# CALENDAR ITEM **01**

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11/16/09 W 26210 N. Lee C. Spurr

#### CONSIDER CERTIFICATION OF AN ENVIRONMENTAL IMPACT REPORT AND ISSUANCE OF A GENERAL LEASE - RIGHT OF WAY USE

#### APPLICANT:

Pacific Gas and Electric Company P.O. Box 770000 Mail Code N10A San Francisco, CA 94177

#### AREA, LAND TYPE, AND LOCATION:

Sovereign lands in the Sacramento River, adjacent to Sutter County Assessor Parcel Number 35-330-020 and Yolo County Assessor Parcel Number 057-050-03, north of the city of Woodland, Sutter and Yolo counties.

#### PROPOSED USE:

Construction, use, operation, and maintenance of a 30-inch diameter steel natural gas pipeline as shown on the attached Exhibit A, and described in Exhibit B.

#### LEASE TERM:

20 years, beginning November 16, 2009.

#### **CONSIDERATION:**

\$3,100 per year; with the State reserving the right to fix a different rent periodically during the lease term, as provided in the lease.

#### SPECIFIC LEASE PROVISIONS:

Insurance:

Liability insurance in the amount of no less than \$10,000,000. Applicant may satisfy all or part of the insurance requirements through maintenance of a self insurance program as outlined in the Lease.

## Bond:

- 1. Surety Bond: \$50,000
- 2. Construction Performance Bond: In an amount equal to the construction cost for those portions of the pipeline that cross sovereign lands and to be submitted prior to the start of construction.
- 3. Mitigation Monitoring Program Performance Bond: \$400,000

Other:

Applicant is required to submit for Commission staff's review and approval the final engineering design and construction plans at least 60 days prior to construction for those portions of the project crossing sovereign lands.

Applicant will comply with all existing and subsequently enacted laws or regulations promulgated by the Federal government including, but not limited to, the Department of Transportation or the National Transportation Safety Board, or any other governmental agency, whether Federal, State or local, having lawful authority and jurisdiction over the pipeline.

Applicant will comply with the mitigation monitoring program as contained in Exhibit C.

Applicant will indemnify the Commission from liability and agrees to reimburse the Commission for all reasonable costs and attorney's fees that the Commission may incur in connection with the defense of any action brought against the Commission challenging the issuance of the lease, any provision of the Lease, the environmental review upon which the issuance of the lease is based, the interpretation or enforcement of the conditions of the lease, or any other matter related to the lease or its issuance, the total obligation will not exceed \$1,000,000.

Applicant will be responsible for reimbursing all of Commission staff's expenses incurred to monitor compliance by the Applicant of all of its reservations, terms, covenants and conditions of the Lease for the term of the lease.

All plans for the future abandonment and/or removal of the pipeline within the Lease Premises must be reviewed and approved by the Commission. In the event that the Commission authorizes the abandonment of all or any portion of the pipeline within the Lease Premises, Applicant may be required to enter into an abandonment agreement.

# **BACKGROUND INFORMATION:**

Pacific Gas and Electric Company (PG&E) is proposing to construct a 30-inch diameter natural gas pipeline project called Lines 406 and 407 and a new distribution feeder main pipeline from the town of Esparto in Yolo County to the western limits of the city of Roseville in Placer County (as depicted in Exhibit F). PG&E also proposes to construct six above ground pressure limiting, pressure regulating, metering, and main line valve stations. The proposed pipeline is approximately 40 miles long and will span four counties: Yolo, Sutter, Sacramento, and Placer. Line 406 will begin at PG&E's existing Lines 400 and 401 in Yolo County at the foot of the Coast Range and extend east to PG&E's existing Line 172A near the town of Yolo. Line 407 will extend from PG&E's existing Line 172A, where the proposed Line 406 would terminate, east to PG&E's existing Line 123 near the city of Roseville. The proposed Distribution Feeder Main (DFM) Pipeline will extend from the new Line 407 south and will parallel Powerline Road to the Sacramento Metro Air Park development in Sacramento County.

Line 407 would cross the Sacramento River, which is located on State-owned sovereign land. An application has been submitted by PG&E for a General Lease – Right of Way Use to authorize the construction, use, operation, and maintenance of the proposed natural gas pipeline for the Sacramento River location. The remaining proposed project involves lands not under the Commission's jurisdiction.

According to PG&E, its existing natural gas transmission system within the Sacramento Valley region no longer provides sufficient capacity to deliver reliable natural gas service to existing customers or to extend service to planned development in the region. PG&E has indicated that without the addition of the Lines 406/407 Natural Gas Pipeline Project (Project), customer service reliability will be at risk and unplanned core customer outages could occur. PG&E's local gas transmission system serving Yolo, Sacramento, El Dorado, Placer, Sutter, Yuba, and Nevada counties has operated at maximum capacity over the last several years and has required an escalating amount of annual investments in new pipeline construction to maintain customer service reliability and serve new customers.

Once constructed, the Project will serve several major residential and commercial developments in the following growth areas:

1. The Metro Air Park, which is a 1,800-acre commercial development just east of the Sacramento International Airport in Sacramento County;

- 2. The Sutter Pointe Project, which designates 7,500 acres of a 10,500-acre Industrial/Commercial Reserve area in southern Sutter County for residential, industrial, commercial, and educational development;
- 3. The Placer Vineyards Project, which is a planned 5,230-acre development of a mixed-use, master-planned community in Placer County;
- 4. The Sierra Vista Specific Plan, which is a proposed 2,100-acre development of residential and commercial uses, schools, parks, and open space in Placer County; and
- 5. The Curry Creek Community Plan, which is a mixed use development in Placer County. The plan area covers 2,828 acres north of Base Line Road, north of the Placer Vineyards Specific Plan and west of the West Roseville Specific Plan.

A combination of construction techniques will be used to install the new pipeline, including conventional trenching, horizontal directional drilling (HDD), and conventional boring techniques, such as hammer boring and auger boring/jack-and-boring. Conventional trenching involves installation of the pipe within an open trench followed by backfilling. The HDD construction technique uses a hydraulically-powered horizontal drilling rig to tunnel under vertically and/or horizontally sensitive surface features such as water areas, levees, and wetlands. Hammer boring is a non-steerable pipeline construction technique that drives an open-ended pipe for short distances under surface features such as roads or smaller water areas. Auger boring/jack-and-boring consist of installing pipe simultaneously during the excavation process.

The Sacramento River (River) crossing will be completed using the HDD construction method for approximately 1,400 feet in length and at a minimum of 60 feet beneath the bed of the River. The proposed HDD activities under the River are anticipated to be completed during the work window for aquatic species of June 1 through November 30 in order to avoid impacts to special status fish species.

The pipeline will be constructed, operated, and maintained in accordance with all applicable requirements included in the U.S. Department of Transportation (DOT) regulations in 49 Code of Federal Regulations (CFR) 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards." The proposed Project will also be subject to California Public Utilities Commission (CPUC) standards as embodied under General Order 112E. These regulations,

which are intended to protect the public and to prevent natural gas facility accidents and failures, include specifications for material selection and qualifications; odorization of gas; minimum design requirements; and protection of the pipeline from internal, external, and atmospheric corrosion. In addition, the proposed pipeline will be operated in accordance with PG&E's Emergency Plan Manual.

#### **ENVIRONMENTAL PROCESS:**

The California State Lands Commission (Commission), as Lead Agency, in accordance with the provisions of the California Environmental Quality Act (CEQA), determined that the proposed Project may result in potentially significant adverse environmental impacts. Therefore, an Environmental Impact Report (EIR) was required pursuant to and in accordance with CEQA (Public Resources Code, section 21000 et seq.), the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, section 15000 et seq.), and the Commission's regulations implementing CEQA (California Code of Regulations, Title 2, Chapter 1, section 2901 et seq.)

The Notice of Preparation (NOP) for the Environmental Impact Report (EIR) was circulated for a 30-day public review and comment period from June 19, 2007 through July 18, 2007. The NOP was sent to federal, state and local agencies, environmental and public interest groups, affected landowners, local libraries, newspapers, and other interested parties (collectively called interested persons). Commission staff conducted four public scoping meetings during the NOP public review period, two in Woodland, California on July 9, 2007, and two in Roseville, California on July 10, 2007, to provide an opportunity for agencies and the general public to learn about the proposed project and to participate in the environmental analysis by providing oral or written comments on the scope of the EIR. Approximately 21 people attended the scoping meetings.

The Notice of Availability of the Draft EIR and Notice of Public Hearings were sent to interested persons on April 29, 2009. The Draft EIR was circulated for a 45-day public review period that started on April 29, 2009 and ended June 12, 2009.

Commission staff also conducted four public hearings, two in the city of Roseville, on June 3, 2009, and two in the city of Woodland, on June 4, 2009. At the hearings an overview of the proposed project was provided, as well as a brief summary of Draft EIR findings. The Commission's decision-making process was also explained. The public was then given the opportunity to present oral and/or written testimony on the Draft EIR and its contents. Approximately 25 people attending the public hearings.

Issues raised during the scoping and public comment period on the Draft EIR were addressed in a Final EIR that was released, along with a Notice of Intent to Certify the EIR, on July 27, 2009. The Final EIR was scheduled to be considered for certification by the Commission at the August 11, 2009 meeting. However, several letters from the public were received from interested persons after release of the July 2009 Final EIR noting that a meeting on the project should be held in Sacramento due to the project location. Consideration of the Final EIR was postponed to a future meeting.

A Revised Final Environmental Impact Report (Revised Final EIR) was prepared that supersedes and replaces the Final EIR circulated for public review in July 2009. The Revised Final EIR consists of the Draft EIR, comments received during the 45-day public comment period, responses to those comments, and changes to the text of the Draft EIR. On October 30, 2009, the Commission circulated the Revised Final EIR and issued a Notice of Intent to certify the Revised Final EIR to interested persons for a 15-day period.

The Revised Final EIR was circulated for public review in order to provide agencies and the public details regarding clarifications made to the risk analysis. The risk assessment included risk measurement terminology that was not defined in the earlier version of the Final EIR, which has resulted in some confusion. The "aggregate risk" was presented erroneously as "individual risk", and the assessment incorrectly compared the aggregate risk to the individual risk threshold. A revised System Safety and Risk of Upset report was completed by EDM Services, Inc. for the proposed Project, and is included as Appendix H-3 to the Revised Final EIR.

#### **ENVIRONMENTAL ISSUES:**

The Revised Final EIR identified significant impacts for the following areas that can be reduced to less than significant levels with the application of the mitigation measures required under the Mitigation Monitoring Program (MMP), Exhibit C, attached: Aesthetics, Biological Resources, Cultural, Historic, and Paleontological Resources, Geology and Soils, Hydrology and Water Quality, Noise, Hazards and Hazardous Materials, Transportation and Traffic, and Greenhouse Gas emissions.

The Revised Final EIR indicates that <u>not all</u> of the identified significant impacts can be reduced to less than a significant level with the application of the mitigation measures required under the Mitigation Monitoring Program (MMP), Exhibit C, attached. The Significant and Unavoidable (Class I) impacts addressed in the Revised Final EIR are discussed below.

## Air Quality

The Revised Final EIR found that construction of the proposed project would produce reactive organic gas (ROG) emissions greater than the current thresholds of all four air districts where the proposed project would be located. ROG, together with oxides of nitrogen ( $NO_x$ ), are ozone precursors that react in the atmosphere in the presence of sunlight to form ozone. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. The construction of Line 406 would occur in Yolo County under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The construction of Line 407 West would occur in Yolo County and Sutter County under the jurisdiction of the YSAQMD and the Feather River Air Quality Management District (FRAQMD), respectively. The construction of Line 407 East and the DFM are expected to overlap temporarily. Line 407 East construction would occur in Sutter County and Placer County under the jurisdiction of the FRAQMD and the Placer County Air Pollution Control District (PCAPCD), respectively. The DFM construction would occur in Sutter County and Sacramento County, under the jurisdiction of the FRAQMD and the Sacramento Metropolitan Air Quality Management District (SMAQMD), respectively.

The following Project impacts remain that would be considered significant following application of all feasible mitigation (Class I impacts):

- Impact AQ-1: Construction or Operation Emissions Exceeding Regional Thresholds. The Project would result in construction or operational emissions that exceed quantitative significance thresholds (including quantitative thresholds for ozone precursors) established by air pollution control districts in which the Project would be constructed.
- Impact AQ-2: Construction or Operation Emissions Exceeding State or Federal Standards. The Project would result in emissions that substantially contribute to an exceedance of a State or Federal ambient air quality standard.

Both of the significant construction air quality impacts would require that all feasible mitigation be implemented, including Mitigation Measures (MMs) AQ-1a, AQ-1b, AQ-1c, and AQ-1d. These mitigation measures would reduce the Project's construction-generated fugitive PM dust emissions (PM<sub>10</sub>) and NO<sub>x</sub> to a less than significant level within all of the air districts.

#### **Residual Air Quality Impacts**

Impact AQ-1: Although implementation of the mitigation measures would substantially reduce impacts related to  $PM_{10}$  and  $NO_x$  emissions, the construction of the proposed Project is likely to adversely affect air quality due to reactive organic gases (ROG) emissions exceeding an established regional threshold. As such, this impact would be considered significant (Class I).

Impact AQ-2: Although implementation of the mitigation measures would substantially reduce impacts related to  $PM_{10}$  and  $NO_x$  emissions, the construction of the proposed Project is likely to result in exceeding State or federal air quality standards due to ROG emissions exceeding an established regional threshold. As such, this impact would be considered significant (Class I).

Approval of the Project would require the Commission to adopt a Statement of Overriding Considerations made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15093), if, after all feasible mitigation is applied, the Commission finds that the construction air quality impacts of the Project would not be reduced to a level that is less than significant (see Exhibit E).

#### ALTERNATIVES

Alternatives that were analyzed in the Revised Final EIR include the No Project Alternative, and 12 different pipeline alignment options (Exhibit G). Each option represented a particular segment of alignment that differed in location from the proposed Project to reduce or eliminate environmental impacts.

While none of the alternative options A through L reduce the Class I construction air quality impacts to a less than significant level, nor any of the Class II impacts to less than significant without mitigation, some of the options do reduce the magnitude of the impacts associated with the proposed Project.

Some of the alternative options (Options A, B, C, D, E, and G) would reduce the number of agricultural fields that would be segmented by the Project pipeline alignment. However, this would result in the movement of the pipeline closer to roadways, residences, and in some cases, businesses, thereby increasing the number of people that could be at risk if a leak or rupture of the pipeline were to occur with a subsequent explosion and/or fire.

Option F would decrease the number of trees impacted, but would increase the magnitude of impacts to other biological resources by bordering an ephemeral drainage with adjacent wetlands that the proposed Project avoids.

Option H would result in a reduction in the magnitude of impacts from construction due to the movement of a portion of the pipeline further away from

residences. However, this option would increase the magnitude of impacts to biological resources due to an increase in the number of trees, wetlands, and riparian woodland communities impacted within the Yolo Bypass.

Alternative Options I, J, K, and L were developed to reduce the magnitude of risk at two planned school sites. Options I and J would move the pipeline to a distance greater than 1,000 feet from the school site, based on the results of a risk analysis, to reduce the risk to the school population if a pipeline incident were to occur resulting in a fire or explosion. As noted in the revised risk analysis attached to the Revised Final EIR as Appendix H-3, the impacts are very minor at distances greater than 1,000 feet. At this distance from the pipeline, the consequences from a potential fire or explosion are not expected to result in any injuries. The California Education Code, section 17213, specifies that a school district may not approve a project involving the acquisition of a school site unless it determines that the property to be purchased or built upon does not contain a pipeline situated underground or aboveground that carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line used only to supply that school or neighborhood. The California Code of Regulations, Title 5, section 14010(h), states that, "the site shall not be located near an above-ground water or fuel storage tank or within 1,500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional."

Option I routes the pipeline approximately 1,550 feet from the planned high school site in order to locate the pipeline outside the CDE study zone and place the pipeline within agricultural fields. This option would increase the magnitude of impacts to biological resources by impacting a seasonal wetland, swale, vernal pool and a creek not associated with the proposed alignment.

Option J would move the pipeline even further from the planned high school, but would move the pipeline closer to residences. Moving the pipeline to a distance of 1,550 feet from the planned high school is adequate since the risk analysis shows that no fatalities or injuries are expected if a pipeline release and subsequent fire or explosion were to occur at a distance greater than 1,000 feet from the pipeline. This option would increase the magnitude of impacts to biological resources such as seasonal wetlands and swales, and a vernal pool, and reduce impacts to trees (potential Swainson's hawk nesting habitat).

Option K places the pipeline route outside the 1,500-foot study zone, while Option L places the construction of the pipeline within the proposed alignment for Line 407-E, within the 1,500-foot study zone, but at a depth of 35 feet to reduce the magnitude of the risk to a planned elementary school. This Option would

increase the magnitude of impacts to biological resources such as seasonal wetlands and swales, and a vernal pool.

With Option L, PG&E would use HDD to place the pipeline at an increased depth (approximately 35 feet deep). PG&E has also proposed to jointly develop a risk analysis with the Center Joint School District to determine pipeline impacts to the school (refer to APM ALT-L in the Revised Final EIR) as a part of Option L. Since the planned elementary school site would be located 1,400 feet from the pipeline, it is already at an adequate distance from the pipeline that no fatalities or injuries are expected to occur if a pipeline incident and subsequent fire or explosion were to occur.

Moving the pipeline another 150 feet (as in Option K) from the planned elementary school and impacting wetlands and vernal pools is not necessary. Increasing the length of the HDD in the area of the planned elementary school would serve to reduce the risks of third-party damage and serve to further reduce the safety risks to the planned school.

#### **Environmentally Superior Alternative**

Under the No Project Alternative, a natural gas pipeline would not be constructed between existing Lines 400 and 401 in Yolo County and the existing Line 123 in Placer County. PG&E's studies indicate that the natural gas transmission and distribution system may not be able to reliably serve current customers and planned development in Yolo, Sacramento, Sutter, and Placer counties by 2009. Additionally, continued growth in those counties would put further strain on existing natural gas infrastructure, and could result in emergency restriction or interruption of services. The No Project alternative would not result in any of the impacts associated with the proposed Project. Therefore, the No Project alternative is considered the environmentally superior alternative. It should be noted that the No Project Alternative would not meet the Project objectives because PG&E would be unable to meet its public utility obligations to provide natural gas service to its customers in accordance with the California Public Utilities Code and associated orders, rules and tariffs.

The CEQA Guidelines requires the selection of an environmentally superior alternative. The determination of an environmentally superior alternative is based on the consideration of how the alternative fulfills the Project objectives and how the alternative either reduces significant, unavoidable impacts or substantially reduces the impacts to the surrounding environment. The CEQA Guidelines section 15126.6(e)(2) state, in part, that "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

The environmentally superior alternative incorporates Alternative Options I and L into the proposed Project alignment. Option I (Exhibit H) would place the pipeline beyond the specified 1,500-foot school study zone to reduce the magnitude of safety impacts to a planned high school. Option L (Exhibit I) places the pipeline approximately 1,400 feet from a planned elementary school and therefore within the 1,500-foot school study zone. However, Option L would reduce the likelihood of the line being damaged by third parties, since the line would be installed 35 feet below ground. The decrease in the magnitude of impacts to planned schools would outweigh the additional impacts to biological resources, and incorporation of Options I and L into the proposed Project would better promote the objectives of the Project than the proposed alignment because it would increase the safety of the pipeline. The increased magnitude of wetland and vernal pool impacts associated with Option I would be mitigated by the measures outlined in Sections 4.4.4 and 4.4.5 of the Revised Final EIR.

Commission staff recommends that the environmentally superior alternative, incorporating Options I and L into the proposed Project, be approved by the Commission (CEQA Guidelines, Title 14, California Code of Regulations, section 15092).

## OTHER ISSUES Pipeline Risk of Upset / Public Health and Safety related to Land Use

Transportation of natural gas by pipeline involves some risk to the public in the event of an accidental release of gas, with the greatest hazard being fire or explosion following a rupture.

<u>Probability of a Pipeline Release</u>: A fire could result from a natural gas release with two conditions present: 1) a volume of natural gas must be present within the combustible mixture range (5% to 15% methane in air); and 2) a source of ignition must be present with sufficient heat to ignite the air/natural gas mixture (1,000 degrees F). In order for an explosion to occur, a third condition must be present - the natural gas vapor cloud must be confined, to a sufficient degree. Over the life of the pipeline, the probability of a pipeline release that would result in a fire varies from 3.2% for a rupture to 7.5% for a puncture (one-inch diameter hole); while the probability of a pipeline release that would result in an explosion varies from 2.0% for a rupture to 4.7% for a puncture. The probability of a puncture or rupture over the 50-year life of the pipeline is very low.

<u>Societal Risk:</u> Societal risk is the probability that a specified number of people will be affected by a given event. Several release scenarios were examined that could impact both building occupants and vehicle passengers. The threshold values for societal risk vary greatly, depending on the agency or jurisdiction.

There are no prescribed societal risk guidelines for the United States or the State of California. The Committee for the Prevention of Disasters and the Netherlands use an annual probability of  $1.0 \times 10^{-3}$  (1:1,000) or less. This criterion was used to evaluate the proposed project. The societal risk posed by the proposed project is less than the significance threshold of 1:1,000 or less.

The California Department of Education (CDE) approach to societal risk uses two calculated parameters: an average individual risk across the depth of a campus site, and a site population risk indicator parameter. The CDE does not specify numerical criteria of acceptability or unacceptability for these indicators (CDE Guidance Protocol for School Site Pipeline Risk Analysis, 2007).

Individual Risk: The revised final EIR provides a clarifying analysis that accounts for individual risks to the public if a pipeline release were to occur with a subsequent fire or explosion. A revised System Safety and Risk of Upset report was completed by EDM Services, Inc. for the proposed Project, and is included as Appendix H-3 of the Revised Final EIR. The risk analysis was revised because the initial calculation of aggregate risk was erroneously reported as individual risk. In addition, the risk analysis incorrectly compared the aggregate risk to the individual risk threshold of an annual likelihood of fatality of 1:1,000,000. The individual risk is defined as the frequency that an individual may be expected to sustain a given level of harm from the realization of specific hazards, at a specific location, within a specified time interval (measured as the probability of a fatality per year). Aggregate risk is the total anticipated frequency of fatalities that one might anticipate over a given time period for all of the project components (the entire pipeline system). There is no known established threshold for aggregate risk, and it is not used in practice to determine individual risk.

The individual risk significance threshold used in the EIR is an annual likelihood of one in one-million (1:1,000,000) for fatality (used by the CDE for school sites). The risk level is typically determined for the maximally exposed individual (assumes that a person is present continuously—24 hours per day, 365 days per year).

Table 1 summarizes the calculated individual risk for each segment of the Project before mitigation. These are maximum individual risk values, which would occur directly over the top of each pipeline. As the distance away from a pipeline increases, the individual risk decreases. Because the calculated individual risk for each pipeline segment would be less than the significance threshold of 1:1,000,000, the risk is considered to be less than significant. The individual risks have been evaluated using two approaches - a simplified and an enhanced approach.

The individual risk for each of the three project components (Line 406, Line 407, and the Distribution Feeder Main) in the Revised Final EIR used the same methodology that was used to determine the aggregate risk presented in Appendix H-3 of the July 2009 Final EIR. (It should be noted that this aggregate risk was incorrectly identified as individual risk in the July 2009 Final EIR.) The simplified analysis used in both the July 2009 Final EIR and the Revised Final EIR made the following assumptions:

- A single release angle at 45° above the horizon was used.
- All releases were assumed to be oriented downwind, which resulted in the worst case impact footprint (e.g., greatest length of exposure measured perpendicular to the pipeline).
- For flash fire impacts which were located overhead, the horizontal extent of the hazard was projected to grade level. This results in some overstatement of the impact since an overhead flash fire would not normally impact those on the ground. However, if the release angle were lower that the single 45° release angle assumed, the flash fire could impact those at ground level.

The enhanced analyses results in a worst case situation, and included the following additional release modeling:

- Five different release angles were considered: 15° above the horizon downwind, 45° above the horizon downwind, vertical, 45° above the horizon upwind, and 15° above the horizon upwind. (Because the pipeline is buried, 15° above the horizon was assumed to be the lowest feasible release angle.) 20% of the releases were assumed to be directed at each of these angles.
- The simplified analysis used a single end point for torch fire impacts, 50% mortality at 8,000 btu/hr-ft<sup>2</sup> for a 30 second exposure. The enhanced analyses included three torch fire end points 100% mortality at 12,000 btu/hr-ft<sup>2</sup>, 50% mortality at 8,000 btu/hr-ft<sup>2</sup>, and 1% mortality at 5,000 btu/hr-ft<sup>2</sup> for 30 second exposures.

# Table 1: Individual Risk Result Summary

Pipeline Segment	Pre-Mitigation Maximum Annual Risk of Fatality	Pre-Mitigation Maximum Annual Probability of Occurrence	Significance Threshold		
Simplified Analysis					
Line 406	3.94 x 10 <sup>-7</sup>	1:2,538,000	1:1,000,000		
Line 407	3.83 x 10 <sup>-7</sup>	1:2,610,000	1:1,000,000		
Line DFM*	1.61 x 10 <sup>-7</sup>	1:6,219,000	1:1,000,000		
Enhanced Analysis					
Line 406	4.68 x 10 <sup>-7</sup>	1:2,137,000	1:1,000,000		
Line 407	4.85 x 10 <sup>-7</sup>	1:2,062,000	1:1,000,000		
Line DFM*	2.35 x 10 <sup>-7</sup>	1:4,255,000	1:1,000,000		

Source: EDM Services, Inc. 2009.

\*Distribution Feeder Main

The required DOT regulations, along with PG&E Project features that exceed the minimum requirements, and required mitigation would reduce the individual risk by 50%. The post-mitigation measures identified in the Revised Final EIR individual risk results are presented in Table 2 below.

# Table 2: Post Mitigation Individual Risk Result Summary

Pipeline Segment	Post Mitigation Maximum Annual Risk of Fatality	Post Mitigation Maximum Annual Probability of Occurrence	Significance Threshold		
Simplified Analysis					
Line 406	1.97 x 10 <sup>-7</sup>	1:5,076,000	1:1,000,000		
Line 407	1.92 x 10 <sup>-7</sup>	1:5,220,000	1:1,000,000		
Line DFM	8.04 x 10 <sup>-8</sup>	1:12,440,000	1:1,000,000		
Enhanced Analysis					
Line 406	2.34 x 10 <sup>-7</sup>	1:4,274,000	1:1,000,000		
Line 407	2.43 x 10 <sup>-7</sup>	1:4,115,000	1:1,000,000		
Line DFM*	1.18 x 10 <sup>-7</sup>	1:8,475,000	1:1,000,000		

Source: EDM Services, Inc. 2009.

\*Distribution Feeder Main

## **Agricultural Lands**

The proposed project would temporarily disturb 511 acres of farmland within the 100-foot temporary right of way (329 acres in Yolo County, 91 acres in Sutter County, 18 acres in Sacramento County, and 73 acres in Placer County). The proposed project would prohibit the planting of deep-rooted plants, such as trees or vines within ten feet on either side of the pipeline centerline (20 feet total within the permanent easement). This would result in the limitation of crops grown on approximately 102 acres of farmland within the four counties to row crops, field crops, or any other crops that do not involve deep rooted plants. The proposed project would result in the loss of 2.0 acres of orchards located within Yolo and Sutter counties and would permanently impact 2.55 acres of farmland across all four counties for the permanent above-ground stations.

The proposed project would bisect and extend along the edges of several agricultural parcels. Alternative options that would avoid bisecting agricultural parcels are Options A, B, C, D, and E. The alternative options A, B, D, and E would move the proposed pipeline to the edges of agricultural fields along roadways, which would move the pipeline closer to homes. This would increase the risks to people residing in those homes. Options A and B would also increase risks to Durst Organic Farmers, and could create an additional "high

consequence area" along the pipeline, because of the number of people that congregate within the 646-foot impact radius of the pipeline. Durst Organic Farms has a processing facility and other buildings that are occupied by 20 or more permanent employees for a minimum of 50 days in a 12-month period (per the 49 CFR 192 regulations).

The amount of farmland permanently impacted (2.55 acres) across all four counties, and the amount of farmland converted from deep rooted plants (orchards) to other types of crops (2.0 acres) in Yolo County does not represent a significant regional loss. Therefore, impacts to agricultural resources are considered to be less than significant and no mitigation measures have been proposed.

#### **Planned Developments**

Several developments are planned within Sutter and Placer counties along the proposed pipeline route. These include the Sutter Pointe Specific Plan area, the Curry Creek Community Plan area, the Sierra Vista Specific Plan area, and the Placer Vineyards Specific Plan area. The planned areas that have EIRs certified by the respective counties are the Placer Vineyards Specific Plan in Placer County, and the Sutter Pointe Specific Plan in Sutter County. In Sacramento County the Sacramento Metro Air Park is planned for development, but has not yet been approved.

The proposed pipeline project would not conflict with these development plans, but would be implemented to provide natural gas service to those areas. As with any high pressure natural gas transmission line, there is a risk for injury and fatality due to a leak or unintentional release of natural gas resulting in the potential for explosion or fire. The most frequent causes of incidents include corrosion and outside forces. Proper design, construction, and maintenance of the pipeline would minimize leaks and corrosion.

The highest risk along a segment of pipeline is to persons located immediately above the pipeline, and the risk decreases as a person is farther away from the pipeline. The required DOT regulations, along with PG&E Project features that exceed the minimum requirements, and required mitigation measures identified in the Revised Final EIR would reduce the individual risk by 50%. The mitigation includes measures that reduce corrosion and third-party damage, as well as the installation of automatic shut-down valves at all locations. The remotely operated automatic shut down valve locations would enhance public safety protection in the planned populated areas.

The proposed Line 407 is intended to serve the planned developments in Sutter and Placer counties. The maximum risk posed by Line 407 before mitigation is

1:2,062,000, and after mitigation is 1:4,115,000 chance of fatality per year. Because the calculated individual risk is less than the threshold of 1:1,000,000, the risk is considered to be less than significant.

# Planned Schools

The Center Joint Unified School District requested that alternatives be provided in the EIR that would avoid or lessen public safety impacts to two planned schools along Base Line Road. California Education Code section 17213 specifies that a school district may not approve a project involving the acquisition of a school site unless it determines that the property to be purchased or built upon does not contain a pipeline situated underground or aboveground that carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line used only to supply that school or neighborhood. The California Code of Regulations, Title 5, section 14010(h) states that, "the site shall not be located near an above-ground water or fuel storage tank or within 1,500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional."

Alternative Options were included in the Draft EIR to address the planned school sites within the approved Placer Vineyard Specific Plan.

Option I would move the pipeline to a location outside of the Center Joint Unified School District's (CJUSD) 1,500 foot study zone of a planned high school along Base Line Road. This option would increase the length of the pipeline by 2,900 feet and would impact an additional seasonal wetland, swale, vernal pool and creek.

Option J would move the pipeline to a location outside of the CJUSD's 1,500 foot study zone of a planned high school along Base Line Road. This option would increase the length of the pipeline by 5,250 feet and would impact an additional seasonal wetland, swale, vernal pool and creek.

Option K would move the pipeline to a location outside of the CJUSD's 1,500 foot study zone of a planned elementary school south of Base Line Road. This option would increase the length of the pipeline by 70 feet, would require the redesign or relocation of the proposed HDD at this location, and would impact a vernal pool and seasonal wetlands.

Option L would reduce the risks to a planned elementary school to be located south of Base Line Road and within 1,500 feet of the proposed pipeline. This option would extend the proposed HDD approximately 1,400 feet to the east

along Base Line Road. This option would reduce individual risks by increasing the depth of cover to 35 feet through the 1,500 foot study zone. The environmentally superior alternative incorporates Alternative Options I and L into the proposed Project alignment. Option I would place the pipeline beyond the specified 1,500-foot school study zone to reduce the magnitude of safety impacts to a planned high school. Option L would not place the pipeline outside of the 1,500-foot school study zone of a planned elementary school site located approximately 1,400 feet from the pipeline. However, Option L would reduce the likelihood of the line being damaged by third parties, since the line would be installed 35 feet below ground. In addition, the risk analysis performed for the proposed project indicates that the impacts are very minor at distances greater than 1,000 feet. The decrease in the magnitude of impacts to safety risks to planned schools would outweigh the additional impacts to biological resources, and incorporation of Options I and L into the proposed Project would better promote the objectives of the Project than would the proposed alignment because it would increase the safety of the pipeline. The increased magnitude of wetland and vernal pool impacts associated with Option I would be mitigated by the measures outlined in Sections 4.4.4 and 4.4.5 of the Revised Final EIR.

The highest risk along a segment of pipeline is to persons located immediately above the pipeline, and the risk decreases as a person is farther away from the pipeline. The required DOT regulations, along with PG&E Project features that exceed the minimum requirements, and required mitigation measures identified in the Revised Final EIR would reduce the individual risk by 50%. The mitigation includes measures that reduce corrosion and third-party damage, as well as the installation of automatic shut-down valves at all locations. The remotely operated automatic shut down valve locations would enhance public safety protection in the planned populated areas, which include schools and other existing and planned developments.

The maximum risk posed by Line 406 before mitigation is 1:2,137,000, and after mitigation is 1:4,274,000 chance of fatality per year. The maximum risk posed by Line 407 before mitigation is 1:2,062,000, and after mitigation is 1:4,115,000 chance of fatality per year. The maximum risk posed by Line DFM before mitigation is 1:4,255,000, and after mitigation is 1:8,475,000. Because the calculated individual risk is less than the threshold of 1:1,000,000, the risk is considered to be less than significant.

## Trees / Nesting Habitat / Swainson's Hawk

Approximately 206 trees are located within the Project site and would be disturbed due to construction of the proposed Project. An additional 1,967 trees are within 250 feet of the Project site.

In addition to their potential habitat value, native oak trees receive further protection under state and county tree protection ordinances, which generally recognize the value of oak trees to both the natural and human environments. Oaks support a host of species that rely on acorns as a food source particularly during winter months.

Installation of the pipeline has the potential to significantly impact Swainson's hawk and other protected bird nesting habitat. There are several large, native trees within the Project site, many of which have recorded occurrences of nesting by Swainson's hawk.

PG&E would be required to avoid disturbance to active raptor nests at all locations. Pre-construction surveys would be performed in all areas to identify potential raptor nesting sites within or near the ROW.

Implementation of APM BIO-29, APM BIO-30, MM BIO-2a, and MM BIO-2b would reduce impacts to native trees and nesting bird species to a less than significant level. Implementation of the APMs and MMs ensures that no net loss of native trees would occur as a result of Project construction; that all native trees within the Project site are identified and mapped; that avoided trees are identified and protected during Project construction; and that trees directly or indirectly impacted by Project construction are replaced.

## Wetlands

The proposed Project would impact wetlands and vernal pools along the pipeline route, resulting in a long-term change in hydrology or soils, or the composition of vegetation of a unique, rare, or special concern wetland community.

There are several APMs incorporated into the Project design that reduce potential direct impacts to federal and State jurisdictional wetlands and water, including APM BIO-1, APM BIO-2, APM BIO-3, APM BIO-5, APM BIO-7, APM BIO-12; APM BIO-13, APM BIO-14, APM BIO-16, APM BIO-17, APM BIO-18, APM BIO-19, APM BIO-20, APM BIO-21, APM BIO-22, APM BIO-23, APM BIO-24, and APM BIO-35. Implementation of the APMs and the additional mitigation measures MM BIO-1a, MM BIO-1b, and MM BIO-1c will reduce impacts to federal and State-jurisdictional wetlands and water features to a less than significant level.

Implementation of the APMs and MMs would ensure that where wetland and/or vernal pool avoidance is not possible, PG&E will develop and implement a Wetland Restoration and Monitoring Plan that will describe restoration methods and compensatory mitigation. This plan will ensure that backfilling and restoration activities occur such that wetland functionality is restored to disturbed

features. For vernal pool habitat suitable for special-status crustaceans, direct, unavoidable impacts will be mitigated through preservation and creation of additional habitat at an approved mitigation bank.

#### **OTHER PERTINENT INFORMATION:**

Applicant has the right to use the uplands adjoining the lease premises.

Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15025), the staff has prepared an EIR identified as COMMISSION EIR No. 740, State Clearinghouse No. 2007062091. The EIR was prepared and circulated for public review pursuant to the provisions of the CEQA. A Mitigation Monitoring Program has been prepared in conformance with the provisions of the CEQA (Public Resources Code section 21081.6) and is contained in Exhibit C, attached hereto.

Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15091) are contained in Exhibit D, attached hereto.

A Statement of Overriding Considerations made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, Section 15093) is contained in Exhibit E, attached hereto.

State Lands Commission staff recommends that the environmentally superior alternative, incorporating Options I and L into the proposed Project, be approved by the Commission. (Title 14, California Code of Regulations, Section 15092).

This activity involves lands which have NOT been identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. However, the Commission has declared that all lands are "significant" by nature of their public ownership (as opposed to "environmentally significant"). Since such declaration of significance is not based upon the requirements and criteria of Public Resources Code sections 6370, et seq., use classifications for such lands have not been designated. Therefore, the finding of the project's consistency with the use classification as required by Title 2, California Code of Regulations, section 2954 is not applicable.

## APPROVALS REQUIRED:

U.S. Army Corps of Engineers; U.S. Fish and Wildlife Service; National Oceanic and Atmospheric Administration Fisheries; Central Valley Regional Water Quality Control Board; California Department of Fish and Game; California Department of Transportation; Central Valley Flood Protection Board; Feather River Air Quality Management District; Placer County Air Pollution Control District; Yolo-

Solano Air Quality Management District; Yolo County Flood Control and Conservation District; city of Roseville; Sacramento, Yolo, Placer, and Sutter counties; and Reclamation Districts 730, 1000, 1600, and 2035

#### EXHIBITS:

- A. Site and Location Map
- B. Land Description
- C. Mitigation Monitoring Program
- D. CEQA Findings
- E. Statement of Overriding Considerations
- F. Project Overview Map
- G. Alternative route option locations
- H. Route Option I
- I. Route Option L

#### PERMIT STREAMLINING ACT DEADLINE:

May 15, 2010

#### **RECOMMENDED ACTION:**

IT IS RECOMMENDED THAT THE COMMISSION:

## **CEQA FINDING:**

CERTIFY THAT COMMISSION EIR NO. 740, STATE CLEARINGHOUSE NO. 2007062091, WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA, THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN AND THAT THE EIR REFLECTS THE COMMISSION'S INDEPENDENT JUDGMENT AND ANALYSIS.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT C, ATTACHED HERETO.

ADOPT THE FINDINGS, MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15091, AS CONTAINED IN EXHIBIT D, ATTACHED HERETO.

ADOPT THE STATEMENT OF OVERRIDING CONSIDERATIONS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15093, AS CONTAINED IN EXHIBIT E, ATTACHED HERETO.

APPROVE THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE, INCORPORATING OPTIONS I AND L INTO THE PROPOSED

PROJECT. (TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15092).

#### **AUTHORIZATION:**

AUTHORIZE ISSUANCE OF A GENERAL LEASE - RIGHT OF WAY USE TO PACIFIC GAS AND ELECTRIC COMPANY, BEGINNING NOVEMBER 16, 2009, FOR A TERM OF 20 YEARS, FOR THE CONSTRUCTION, USE, OPERATION, AND MAINTENANCE OF A 30-INCH DIAMETER STEEL NATURAL GAS PIPELINE AS SHOWN ON EXHIBIT A (FOR REFERENCE PURPOSES ONLY) AND DESCRIBED IN EXHIBIT B ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF: CONSIDERATION IN THE AMOUNT OF \$3,100 PER YEAR: WITH THE STATE RESERVING THE RIGHT TO FIX A DIFFERENT RENT PERIODICALLY DURING THE LEASE TERM. AS PROVIDED IN THE LEASE; GENERAL LIABILITY INSURANCE IN THE AMOUNT OF NO LESS THAN \$10.000,000: APPLICANT MAY SATISFY ALL OR PART OF THE INSURANCE REQUIREMENTS THROUGH MAINTENANCE OF A SELF INSURANCE PROGRAM AS OUTLINED IN THE LEASE; SURETY BOND IN THE AMOUNT OF \$50,000: A CONSTRUCTION PERFORMANCE BOND IN AN AMOUNT EQUAL TO THE CONSTRUCTION COST OF THOSE PORTIONS OF THE PIPELINE THAT CROSS SOVEREIGN LANDS. AND A MITIGATION MONITORING PROGRAM PERFORMANCE BOND IN THE AMOUNT OF \$400.000.