

## 5.16 Transportation/Traffic

### TRANSPORTATION AND TRAFFIC

**Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

### 5.16.1 Setting

During construction, access to the substation site and the power and distribution lines would be via Highway 101, Old Redwood Highway, Arata Lane, Starr Road, Gumview Road, and Herb Road (public section). Other minor side streets would be used for short-term access to individual pole locations, including Dawn Way and Godfrey Drive. The exact locations of pull and tension sites would depend on city traffic permits and permission from property owners. PG&E anticipates using two pull and tension sites for Circuit 1 and seven pull and tension sites for Circuit 2. For Circuit 1 the approximate sites would be Starr Road where it intersects the Fulton No. 1 60 kV Power Line, and Windsor River Road where it intersects the Fulton No. 1 60 kV Power Line. The approximate pull and tension site locations for Circuit 2 would be Old Redwood Highway just east of the substation site and Old Redwood Highway near the intersections with Starr Road, Arata Lane, Rio Ruso Drive, Dawn Way, Godfrey Drive, and Windsor Road (PG&E 2011-2013).

Old Redwood Highway borders the project substation site to the east; access to the substation site parcel would be directly off of Old Redwood Highway via a newly-installed curb cuts and driveways on the east side of the parcel. Figures 4-3 and 4-4 (in Appendix C) depict the existing streets and roadways in the project vicinity. Distribution line installation may require both general access and additional workspace within Old Redwood Highway, Starr Road, Gumview Road, Herb Road, and minor access roads leading to individual pole locations on the Fulton No. 1 60 kV Power Line (PG&E 2011).

The Sonoma County General Plan 2020, Circulation and Transit Element and the Town of Windsor General Plan provide assessments of the level of service (LOS) on roads within their respective jurisdictions. LOS is based on traffic congestion, which is measured by dividing traffic volume by roadway capacity. The resulting number, known as the volume-to-capacity ratio, is divided into six LOS categories, A through F, which represents conditions ranging from unrestricted traffic flow (A) to extreme traffic congestion (F).

The Circulation Element of the Sonoma County General Plan includes the following objectives (Sonoma County 2008):

- Objective CT-3.1 requires a LOS of C or better on roadway segments unless a lower LOS has been adopted;
- Objective CT-3.2 requires maintenance of a LOS of D or better at roadway intersections;
- Objective CT-3.3 allows these levels of service to be exceeded if it is determined to be acceptable due to environmental or community values, or if a project has an overriding public benefit that outweighs the lower level of service and increased congestion.

The Town of Windsor General Plan (1995, 2009 update) includes the following policies related to transportation and circulation:

- **Implementation Standard D.4, Level of Service Standards**, states that the Town shall adopt a level of service standard D for Crosstown Streets and signalized intersections, but that the Town shall recognize that reducing congestion must be balanced against improvement costs and community character concerns;
- **Implementation Standard D.7, Traffic Mitigation Fee**, states that the Town should collect Traffic Mitigation Fees from new development to finance transportation improvements.

## Highways

Major north-south access to the project area is provided by Highway 101, which connects Windsor and the greater Santa Rosa area with the Bay Area and California’s north coast. It runs less than 0.25 miles east of the proposed project site, and the nearest highway off-ramps are 0.4 miles to the south. The segment of Highway 101 in Windsor is four lanes with a daily traffic volume of 66,000 vehicles and peak-hour LOS of less than C (PG&E 2011). Sonoma County has a LOS objective of D for the segment of Highway 101 north of Windsor River Road (Sonoma County 2008). Additionally, Highway 101 has opened up third travel lanes in each direction (operating as High Occupancy Vehicle lanes) between northern Santa Rosa and Windsor.

A number of projects are planned in proximity to the proposed project and would likely require use of Highway 101 for construction traffic (see Table 5.16-1). However, construction schedules for most of these projects are not yet known (PG&E 2011-2013, Data Responses).

**Table 5.16-1. Planned Projects in the Vicinity of the Proposed Windsor Substation.**

Project Name	Address	Proximity to Substation Site	Type of Development	Description	Size (approx.)	Status <sup>2</sup>	Anticipated Construction Schedule
Sanderson Ford	10920 Old Redwood Hwy	0.20 mile	Nonresidential	Auto dealership	7 acres	AU	Unknown
LaFranchi Retail	8779 Conde Lane	2 miles	Nonresidential	Retail	8.5 ksf <sup>1</sup>	P	Unknown
Los Robles Meadows 1 & 2	9885 Old Redwood Hwy	1 mile	Residential	Single-family detached	Unknown	Unknown	Unknown
Cole Subdivision	9885 Old Redwood Hwy	0.70 mile	Residential	20 single-family attached/11 single	Unknown	N/A	Project Withdrawn
Columbo	10095 Old Redwood Hwy	0.80 mile	Residential	Single-family detached	Unknown	N/A	Project Withdrawn

**Table 5.16-1. Planned Projects in the Vicinity of the Proposed Windsor Substation.**

Project Name	Address	Proximity to Substation Site	Type of Development	Description	Size (approx.)	Status <sup>2</sup>	Anticipated Construction Schedule
Coate Minor Subdivision #3	450 Duncan Drive	2 miles	Residential	Single-family detached	Unknown	Unknown	Unknown
Coate Minor Subdivision #4	475 Ginny Drive	2 miles	Residential	Single-family detached	Unknown	Unknown	Unknown
Town Green Village 5	8900 Bell Rd	1.70 miles	Mixed use	66 single-family detached (condos) over 30.4 ksf <sup>1</sup> retail	Unknown	Unknown	Unknown
Windsor Mill	8777 Bell Rd	1.90 miles	Mixed use	53 single-family detached, 23 live/work townhomes, 127 single-family attached	Unknown	Unknown	Unknown
Village at Windsor	8975 Conde Lane	1.90 miles	Mixed use	16 single-family detached (condos) over 12.1 ksf <sup>1</sup> retail	Unknown	Unknown	Unknown
Windsor Gateway	9397 Old Redwood Hwy	1.40 miles	Mixed use	152 single-family detached (condos) over 40 ksf <sup>1</sup> retail	Unknown	AU	Unknown
Bell Village Project	9290 Old Redwood Hwy	1.27 miles	Mixed use	403 residential units (condos and townhouses; 77.6 ksf <sup>1</sup> retail	27.18 acres	AU	Unknown

1 - ksf = thousand square feet

Sources: Town of Windsor Planning Department 2007, Jones 2011

2 - Status:

- C A project application is anticipated
- P The project is pending in the formal application review process
- AU The project application has been approved, but no known construction schedule yet
- AK The project application has been approved and there is a construction schedule
- U The project is under construction
- Unknown No reply from phone call to project proponent and status is unknown to Windsor planning staff

Two projects, the Charles M. Schultz/Sonoma County Airport Master Plan and gravel mining along the Russian River near Geyserville would likely require use of Highway 101 during the proposed substation project construction schedule, beginning in February 2014. The Airport Master Plan construction and would require a work force of from 10 to 60 people and a maximum delivery truck round trips per day of 70 during 110 working days (Sonoma County 2011). As of June 2013 that construction has not begun; it is anticipated to begin in August 2013. The proposed gravel mining is expected to increase traffic volumes on Highway 101 north of Healdsburg until 2025; however, the project would not result in a degradation of traffic conditions on Highway 101 below the existing LOS of C (Sonoma County 2010).

The Level of Service for Highway 101 and other roads that would be used during project construction and operations is presented in Table 5.16-2.

**Table 5.16-2. Level of Service for Roadways in the Proposed Project Vicinity**

Roadway	Lanes	Classification	Daily Traffic Volume	Peak-Hour Level of Service
Highway 101 (between Arata Lane and Windsor Road Exit)	4	Highway	66,000	Less than C
Old Redwood Highway (Arata Lane to Starr Road)	2	Arterial	3,172 to 6,269	A to C
Starr Road (Windsor River Road to Old Redwood Highway)	2	Collector	7,100	A/B
Gumview Road	2	Local	< 2,000	A/B
Herb Road	2	Local	< 2,000	A/B
Arata Lane	2	Collector	5,000	A/B
Dawn Way	2	Local	< 2,000	A/B
Godfrey Drive	2	Local	< 2,000	A/B

Source: PG&E 2011.

### Arterial Highways and Other Roads

Two major arterial highways, Old Redwood Highway and Arata Lane, and three rural roads, Starr Road, Gumview Road, and Herb Road, provide general access to the site. Dawn Way and Godfrey Drive, two rural roads, would provide access to individual pole locations. Starr Road, Windsor River Road, and Old Redwood Highway would provide access to pull and tension sites.

Old Redwood Highway runs north to south, parallel to Highway 101 and provides access to the site. It has a LOS ranging from A to C in the project vicinity and average daily traffic volume of 3,172 to 6,269 vehicles. Arata Lane runs east to west crossing under Highway 101 at 0.5 miles from the project site. It connects Old Redwood Highway (to the west) with local roadways east of the proposed site. It is assumed to operate primarily at free flow (PG&E 2011).

Starr Road, a paved two-lane rural road, connects Old Redwood Highway and local roadways south of the project site and would cross the railroad right-of-way. Gumview Road (also paved two-lanes) runs east to west between Starr Road and Herb Road. Herb Road borders the substation site to the north, connecting to Old Redwood Highway.

### Mass Transit

Sonoma County Transit (SCT) provides intercity transit throughout Sonoma County. SCT bus route 60 (from Cloverdale to Santa Rosa) runs through the Town of Windsor along Starr Road, Windsor Road, and Old Redwood Highway. The nearest bus stops are on Old Redwood Highway, immediately to the south of the site for route 60 south and directly across Old Redwood Highway for route 60 north (SCT 2011a).

The Windsor Shuttle, under contract with the Town of Windsor, operates Route 66 along Arata Lane and Old Redwood Highway Monday through Saturday. Route 66 bus stops near the project site are along Old Redwood Highway at Miller Lane, Rio Ruso Drive, Godfrey Drive, Windsor Road, Market Street, and Windsor River Road (along the distribution line work) (SCT 2011b).

### Rail

The NWPRR railroad line 300 feet west of the western project boundary was closed by the Federal Railroad Administration in 1998 due to severe winter storm damage. The right-of-way has been acquired for future passenger service and freight service. The Sonoma-Marin Area Rail Transit District (SMART) plans to operate passenger trains along the 14-station, 70 mile long rail line from Larkspur to Cloverdale. The first phase, a 37-mile rail and trail project connecting San Rafael and Santa Rosa is supposed to be completed

by late 2014 (SMART 2011). Future phases, including a station that would be located at Windsor River Road, would be completed as funding is identified (SMART 2011).

The North Coast Railroad Authority (NCRA) also has an easement for freight operations along a portion of this route. In May 2011 the Federal Railroad Administration declared the NWPRR line safe for freight service from Brazos Junction to Windsor and in July 2011, the first freight trains began service along this portion of the track (NCRA 2011, Hart 2011).

## Bicycle

Bicycle paths, bicycle lanes, and sidewalks provide safe routes for non-motorized transport. There are several existing Class I (separate, multi-use trails or paths) and Class II (striped bicycle lanes on roadways) bicycle facilities in the project vicinity. A Class I route runs along the NWPRR from north of the Wilson Ranch Soccer Park to north of Shiloh Road; SMART proposes to extend the path to the Town of Windsor limits. A Class II bikeway has also been proposed along Old Redwood Highway from south of Windsor Road to the Town of Windsor northern limits (PG&E 2011).

## Air Transportation

The Charles M. Schulz Sonoma County Airport is the nearest airport to the proposed project; it is located approximately 3.6 miles southeast of the proposed substation site. This airport offers commercial airline service and is a designated fire base by the California Department of Forestry and Fire Protection. Other airports in Sonoma County open for public use include the privately owned Graywood Ranch Airport (the closest private air strip at 17 miles from the substation site), Angwin Airport, Sonoma Skypark and Sonoma Valley airport. The city-owned Cloverdale, Healdsburg, and Petaluma airports are also in the vicinity (PG&E 2010).

## Permits and Approvals Necessary

**California Department of Transportation.** PG&E would need to apply for and obtain a Caltrans Transportation Permit for transportation of oversized or excessive loads. This permit would determine a specific route for the shipper to follow from origin to destination.

**Local Agencies.** For distribution line work, PG&E would need to apply to the Town of Windsor for ministerial encroachment permits to conduct work in public rights-of-way. Oversized or excessive loads would require a transportation permit with Sonoma County and the Town of Windsor. An encroachment permit for temporary positioning of oversized vehicles that may obstruct traffic on through roads may also be needed in order to deliver equipment or materials to the project site.

## 5.16.2 Environmental Impacts and Mitigation Measures

- a. Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?*

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* The proposed project would add truck trips and worker commute trips during construction and operation.

**Construction vehicles/trips:** During peak construction, approximately 15 people would work at the substation site, and they would make approximately two trips per day to and from the site. Distribution line installation, including pole replacement and reconductoring, would require a maximum workforce of approx-

imately 16 workers over approximately six to seven months. This would require a maximum of 32 truck trips to and from the distribution line work area, and up to 62 trips if overlapping with substation site work.

The peak level of estimated truck trips would occur during substation site grading. Required truck trips are summarized in Table 4-2. As described in Section 4.10.1, an estimated 142 truck trips would be required to remove and import soil and other materials to bring the substation site to its final grade. An additional 146 truck trips would be required for other work, including trenching and boring for the distribution lines. In the future, approximately 43 truck trips would be required for installation of equipment (these trips would occur over time).

Daily traffic volume on roads in the project vicinity is shown in Table 5.16-2. Highway 101 would be the main route to and from the substation. From the south, truck traffic to the site would use the Arata Lane exit to Old Redwood Highway, approximately 3,000 feet south of the site. From the Substation site, southbound trucks would enter Highway 101 off Old Redwood Highway 800 feet south of the site. Full interchanges with Highway 101 are at Windsor River Road 1.9 miles south of the site and 2.3 miles north of the site, where Old Redwood Highway crosses under Highway 101. An unlikely 'worst case' scenario would be for *all* 142 of the truck trips required during grading to occur on the same day. Assuming an 8 hour work day, this would result in about 18 trucks an hour. In 2010, peak hour traffic on US 101 was 5,000 vehicles south of Windsor River Road and 3,750 vehicles north of Windsor River Road. Eighteen trucks would represent less than a 0.5 percent increase in peak hour traffic volume on the highway, if the trucks were on US 101 during that hour. Local roads are mostly LOS A/B with one LOS A to C road (Old Redwood Highway), this worst-case addition in truck traffic volume would not be a large increase relative to the existing volume and is not expected to affect the existing LOS.

Temporary traffic slowdowns may occur while large slow-moving equipment is moved over public roadways. By law, the heavy loads would require PG&E to obtain transportation permits from the local jurisdictions and Caltrans. The transportation permits would designate the haul routes to be taken and require PG&E to repair any damage caused to any restricted load limit streets. In addition, PG&E may use flaggers to hold traffic for brief periods of time for construction along Old Redwood Highway, Starr Road, Gumview Road, Herb Road, and other access roads leading to individual pole locations within the Town of Windsor. These slight increases in traffic will be temporary and short-term. PG&E would obtain ministerial encroachment permits to conduct work in public rights-of-way as required by the state and the Town of Windsor for distribution line installation and substation construction. PG&E has committed to implementing a Pedestrian and Traffic Control Plan as part of the encroachment permit, which incorporates appropriate Best Management Practices (BMPs) to manage potential traffic resulting from construction. This plan has not been prepared as it will be subject to site-specific conditions based on the location of the work along the right-of-ways and based on engineering design.

Enforcement of the terms of an encroachment permit would reduce impacts associated with short-term road closures. However, the terms of an encroachment permit would be specified by the agency having jurisdiction. Compliance with BMPs would avoid or reduce some impacts; however, they may not specifically address time-of-day closures. As such, overall impacts would remain potentially significant. Implementing **Mitigation Measure T-1** would restrict the time of day when lane closures would occur and would ensure that impacts are less than significant.

**Operation vehicles/trips:** Only about one truck trips per month would be required during operations for routine maintenance. This would be a very minimal increase in traffic; impacts would be less than significant.

**T-1 Restrict lane closures.** PG&E shall restrict all necessary lane closures or obstructions on major roadways associated with overhead or underground construction activities to off-peak periods in congested areas to reduce traffic delays. Lane closures must not occur between 6:00 and 9:30 a.m. or between 3:30 and 6:30 p.m., unless otherwise authorized in writing by the responsible public agency issuing an encroachment permit.

**b. Would the project cause, either individually or cumulatively, a level-of-service standard established by the county congestion management agency for designated roads or highways to be exceeded?**

*LESS THAN SIGNIFICANT.* Construction of the proposed project would cause a slight short-term increase in the local traffic throughout the project study area. As stated in Section 5.16.2(a), project-related traffic would result in a relatively small increase when added to the existing daily traffic on freeways and arterial roadways. The proposed project would not increase traffic substantially. However, the Airport Master Plan construction could overlap with the proposed project construction with a worst case scenario of 91 construction workers round trips per day and 70 (+ project truck trips) delivery truck trips per day. Because the regional roads are operating at an acceptable LOS and because of the newly opened third lane in either direction on Highway 101, the increase in trips would not likely alter the project area roadways' existing level of service designations, and level of service standards would not be exceeded. PG&E has stated that they would encourage construction workers to carpool to the job site to the extent feasible (**APM AQ-6**), further reducing the number of trips required for the project on a daily basis. Operation of the proposed project would only require routine inspection and periodic maintenance visits, which would not cause level of service standards to be exceeded. Therefore, the project's impact on level of service standards would be less than significant.

**c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

*NO IMPACT.* The project area is 3.6 miles northwest of the Charles M. Schulz Sonoma County Airport. The new distribution poles are located approximately 2.2 miles northwest from the end of the Sonoma County Airport runway. The proposed project is outside both the Comprehensive Airport Land Use Plan Safety Zones and the Relocated Comprehensive Airport Land Use Plan Safety Zones as proposed in the Draft Environmental Impact Report for the Charles M. Schulz/Sonoma County Airport Master Plan Implementation Project (Sonoma County 2011). As such, the proposed project would not include any features that would disrupt or affect air traffic and there would be no impacts on air traffic patterns.

**d. Would the project substantially increase hazards because of a design feature or incompatible uses?**

*LESS THAN SIGNIFICANT.* The distribution line would be the closest project feature to a public roadway. It is possible, but unlikely, that new conductors could break during the pulling and tensioning process that is associated with the reconductoring the distribution line along Old Redwood Highway. PG&E would pull the conductor through each structure under a controlled tension to keep it elevated and away from obstacles, preventing damage to the line and protecting vehicular and pedestrian traffic. In addition, the reconductoring is a temporary and short-term construction process. No other features would have the potential to increase traffic hazards in the area, and there are no incompatible uses (PG&E 2011). Because PG&E would use a controlled tension during pulling of the conductor, the potential for hazards on area roadways would be less than significant.

**e. Would the project result in inadequate emergency access?**

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* Windsor Road south of the transmission line reconductoring is a primary emergency access for the Windsor Fire Station Two located at 8600 Windsor Road (PG&E 2011). Reconductoring activities would occur at the intersection of Windsor Road and Windsor River Road and along Old Redwood Highway. Temporary road closures would be required during underground cable installation, pole removal and installation, and conductor stringing activities. Road closures could lengthen the response time required for emergency vehicles passing through the construction zone. Implementing **Mitigation Measure T-2** would ensure advance coordination with emergency service providers to avoid restricting movements of emergency vehicles. With the implementation of this measure, potential impacts to emergency access would be less than significant.

**T-2**            **Ensure emergency response access.** 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.

**f. Would the project result in inadequate parking capacity?**

*LESS THAN SIGNIFICANT.* The proposed project would not occur within any parking lots. Construction personnel would park in designated areas on the substation parcel, and would not use public parking lots, including “park and ride” lots at the intersection of Old Redwood Highway and Starr Road. Reconductoring of the distribution line would require nine pull and tension locations (40 to 50 feet long by 10 feet wide) along public streets at dead end or angle pole locations (PG&E 2011, PG&E 2011-2013). Distribution line installation may require additional workspace within Old Redwood Highway, Starr Road, Gumview Road, Herb Road, and other access roads leading to individual pole locations. However, associated lane closures would be brief, and PG&E would be required to comply with the Town of Windsor encroachment permit process. Operation of the proposed project would not create a need for parking outside of the substation site. Because the lane closures and any associated interference with street parking would be temporary, impacts to parking capacity would be adverse, but less than significant.

**g. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* Overhead conductor stringing activities and placement of underground distribution cables involving short-term road closures would occur with construction and reconductoring of distribution lines. Access to the substation site would require curb cuts and driveways to be built off Old Redwood Highway. A replaced TSP Loop pole would loop the existing Fulton No. 1 60 kV power line from its location west of the NWPRR over the tracks and into the substation. These activities could disrupt at least two SCT bus routes (Route 60 and the Windsor Shuttle) and the NCRA freight service. Operational maintenance and emergency repairs would potentially also occur along the bus routes. This may cause scheduling delays and temporary rerouting of buses or relocation of stops. Implementing **Mitigation Measure T-3** would reduce impacts to public transit and school bus routes to less than significant levels. PG&E has initiated discussions with SMART staff to obtain permission to cross



the railroad and would consult with SMART regarding coordination of construction activities within and adjacent to the railroad crossing (PG&E 2010).

**T-3**            **Consult with SCT and SMART.** 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.

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