

MODIFIED EXHIBIT F – CENTRAL COASTAL CALIFORNIA SEISMIC IMAGING PROJECT

STATEMENT OF OVERRIDING CONSIDERATIONS

Modified Timing Three-Loop Configuration

August 20, 2012

INTRODUCTION TO STATEMENT OF OVERRIDING CONSIDERATIONS

The California State Lands Commission (CSLC) as the lead agency under the California Environmental Quality Act (CEQA) has prepared a Final Environmental Impact Report (EIR) (State Clearinghouse No. 2011061085) for the Central Coastal California Seismic Imaging Project (Project), which Pacific Gas and Electric Company (PG&E or Applicant) proposes to conduct offshore and adjacent to the Diablo Canyon Power Plant (Diablo Canyon or DCP), a nuclear power plant located in Avila Beach, San Luis Obispo County.¹ The EIR identifies significant impacts of the Project that cannot feasibly be mitigated to below a level of significance. This Exhibit (Modified Exhibit F, Statement of Overriding Considerations) addresses the CSLC's obligations under Public Resources Code section 21081, subdivisions (a)(3) and (b). (See also § 15091, subd. (a)(3) and § 15093 of the State CEQA Guidelines.²)

Under these provisions, CEQA requires the CSLC to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of the Project (as approved by issuance of the Geophysical Survey Permit), against the backdrop of unavoidable significant environmental impacts. For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, those effects may be considered "acceptable" and the decision-making agency may approve the underlying project (State CEQA Guidelines § 15092, subd. (b)(2)(B)). CEQA, in this respect, does not prohibit the CSLC from approving the Geophysical Survey Permit even if the seismic survey activities as authorized by that permit may cause significant and unavoidable environmental effects.

Based on the analysis conducted in preparation of the Final EIR, information provided by PG&E, information obtained through the public review process, and other information in the administrative record, this Statement of Overriding Considerations presents a discussion of the Project selected for approval, which is described below and hereafter referred to as the "Modified Timing Three-Loop Configuration." This discussion includes (1) mitigation measures that avoid or substantially lessen significant effects but not to a level below significance, (2) the specific significant effects on the environment

¹ The Final EIR was published in July 2012 and is available on the CSLC website at: www.slc.ca.gov (under the "Information" tab and "CEQA Updates" link).

² The State "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

attributable to the Project that cannot feasibly be mitigated to below a level of significance, (3) benefits derived from the Project, and (4) specific reasons for approving the Project.

Alternatives and Mitigation Measures

As explained in *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000, “When it comes time to decide on project approval, the public agency’s decisionmaking body evaluates whether the alternatives [analyzed in the EIR] are *actually* feasible....At this final stage of project approval, the agency considers whether ‘[s]pecific economic, legal, social, technological, or other considerations...make infeasible the mitigation measures or alternatives identified in the environmental impact report.’ Broader considerations of policy thus come into play when the decisionmaking body is considering actual feasibility than when the EIR preparer is assessing potential feasibility of the alternatives” [citations omitted].

Alternatives

The CSLC finds that the No Project Alternative is the environmentally superior alternative because it is the only alternative that would reduce impacts to *Less than Significant*. However, the CSLC finds that this alternative is infeasible for the following reasons.

- The California Energy Commission (CEC) conducted a comprehensive assessment of DCPD as directed by Assembly Bill (AB) 1632 (Blakeslee, Chapter 722, Statutes of 2006; codified as Pub. Resources Code, § 25303). AB 1632 did not expressly mandate that PG&E conduct a new three-dimensional (3D) geophysical survey of earthquake fault zones near the DCPD; it required only that the effects upon the State’s electric supplies of a seismic event at the power plant be evaluated. The CEC’s assessment found that an extended shutdown at the plant would have major economic, environmental, and reliability implications, and recommended that PG&E update DCPD’s seismic assessments. The CEC specifically recommended that PG&E use “3D geophysical seismic reflection mapping and other advanced techniques” to supplement ongoing seismic research programs. The California Public Utilities Commission (CPUC) directed PG&E to complete these advanced seismic studies and submit the results as part of the CPUC’s review of United States Nuclear Regulatory Commission (NRC) license renewal applications for the DCPD. The Project was proposed in response to this directive; selecting the No Project Alternative would put PG&E in the position of non-compliance with the CPUC directive.
- The Project objectives would not be met. No new information regarding the survey targets (either on- or offshore and including data on the Shoreline fault that was discovered in 2008) would be obtained. At-depth information regarding fault geometries would not be obtained in the area offshore of the DCPD. Key geologic features, such as the dip angle of the various faults, would remain as gaps in the understanding of the seismicity in the DCPD vicinity. The current regional seismic database would not be augmented. Choosing the No Project

Alternative would not allow PG&E to refine its predictive ground motion/seismic hazard modeling to the extent required.

The CSLC finds that the alternatives considered in the EIR (other than the No Project Alternative) would reduce one or more of the significant impacts, but would not eliminate them altogether. The CSLC further determines that Alternative IIIb (Three-Loop Configuration) would have lower overall environmental impacts than the other alternatives analyzed individually in the EIR, and is therefore identified in the EIR as the Environmentally Superior Alternative. Alternative IIIb would accomplish the Project objectives associated with survey targets in three of the proposed survey zones, but would not accomplish the objectives for data collection in the northernmost survey zone (Zone 3). In Zone 3, the survey target of interest to PG&E is the Hosgri-San Simeon step-over. However, discussions with PG&E and the Independent Peer Review Panel (IPRP)³ revealed technical opinions that conclusions about the Hosgri-San Simeon step-over feature could be drawn from existing information, or obtained with techniques other than 3D high-energy seismic surveys. Therefore, conducting seismic surveys in this zone was considered of less technical value than the other three proposed survey zones, and the CSLC concludes, as a result, that Alternative IIIb would accomplish most of the project objectives. Under Alternative IIIb, impacts would be reduced primarily through:

1. Reducing the survey footprint, which would:
 - avoid the White Rock-Cambria Marine Protected Areas (MPAs);
 - increase the survey's distance from the Monterey Bay National Marine Sanctuary (MBNMS);
 - reduce impacts to marine wildlife due to noise; and
 - reduce impacts to commercial and recreational fishing from preclusion; and
2. Reducing the survey duration, thereby reducing impacts to marine wildlife, air quality, greenhouse gases (GHGs), and commercial and recreational fishing. Overall, the survey duration would be reduced by approximately 14 days from 82 days to 68 days - within which the period of active full air gun deployment would be reduced by approximately 7 days, from 41 days to 34 days.

Modified Timing Three-Loop Configuration

While Alternative IIIb (Three-Loop Configuration) as described in the EIR reduces the survey footprint (thereby avoiding two MPAs), shortens the expected survey duration, and reduces several significant impacts as compared to the applicant-proposed Project, the CSLC determines that additional modifications to the survey timing would likely further reduce impacts to some marine species and reduce the adverse social and economic consequences on commercial fishermen, fishing-related businesses, ancillary

³ The CPUC's Decision 10-08-003 (2010) established the IPRP to conduct a peer review of the proposed seismic study plans and, if the Project is implemented, to review study findings. The IPRP includes staff from the CPUC, CEC, California Seismic Safety Commission, California Coastal Commission, and County of San Luis Obispo with contract support from the California Geological Survey.

businesses, and the regional communities. **Based on all available information presented, the CSLC adopts a modified version of Alternative IIIb, as set forth below, which incorporates additional survey timing restrictions, as well as aspects of Alternative IIb (Phased Survey), which was also analyzed in the EIR.**

The Modified Timing Three-Loop Configuration consists of Alternative IIIb as modified by the following:

- **Project Timing:** Project-related activities including mobilization to the area, pre-survey aerial surveys, pre-survey terrestrial surveys, onshore and nearshore geophone deployment, and other initial equipment deployment will not commence prior to **October 15**. Project-related activities will not be conducted after December 31;
- **Survey Activities:** Use of air guns (i.e., commencement of survey) will not commence prior to **November 1**;
- **Phasing Contingency:** In the event the survey has not been completed by December 31, 2012, survey and related Project activities may occur between October 15, 2013, and December 31, 2013, subject to the above restrictions (e.g., no use of air guns before November 1, 2013).

In adopting this option to Alternatives IIIb and IIb, the CSLC has balanced the economic, legal, social, technological, and other benefits of the project, including region- or statewide environmental benefits, against the adverse environmental consequences as described in this Statement of Overriding Considerations. In this respect, some specific significant impacts would decrease or may increase depending on when PG&E completes surveying the target faults identified in its Project objectives. Implementation of adaptive management, as suggested during public comment (see Comment Letter No. 23 in the EIR, Volume 1, from the Natural Resources Defense Council, Ocean Conservancy, and The Otter Project, May 3, 2012) could also decrease impacts. If all, or part, of the first year survey fails to yield useful data, the survey proposed for year two could be reduced or eliminated and related impacts (up to 50 percent of the total impact on wildlife and fisheries) avoided entirely.

For example, as discussed in greater detail below:

- With the shortened Project duration, total vessel emissions and emissions during the fourth quarter of 2012 under the Modified Timing Three-Loop Configuration would be less than those resulting from the Environmentally Superior Alternative (Alternative IIIb – Three-Loop Configuration), if PG&E completes the Project in a single year. This could be accomplished if there were fewer delays caused by equipment malfunctions, weather, presence of marine mammals, or other circumstances than PG&E anticipates may occur in year one.
- Vessel emissions would likely be greater, however, if PG&E needs to complete the Project in year two, since PG&E would, in the second year, need to bring the survey vessel back to the Project area and would need to repeat mobilization and demobilization activities.

Similar impacts relating to some marine mammals, MPAs, and Fishing activities may also be reduced or increased under the Modified Timing Three-Loop Configuration option depending on whether PG&E is able to complete the survey in one year or two years.

As required by section 15091, subdivision (c) and section 15093, subdivision (b) of the State CEQA Guidelines, the CSLC's specific reasons for not adopting the Environmentally Superior Alternative are contained in Modified Exhibit E – Statement of Findings, and in this Statement of Overriding Considerations (Modified Exhibit F).

Mitigation Measures

The CSLC finds that all mitigation measures identified in the EIR have been imposed to avoid or lessen impacts to the maximum extent feasible.⁴

Conclusions for Impacts Related to Emissions Due to Survey Vessels (AQ-1, AQ-2, AQ-3, and GHG-1).

Based on emission estimates, the proposed survey operations are predicted to result in criteria pollutant⁵ emissions that will exceed the daily air quality significance thresholds and quarterly Level 1 and 2 air quality thresholds. The EIR presents a comprehensive set of mitigation measures that are adopted as part of this Project approval by the CSLC. The mitigation measures will reduce, to the maximum extent feasible, the probability, severity, or frequency of air quality threshold exceedances.

Measures specific to reducing daily or quarterly air quality significance threshold exceedances include the following:

- Application of the “Standard Mitigation Measures for Construction,” listed in the current edition of the San Luis Obispo County Air Pollution Control District (APCD) CEQA Handbook;
- Implementation of Best Available Control Technology (BACT) Measures as defined in the current San Luis Obispo County APCD CEQA Handbook; and
- Implementation of Fugitive Dust Controls.

An additional measure associated with this impact is preparation of a Project-specific Emissions Reduction Plan (ERP), with input from the APCD. While this measure will not reduce actual Project-related emissions, it will provide a mechanism to implement a set of emission reductions, including identification of suitable means to offset those emissions by reducing emissions associated with other sources. Additionally, while total

⁴ Impacts and mitigation measures are identified and discussed throughout Section 4.0 of the EIR. A summary of all impacts and mitigation measures is provided in the Mitigation Monitoring Program (MMP), adopted as part of this Project approval, as set forth in Exhibit D.

⁵ As discussed in EIR Section 4.2, Air Quality, criteria pollutants include carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter with a diameter of 10 microns or less (PM₁₀) and 2.5 microns or less (PM_{2.5}), lead (Pb), sulfates (SO₄), and hydrogen sulfide (H₂S).

Project emissions could be increased if the additional year of survey activities were necessary to complete the surveys, because of the restricted time frame of the survey, quarterly emissions exceedences may not be as severe as with the applicant-proposed Project and other alternatives (as described in Section 5.3.2 of the EIR).

PG&E met with the APCD in April 2012 to discuss Project air emissions and the need for PG&E to prepare an ERP. The APCD staff has stated that it is confident that implementation of the to-be-developed ERP would successfully reduce Project emissions below daily and quarterly air quality significance thresholds; however, the particular measures of the ERP that would ensure this reduction are still in development and rely to a large extent on the information presented in the EIR and identification of vessels and boat owners who may participate (therefore making it infeasible to complete the ERP and include it as a mitigation measure in the EIR). The CSLC finds this impact remains and will remain significant until such time that specific feasible mitigation is developed as a result of negotiations between the APCD and PG&E. Therefore, the Project impacts on air quality remain *Significant and Unavoidable*.

These above measures will also reduce the Project's contributions to GHGs in the Project area.

Conclusions for Impacts Related to Marine Mammals (BIO-12 and BIO-13).

The proposed surveys will produce seismic noise at specific magnitudes and frequencies that are designed to provide penetration of the earth's crust to the desired depths, but that would also have the potential to harm or disturb marine mammals. A number of alternative technologies for deep seismic imaging are considered in the EIR alternatives evaluation. None of those alternative options were deemed likely to reduce environmental impacts while achieving the Project objectives. All were rejected as viable options and were eliminated from further consideration.

The EIR presents a comprehensive set of mitigation measures that are adopted as part of this Project approval by the CSLC. The mitigation measures will reduce, to the maximum extent feasible, the probability, severity, or frequency of marine mammal impacts. Given that these noise magnitudes and frequencies cannot be adjusted to avoid impacts to marine mammals, measures in the EIR specific to reducing impacts to marine mammals from that noise include the following.

- Conducting a marine mammal pre-survey to determine marine mammal density in the Project area, to allow for adjustments in the survey timing or avoidance of large mammal concentrations.
- Conducting aerial surveys to identify the presence of marine mammals within the survey areas;
- Development of flight plans to avoid areas where pinnipeds "haul out" onto land;
- Establishment of Marine Mammal Observer (MMO) qualifications and use of equipment and procedures to enhance marine mammal detection rates, particularly during night-time operations;

- Establishment of an expanded Exclusion Zone, within which, if marine mammals are observed, the survey vessel crew would undertake specified actions to avoid potential takes;
- Use of multiple scout boats with MMOs to increase detection rates;
- Performance of track lines with highest mammal densities during daylight hours;
- Increase the scan period prior to air gun ramp-up⁶ to allow for the presence of species with long dive time and to accommodate poor visibility conditions;
- Employment of a program of adaptive management when mammal sightings trigger multiple shut downs to provide the opportunity for agency input *before* a take or exceedance of a take limit occurs; and
- Establishment of shut down contingency in the event of a North Pacific Right Whale.

Implementation of the Modified Timing Three-Loop Configuration will likely further reduce impacts to blue, fin, and humpback whales, as the later air gun start date of November 1 places the survey within a time frame of lower expected densities of these species. In addition, these mitigation measures and the timing restriction will also be effective in reducing noise impacts to sea otters and minimize conflict with sea otter breeding. If the survey is not completed by December 31, 2012, and the survey is completed in year two, the impacts to Morro Bay harbor porpoise could be increased as compared to the Environmentally Superior Alternative (Alternative IIIb – Three-Loop Configuration), as they are resident species in the Project area and would be exposed to noise impacts twice; however, the duration of each exposure would be reduced from that of the applicant-proposed Project and the Environmentally Superior Alternative.

Conclusions for Impacts Related to Conflicts with Marine Protected Areas (MPAs) (LU-2).

A network of MPAs was created in response to California Marine Life Protection Act (MLPA) (Fish & G. Code, §§ 2850–2863) requirements and is intended primarily to protect or conserve marine life and habitat. Three MPAs are present in the Project area as proposed: the Point Buchon State Marine Reserve (SMR) and State Marine Conservation Area (SMCA), the Cambria SMCA, and the White Rock SMCA. Under the approved project, the Modified Timing Three-Loop Configuration, the survey footprint is reduced as compared to the applicant-proposed Project, and will avoid the White Rock-Cambria MPAs – thereby reducing conflicts with MPA policies due to the Project and increasing the distance between the survey track lines and the MBNMS. However,

⁶ “Ramp-up” is a standard mitigation measure identified in high energy seismic survey guidelines for marine surveys. This has occurred in recognition of the potential risk that immediate hearing damage could occur to a nearby marine mammal if a high-energy sound source, such as an air gun array, were turned on suddenly. The ramp-up procedure generally involves the gradual increase in intensity of a sound source to full operating intensity over a period of time. It is assumed that marine mammals will hear the sound and move away before hearing damage or physiological effects occur.

impacts to marine wildlife will not be avoided altogether, and the Point Buchon SMR/SMCA will still remain within the survey footprint. Under the Modified Timing Three-Loop Configuration, if a second survey year is necessary, any conflicts with the MPAs would be of shorter duration, but may be repeated. Reentry into the MPAs may or may not be necessary in the second year, and would require approval by the California Department of Fish and Game (CDFG). The offshore survey may result in “take” of marine species, which is prohibited in the MPAs without a permit. In addition, the northernmost Project area extends slightly into the MBNMS; none of the survey lines enter into the MBNMS. In accordance with the National Marine Sanctuaries Act, flying motorized aircraft at less than 1,000 feet (304 meters) is prohibited in this area.

The EIR presents a comprehensive set of mitigation measures that are adopted as part of the CSLC’s approval of the Modified Timing Three-Loop Configuration. The mitigation measures will reduce, to the maximum extent feasible, the probability, severity, or frequency of conflicts with MPAs. The following measure in the EIR applies to reducing conflicts with these protected areas:

- Restrictions of aircraft flying less than 1,000 feet above MBNMS Exclusion Zones

The measures listed above for marine mammals are also consistent with the intent of the establishment of MPAs to protect or conserve marine life and habitat.

Conclusions for Impacts Related to Commercial and Recreational Fishing (LU-1, FISH-1 and FISH-2).
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Non-Project vessels will be restricted from active survey areas during Project implementation. The Project area supports year-round and seasonal fisheries, the closures of which vary from year to year and cannot be forecasted precisely. Under both the applicant-proposed Project and the Environmentally Superior Alternative (Alternative IIIb – Three-Loop Configuration), year-round fisheries would be restricted for approximately one-quarter of the year. For fisheries that are only open during the proposed survey months, the impact would be much greater, possibly excluding fishing in the Project area for an entire season. The ability for fishermen to fish in alternate locations is highly dependent on the fishery (gear type, season, and other conditions). Although substitution could, for some fisheries, maintain fishing activity during the proposed survey period, it may also be less efficient and/or incur higher fuel and other costs.

The Project will also have potential short-term adverse effects on commercial catch caused by fishing preclusions and fish injury or behavioral changes due to Project-related noise. As noted in Section 7.1, Socioeconomic Effects, of the EIR, there will be adverse economic impacts resulting from the proposed geophysical survey, particularly to individual fishermen in the San Luis Obispo County region, including commercial fishermen and charter boat operators, and other businesses that support the fishing industry (e.g., bait, tackle, other supplies and fuel). While the Project is not expected to have long-term or widespread impacts on the local economy, by restricting the survey to the November 1 to December 31 time frame (October 15 for pre-survey preparation and

mobilization), the Modified Timing Three-Loop Configuration reduces the duration of the disruption and/or preclusion of fishing activities, and in turn, reduces the social and economic effects associated with a longer disruption of the fishermen's and other community members' livelihoods. While fishing could be disrupted in the subsequent year if the survey is not completed by December 31, 2012, the duration of each disruption would be less. The benefit provided by restricting the project timing, even if a second survey year is necessary, while not related to "potentially significant environmental effects" analyzed in the EIR, is an important consideration in the CSLC's decision to approve the Modified Timing Three-Loop Configuration, as discussed further below.

The EIR presents a comprehensive set of mitigation measures that are adopted as part of this Project approval by the CSLC. The mitigation measures will reduce, to the maximum extent feasible, the probability, severity, or frequency of physical impacts to commercial and recreational fishing. The following measure in the EIR applies to reducing impacts to recreational and commercial fishing:

- Development and implementation of a communication plan with local fishing, boating, and other recreational interests.

Significant Impacts

Although the Applicant has designed the Project to minimize environmental effects, and the CSLC has approved the Modified Timing Three-Loop Configuration and imposed all feasible mitigation measures to further reduce impacts, impacts remain that are considered significant.

Remaining Project-related significant impacts are within the following environmental issue areas analyzed in the EIR:

- Air Quality [**AQ**];
- Biological Resources - Marine [**MARINEBIO**];
- Greenhouse Gases [**GHG**];
- Land Use and Recreation [**LU**]; and
- Commercial Fishing [**FISH**].

As shown in Table 1, these significant impacts fall into the following categories:

- Emissions Due to Survey Vessels;
- Impacts to Marine Mammals;
- Conflicts with MPAs; and
- Impacts to Commercial and Recreational Fishermen.

Table 1. List of Significant Impacts Identified for the Project, as Modified by the Modified Timing Three-Loop Configuration

Impact	Impact Summary	Impact Description
Emissions Due to Survey Vessels		
<p>AQ-1</p>	<p>Mobilization and demobilization activities (including equipment deployment and retrieval) would result in daily emissions of criteria pollutants that would exceed air quality significance thresholds.</p>	<p>Criteria pollutant emissions during mobilization and demobilization (including equipment deployment and retrieval) would be associated with (1) transit of the survey vessel to and from the Project area; (2) support boats used to deploy the equipment and to transport the survey crew, required equipment, and support provisions; and (3) onshore construction vehicles that would be used to deploy the onshore geophones. Estimated criteria pollutant emissions associated with these actions exceed the daily air quality significance thresholds.</p> <p>The San Luis Obispo County APCD staff has stated that it is confident that implementation of the to-be-developed Emission Reduction Program (ERP) would successfully reduce Project emissions below daily and quarterly air quality significance thresholds; however, the particular measures of the ERP that would ensure this reduction are still in development.</p>
<p>AQ-2</p>	<p>Survey activities would result in daily emissions of criteria pollutants that would exceed air quality significance thresholds</p>	<p>Criteria pollutant emissions during survey operations would be associated with (1) transits of the survey vessel along tracklines; (2) support boats conducting mammal surveys, supporting the primary vessel, and scouting the area for obstructions; and (3) onshore construction vehicles that would be used for onshore seismic noise generation. Estimated criteria pollutant emissions associated with these actions exceed the daily air quality significance thresholds.</p> <p>The San Luis Obispo County APCD staff has stated that it is confident that implementation of the to-be-developed ERP would successfully reduce Project emissions below daily and quarterly air quality significance thresholds; however, the particular measures of the ERP that would ensure this reduction are still in development.</p>
<p>AQ-3</p>	<p>Total Project activities would result in quarterly emissions of criteria pollutants that would exceed air quality significance thresholds.</p>	<p>Because the Project duration is expected to last nearly one (calendar) quarter in year one, the total emissions must be evaluated against the quarterly significance criteria for criteria pollutants. Similar additional emissions could occur in year two if the survey is not completed in year one. The total quarterly emissions estimated for the Project exceed the Quarterly Level 1 and 2 air quality thresholds.</p>

Table 1. List of Significant Impacts Identified for the Project, as Modified by the Modified Timing Three-Loop Configuration

Impact	Impact Summary	Impact Description
		<p>The San Luis Obispo County APCD staff has stated that it is confident that implementation of the to-be-developed ERP would successfully reduce Project emissions below daily and quarterly air quality significance thresholds; however, the particular measures of the ERP that would ensure this reduction are still in development. Timing restriction of October 15 to December 31 would reduce the effect related to quarterly emissions; however, a phased survey over 2 years would increase the overall emissions of the Project.</p>
GHG-1	<p>The Project would result in emissions of GHGs that would exceed significance thresholds.</p>	<p>During the Project, offshore survey and supporting vessels and onshore construction vehicles will emit GHGs. Estimated emissions would exceed San Luis Obispo County APCD's proposed emission threshold. If a second survey year is necessary, overall GHGs would be higher than Alternative IIIb.</p> <p>The San Luis Obispo County APCD staff has stated that it is confident that implementation of the to-be-developed ERP would successfully reduce Project emissions below daily and quarterly air quality significance thresholds; however, the particular measures of the ERP that would ensure this reduction are still in development.</p>
Impacts to Marine Mammals		
MARINE BIO-12	<p>Injury or mortality of marine mammals would occur due to noise during seismic survey acquisition.</p>	<p>Noise generated underwater during the seismic survey would adversely affect marine mammals, by either: (1) masking other noises needed for survival; (2) disturbing their behavioral patterns; (3) resulting in temporary or permanent hearing loss; or (4) causing other physiological effects, such as stress or immune response. Restricting air gun operation to the November 1 to December 31 time frame would reduce these impacts on blue, fin, and humpback whales, but a second survey year, if it is necessary, could increase impacts on Morro Bay harbor porpoise.</p>
MARINE BIO-13	<p>Injury or mortality to Southern Sea Otters would occur due to noise during seismic survey acquisition.</p>	<p>No mortality of sea otters is expected. Noise generated underwater during the seismic survey would disturb sea otters' normal behaviors. Restricting the air gun operation to the November 1 to December 31 time frame would slightly reduce conflicts with breeding</p>

Table 1. List of Significant Impacts Identified for the Project, as Modified by the Modified Timing Three-Loop Configuration

Impact	Impact Summary	Impact Description
Conflicts with Marine Protected Areas (MPAs)		
LU-2	Offshore Project activities would conflict with some applicable land use plans.	The offshore survey may result in “take” of marine species, which is prohibited in the MPAs without a permit. The CDFG has authority over the MPAs and would, at its discretion, need to issue a Scientific Collecting Permit in order for the Project to proceed with any part of the Project that would result in “take” in the MPAs. In addition, Project activities would potentially interfere with ongoing monitoring efforts aimed at measuring the effectiveness of MPA management. If the second year of the survey is necessary, these impacts would be increased, although the length of each impact event would be decreased.
Impacts to Commercial and Recreational Fishing		
LU-1	Offshore Project activities would adversely impact offshore recreational activities during a peak season.	Non-Project vessels would be precluded from active survey areas within the offshore Project area; survey operations would result in preclusion of recreational fishermen from certain fishing areas during a peak season. Limiting project activities to October 15 – December 31 would decrease this impact in a given year; however, some impacts would occur twice if the survey is not completed in the first year.
FISH-1	Offshore Project activities would adversely impact commercial fishing by precluding fishing for all or most of a season.	Non-Project vessels would be precluded from active survey areas within the offshore Project area; survey operations would result in preclusion of commercial fishermen from certain fishing areas during a peak season. Limiting project activities to October 15 – December 31 would decrease this impact in a given year; however, some impacts would occur twice if the survey is not completed in the first year.
FISH-2	Project activities would have short-term adverse effects on catch resulting from survey-related noise.	The Project would have short-term adverse effects on commercial catch caused by (1) Restrictions or preclusion in the Project area during some or all of the survey; (2) Fish injury; or (3) Behavioral response of fish, leading to reduced catch per unit effort (CPUE). Limiting project activities to October 15 – December 31 would decrease this impact in a given year; however, some impacts would occur twice if the survey is not completed in the first year.

BENEFICIAL IMPACTS OF THE PROJECT

Region-wide Benefits

This Project can be traced back to AB 1632, which required that the CEC, as part of its electricity and natural gas forecasting and assessment activities, compile and assess existing scientific studies to determine the potential vulnerability to a major disruption, due to aging or from a major seismic event, of the State's two nuclear facilities, including a specified analysis of the impact of a major disruption on system reliability, public safety and the economy. As stated earlier, AB 1632 did not mandate geophysical surveys. However, the CEC recommended that 3D geophysical surveys of nearby faults would yield information that could ultimately prove helpful in evaluating DCCP's reliability, and, consequently, the CPUC ordered PG&E to pursue such surveys.

PG&E will submit data from the survey for analysis by the NRC pursuant to its regulatory authority over the safety aspects of nuclear power, which includes plant licensing and license extensions. The State may set electricity generation priorities, but cannot shut down the plant or order safety-related modifications; those are within the NRC's jurisdiction. The NRC may consider the seismic survey results in evaluating relicensing of the DCCP prior to expiration of its current license in 2024, but, more immediately, it may at any time order enhancements to the safety of the plant or a complete shut-down.

The ultimate aim of AB 1632 was to improve system reliability, public safety, and economic impacts caused by disruptions from California's nuclear power plants. To the extent that data generated from the Project could refine the understanding of fault geometries in the area offshore of the DCCP and could be used to update PG&E's predictive ground motion/seismic hazard modeling, the Project could ultimately benefit the overall safety and reliability of the DCCP operations.

The CSLC must therefore balance the possibility that the survey may produce data that the NRC might consider sufficient to justify requiring enhancements to the safety of the DCCP against the significant or potentially significant environmental and socioeconomic impacts from the Project. The consequences, however, of a major failure at the facility would be incalculable. Using the partial melt-down at the Fukushima Dai-Ichi facility as an example, both the economy and the environment of virtually the entire San Luis Obispo County coast could be devastated. Given the extreme and far reaching consequences to both the regional economy and the environment that could result from a major failure at DCCP, the possibility that new data about potential earth movement from seismic events could lead to improvements to plant safety must be considered sufficient to override the otherwise clear concerns about the environmental impacts that would result from collection of these data.

Benefits to the State Economy

As noted above, preventing or lessening economic impacts caused by disruptions from nuclear power plants, as well as enhancing public safety and system reliability, was a primary consideration in AB 1632. Conducting the CEC-mandated geophysical survey

in the near future would also enable the CEC to identify alternatives to the DCPD should the NRC, after evaluating the seismic survey data, order a short- or long-term shut-down of the DCPD for safety reasons. The benefits of safe and reliable operation of the DCPD to the state economy, while less direct and immediate than benefits to the region, are substantial in the context of maintaining a safe and reliable power grid. According to the CEC (2011), nuclear power generation provides 15.7 percent of California's in-state generation, of which DCPD provides about 50.6 percent (about 8.0 percent of total in-state generation) (see http://energyalmanac.ca.gov/overview/energy_sources.html). The continued contribution of power generation is essential to the state economy.

CSLC ADOPTION OF STATEMENT OF OVERRIDING CONSIDERATIONS

Under Public Resources Code section 21081, subdivisions (a)(3) and (b) and State CEQA Guidelines section 15093, subdivision (a), the decision-making agency is required to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve a project.

For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, the decision-making agency may approve the underlying project. CEQA, in this respect, does not prohibit the CSLC from approving the Project, issuance of a Geophysical Survey Permit, even if the seismic survey activities as authorized by that permit may cause significant and unavoidable environmental effects.

This balancing is particularly difficult given the significant and unavoidable impacts on resources discussed above and the potential adverse social and economic impacts resulting from the proposed seismic survey on fishermen and fishing-related businesses. Nevertheless, the CSLC finds, as set forth below, that the benefits of the information expected to be obtained by implementing the Project outweigh and override the expected significant effects. Furthermore, the CSLC finds that the social and economic considerations related to the commercial fishermen, fishing-related businesses, ancillary businesses and the regional communities, and the need to reduce the duration that these community members experience economic hardship in any given year, provide specific support for the CSLC's adoption of the Modified Timing Three-Loop Configuration, even though it is not the Environmentally Superior Alternative identified in the EIR.

The CSLC has balanced the benefits of the Project against the significant unavoidable impacts that would remain after selection of the Modified Timing Three-Loop Configuration and with implementation of all feasible mitigation in the EIR that is adopted as enforceable conditions of the CSLC's approval of the Project. The CSLC adopts and makes this Statement of Overriding Considerations with respect to the impacts identified in the EIR that cannot be reduced to a less than significant level. Each benefit set forth above or described below constitutes an overriding consideration

warranting approval of the project, independent of the other benefits, despite each and every significant unavoidable impact.

OVERRIDING CONSIDERATIONS CONCLUSION

The Project objective to collect data regarding at-depth geologic features in the DCPD vicinity would not be met if the Geophysical Survey Permit was not granted to conduct the high-energy seismic survey associated with the Project. Experts within PG&E and the IPRP have indicated that there are no commercially available survey techniques other than the high-energy seismic survey techniques planned for the Project that are capable of generating the necessary data. These experts have designed the survey to focus on specific target areas, where associated data are particularly and uniquely critical. If the Geophysical Survey Permit was not granted for the Project, it would not be possible for PG&E to collect the location-specific, at-depth data that it (and the IPRP) has determined are needed for DCPD hazard analyses.

Desktop and less intensive techniques (such as low-energy and two-dimensional seismic surveys) have been conducted to study the seismicity of the DCPD area, and are ongoing. PG&E has used these techniques to provide data for the hazard models required to assess the current safety of the DCPD; however, deeper survey data are needed that can only be obtained using high energy seismic surveys. In addition, the previously unidentified Shoreline fault zone that the U.S. Geological Survey and PG&E discovered in 2008 approximately 0.6 mile (1 kilometer) offshore of the DCPD has not been recently or adequately mapped using deep, high energy seismic surveys that would shed light on this fault's direction and potential connectivity to other faults, including the Hosgri fault. These data are necessary to more realistically defining the faults and reducing the uncertainty in the parameters in order to refine and improve the risk hazard analysis for the DCPD. According to the IPRP, "Increased knowledge of the Shoreline fault is particularly important because the fault is located so close to the DCPD." (IPRP Comments on the Draft EIR for DCPD Seismic Studies, May 2, 2102.) Therefore, if the Geophysical Survey Permit was not granted the need for at-depth data will be unmet. Further, the ability to better assess the potential for a Fukushima-scale event would also be unmet, and the implications for public safety, particularly in the immediate Project area, could be devastating.

With the technical input of the IPRP, an alternative was developed to meet the critical technical objectives of the Project while reducing the scope and duration of the Project to avoid significant impacts on the White Rock-Cambria MPAs, and to reduce significant effects on Air Quality; Biological Resources - Marine; Greenhouse Gases; Land Use and Recreation; and Commercial Fishing. The EIR identified this alternative as the Environmentally Superior Alternative (Alternative IIIb – Three-Loop Configuration); however based on information presented during the environmental documentation process and consideration of whether and how to approve the Project, the CSLC determined that the Modified Timing Three-Loop Configuration has certain specific social and economic benefits to the regional community as compared to the Environmentally Superior Alternative, as described above, that outweigh the adverse environmental consequences of the project as approved. Furthermore, the CSLC

determined that the benefit of reducing impacts to certain marine species by restricting the survey timing, even though such a restriction could result in the need for a second survey year, outweighs the adverse effect of an increase in impacts related to air and GHG emissions, as well as other potential incremental increased impacts to Land Use and Biological Resources (i.e., harbor porpoises). Importantly, these possibly-increased impacts would only occur if the survey is not completed in the first year.

The CSLC further finds that all mitigation measures identified in the EIR have been imposed to avoid or lessen impacts to the maximum extent feasible. Based upon the above discussion, the CSLC finds that the Project's benefits set forth above override and outweigh its unavoidable adverse environmental effects.

Data to support the overriding factors are found in the EIR, including in the following EIR sections: Introduction, Project Description, Air Quality, Biological Resources-Marine, Greenhouse Gases, Land Use and Recreation, and Commercial Fishing and in the administrative record of proceedings.