground hazards; contractual liability; contractors' protective liability; and personal injury liability.

(b) Products and completed operations coverage, which shall include broad form property damage and XCU endorsements.

(c) Automobile liability insurance on all owned, non-owned and/or hired vehicles with minimum coverage of at least One Million Dollars (\$1,000,000) combined single limit per occurrence for bodily injury and/or property damage, and physical damage insurance for the actual cash value of each such vehicle.

(d) Umbrella general liability coverage in the minimum amount of \$5,000,000 or as established in the Work Authorization.

The policies furnished in compliance with Section 10.1 (a) – (d) shall be primary insurance to any other liability insurance of Owner.



- (e) Employer's liability insurance with minimum coverage of at least One Million Dollars (\$1,000,000). Contractor shall also comply with all applicable workers' compensation and/or other laws that may accrue in favor of any Contractor Personnel in all locales where Contractor Personnel perform(s) hereunder.
- (f) Contractor's Professional Liability Insurance with minimum limits of \$5,000,000 per claim and aggregate and Contractor's Pollution Liability Insurance coverage with minimum limits of \$5,000,000 per claim and in the aggregate, or as established in the applicable Work Authorization for both insurance requirements, with all coverage retroactive to the earlier of the date of the Agreement or the commencement of work.
- (g) If the Work include design/build work, Professional Liability Insurance covering liability for loss or damage due to an act, error, omission or negligence, with a minimum limit of (i) Five Million Dollars (\$5,000,000) per claim and aggregate for mechanical (including fire protection), electrical and curtain wall enclosure, and (ii) Two Million Dollars (\$2,000,000) per claims and aggregate for all other trades. Professional liability coverage shall be provided by annual policy or policies to be renewed for a continuous period of two years following the Final Completion Date of the Project by the Owner or such longer period as the Contract Documents may require. Renewal policies during this period shall maintain the same retroactive date.

10.2 Insurance, Generally. Contractor will be responsible for all deductibles and retentions with regard to its insurance. In the case of loss or damage or other event that requires notice or other action under the terms of any insurance coverage described above, Contractor will be solely responsible for taking such action. Contractor will provide Tesla with contemporaneous notice and such other reasonable and relevant information as Tesla may request regarding the event. The policies shall: (a) be primary and not contributory with any liability coverage carried by Tesla or any Affiliate of Tesla; (b) name Tesla and any other entity reasonably requested by Tesla as additional insureds; (c) provide for severability of interests; (d) provide for waiver of subrogation; (e) be with one or more insurance companies rated A minus or better (as determined by A.M. Best & Company), and licensed to do business in the locations where Services are to be performed; (f) shall remain in force for the benefit of the Owner for claims arising out of the Work under this Agreement for at least 24 months after Final Completion, except for completed operations coverage which shall extend for a period of six (6) years from Substantial Completion, and (g) require the insurer to give Tesla at least 30 days' prior written notice of any restrictive change, non-renewal or cancellation that may affect Tesla's rights thereunder. Contractor will furnish to Tesla a certificate evidencing such coverage, upon request.

## 11. INDEMNIFICATION

11.1 Indemnification by Contractor. To the fullest extent provided by Law, Contractor will indemnify, defend and hold harmless Tesla, its Affiliates and their respective officers, directors, employees, agents and representatives (collectively, "**Tesla Indemnitees**"), from any and all losses arising from, in connection with, or based on allegation of any of the following:

- (a) Any Claim by, on behalf of or relating to Contractor Personnel;
- (b) Any Claim that, if true, would constitute a breach of Contractor's obligations under Section 6 (Confidentiality);
- (c) Any Claim that, if true, would arise from or be attributable to a breach of Contractor's obligations under Section 2.5 (Compliance with Laws and Tesla Policies);
- (d) Any Claim that, if true, would arise from or be attributable to a breach of Contractor's obligations under Section 9.4 (Non-Infringement);
- (e) Any Claim for death or bodily injury, or the damage, loss or destruction of real or tangible personal property of third parties (including employees of Tesla and Contractor and their respective Subcontractors) caused by the tortious conduct of Contractor, any Contractor Personnel, or any of Contractor's third-party suppliers; and
- (f) The inaccuracy or untruthfulness of any representation or warranty made by or on behalf of Contractor in this Agreement.

If Losses are caused or alleged to be caused in part by any joint or concurrent negligent act (either active or passive), willful misconduct, omission or breach of contract by the Tesla Indemnitees, the Contractor shall indemnify, hold harmless and defend the Tesla Indemnitees from such Losses only to the extent such Losses do not arise out of or result from the sole and active negligence or willful misconduct of the Tesla Indemnitees. In no event shall



Contractor be obligated to indemnify a Tesla Indemnitee for Losses which arise out of or result from the sole and active negligence or willful misconduct of such Tesla Indemnitee or its agents, servants or independent contractors who are directly responsible to such Tesla Indemnitee, excluding Contractor herein.

11.2 Infringement Claims. If any item used by Contractor to provide the Services becomes, or in Contractor's reasonable opinion is likely to become, the subject of an infringement or misappropriation Claim, Contractor will at its expense, in addition to indemnifying Tesla Indemnitees as provided in this Section 11 (Indemnification) and to the other rights Tesla may have under this Agreement, (i) promptly secure the right to continue using the item, or (ii) if this cannot be accomplished with Commercially Reasonable Efforts, then replace or modify the item to make it non-infringing or without misappropriation; provided, however, that any such replacement or modification may not degrade the performance or quality of the affected components of the Services or disrupt Tesla's business operations, or (iii) if neither of the foregoing can be accomplished by Contractor with Commercially Reasonable Efforts, then upon at least 180 days' prior written notice to Tesla, Contractor may remove the item from the Services, in which case Contractor's charges will be equitably adjusted to reflect such removal. If removal of the item from Services causes material loss or degradation of the Services, such loss or degradation will constitute a material breach of this Agreement by Contractor in respect of which Tesla may exercise its termination and other rights and remedies.

11.3 Indemnification Procedures. Tesla will give Contractor prompt written notice of any Claim for which indemnification is sought under this Section 11 (Indemnification). Failure to give notice will not diminish Contractor's obligation under this Section if Contractor has or receives knowledge of the existence of such Claim by any other means or if the failure does not materially prejudice Contractor's ability to defend the Claim. Contractor may select legal counsel to represent Tesla (said counsel to be reasonably satisfactory to Tesla) and otherwise control the defense of such Claim. If Contractor elects to control the defense of such Claim, Tesla may participate in the defense at its own expense. If Contractor, within a reasonable time after receipt of such notice, fails to defend Tesla, Tesla may undertake the defense of and compromise or settle the Claim on behalf and at the risk of Contractor. If the Claim is one that cannot by its nature be defended solely by Contractor, then Tesla will make available information and assistance as Contractor may reasonably request, at Contractor's expense. Contractor may not, without the prior written consent of Tesla, (i) consent to the entry of any judgment or enter into any settlement that provides for injunctive or other non-monetary relief affecting any Tesla Indemnitee, or (ii) consent to the entry of any judgment or enter into any settlement unless such judgment or settlement provides for an unconditional and full release of the Tesla Indemnitees and does not diminish any of Tesla's rights under this Agreement or result in additional fees or charges to Tesla.

## 12. Liability

12.1 For any breach of this Agreement or this Master Services Agreement by Contractor, Contractor shall be liable to Tesla for direct damages caused by Contractor's breach, incidental damages incurred by Tesla as a result of such breach, other damages that were reasonably foreseeable at the time of the breach as a result of such breach, and costs and expenses incurred by Tesla in connection with the foregoing types of damages, including without limitation any costs and expenses of containment, sorting, repair, replacement, cure, cover, or other costs and expenses incurred by Tesla (including labor).

12.2 TESLA WILL NOT BE LIABLE TO CONTRACTOR IN CONNECTION WITH THE AGREEMENT OR THIS MASTER SERVICES AGREEMENT FOR ANY INTEREST, PENALTIES OR CONSEQUENTIAL, INCIDENTAL, INDIRECT, MULTIPLE, EXEMPLARY, OR PUNITIVE DAMAGES, OR ANY LOSS OF REVENUE, BUSINESS, SAVINGS OR GOODWILL, REGARDLESS OF THE FORM OF ACTION OR THE THEORY OF RECOVERY, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

(a) .

## 13. DISPUTE RESOLUTION

### 13.1 Informal Dispute Resolution.

(a) The Owner and Contractor shall first endeavor to negotiate resolution of Claims and disputes relating to the Contract directly. If the Claims cannot be resolved through such negotiations within a reasonable time, either Party may request non-binding mediation to be conducted in San Francisco, California, by the Judicial Arbitration and Mediation Services/Endispute ("JAMS") or by a mediator approved by both Parties, and neither Party shall unreasonably withhold approval of a mediator proposed by the other Party in good faith. Each Party shall participate in the mediation process in good faith, with each bearing its own expenses and equally sharing the fees and expenses of the mediator.





(b) If the Parties are unable to resolve a Claim through good-faith negotiations within 60 days after commencing mediation, the Claim shall be resolved exclusively by final and binding arbitration conducted by the JAMS in accordance with the then-current JAMS Streamlined Arbitration Rules & Procedures. The existence, content and result of the arbitration shall be held in confidence by the Parties, their representatives, any other participants, and the arbitrator. The arbitration will be conducted by a single arbitrator selected by agreement of the Parties or, failing such agreement, appointed in accordance with the JAMS rules. The arbitrator shall be experienced in agreements for capital equipment. Any demand for arbitration and any counterclaim will specify in reasonable detail the facts and legal grounds forming the basis for the claimant's request for relief and will include a statement of the total amount of damages claimed, if any, and any other remedy sought by the claimant. The arbitration will be conducted in the English language in Palo Alto, California. Each Party will bear its own expenses in the arbitration and will share equally the costs of the arbitration; provided, however, that the arbitrator may, in their discretion, award reasonable costs and fees to the prevailing Party. The arbitrator will have full power and authority to determine issues of arbitrability and to interpret or construe the applicable provisions of the Contract and/or this Master Services Agreement and to fashion appropriate remedies for breaches of the Contract and/or this Master Services Agreement (including interim or permanent injunctive relief); provided that the arbitrator will not have any right or authority: (i) in excess of the authority of a court having jurisdiction over the Parties and the dispute would have absent this arbitration agreement; (ii) to award damages in excess of the types and limitation of damages found in the Contract and/or this Master Services Agreement; or (iii) to modify the terms of either the Contract or this Master Services Agreement. The award of the arbitrator will be issued within 30 days of the completion of the hearing, shall be in writing, and shall state the reasoning on which the award is based. Judgment upon the award rendered in the arbitration may be entered in any court of competent jurisdiction. Notwithstanding the foregoing, the Parties acknowledge that Seller's breach of an obligation under this Master Services Agreement or the Contract will subject Tesla to irreparable and continuing injury for which remedies at law would be inadequate and, accordingly, Tesla shall be entitled to temporary, preliminary, or permanent injunctive relief, specific performance, or other equitable relief as appropriate. Seller hereby waives any bond requirements for obtaining equitable relief. The Parties further consent to the jurisdiction of any state or federal court with subject matter jurisdiction located within a district that encompasses assets of a Party against whom a judgment (or award) has been rendered for the enforcement of the judgment (or award) against the assets of such Party.

(c) Each Party shall continue performing its obligations under the Master Services Agreement and the Contract while a dispute is being resolved unless and until such obligations are terminated by the termination or expiration thereof.

### 13.2 Jurisdiction and Venue.

(a) If the Owner and Contractor do not resolve the Claim or dispute through mediation, any and all such Claims or disputes shall be decided through litigation under the laws of the State of California. The exclusive venue for such litigation shall be a court of competent jurisdiction located in the United States District Court for the Northern District of California or, if that court does not have jurisdiction, in the Superior Court of the State of California, County of Santa Clara. The Parties irrevocably and unconditionally waive any objection to the laying of venue of any proceeding arising out of or relating to the Agreement in such courts. The Parties further consent to the jurisdiction of any state or federal court with subject matter jurisdiction located within a district that encompasses assets of a Party against whom a judgment (or award) has been rendered for the enforcement of the judgment (or award) against the assets of such Party.

(b) Contractor may not sue or bring any action of any kind whatsoever against Owner on any Claim or dispute under the Contract Documents after the expiration of three hundred sixty-five (365) days from Substantial Completion. This contractual period of limitation takes precedence over any contrary or conflicting statutory provision or rule of law applicable to any Claims or disputes which the Contractor may seek to bring.

## 14. MISCELLANEOUS

14.1 Waiver. No failure or delay by a Party in exercising any right, power or remedy will operate as a waiver of that right, power or remedy, and no waiver will be effective unless it is in writing and signed by an authorized representative of the waiving Party. If a Party waives any right, power or remedy, the waiver will not waive any successive or other right, power or remedy that Party may have.



14.2 Remedies Cumulative. All remedies provided in this Agreement are cumulative and in addition to and not in lieu of any other remedies available to a Party under this Agreement, at law, or in equity.

14.3 Assignment. Contractor may not assign, transfer or otherwise convey or delegate any of its rights or duties under this Agreement to any other Party (except to the successor in a merger or acquisition of Contractor) without the prior written consent of Tesla, and any attempt to do so will be void. This Agreement shall be binding upon the respective successors and permitted assigns of the Parties.

14.4 Governing Law. This Agreement will be interpreted and construed in accordance with the substantive laws of California and the United States generally applicable therein, without regard to any provisions of its choice of law rules that would result in a different outcome. Notwithstanding the foregoing, if a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

14.5 Audits and Records. During business hours and upon reasonable advance notice, Tesla and its agents may inspect, examine and audit the records and data of Contractor (and its Subcontractors) that pertain to the Services to verify (a) the accuracy of Contractor's invoices, and (b) Contractor's compliance with this Agreement. In support of the foregoing right, Contractor will keep and maintain (i) financial records relating to this Agreement in accordance with generally accepted accounting principles, (ii) records substantiating Contractor's invoices, (iii) records pertaining to Contractor's compliance with this Agreement and the Work Authorizations, and (iv) such other operational records pertaining to performance of the Services as Contractor keeps in the ordinary course of its business. Contractor will retain such records for the longer of three (3) years after the Term ends or as required by applicable Laws. Contractor will make such records available to Tesla and its auditors for examination and copying upon request.

14.6 Notices. All formal notices, requests, demands, approvals and communications under this Agreement (other than routine operational communications) (collectively, "**Notices**") will be in writing and may be served either (i) in person or (ii) by registered or certified mail with proof of delivery, addressed to the Party at the addresses set forth below. Notices given as described in the preceding sentence will be considered received on the day of actual delivery. A Party may change its address or designee for notification purposes by giving the other Party prior written notice of the new address or designee in the manner provided above. The Parties may mutually agree that certain types of routine approvals and notices of a non-legal nature may be given by electronic mail.

<p>In the case of Tesla:</p> <p>Tesla, Inc. 13101 Tesla Road Austin, Texas 78725</p> <p>Attn: _____</p>	<p>With a copy to:</p> <p>Tesla, Inc. 13101 Tesla Road Austin, Texas 78725</p> <p>Attn: Legal Department</p>
<p>In the case of Contractor:</p> <p>_____ _____ _____</p> <p>Attn: _____</p>	<p>(Note: If no information is listed here for Contractor, notices shall be sent to the attention of the Contractor representative who signs this MSA.)</p>

14.7 Interpretation. Section references are to sections of the document in which the reference is contained and will be deemed to refer to and include all subsections of the referenced section. The section headings in this Agreement are for reference purposes only and may not be construed to modify or restrict any of the terms of this Agreement. This Agreement will be deemed to have been written by both Parties. Section references are to sections of the document in which the reference is contained and will be deemed to refer to and include all subsections of the referenced section. The section headings in this Agreement are for reference purposes only and may not be construed to modify or restrict any of the terms of this Agreement. This Agreement is written in the English language, and the English text of this Agreement shall prevail over any translation hereof. Unless the context requires otherwise, (i) "including" (and any of its derivative forms) means including but not limited to, (ii) "may" means has the right, but not the obligation to do something and "may not" means does not



have the right to do something, and (iii) “will” and “shall” are expressions of command, not merely expressions of future intent or expectation.

14.8 Order of Precedence. In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities: (a) Work Authorization, solely to the extent the Work Authorization parties agree that the Work Authorization amends this Agreement, (b) this Agreement, as amended, including all Exhibits; (c) Addenda, if any, with those of later date having precedence over those of earlier date; (d) Modifications to the Drawings and Specifications issued after the execution of the Work Authorization, Specifications, Drawings, and Addenda issued prior to execution of the Work Authorization; and (f) Specifications and Drawings. Unless specifically enumerated in the Agreement or any Work Authorization, the Contract Documents do not include the advertisement or invitation to bid, instructions to bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor’s bid or proposal, or portions of Addenda relating to bidding requirements.

14.9 Severability. If any provision of this Agreement or a Work Authorization is held invalid by a court with jurisdiction over the Parties to this Agreement, such provision will be severed from the Agreement, and the remainder of this Agreement will remain in full force and effect.

14.10 Third Party Beneficiaries. This Agreement is entered into solely between Tesla and Contractor and, except for the Parties’ indemnification obligations under Section 11 (Indemnification) and the Service Recipients, will not be deemed to create any rights in any third parties or to create any obligations of either Tesla or Contractor to any third parties.

14.11 Survival. Any provision of this Agreement that contemplates or governs performance or observance subsequent to termination or expiration of this Agreement will survive the expiration or termination of this Agreement for any reason, including the following Sections: 6 (Confidentiality), 7 (Intellectual Property Rights), 9 (Representations and Warranties of Contractor), 11 (Indemnification), 12 (Liability), 13 (Dispute Resolution) and 14 (Miscellaneous) .

14.12 Entire Agreement. This Agreement including all Schedules constitutes the entire agreement between the Parties with respect to its subject matter and merges, integrates and supersedes all prior and contemporaneous agreements and understandings between the Parties, whether written or oral, concerning its subject matter. Any terms and conditions on any order or written notification from either Party that purport to vary or supplement this Agreement shall not be effective or binding on the other Party. This Agreement may be amended or modified solely in a writing signed by a duly authorized representative of each Party.

14.13 Defined Terms. Terms used in this Agreement with initial capitalization have the meanings specified where used or in this Section 14.13.

(a) *“Addenda” or “Addendum”* means written information adding to, clarifying or modifying the bidding documents.

(b) *“Affiliate”* means with respect to an entity, any other entity or person controlling, controlled by, or under common control with, such entity. For purposes of this Agreement, “control” means possessing, directly or indirectly, the power to direct or cause the direction of the management, policies or operations of an entity, whether through ownership of voting securities, by contract or otherwise.

(c) *“Change”* means any material change to the scope of, charges for, or other contractual commitments of a Party with respect to, the Services being provided by Contractor.

(d) *“Change Order”* means a mutually agreed Change to the scope, timing, manner or cost of performing the Services pursuant to an Work Authorization. A change order may not modify the terms of the body of this Agreement.

(e) *“Claim”* means any demand, or any civil, criminal, administrative or investigative claim, action or proceeding (include arbitration) asserted, commenced or threatened against an entity or person by an unaffiliated third party. For the purposes of this definition, an employee of either Party is considered an unaffiliated third party.

(f) *“Commercially Reasonable Efforts”* means taking all such steps and performing in such a manner as a well managed company would undertake where it was acting in a determined, prudent and reasonable manner to achieve a particular desired result for its own benefit.



- (g) *"Deliverable"* means any work product identified as a 'Deliverable' in the Agreement or an Work Authorization.
- (h) *"Drawings"* mean graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.
- (i) *"Intellectual Property Rights"* means all (i) patents, patent applications, patent disclosures and inventions (whether patentable or not), (ii) trademarks, service marks, trade dress, trade names, logos, corporate names, Internet domain names, and registrations and applications for the registration for any of them, together with all goodwill associated with any of them, (iii) copyrights and copyrightable works (including computer programs and mask works) and registrations and applications for registration, (iv) trade secrets, know-how and other confidential information, (v) waivable or assignable rights of publicity, waivable or assignable moral rights, (vi) unregistered and registered design rights and any applications for registration, and (vii) database rights and all other forms of intellectual property, such as data.
- (j) *"Law(s)"* means any statute, regulation, ordinance, rule, order, decree or governmental requirement enacted, promulgated or imposed by any governmental authority at any level (*e.g.*, municipal, county, province, state or national).
- (k) *"Malware"* means program code or programming instruction(s) or set(s) of instructions intentionally designed to disrupt, disable, harm, interfere with or otherwise adversely affect computer programs, data files or operations, or other code typically described as a virus, Trojan horse, worm, back door or other type of harmful code.
- (l) *"Modification"* is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Work Authorization or (4) a written order for a minor change in the Work issued by the Owner that does not increase costs or construction time.
- (m) *"Open Source Code"* means software that requires as a condition of its use, modification or distribution, that it be disclosed or distributed in source code form or made available at no charge, including, without limitation, software licensed under the GNU General Public License (GPL) or the GNU Lesser/Library GPL.
- (n) *"Party"* means either Tesla or Contractor, as required by the context.
- (o) *"Project"* means a group of related functions or activities that spans multiple days, weeks, or months and builds cumulatively toward the achievement of defined target outcomes or objectives. A Project typically has multiple phases or life-cycle stages and involves written project plans with defined interim milestones and deliverables to measure progress toward the achievement of its target outcomes or objectives. The Services provided for each Tesla Facility will be deemed a separate Project for purposes of this Agreement.
- (p) *"Specifications"* means that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.
- (q) *"Substantial Completion"* or *"Substantially Complete"* is further defined as the date certified respectively, by the Owner when (i) the Owner have prepared a Punchlist of Work *remaining* to be performed and has established sufficient reserves for purposes of completing such Punchlist of Work, and (ii) all required governmental or regulatory inspections applicable to the Contractor's Work have been conducted and all final approvals required for occupancy have been obtained from all authorities having jurisdiction over the Project. Any such occupancy or use described above shall not negate or change the responsibility of the Contractor to Owner for satisfactory completion of the Work nor shall such occupancy or use negate any insurance provisions required hereunder.
- (r) *"Supplier"* means a person or entity who has a direct or indirect contract with Contractor or a Subcontractor at any tier to provide any equipment, supplies, materials, or other goods in connection with the Work and who is not a Subcontractor or a Sub-subcontractor.
- (s) *"Tesla Data"* means all data and information regarding Tesla, its customers and suppliers that is either: (i) furnished, disclosed or otherwise made available to Contractor Personnel, directly or indirectly, by or on behalf of Tesla pursuant to this Agreement; or (ii) collected or created by Contractor Personnel on behalf of



Tesla in the course of performing the Services. Tesla Data will be deemed to be Confidential Information that is subject to the NDA.

- (t) *"Tesla Facility"* means, collectively, the Tesla facility or real property at which Contractor will perform Services and the reasonable office space, furniture, fixtures, equipment, hardware, software, telephones, office supplies, and other facility resources to be provided or made available by Tesla to Contractor Personnel who are assigned by Contractor to work on Tesla premises by mutual agreement of the Parties, as evidenced in the applicable Work Authorization.
- (u) *"Use"* means the right to use, execute, display, copy, perform, distribute copies of, maintain, modify, enhance, and create derivative works of software or other copyrighted or copyrightable works.
- (v) *"Work Authorization"* means the form of document that will be used to authorize Contractor to perform Services by mutual agreement of the Parties. When duly executed by the authorized representatives of both Parties, a Work Authorization becomes an *"Work Authorization."*

## 15. MECHANIC'S LIENS

15.1 If at any time, a lien is filed on the Project arising out of the Work, the Contractor, within five (5) days after the date of the filing of such notice of lien, and to the Owner's satisfaction and in accordance with the mechanic's lien laws of the place where the Project is located, shall discharge and remove the lien or post a bond satisfactory to the Owner for such lien or claim of lien and shall indemnify and hold the Owner harmless for all costs, including, but not limited to, attorneys' fees and expert fees, regarding such lien or claim of lien, together with interest on the same from the date any such cost was paid by Owner until reimbursed by Contractor at the rate of interest provided in the Agreement, except if the lien is the result of Owner's nonpayment of an amount contained in a previously submitted pay application over which no good-faith dispute exists between Owner and Contractor. The obligations of Contractor under this Subsection shall survive the expiration or termination of the Contract.

15.2 Contractor shall promptly advise Owner in writing of any action, administrative or legal proceeding or investigation as to which Subsection 15.1 may apply, and provided the Owner is not in default of its payment obligations to the Contractor, Contractor, at Contractor's expense, shall assume on behalf of Owner, and conduct with due diligence and in good faith, the defense thereof with counsel satisfactory to Owner, provided that Owner shall have the right to be represented therein by advisory counsel of its own selection and at Contractor's expense, and provided further that if the defendants in any such action include Contractor and Owner and Owner concludes that Contractor has a conflict of interest and cannot adequately represent the Owner, then the Owner shall have the right to select separate counsel to participate in the defense of such action on its own behalf for which fifty percent (50%) of the cost shall be at the Contractor's expense. In the event of failure by Contractor to fully perform in accordance with this Subsection, Owner, has the option of, and without relieving Contractor of its obligations hereunder, to so perform, but all costs and expenses, including but not limited to attorneys' fees and expert fees, so incurred by Owner in that event shall be reimbursed by Contractor to Owner, together with interest on the same from the date any such expense was paid by Owner until reimbursed by Contractor at the rate of interest provided in the Agreement. The obligations of Contractor under this Subsection shall survive the expiration or termination of the Contract.

15.3 The Owner shall release any payments withheld due to a lien or claim of lien if the Contractor removes the lien or obtains security acceptable to the Owner or a lien bond that is (i) issued by a surety acceptable to Owner, (ii) in a form and substance satisfactory to the Owner, and (iii) in an amount not less than one hundred fifty percent (150%) of such lien claim. By posting a lien bond or other acceptable security, however, the Contractor shall not be relieved of any responsibilities or obligations under this Section 15.3, including without limitation the duty to defend and indemnify the Owner. The cost of any premiums incurred in connection with such bonds and security shall be the responsibility of the Contractor and shall not be a part of, or cause any adjustment to, the Contract Price.

15.4 Notwithstanding anything to the contrary contained herein, if the Contractor does not promptly post the bond, the Owner may withhold 150% of the amount of such lien until such lien is discharged or the Owner is protected by bond satisfactory to the Owner in the amount of at least 150% of the amount of the lien or other



means satisfactory to the Owner. If no monies are available to be withheld, the Contractor shall within three (3) consecutive calendar days refund to the Owner 150% of the amount of such lien(s).

15.5 Notwithstanding anything in Section 15 to the contrary, and in the event the Contractor fails to make payments to its Subcontractors or Suppliers in accordance with this Contract and does not provide justifiable reasons to the Owner upon Owner's request, Owner may, at the Owner's sole discretion, elect to make any payment requested by the Contractor on behalf of a Subcontractor of any tier or a Supplier, jointly payable to the Contractor and each Subcontractor and/or Supplier. The Contractor and such Subcontractor or Supplier shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint payment be construed to create any (i) contract between the Owner and a Subcontractor or Supplier of any tier, (ii) obligations from the Owner to such Subcontractor or Supplier, or (iii) rights in such Subcontractor or Supplier against the Owner. The Contractor agrees to sign such additional documents and take such action as the Owner shall deem necessary to carry out the intent of this Section 15.5.

Intending to be legally bound, each of the undersigned parties has caused its duly authorized representative to execute this Agreement as of the Effective Date.

<b>Tesla, Inc.</b>
By: _____
Printed: _____
Title: _____
Date: _____

<b>Contractor</b>
By: _____
Printed: _____
Title: _____
Date: _____
Company: _____
Address: _____



## EXHIBIT A

## APPROVED WORK ORDER NO. \_\_ FOR SERVICES

**1. Introduction.** This Work Order is entered into as of the Date of Order set forth below by and between the Tesla affiliate set forth below (for the purposes of this Work Order, "Tesla") and Contractor, and made a part of that certain Master Services Agreement between [INSERT TESLA ENTITY] ("Tesla") and [CONTRACTOR NAME AND ADDRESS] ( hereinafter "Contractor") dated [INSERT AGREEMENT DATE] (the "Agreement"). This Work Order sets forth the terms and conditions for the Project described in this Work Order. All capitalized terms not defined in this Work Order have the respective meanings set forth in the Agreement.

**2. Description of Project Services and Performance Measurement.**

Contractor will perform the following Services pursuant to this Work Order.

(a) [describe services, any required resources, any Deliverables, and any deadlines or milestones]: \_\_\_\_\_

\_\_\_\_\_

(b) Project Site: \_\_\_\_\_

(c) Project Milestones (specify delivery dates): [IF APPLICABLE]

(i) Contractor shall begin Work on \_\_\_\_\_, and shall be substantially complete as soon as due diligence and good practice will permit, but not later than \_\_\_\_\_. or

(ii)

Project Milestones	Deadline
Substantial Completion Date	
Final Completion Date	

(d) List of applicable Plans and Specifications: \_\_\_\_\_

\_\_\_\_\_

**3. Work Schedule:**

From the mutual execution of this Work Order until Substantial Completion, at Tesla's request, Contractor shall provide weekly written updates to Tesla describing the Services completed to date and a comparison of costs incurred versus budgeted amounts and providing an updated Work Schedule for the remainder of the Services, including the anticipated date of Substantial Completion.

Tesla may request additional services after the Effective Date. Unless otherwise agreed by the Parties in writing, the fees for such services will be calculated by multiplying the Productive Hours by the applicable agreed billing rates set forth herein, or currently on file.

Tesla shall have the right within the general scope of the Work and without notice to any surety or sureties of the Contractor, to make changes in the Work pursuant to a written change order ("Change Order"), either by altering the nature of the same or by adding to or deducting from it as more specifically set forth in the Construction General



Conditions incorporated herein.

4. **Contract Price.** With reference to Section 4 (Charges) of the Agreement, Tesla will pay the Contractor for the performance of work specified herein the total price of (INSERT TOTAL AMOUNT OF WORK ORDER IN TEXT and no cents) (\$00,000.00).

5. **Monthly Invoicing:** Tesla will pay Contractor the amount above in accordance with the Agreement, subject to receipt of invoices from Contractor in a form and content reasonably acceptable to Tesla. Such invoices shall contain sufficient information to allow Tesla to determine the accuracy of the amounts billed and shall include invoices from all subcontractors, any relevant certificates of completion, unconditional lien waivers for all past work and conditional lien waivers for current work. Tesla will pay invoices not disputed in good faith as per the Agreement, less a retainage of 10%. Tesla will pay the accumulated retainage 30 days after the later of (a) receipt of the Close Out Book; or (b) Final Completion; in each case together with invoices and final unconditional lien waivers from all subcontractors.

Payment terms are otherwise as set forth in the Agreement, however Contractor shall be paid by Tesla within (\_\_\_\_) days of Tesla's receipt of the applicable invoice for such amounts.

6. **Key Contractor Positions.** With reference to Section 3.2 (Key Contractor Positions) of the MSA, the Key Contractor Positions for purposes of this Work Order, if any, are: \_\_\_\_\_

7. **Service-Specific Terms and Conditions.** Annexes or additional documents attached hereto set forth additional terms and conditions which may apply for purposes of this Work Order, if applicable to the Services to be performed hereunder.

Intending to be legally bound, each of the undersigned parties has caused its duly authorized representative to execute this Approved Work Order as of the date last entered below.

<b>TESLA, INC.</b>
By: _____
Printed: _____
Title: _____
Date: _____

<b>Contractor</b>
By: _____
Printed: _____
Title: _____
Date: _____
Company: _____
Address: _____





**EXHIBIT B**

**FORM OF CHANGE ORDER**

**TESLA MASTER SERVICES AGREEMENT (CONSTRUCTION) CHANGE ORDER**

Work Authorization No: \_\_\_\_\_  
 Change No.: \_\_\_\_\_ Date: \_\_\_\_\_  
 Architect/Engineer: \_\_\_\_\_

To (Contractor): \_\_\_\_\_  
 Your proposal dated \_\_\_\_\_ has been accepted for making the following changes:

DESCRIPTION OF CHANGE				DECREASE	INCREASE
(Attach additional sheets if required.)					
NOTICE TO PROCEED DATE:		ORIGINAL CONTRACT SUM:			
Contract Time	Days	Complete*	Subtotal		
Present Contract			New (Add) (Deduct)		
This Change			Present Contract Sum		
New Contract Time			New Contract Sum		

\*SUBSTANTIAL COMPLETION DATE

This Change Order is an amendment to the Agreement, and all contract provisions shall apply unless specifically exempted. The amount and time Change designated are the maximum agreed to by both the Owner and the Contractor for this change. In consideration of the foregoing adjustments in Contract Time and Contract Sum, the Contractor hereby releases Owner from all Claims, demands, or causes of action arising out of the transactions, events and occurrences giving rise to this Change Order. This written Change Order is the entire agreement between Owner and Contractor with respect to this Change Order. The cost of the change indicated on the face of this Change Order is the entire amount of the change, and no backup documentation attached hereto may reserve the Contractor's right to increase the contract time or the cost of this change for extended overhead or general conditions or any other reason.

AGREED TO IN FORM AND CONTENT

\_\_\_\_\_  
 CONTRACTOR

\_\_\_\_\_  
 DATE

\_\_\_\_\_  
 ARCHITECT/ENGINEER

\_\_\_\_\_  
 DATE

\_\_\_\_\_  
 TESLA, INC.

\_\_\_\_\_  
 DATE

T = S L n

Item #5

**FORECAST  
12-MONTH ROLLING CALENDAR**

	Utilities Advisory Commission	City Council
February 2024	<ul style="list-style-type: none"> <li>- Tesla Public Private Partnership</li> <li>- Cyber Security Discussion</li> <li>- Grid Modernization</li> <li>- Residential Customer Satisfaction Survey Results</li> </ul>	<ul style="list-style-type: none"> <li>* Temp Staffing WaterTalent (C)</li> <li>* Lead Sampling in Schools (C)</li> <li>* Approval of Amendment No2 with Clearesult (C)</li> <li>* Reliability and Resilience Strategic Plan Update (C)</li> <li>* Contract Amendment for Fiber &amp; Grid Mod Pilot (C)</li> <li>* Preliminary Financial Forecast (FCM)</li> <li>* CLEAN Programs Rules and Agreement Resolution (C)</li> <li>* ZWED Contract Approval (C)</li> <li>* Third Phase Agreement with Northern California Power Agency (C)</li> <li>* Blanket PO w/ Eaton – Pad Mounted Electric Equipment (C)</li> </ul>
March 2024	<ul style="list-style-type: none"> <li>- Wastewater Rates</li> <li>- Water Rates</li> <li>- Gas Rates</li> <li>- Electric Rates</li> <li>- SFPUC Water Allocations During Droughts</li> </ul>	<ul style="list-style-type: none"> <li>* CLEAN Program Rules Update (C)</li> <li>* Reliability and Resiliency S/CAP (C)</li> <li>* SVCE Master Agreement Approval (C)</li> </ul>
April 2024	<ul style="list-style-type: none"> <li>- Utilities Quarterly Report FY24-Q2</li> <li>- NCPA Prepayment for Geothermal PPA</li> <li>- Crossbore</li> <li>- Long Term Gas Hedging Policy</li> <li>- WAPA Hydroelectricity Base Resource Contract</li> </ul>	<ul style="list-style-type: none"> <li>* Financial Plans and Rates (FCM)</li> </ul>
May 2024	-	<ul style="list-style-type: none"> <li>* Long Term Gas Hedging Policy (FCM)</li> <li>* WAPA Hydroelectricity Base Resource Contract (FCM)</li> </ul>
June 2024	-	<ul style="list-style-type: none"> <li>* WAPA Hydroelectricity Base Resource Contract (C)</li> <li>* Financial Plans and Rates (C)</li> </ul>
July 2024	-	
August 2024	-	<ul style="list-style-type: none"> <li>* Long Term Gas Hedging Policy (C)</li> </ul>
September 2024	-	
October 2024	-	
November 2024	-	
December 2024	-	

To be Scheduled

- Educational Update on any Type of New Technology or Terminology
- Projects with a Resiliency Component
- Quarterly Reports (Q1-3 Info Rpts)(Q4 Discussion Summary of the year)

- Financial Report
- Utilities Programs Update
  - Informational EV Charger Installation Updates
  - Informational Bucket 1 REC Sales Updates
- Informational Fiber Updates

- DER discussion
- Second transmission line update
- 24/7 load following
- Reliability and resiliency strategic plan update
- Dark fiber utility rates comparison
- Commercial electricity segmentation plans
- One Water Update
- Permitting Process Return

