STATE OF CALIFORNIA Edmund G. Brown Jr., Governor

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 30, 2017

Jamie Dean, AICP
Senior Land Planner
Pacific Gas & Electric
Environmental Management - Transmission
245 Market Street, Room 1072A
San Francisco, CA 94105

RE: Windsor Substation Project: Notice to Proceed #2

Dear Ms. Dean,

On February 17, 2017, Pacific Gas and Electric Company (PG&E) submitted a Notice to Proceed (NTP) request to the California Public Utilities Commission (CPUC) for the Windsor Substation Project, in the Town of Windsor, Sonoma County, California. Under this NTP request, PG&E is seeking CPUC authorization to rebuild a segment of the Fulton No. 1 power line to hold a new double-circuit 12 kilovolt (kV) distribution line underbuild, and reconductor an existing distribution line along Old Redwood Highway. PG&E provided additional information to the CPUC on March 24, 2017.

The PG&E Windsor Substation Project was evaluated in accordance with the California Environmental Quality Act (CEQA). The mitigation measures (MMs) and applicant-proposed measures (APMs) described in the Final Mitigated Negative Declaration (MND) were adopted by the CPUC as conditions of Project approvals. The CPUC voted on April 3, 2014 to approve the PG&E Windsor Substation Project (Decision D.14-03-031) and a Notice of Determination was submitted to the State Clearinghouse (SCH# 2013072033). The CPUC also adopted a Mitigation, Monitoring, Compliance and Reporting Program (MMCRP) to ensure compliance with all MMs imposed on the Windsor Substation Project during implementation.

As currently proposed by PG&E, the Windsor Substation Project will be constructed in two phases and separate NTPs will be issued for each phase. This is a typical process for substations and transmission line projects. Given that the Windsor Substation Project has been approved by the CPUC, as described above, this phased construction review process allows PG&E to proceed with individual Project components where compliance with all applicable MMs and conditions can be documented. The CPUC issued NTP #1 for the construction of the substation component phase on June 15, 2016.

After the Permit to Construct was issued, revised future loading estimates indicated that reconductoring of the distribution line along Old Redwood Highway is now only needed as far south as Pole a18, which is the first pole south of Arata Lane. Therefore, there will be no underground work along Old Redwood Highway, previously identified at Rio Ruso, Dawn Way, and Godfrey Drive. As a result, the extent of reconductoring along Old Redwood Highway has been reduced from approximately 1.8 miles to approximately 0.6 mile.

Under this NTP request, PG&E is also proposing four Minor Project Changes that were not included in the Project description in the MND. The MMCRP acknowledges that Minor Project Changes are anticipated and common practice for construction efforts of this scale and that a Minor Project Change request would be required for these activities and can be incorporated into an NTP. This letter documents the CPUC's thorough evaluation of all activities covered by the requested Minor Project Changes, and that no new impacts or increase in impact severity would result. Further, Minor Project Changes are reviewed to ensure that they are within the geographic boundary of the Project study area and that they do not trigger other permit

requirements unless the appropriate agency has approved the change, and clearly and strictly comply with the intent of the MM or applicable law or policy.

This letter documents the CPUC's thorough evaluation of all activities covered in this NTP, including the preconstruction compliance mitigation table provided with the subject NTP request. The evaluation process ensures that all MMs applicable to the location and activities covered in the NTP are implemented, as required in the CPUC's Decision.

NTP #2 for the rebuild of a segment of the Fulton No. 1 power line to hold a new double-circuit 12 kilovolt (kV) distribution line underbuild, and reconductoring an existing distribution line along Old Redwood Highway is granted by the CPUC based on the factors described below.

PG&E NTP Request

A detailed description of the substation component of the Windsor Substation Project is included in the MND and is summarized as follows:

Activities covered under NTP #2 of the Windsor Substation Project will consist of the following:

- Connection of the new substation to an existing 60 kV powerline by way of a new tubular steel pole (TSP) replacing an existing wood pole.

- Approximately 1.5 miles of the existing Fulton No. 1 60 kV Power Line will be rebuilt. This will require replacing 39 wood poles (with 38 wood poles and 1 steel pole) and installation of two (2) new wood riser poles.

- Approximately 0.6 mile of existing distribution line with 12 kV double-circuit conductor along Old Redwood Highway will be reconductored. This will require replacement of 18 wood poles with taller wood poles.

- Underground installation of three 12 kV circuits from the substation to Fulton No. 1 60 kV Power Line and Old Redwood Highway distribution line.

The construction for the powerline interconnection work will be in two phases: (1) replacing the existing pole on the Fulton No. 1 60 kV power line with a TSP, and (2) installing the conductor.

Power Line Interconnection Construction

Pole Installation and Replacement. The existing wooden pole on the Fulton No. 1 60 kV power line that will be replaced with a TSP is located on the west side of the railroad right-of-way (ROW) in an area containing open space and rural residences. See Minor Project Change #6 below for a description of the new TSP.

To erect the pole, a semi-truck and trailer will deliver the TSP to the pole site in sections. A crane will off-load TSP sections in preparation for assembly. An area approximately 50 feet square will be required temporarily for the installation of the TSP. This will require a brief temporary lane closure on Old Redwood Highway that will be coordinated with the Town of Windsor.

A tracked drilling rig will excavate the TSP's foundation. The rig will auger a hole between five feet and eight feet in diameter and approximately 15 to 20 feet deep, with the exact depth determined by local soil characteristics. Excavated soil will be tested and disposed of in accordance with applicable regulations or reused. The completed hole will be temporarily covered until installation of the new foundation. A reinforcing bar cage will be lowered into the hole and foundation bolts will be attached to the cage. Wood forms will then be constructed around the foundation and concrete poured into these forms. Excavating the foundation hole and pouring the concrete will require approximately three days. Once the concrete has cured, the bottom

section of the TSP will be delivered to the site and lowered onto the foundation by a crane. The remaining sections will be installed later as described in the MND.

The existing wood pole will be loosened for removal by a hydraulic jack mounted on a line truck. Some unused soil from the augured hole will be used to backfill around the concrete foundation of the TSP and will be feathered around the new pole site. Wooden poles and any sawdust will be deposited at the appropriate Santa Rosa PG&E Service Center collection bin or another appropriate available facility as necessary for ultimate disposal at a licensed Class 1 landfill or a composite-line portion of a solid waste landfill.

Before attaching conductors to the new TSP, a circuit clearance will be scheduled. At that time, a crane or bucket truck will lift the existing 60 kV transmission conductors from their current position and shift them out of the way. A second crane will lower the remaining sections of the new TSP into place. Line crews will then transfer the 12 kV distribution circuit from the riser poles to the TSP and the 60 kV transmission conductors from the crane to the TSP.

Stringing 60 kV Conductor. Stringing the conductor looping between the Fulton No. 1 60 kV power line and the substation will begin with the installation of sheaves or stringing blocks. Sheaves are rollers that are attached to the cross arm of a supporting structure. The sheaves allow the conductor to be pulled through each pole until it is ready to be pulled up to its final tension position. Once the pull and tension equipment is in place, a small cable used to pull the conductor, a "sock line", will be pulled from structure to structure by ground equipment. The conductor will then be attached to the sock line and strung via the tension-stringing method. This method controls the tension of the conductor as it is pulled through each sheave, ensuring the conductor remains elevated above the railroad. After pulling the conductor into place, sag will be adjusted to a pre-calculated level. Finally, the conductor will be clamped to the end of each insulator, and the sheaves will be removed. Vibration dampers and other accessories will complete the installation.

Reconductoring of Distribution Line and Power Line Underbuild

Pole Replacement. Reconductoring and rebuilding of power lines for the Project will require replacement of 56 wood poles along two existing distribution lines and the installation of 2 new riser poles. Existing poles are approximately 45 feet tall, and new poles will be approximately 20 feet higher, or about 65 feet tall. The new wood poles will employ an avian-safe design to protect raptors and other birds from electrocution.

Pole replacement will require an approximately 75-foot radius of temporary impact around the TSP, a 50-foot radius of temporary impact around wood poles, and an approximately 10-foot-wide corridor of temporary impacts between poles. Most replacement poles will be installed within three to six feet of the existing pole they are replacing. Wood poles will be delivered to each pole site on a line truck with trailer. The line truck will auger a hole to the appropriate depth. The replacement wood pole will be framed with the necessary insulators and hardware, and then installed in the hole by the line truck or a crane. Soil from the augured hole will be covered with plastic tarps and will be used for filling holes, feathered around the pole base, or will be removed.

Whenever possible, work will take place within previously disturbed areas around the base of the existing poles. At most pole locations, crews will be working from paved streets. In addition to electric lines, the existing wood poles along Old Redwood Highway support telephone and cable television lines. Collocated utility lines will be detached from the existing poles and attached to the replacement poles.

Bucket trucks will be used to remove cross arms and wires from poles. A boom mounted on the line truck will loosen old poles as needed so that crews can then use the line truck to pull the wood poles out of the ground. Based on site-specific conditions, some old wood poles may be cut off at the base or six to 12 inches below the surface and left in place. All old poles, associated hardware, and any debris generated will be removed and disposed of properly.

Reconductoring. During reconductoring of overhead distribution lines, the existing conductor will be replaced with heavier-duty 1,100 thousand circular mil (kcmil) all-aluminum conductor, increasing the capacity of the line. Pull and tension locations along public streets will be required for the Project. These pull and tension sites will be located around dead end or angle poles and will require an area of approximately 400 to 500 square feet (40 to 50 feet long by 10 feet wide) for operations. Insulators will be installed or replaced as part of the reconductoring work.

New insulators will be placed on poles with conductor rollers at their end. To install the new overhead conductors, the existing conductor at one end of a given pull section will be attached to a puller-truck cable. The new conductor will be attached to the existing conductor at the opposite end of the pull section. Once the new conductor is in place and the sags between structures have been adjusted to a pre-calculated level, the new conductor will be detached from the rollers and clipped into the end of each insulator. At maximum sag, the conductor will be 25 feet or more above ground level. The rollers will be removed and vibration dampers and other accessories will be installed. A line truck will take the old conductor from the site to the PG&E construction storage yard located at 101 Airport Boulevard in Santa Rosa.

Underground Installation. Undergrounded conductor segments extending across the substation parcel between the Fulton No. 1 60 kV Power Line and Old Redwood Highway will be completed using open trenching. Circuit 1 will extend approximately 458 feet west across the substation parcel and under the railroad tracks to the Fulton No. 1 60 kV Power Line. Circuit 2 will extend approximately 620 feet east across the substation parcel to Old Redwood Highway. Circuit 3 will extend approximately 538 feet west across the substation parcel and under the railroad tracks to Fulton No. 1 60 kV Power Line. Section 4.12.3 of the Final MND describes techniques to be used for underground installation of distribution lines as including horizontal directional drilling (HDD), jack and bore, or open trenching, noting that a jack and bore technique would "likely" be used under the railroad west of the substation. PG&E has concluded that the HDD technique will be used under the railroad west of the substation to install Circuits 1 and 3. The HDD equipment entry pit will be set up east of the wetland and the drill will extend under the SPCC pond, the wetland, and the railroad tracks.

Regional groundwater occurs at a depth of approximately 80 feet below the ground surface, which is deeper than any of the proposed bores. If significant volumes of perched groundwater are encountered, water will be evacuated using a sump pump, transferred into water storage tanks (to be sited at the substation site), sampled, analyzed, transported, and disposed in accordance with all federal, state, and local regulations. If any worker observes potential contamination or signs of preexisting hazardous waste during excavation, work in that area will be stopped until the contamination is dealt with in accordance with all federal, state, and local regulations. As part of final construction activities, PG&E will restore all paved surfaces, and restore landscaping or vegetation, as necessary and in compliance with the road encroachment permit.

To ensure no contamination will occur to nearby storm drains and water sources, PG&E construction crews will implement best management practices (BMPs) outlined in PG&E's *Water Quality Construction Best Management Practices Manual.*

Open Trenching. Trenches will measure approximately 48 to 56 inches deep and 18 to 24 inches wide. A backhoe will be used to dig the trenches; trenching in paved locations will require first saw-cutting and/or breaking the pavement. Cable conduit will be installed in the open trench using reinforcement bar, ground wire, and concrete conduit encasement. To complete the work, thermal select or controlled backfill will be added and compacted in the trench. A road base backfill or slurry concrete cap will then be installed. Soil excavated during trenching will be temporarily stored at the substation property. If testing shows these soils are non-hazardous, they can be used as backfill at any Project site. Unused soil will be disposed of in accordance with all federal, state, and local regulations.

Jack and Bore. Jack and bore techniques will likely be used under the railroad west of the substation. The final location of entrance and exit pits for jack and bore techniques have not been determined. Placement would

be determined by PG&E engineering design and a Town of Windsor encroachment permit, and/or consultation with SMART (Sonoma-Marin Rail Transit) as appropriate. Boring will begin with the digging of entrance and exit pits (approximately 24 feet long, 16 feet wide, and 6 feet deep). Shoring will be installed when necessary. After shoring, bore equipment will be installed in the bore pit. Steel casing will be welded in sections and jacked into the bore. Finally, assembled conduits will be pulled through the steel casing.

Approximately 200 cubic yards of material will be excavated to create the pits. Approximately 20 truck trips will be needed to haul soils removed from the pits. The soil will be transported to one of three locations or another appropriate available facility as necessary: the substation site; Syar Industries at 13666 Healdsburg Avenue, Healdsburg; or a private property at 40887 River Road, Cloverdale for temporary storage. Soils classified as non-hazardous can be used as backfill or at another permitted construction site. Unused soil will be disposed of in accordance with all federal, state, and local regulations.

Minor Project Changes

Minor Project Changes (MPCs) #1 through #3 were approved as part of NTP #1 dated June 10, 2016, and MPC #4, Revision of the Conceptual Landscape Plan, was approved on August 19, 2016. PG&E is submitting MPCs #5 through #8 with NTP #2 request, along with figures and photographs. CPUC has reviewed each MPC request and has confirmed that each request satisfies the MPC review criteria as presented above.

- **MPC #5: Use of a Crane Staged on SMART Tracks**

  PG&E is proposing to use a crane, staged on the SMART tracks, to replace certain poles along the Fulton No. 1 line that are difficult to access. This refinement has been made to minimize construction disturbance by utilizing the existing railroad tracks for access. The SMART tracks are within approximately 60 feet of the Fulton No. 1 power line. Poles that would be replaced in this manner include the poles within the proposed Kerry Preserve (Poles a7 and a8), and poles located within the backyards of houses along Starburst Court, Collen Drive, and Joni Court (Poles a21 through a28). It is also possible that Poles a1 through a6 (in the field north of the Kerry Preserve) and Poles a9 and a10 (south of the Kerry Preserve) will be replaced using a crane situated on the SMART tracks, as the crane will already be working in proximity to these locations.

  The crane will access the tracks at the crossing of Starr Road, approximately 0.6 mile south of the substation site. Crane access requires the SMART tracks to be clear for a width of approximately 7 feet from the center of the track - a width of approximately 14 feet in total. The SMART tracks have not been used recently by railway traffic, and trees and shrubs have encroached onto the tracks in several locations. Tree species are primarily acacia and eucalyptus. One tree will need to be removed if the crane is used to replace Pole a6; other trees will only need to be trimmed, not removed. The tree that may be removed is a valley oak in declining health, with a diameter at breast height (dbh) of 18 inches. A minimal amount of vegetation clearing will be required to allow the crane to be moved along the tracks.

  At locations where the crane is performing work, outriggers will extend for stabilization and crane cribbing will be placed on the ground to dissipate the pressure of the outriggers. One of two types of crane could be used – a crane that has a width of 27 feet between outriggers, or a slightly smaller crane that has a width of 24 feet and 3 inches between the outriggers. The type of cribbing to be used will depend on the grade at each location. Typically, cribbing consists of wood mats that measure approximately 4 feet by 7 feet or 5 feet by 7 feet. Where the ground is uneven or there is a ditch, wood blocks will be placed on the ground and bridged with a steel plate measuring approximately 6 feet by 10 feet in size. At the end of each work day, the crane and cribbing may remain in place overnight, or may be moved to a new location along the tracks.

By using the existing railroad tracks, an established route, to provide access, potential disturbance to residents and the proposed Kerry Preserve during construction would be minimized. Furthermore, construction equipment would be similar to that disclosed in the MND (Table 4-3. Construction – Typical Equipment Used) and the level of disturbance associated with installation of pole replacement would be consistent with the description in the MND (MND, Section 4.12.1). For these reasons, this minor Project refinement does not involve substantial changes to the Project or Project circumstances as described in the MND, and will not result in new significant environmental effects or a substantial increase in the severity of previously identified impacts.

In accordance with the preconstruction compliance MMs presented in Attachment B of the NTP request, surveys for special-status plant and wildlife species will be conducted prior to using the SMART tracks. Additional surveys for cultural resources will not be required because the crane will be positioned on the tracks, with wood cribbing placed on the ground surface on either side of the tracks to support the outriggers.

- **MPC #6: Pole Installation and Replacement**

Final engineering and design of the Project has identified the following minor refinements and clarifications to Section 4.11.1 on the MND (Pole Installation and Replacement):

> The MND states *"The existing wooden pole on the Fulton No. 1 60 kV power line that would be replaced with a TSP is located on the west side of the railroad right-of-way in an area containing open space and rural residences. The new TSP would be made of weathered steel tapering upward from a ground-level diameter of approximately 30 inches. A concrete foundation for the TSP would have a diameter of approximately 5.5 feet. The TSP would reach a height of 75 feet; two cross arms would extend 4-feet laterally on each side of the pole."*

The final design of the TSP concluded that it will be composed of galvanized steel tapering upward from a ground-level diameter of approximately 55 inches (versus 30 inches), the concrete foundation will have a diameter of approximately 5.7 feet (versus 5.5 feet), the TSP will be approximately 80 feet tall (versus 75 feet), and two cross arms will extend 5 feet laterally on each side of the pole (versus 4 feet). Galvanized steel is preferred over weathered steel, especially in wet climates, because weathered steel requires re-coating to preserve structural integrity. It is also less visible against the sky than weathered steel. Given the location of the TSP in an open area behind the substation and the railroad track, PG&E's designers proposed to go with galvanized steel. The TSP will be less visible against the skyline where it is viewed above the existing trees.

The MND identified four Key Observation Points (KOPs) representing the typical and worst-case visual aesthetic impacts of the proposed Project and "because the distribution line work is updating existing landscape elements rather than creating new ones, KOPs were chosen for the substation only" (MND Section 5.1.2). However, KOP-4 from Herb Road and the Northwestern Pacific Railroad, looking southeast, included view of the TSP noting that the new TSP would be visible above the existing trees along the railroad corridor. The discussion concluded that overall visual change would be moderate (MND Section 5.1.2, Visual Change at KOP-4).

While the base of the TSP would be larger with this Project refinement, the TSP is situated adjacent to the railroad right-of-way in a relatively secluded area containing open space. The nearest rural residence is located more than 250 feet north of the TSP and views of the TSP are screened by existing trees and vegetation. Thus, the base of the TSP would not be highly visible. Furthermore, the TSP will be located within an existing utility corridor. The TSP 5 foot height increase and slightly longer arms (one foot increase) would result in an incremental change, but would not be readily noticeable. The galvanized steel TSP would also be less visible against the skyline where it is above the existing trees.

For these reasons, the minor refinements in the final design of the new TSP do not involve substantial changes to the Project or Project circumstances, and do not result in new significant environmental effects or a substantial increase in the severity of previously identified impacts.

SCE also offers the following minor clarifications concerning the pole replacements:

- The two wood poles to be installed on either side of the TSP, incorrectly described in Section 4.11.1 as temporary shoo-fly poles, are correctly depicted on Figure 5.4.1 of the MND as permanent new riser poles.
- Section 4.11.1, Pole Installation and Replacement, states that the Fulton No. 1 line currently has two 12 kV distribution circuits mounted under the 60 kV conductors. Currently there is only one underbuild; the Project is adding the second circuit, and when completed, there will be two distribution underbuilds.

- **MPC #7: Tree Trimming and Removal**

  Figure 5.4-1 of the MND identified three trees to be removed in association with the reconductoring work – one near Pole a2 on the west side of the SMART tracks, and two at the north end of the Kerry Preserve. Based upon final design and engineering, and proposed use of the SMART tracks for construction access at some locations, a different tree must be removed near Pole a2 than was identified in the MND. The tree to be removed is on the east side of the SMART tracks – as depicted on the biological resources map in Attachment A of the NTP request – and has a dbh of 10 inches, requiring in-kind replacement at a ratio of 1:1 dbh. No adjustment to the substation landscape plan needs to be made to accommodate this mitigation ratio as the tree has a smaller dbh than the tree previously identified to be removed.

  With the use of a crane staged on the SMART tracks to replace Poles a6 and a7, the two oak trees at the north end of the Kerry Preserve will not need to be removed. A large dead oak tree on the ground within the Kerry Preserve will need to be cleared to access Pole a7. Tree trimming will be required at various locations to access poles or use the crane to remove and install poles from the SMART tracks. One valley oak, near Pole a6, will need to be removed if the crane situated on the SMART tracks is used to replace this pole; this tree is in decline, and as such does not qualify for in-kind replacement. Per APM BIO-15 of the MND, PG&E has committed to replacing or compensating for the removal of protected oak trees in accordance with the Town of Windsor's Tree Ordinance. Page 3-126 of the Town of Windsor Tree Ordinance states "If the protected tree is dead, dying, or diseased, replacement/in-lieu fee will not be required." Page 3-127 states "In no case shall an applicant for a Tree Removal Permit be required to replace or otherwise pay for the value of a tree that is diseased or in danger of collapse, or that the Town has requested to be removed.

- **MPC #8: Additional Pull Site**

  PG&E is requesting an additional pull and tension site, located on Railroad Avenue between Poles a32 and a33. This pull site is needed because the distance between Starr Road and Windsor River Road is slightly longer than the size of a standard spool of wire. The location of this pull site is depicted on the map in Attachment A of the NTP request.

  The MND identified an approximate number of pull and tension sites, and also noted that "exact locations of pull and tension sites would depend on Town traffic permits and permission from property owners" (MND Section 4.12.2). The additional pull and tension site is within the Project study corridor as defined by the MND and it is identified as a developed/landscaped area. This site would be located within existing paved roadways, and an encroachment permit would be acquired prior to work occurring within the public right-of-way. This minor Project refinement does not involve substantial

changes to the Project or Project circumstances as described in the MND, and will not result in new significant environmental effects or a substantial increase in the severity of previously identified impacts.

CPUC Evaluation of Preconstruction Mitigation Implementation

All applicable Project MMs, APMs, compliance plans, and permit conditions shall be implemented. Some measures have on-going/time-sensitive requirements and are required to be implemented prior to and during construction where applicable. The Compliance Status Table in PG&E's NTP request provides preconstruction compliance information for the issue areas addressed by the Windsor Substation Project Final MND. The following contains a status of applicable MMs and APM required submittals, including any outstanding requirements:

Biological Resources:

Fulton No. 1 60 kV Power Line. Habitat along the Fulton No. 1 60 kV Power Line is a mosaic of natural habitats such as annual grasslands, wetlands, Starr Creek, and oak woodlands; rural, medium-, and high-density residential areas, livestock areas, public roadways and other developed/disturbed areas. The property directly west of the substation site is where the TSP, three replacement poles, and an access road will be located. This area contains mostly annual grassland, along with some oak woodland, as well as a seasonal swale and three vernal pools. Directly south of this vacant property is a parcel that is part of the proposed Kerry Conservation Site, which is a mitigation area in the Santa Rosa Plain Conservation Strategy. CDFW intends for this parcel to serve as a special-status plant mitigation area. The pending mitigation area parcel contains vernal pools and fairly dense oak woodland.

Old Redwood Highway 12 kV Distribution Line. The area along this distribution line between the substation site and Windsor River Road is largely residential, commercial, and industrial. The survey area along this alignment is adjacent to ruderal, grassland, and woodland habitats, as well as developed areas (including residences). The line spans and/or is adjacent to numerous roadside ditches, several drainage ditches and swales.

Windsor Substation Site. The Windsor Substation site is relatively flat and has been graded and had base rock spread and compacted over a majority of the site. There are mature trees along the northern, southern, and western property lines. There is a seasonal swale along parts of the southern and western boundaries, which is protected by silt fencing and Environmentally Sensitive Area (ESA) fencing, as well as a small drainage ditch along the northern boundary, which is protected with BMPs (fiber rolls and sand bags). A roadside ditch runs outside of the substations site at the eastern edge of the property along Old Redwood Highway.

Biological Mitigation/Resource Agency Requirements, include the following:

- Wetland jurisdictional areas will be avoided and protected by Environmentally Sensitive Area (ESA) fencing and silt fencing per the Stormwater Pollution and Prevention Plan (SWPPP).
- PG&E has conferred with CDFW regarding nesting bird surveys during the avian nesting season (February 1 through September 15), and preconstruction nesting bird surveys will be conducted prior to the start of construction and continue throughout the nesting season.
- Preconstruction surveys for special-status bats were conducted and reports submitted to the CPUC, which were reviewed and approved on May 18, 2016 and July 28, 2016. An additional special-status bat survey will need to be performed as a new tree has been identified as requiring removal. Preconstruction surveys for special-status wildlife and plant species shall be conducted prior to construction.
- If special-status wildlife species or signs (i.e. occupied badger burrows), PG&E will contact CDFW and/or USFWS immediately, as well as the CPUC Environmental Monitor (EM).

- If special-status plant species are found during any of the special-status plant surveys, PG&E will modify the Project to avoid impacts to special-status plants. If identified special-status plants cannot be avoided, PG&E will consult with the appropriate resource agency and comply with permit conditions.
- Avoidance and minimization measures to protect special-status plants, wetlands, and vernal pools have been incorporated into the Project design and planned construction activities.
- Resumes of qualified biologists were submitted with NTP Request #1 to the CPUC; these were reviewed and approved May 18, 2016.
- All construction personnel shall receive biological resource training as part of the Worker Environmental Awareness Program (WEAP) prior to starting work.

Cultural Resources: The records search for prehistoric resources did not return any finds near the Windsor Substation site or along the Fulton No. 1 60 kV Power Line or Old Redwood Highway distribution line other than the following: Historic resources that have been documented near the Project site include the Northwest Pacific Railroad and associated features (recommended as ineligible for listing in the NRHP and CRHR), the Fulton No. 1 60 kV Power Line (rebuilt in 2009), Old Redwood Highway (continuously used and frequently upgraded), and other historic structures that will be avoided.

Prior to the initiation of construction or ground-disturbing activities, as part of the WEAP, PG&E will train all construction personnel to understand the potential for exposing subsurface cultural resources and to recognize possible buried cultural resources. Training will inform all construction personnel of the anticipated procedures that will be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains and their treatment.

As discussed by APM CU-3, in the event human remains are encountered during the Project, work in the immediate area of the find will be halted and the County Coroner will be notified immediately. Work will remain suspended until the Coroner can assess the remains. In the event the remains are determined to be prehistoric in origin, the Coroner will notify the Native American Heritage Commission, who will then identify a Most Likely Descendent. The Most Likely Descendent will consult with PG&E's archaeologist to determine further treatment of the remains.

Paleontological Resources: The geology in the vicinity of the Project consists largely of Halocene and Pleistocene age sedimentary and volcanic rocks. The Project is located on Quaternary sedimentary units which include alluvium, Glen Ellen, Huichica, and Sonoma Volcanics formations. The alluvial sediments are unlikely to contain any significant fossil resources. The sedimentary rocks of the Glen Ellen and Huichica formations have not been identified as important paleontological formations. Sonoma Volcanics are typically deep below the surface, so construction activities would be unlikely to encounter this formation. The UC Museum of Paleontology (UCMP) databases of known paleontological sites in Sonoma County were reviewed by the Applicant to identify the occurrence of fossils in these formations and to determine the likelihood that paleontological resources might be encountered during excavation and grading of the substation site. The UCMP records search indicated that there are 503 fossil locations within Sonoma County, with the closest two specimens collected from locations two to five miles west of the Project substation site. Most previously identified fossils within Sonoma County were found in the Wilson Grove and Petaluma formations. These formations are unlikely to be encountered during Project construction (PG&E 2010).

Hazards and Hazardous Materials: A Hazardous Substance Control and Emergency Response Plan was submitted with NTP Request #1, which was reviewed and approved by the CPUC on June 8, 2016. The plan prescribes hazardous material handling procedures to reduce the potential for a spill during construction or exposure of the workers or public to a hazardous material. The plan provides a discussion of appropriate response actions in the event that hazardous materials are released or encountered during field activities. The

WEAP will communicate environmental concerns and appropriate work practices to all construction field personnel. The training program will emphasize site-specific physical conditions to improve hazard prevention, and will include a review of the Hazardous Substances Control and Emergency Response Plan and SWPPP. As required by MM HAZ-1, proper notification shall be made in the event of spills and if contaminated soil is encountered, PG&E shall ensure proper sampling, data review, regulatory coordination, and documentation of compliance.

Hydrology & Water Quality. This Project is subject to the requirements listed in the National Pollutant Discharge Elimination System (NPDES No. CAS000002) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Permit), Order No. 2009-0009-DWQ2 (CGP) and is managed by the State Water Resources Control Board per the Clean Water Act (CWA) Section 402(b) and 40 CFR Part 123. PG&E has prepared an Erosion and Sediment Control Plan as part of the SWPPP. The Regional Water Quality Control Board has issued a Waste Discharge Identification (WDID) number for the Project (WDID# 469458). Erosion control and pollution prevention measures in the SWPPP address elements such as track-out controls, stock-pile handling, dewatering discharge, drain inlet protection, and replacement of any disturbed pavement or landscaping. PG&E has also prepared a Spill Prevention Containment and Countermeasure (SPCC) Plan, which was included with the grading permit application to the Town of Windsor. Oil-absorbent material, tarps, and storage drums will be present on-site to contain and control any minor releases. Prior to the start of construction, all field personnel shall be required to attend WEAP training, which will include a review of the appropriate application and construction or erosion and sediment control measures. The WEAP will also discuss appropriate hazardous materials management and spill response. No jurisdictional waters will be impacted by the Project; therefore, no additional permits are required.

Sensitive Land Uses/Noise. The Windsor Substation site is located west of Highway 101 and is bounded on the north by Herb Road, on the west by the Northwest Pacific Railroad right-of-way, and on the east by Old Redwood Highway. The adjacent parcels to the north and west each contain two single-family dwelling units. One residence is located on the east side of Old Redwood Highway. The nearest homes are 60 feet north and 160 feet west of the Project substation parcel boundary and 125 feet north and 200 feet west of the substation fence line. The installation of the underground distribution lines from the substation to the Fulton No. 1 60 kV line, and from the substation to Old Redwood Highway, will occur in an area zoned Service Commercial. Installation of the overhead, double-circuit distribution line under the Fulton No. 1 Power Line will primarily occur on lands zoned Surrounding Residential, with portions of the power line being adjacent to lands zoned as Estate Residential and Planned Development to the west. Reconductoring of the distribution line along Old Redwood Highway includes lands zoned as Service Commercial, Public Institutional, and Medium Density Residential. Construction notifications shall be provided to the public prior to the start of construction along with contact information for complaints related to construction activities. PG&E has also specified construction noise reduction measures that require the contractor to ensure all equipment is in good working order, adequately muffled, and maintained in accordance with the manufacturers' recommendations. Stationary equipment shall be located as far as practical from sensitive noise receptors.

Traffic and Transportation. As required by MM T-2, PG&E shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. Police departments, fire departments, ambulance services, and paramedic services serving the Project area shall be notified 30 days in advance by PG&E of the proposed locations, nature, timing, and duration of any construction activities and advised of any access restrictions that could impact their effectiveness. At locations where roads will be temporarily blocked, work crews shall be ready at all times to accommodate emergency vehicles through immediately stopping work for emergency vehicle passage and/or facilitating the use of short detours and alternate routes in conjunction with local agencies. As required by MM T-3, PG&E shall consult with Sonoma County Transit District at least one month prior to construction to reduce potential interruption of bus transit services. If necessary, PG&E shall arrange for transit bus routes to be temporarily rerouted until construction in the

vicinity is complete. PG&E shall obtain approval from SMART to encroach on the railroad right-of-way. Documentation of coordination with emergency services providers and Sonoma County Transit District, as well as SMART approval for encroachment on the railroad right-of-way, shall be provided to the CPUC prior to the start of construction.

Conditions of NTP Approval

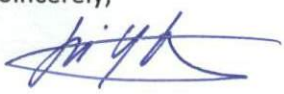
The conditions noted below shall be met by PG&E and its contractors:

- All applicable Project MMs, APMs, compliance plans, and permit conditions shall be implemented. Some measures have on-going/time-sensitive requirements and shall be implemented prior to and during construction where applicable.
- Copies of all relevant permits, compliance plans, and this NTP #2 shall be available on site for the duration of construction activities. All permits and plans shall be made available to the CPUC EM upon request.
- As required by MM LU-1, prior to construction, the Applicant shall give at least 10 days advance notice of the start of any construction-related activities. Notification shall be provided by posting signs along affected roadsides to tell the public about the work. The posted signs shall: describe where and when construction is planned, and provide contact information for a point of contact for complaints related to construction activities. Prior to commencing ground disturbing activities, the Applicant shall submit a copy of the template used for the posted sign. *Reporting of Complaints*. The Applicant shall document all complaints and strategies for resolving complaints in regular reporting to the CPUC.
- All crew members shall be WEAP trained prior to working on the Project as described by APMs BIO-1, BIO-3, CU-1, HM-3, and WQ-3, and MM B-1. A log shall be maintained on-site with the names of all crew personnel trained. The WEAP training brochure can be provided in Spanish or other languages if appropriate. All participants will receive a hard-hat sticker for ease of compliance verification.
- As described in MM B-1 and APM BIO-4, a pre-construction wildlife and plant survey will be conducted within 7 days prior to the start of construction activities to identify any special-status species, nesting birds or mammals, and occupied burrows in the substation site. Should a sensitive wildlife or plant species be found, CDFW and/or USFWS will be contacted immediately, as well as the CPUC EM.
- As described in MM B-1 and APM BIO-5, daily biological monitoring shall be required during all construction activities near sensitive resources, including special-status species, wetlands, vernal pools, and oak woodlands. If appropriate (based on the phase and location of construction activities), PG&E may request that the CPUC allow less frequent monitoring.
- As described in MM B-1 and APM BIO-7, if special-status plant species are found during any of the special-status plant surveys, PG&E will modify the Project to avoid impacts to special-status plant species. If identified special-status plant species cannot be avoided, PG&E will consult with the appropriate resource agency and comply with permit conditions to ensure that the Project will not have a substantial adverse effect on such species, either directly or through habitat modification.
- As described in APM BIO-11 and APM BIO-12, badger dens will be clearly demarcated with appropriate flagging and signs and avoided if possible. If a badger den cannot be avoided, CDFW will be consulted to discuss the possible relocation of the badger.
- As required by MM B-1 and supplementing APMs BIO-1, BIO-4, and BIO-5, PG&E shall conduct WEAP training that also addresses California Species of Special Concern and provide brochures addressing all potentially affected special-status species. Pre-construction surveys by a qualified biologist (approved by the CPUC) shall be conducted within 7 days of construction activities and biological resources monitoring shall be required on a daily basis during all construction activities near sensitive resources.

- In accordance with MM B-2, prior to the onset of construction activities, a qualified biologist (approved by the CPUC) shall delineate any wetland or water features within the Project area as environmentally sensitive areas (ESA) using clear markers. Construction crews shall be provided with maps of environmentally sensitive areas. Staking for ESA fencing and construction work areas shall be reviewed and approved in the field by the CPUC EM prior to the start of construction.
- If a northwestern pond turtle is found during preconstruction surveys or during construction, avoidance and/or relocation measures as specified in MM B-3 will be implemented.
- Preconstruction surveys for nesting birds shall be conducted during the avian nesting season (February 1 through September 15), the establishment of buffers and their reductions, and monitoring and reporting shall occur in accordance with MM B-4. Requests to reduce standard buffers must be submitted to the independent avian biologist(s) to be reviewed in coordination with the CDFW. If the qualified wildlife biologist determines that there are nests of listed or fully protected bird species within 500 feet of Project activities, consultation with CPUC and CDFW (and USFWS as appropriate) shall be required to discuss how to implement the Project and avoid "take."
- In accordance with MM B-5, a survey for roosting bat habitat was conducted on March 15 and 16, 2016, and a follow-up survey was conducted June 21, 2016; however, an additional survey shall be performed for the new tree that has been identified as requiring removal as described under MPC #7 above.
- In the case of an unanticipated cultural or paleontological resources discovery, the CPUC EM shall be notified immediately.
- As described in APM CU-3, in the event human remains are encountered during the Project, work in the immediate area of the find will be halted and the County Coroner will be notified immediately. Work will remain suspended until the Coroner can assess the remains. In the event the remains are determined to be prehistoric in origin, the Coroner will notify the Native American Heritage Commission, who will then identify a Most Likely Descendent. The Most Likely Descendent will consult with PG&E's archaeologist to determine further treatment of the remains.
- If contaminated soil is encountered during construction, the requirements of MM HAZ-1 shall be implemented.
- As described in APMs WQ-1 and WQ-2, all BMPs will be on-site and ready for installation before the start of construction activities and the SWPPP shall be implemented and monitored during construction. As described in APM WQ-5, oil-absorbent material, tarps, and storage drums will be present on-site to contain and control any minor releases. The CPUC EM shall be notified immediately of all spills. If a reportable spill occurs, as defined by the Hazardous Substance Control and Emergency Response Plan, immediate telephone notification shall be made to Cal EMA and the National Response Agency.
- If construction debris or spills enter into environmentally sensitive areas, appropriate jurisdictional agencies and the CPUC EM shall be notified immediately.
- As required by MM T-2, PG&E shall submit documentation of notification and coordination with emergency service providers to the CPUC prior to the start of construction.
- As required by MM T-3, PG&E shall consult with Sonoma County Transit District (SCTD) at least one month prior to construction to reduce potential interruption of bus transit services. Also, PG&E shall obtain approval from SMART to encroach on the railroad right-of-way. PG&E shall submit documentation of coordination and approval to the CPUC prior to the start of construction.
- No movement or staging of construction vehicles or equipment shall be allowed outside of the approved areas. If additional temporary workspace areas or access routes, or changes in technique and mitigation

implementation to a lesser level are required, a Minor Project Change request shall be submitted for CPUC review.

Sincerely,



Eric Chiang
CPUC Environmental Project Manager

cc: V. Strong, Aspen