
1 1.0 INTRODUCTION

2 1.1 PURPOSE

3 A Revised Final Environmental Impact Report (Revised Final EIR) has been
4 prepared for the consideration of a new lease by the California State Lands
5 Commission (CSLC) for a pipeline river crossing at the Sacramento River for the
6 PG&E Line 406/407 Natural Gas Pipeline Project, which spans four counties over 40
7 miles. This Revised Final EIR supercedes the Final EIR circulated for public review
8 on July 27, 2009.

9 The Revised Final EIR consists of the April 2009 Draft EIR, comments received
10 during the Draft EIR's 45-day public comment period, responses to those comments,
11 and changes to the text of the Draft EIR. The Revised Final EIR shows changes
12 made to the Responses to Comments since release of the previous Final EIR on
13 July 27, 2009, as underline for new text, and ~~strike-out~~ for deleted text. The Revised
14 Final EIR also shows changes made to the Draft EIR (in their final form by
15 incorporating any previous changes shown in the superceded Final EIR and the
16 changes made as a result of the clarifications presented in this Revised Final EIR as
17 underline for new text, and ~~strike-out~~ for deleted text, and are organized by section
18 of the Draft EIR.

19 Note that the Revised Final EIR references and incorporates the Draft EIR. The
20 Revised Final EIR and the Draft EIR may be viewed electronically, in Word or
21 Acrobat format, on the CSLC internet website at: <http://www.slc.ca.gov/>

22 The Revised Final EIR has been prepared pursuant to the California Environmental
23 Quality Act (the CEQA) (section 21000 et seq., California Public Resources Code)
24 and in accordance with the *Guidelines for the Implementation of the California*
25 *Environmental Quality Act* (section 15000 et seq., California Code of Regulations,
26 Title 14). The *Guidelines* stipulate that an EIR must be prepared for any project that
27 may have a significant impact on the environment. The PG&E Line 406/407 Natural
28 Gas Pipeline Project is a "project" as defined by the *Guidelines*. Upon preliminary
29 review, the CSLC determined that the PG&E Line 406/407 Natural Gas Pipeline
30 Project may have a significant adverse impact on the environment and, therefore, an
31 EIR is required. The CSLC selected an environmental contractor to prepare the EIR
32 to ensure that the document reflects an independent, objective analysis of the
33 proposed Project.

1 The CSLC, as the Lead Agency for this project, is required by section 15089 of the
2 CEQA to prepare a Final EIR. The Revised Final EIR will be used by the CSLC as
3 part of its approval process, including setting the conditions of the lease agreement,
4 and incorporating mitigation measures for project implementation. A Mitigation
5 Monitoring Program inclusive of revisions following the publication of the Draft EIR is
6 included in this Revised Final EIR.

7 The CSLC, as the Lead Agency for this project, is not required to recirculate the EIR
8 because we are not providing “significant new information” requiring recirculation.
9 According to CEQA Guidelines Section 15088.5, recirculation of an EIR would be
10 required if: 1) a new significant environmental impact would result from the project or
11 from a new mitigation measure proposed to be implemented; 2) a substantial
12 increase in the severity of an environmental impact would result unless mitigation
13 measures are adopted that reduce the impact to a level of insignificance; 3) a
14 feasible project alternative or mitigation measure considerably different from others
15 previously analyzed would clearly lessen the significant impacts of the project, but
16 the project’s proponents decline to adopt it; and 4) the Draft EIR was so
17 fundamentally and basically inadequate and conclusory in nature that meaningful
18 public review and comment were precluded.

19 Recirculation of an EIR is not required where the new information merely clarifies,
20 amplifies, or makes minor modifications to an adequate EIR (CEQA Guidelines
21 Section 15088.5(b)). The new information in this Revised Final EIR provides
22 clarification to the risk analysis and revises a mitigation measure that increases
23 public safety.

24 The Revised Final EIR is being circulated for public review in order to provide
25 agencies and the public details regarding the clarifications made to the risk analysis.
26 Clarifications have been made to the System Safety and Risk of Upset Report
27 prepared by EDM Services, Inc. that was included as Appendix H-3 to the Draft EIR.
28 The Revised System Safety and Risk of Upset report shows changes as underline
29 for new text, and ~~strike-out~~ for deleted text, and is included as Appendix H-3 to this
30 Revised Final EIR. Revisions to the Draft EIR, Section 4.7, Hazards and Hazardous
31 Materials, and Section 4.9, Land Use and Planning, reflect the clarifications to the
32 risk analysis and are provided in Section 4.0 of this Revised Final EIR.

33 This Revised Final EIR provides an analysis that has been clarified to account for
34 individual risks to the public if a pipeline release were to occur with a subsequent fire
35 or explosion.

1 It should be noted that the probability of a puncture or rupture over the 50-year life of
2 the pipeline is very low. A fire could result from a natural gas release only if two
3 conditions are present: 1) a volume of natural gas must be present within the
4 combustible mixture range (5% to 15% methane in air); and 2) a source of ignition
5 must be present with sufficient heat to ignite the air/natural gas mixture (1,000
6 degrees F). In order for an explosion to occur, a third condition must be present: the
7 natural gas vapor cloud must be confined, to a sufficient degree. Over the life of the
8 pipeline (50 years), the probability of a pipeline release that would result in a fire
9 varies from 3.2% for a rupture to 7.5% for a puncture (1-inch diameter hole); while
10 the probability of a pipeline release that would result in an explosion varies from
11 2.0% for a rupture to 4.7% for a puncture.

12 The earlier version of the risk assessment included risk measurement terminology
13 that was not defined in the document, which has resulted in some confusion. The
14 “aggregate risk” was presented in the Draft EIR erroneously as “individual risk”. The
15 aggregate risk presents the anticipated annual likelihood of fatalities from all of the
16 project components, which includes approximately 40 miles of 30-inch diameter
17 pipeline, 2.5 miles of 10-inch diameter pipeline, and six fenced, aboveground
18 pressure limiting, pressure regulating, metering, and mail line valve stations. The
19 actual “individual risk”, relates to the risk to an individual at a specific location.
20 Individual risk is most commonly defined as the frequency that an individual may be
21 expected to sustain a given level of harm from the realization of specific hazards, at
22 a specific location, within a specified time interval. The risk level is typically
23 determined for the maximally exposed individual (assumes that a person is present
24 continuously—24 hours per day, 365 days per year). The individual risks are
25 evaluated using two approaches: a simplified and enhanced approach.

26 Section 4.1.4 of the Draft EIR correctly stated that a commonly accepted “individual
27 risk” threshold is an annual likelihood of fatality of one in one-million (1:1,000,000)
28 for fatality (used by the California Department of Education for school sites).
29 However, the report incorrectly compared the calculated “aggregate risk” to the
30 threshold for “individual risk.” Aggregate risk has no known established threshold
31 and is not used in practice to determine individual risk.

32 The highest individual risk along a segment of pipeline is to persons located
33 immediately above the pipeline. As the distance from each pipeline segment
34 increases, the individual risk decreases. The maximum risk posed by Line 406
35 before mitigation is 1:2,137,000, and after mitigation is 1:4,274,000 chance of fatality
36 per year. The maximum risk posed by Line 407 before mitigation is 1:2,062,000,

1 and after mitigation is 1:4,115,000 chance of fatality per year. The maximum risk
2 posed by Line DFM before mitigation is 1:4,255,000, and after mitigation is
3 1:8,475,000. Since the maximum calculated individual risk is less than the
4 threshold, the risk is considered to be less than significant.

5 **1.2 CONTENTS OF THE REVISED FINAL EIR**

6 As required by section 15132 of the CEQA *Guidelines*, the Final EIR consists of the
7 following elements:

- 8 • The Draft EIR or a revision of the draft;
- 9 • A list of persons, organizations, and public agencies commenting on the Draft
10 EIR (see Section 2.0);
- 11 • Comments and recommendations received on the Draft EIR (see Section 3.0);
- 12 • Responses to significant environmental points raised in the review and
13 consultation process (see Section 3.0). For ease of reference, those portions
14 of the public meeting transcripts reflecting comments by parties submitting
15 letters immediately follow such letters. The transcripts in their entirety are in
16 Appendix J; and
- 17 • Revisions to the Draft EIR (see Section 4.0).

18 **1.3 DECISION MAKING PROCESS**

19 The CSLC is the Lead Agency for this Revised Final EIR because the CSLC has
20 jurisdiction over the Sacramento River that would be crossed by the PG&E Line
21 406/407 Natural Gas Pipeline Project. The CSLC will use the Revised Final EIR in
22 its decision-making process in determining whether or not to issue a lease of State
23 lands for construction and operation of the proposed Project. The CSLC must certify
24 that:

- 25 • The Revised Final EIR has been completed in compliance with the CEQA;
- 26 • The Revised Final EIR was presented to the CSLC in a public meeting and the
27 CSLC reviewed and considered the information contained in the Revised Final
28 EIR prior to considering the proposed Project; and
- 29 • The Revised Final EIR reflects the CSLC's independent judgment and analysis
30 (CEQA Guidelines section 15090).

1 In conjunction with certification of the Revised Final EIR, the CSLC must prepare
2 one or more written findings of fact for each significant environmental impact
3 identified in the document. These findings must either state that:

- 4 • The Project has been changed (including adoption of mitigation measures) to
5 avoid or substantially reduce the magnitude of the impact;
- 6 • Changes to the Project are within another agency's jurisdiction and have been
7 or should be adopted; or
- 8 • Specific considerations make mitigation measures or alternatives infeasible.

9 If any of the impacts identified in the Revised Final EIR cannot be reduced to a level
10 that is less than significant, the CSLC may issue a Statement of Overriding
11 Considerations for approval of the project if specific social, economic, or other
12 factors justify a project's unavoidable adverse environmental effects. If the CSLC
13 decides to approve a project for which a Final EIR has been prepared, the CSLC will
14 issue a Notice of Determination.

1
2
3
4

This page intentionally left blank.