

Attachment A

Findings of Fact and Statement of Overriding Considerations for Unavoidable Significant Environmental Impacts Identified in the Final Environmental Impact Report for the Clean Water Act Section 401 Water Quality Certification of Pacific Gas and Electric Company's Kilarc-Cow Creek Hydroelectric Project License Surrender (State Clearinghouse No. 2013032029)

State Water Resources Control Board

November 2019

Section 1, Introduction:

1. The State Water Resources Control Board (State Water Board), the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et. seq.) and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), makes these Findings of Fact and Statement of Overriding Considerations (Findings) in connection with the Environmental Impact Report (EIR) prepared for consideration of the State Water Board's issuance of the water quality certification (certification) under section 401 of the Clean Water Act (33 U.S.C. § 1341 [Section 401]) for the Kilarc-Cow Creek Hydroelectric Project (Project) License Surrender.
2. These Findings accompany the certification as Attachment A and are attached thereto and incorporated therein by reference.
3. These Findings are based on substantial evidence in light of the entire administrative record, including specific reports, supporting documents, and the contents of the environmental documents produced for the Project license surrender and decommissioning. References to specific reports and pages or sections of certain documents are not intended to identify those sources as the exclusive basis for the Findings.

Overview and Description of Proposed Project:

4. The Project, owned and operated by Pacific Gas and Electric Company (PG&E), is located in the Cow Creek Watershed, about 30 miles east of Redding, in Shasta County, California. Licensed by the Federal Energy Regulatory Commission (FERC) (Project No. 606), PG&E currently diverts water to generate power through a system of canals, penstocks, and powerhouses for both the Kilarc Development and the Cow Creek Development. PG&E's existing FERC license for the Project expired on March 27, 2007, and PG&E continues to operate under an annual license.
5. The Proposed Project, as described in the Final EIR and certification, is PG&E's proposed license surrender and decommissioning of the Project. In March of

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2009, PG&E filed with FERC a License Surrender Application to surrender the hydropower license for and decommission the Project. The primary basis for the State Water Board's description and analysis of the Proposed Project in the Final EIR and certification is based on PG&E's License Surrender Application, which includes: its Proposed Project features, design elements, and activities; protection, mitigation, and enhancement (PM&E) measures; and Proposed Decommissioning Plan.

6. Due to the Proposed Project's potential water quality impacts and Section 401's associated requirements for any federal licensing or permitting action, including FERC's issuance of a license surrender order, PG&E applied to the State Water Board for certification of the Proposed Project. The State Water Board's certification must be included as part of the FERC final license surrender order, if an order is issued.

Administrative Record:

7. The administrative record, upon which all findings and determinations related to the approval of the Proposed Project are based, includes the following:
 - i. PG&E's application for certification, including its entire License Surrender Application.
 - ii. The final Environmental Impact Statement (EIS) issued by FERC for the Proposed Project.
 - iii. The Final EIR and all documents referenced in or relied upon by the Final EIR.
 - iv. All information and reports provided to the State Water Board by the environmental consultants who prepared the EIR in consultation with State Water Board staff.
 - v. All information presented to the State Water Board from other public agencies or other parties that relates to the Final EIR.
 - vi. The Mitigation Monitoring and Reporting Plan (MMRP) for the Proposed Project, which is included and incorporated into enforceable conditions in the certification.
 - vii. All public comments received on the Draft EIR and responses by the State Water Board to comments received on the Draft EIR.
 - viii. These Findings.
 - ix. All other Project-related documents composing the record pursuant to subdivision (e) of section 21167.6 of the Public Resources Code.

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8. The record is kept by the State Water Board's Division of Water Rights at 1001 I Street, Sacramento, California.

Section 2, Findings of Fact:

Alternatives Evaluated in EIR:

9. Section 21002 of CEQA and section 15126.6 of the CEQA Guidelines require consideration and discussion of alternatives of a proposed project in an EIR. The purpose of the alternatives analysis is to identify ways to mitigate or avoid the potentially significant adverse effects that may result from implementation of the Proposed Project, while also attaining most of the basic objectives of the Proposed Project. The alternative selection process involved the following sequence of steps:

- (1) Identification of Proposed Project goals and objectives;
- (2) Identification of potentially significant impacts from the Proposed Project;
- (3) Development of evaluation criteria;
- (4) Review of a range of alternatives that could avoid or substantially lessen adverse environmental effects as compared to the Proposed Project;
- (5) Identification and selection of potentially feasible alternatives for further evaluation in the EIR, and explanation of the reasoning for selecting and rejecting alternatives; and
- (6) Evaluation of selected alternatives in the EIR based on a comparative environmental impact assessment.

The EIR's alternatives analysis reflects FERC's EIS and additional input received during the scoping and planning processes for the Proposed Project, with a goal to evaluate options for limiting environmental impacts while satisfying Proposed Project objectives.

10. As detailed in Section 3.3, Chapter 4 and Chapter 5 of the Final EIR, the following alternatives were analyzed under the EIR, in addition to and in comparison to the Proposed Project:

- Alternative 1 – Retaining Kilarc Forebay
- Alternative 2 – Retaining Flow to the Abbott Ditch Users (ADU)
 - Option A – Retaining Flow to ADU via Existing Point of Diversion
 - Option B – Retaining Flow to ADU via Restored East Channel (Technical Solution)

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- Option C – Retaining Flow to ADU via New Pump in South Cow Creek
- Option D – Retaining Flow to ADU via New Conveyance to Hooten Gulch
- No Project Alternative

11. As discussed in more detail in Section 3.4 of the Final EIR, two alternatives, based on incomplete and untimely proposals to FERC for transfer and operation or reoperation of some of the Project facilities, were initially considered but were ultimately eliminated from further consideration in the EIR:

- Davis Hydro Alternative — The Davis Hydro Alternative, which proposed both continued Kilarc Development hydropower operations and fisheries restoration, lacks technical and scientific detail and was not proven to be technically or economically feasible. Additionally, by continuing existing Kilarc Development diversions, the Davis Hydro Alternative would not have satisfied basic Proposed Project objectives.
- Community Proposal — The Community Proposal alternative, which proposed both continued diversions and facilities at the Kilarc Development and Cow Creek Development, also was not proven to be technically or economically feasible. Additionally, by substantially continuing existing diversions for both the Kilarc Development and the Cow Creek Development, the Community Proposal would not have satisfied basic Proposed Project objectives.

Significant But Mitigable Impacts:

12. Under CEQA (§ 21081, subd. (a)(1)) and the CEQA Guidelines (§§ 15091, subd. (a)(1) and 15092, subd. (b)), and as reflected in the Final EIR and the certification, the State Water Board finds that changes or alterations to the Proposed Project have been required to avoid or substantially lessen potentially significant effects on the environment. The following potentially significant impacts of the Proposed Project will be reduced to a less-than-significant level through implementation of mitigation measures and corresponding conditions of approval in the certification.

Terrestrial Biological Resources

- IMPACT 4.7-4 (Kilarc): The Proposed Project could have significantly influenced the spread of invasive/noxious plants. Implementation of Mitigation Measure 4.7-4 will reduce this impact to a less-than-significant level.
- IMPACT 4.7-9 (Cow Creek): The Proposed Project could have resulted in significant impacts on wetlands and riparian habitats.

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Implementation of Mitigation Measure 4.7-9 will reduce these impacts to a less-than-significant level.

- IMPACT 4.7-10 (Cow Creek): The Proposed Project could have resulted in significant impacts on special-status plant species. Implementation of Mitigation Measure 4.7-10 will reduce these impacts to a less-than-significant level.
- IMPACT 4.7-11 (Cow Creek): The Proposed Project could have significantly influenced the spread of invasive/noxious plants. Implementation of Mitigation Measure 4.7-4 will reduce this impact to a less-than-significant level.
- IMPACT 4.7-12 (Cow Creek): The Proposed Project could have resulted in significant impacts on birds and mammals. Implementation of Mitigation Measures 4.7-9 and 4.7-10 will reduce these impacts to a less-than-significant level.
- IMPACT 4.7-13 (Cow): The Proposed Project, specifically dewatering of canals, forebays, and related watercourses, could have resulted in significant impacts on amphibians and pond turtles. Implementation of Mitigation Measures 4.7-9 and 4.7-10 will reduce these impacts to a less-than-significant level.
- IMPACT 4.7-14 (Cow Creek): The Proposed Project could have resulted in significant impacts on rare, threatened, and endangered terrestrial species. Implementation of Mitigation Measures 4.7-9 and 4.7-10 will reduce these impacts to a less-than-significant level.

13. The referenced mitigation measures to avoid or reduce these potential environmental impacts of the Proposed Project to less-than-significant levels are more fully set forth in Chapter 4 of the Final EIR and in the certification.

14. Section 21081.6 of CEQA and section 15097 of the CEQA Guidelines require the State Water Board to adopt a monitoring or reporting program to ensure that the mitigation measures and revisions to the Proposed Project identified in the Final EIR are implemented. Accordingly, the Mitigation Monitoring and Reporting Plan is incorporated into and made enforceable under the certification.

Significant and Unavoidable Impacts:

15. Under CEQA (§ 21081, subds. (a)(3)) and the CEQA Guidelines (§ 15091, subd. (a)(3)), and as reflected in the Final EIR and the certification, the State Water Board finds that the following impacts of the Proposed Project remain significant and unavoidable, notwithstanding the imposition of all feasible mitigation measures.

Agriculture and Forestry Resources

- IMPACT 4.4-6 (Cow Creek): The Proposed Project could convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.
- IMPACT 4.4-10 (Cow Creek): The Proposed Project could involve other changes in the existing environment which could result in conversion of Farmland to non-agricultural use.

Recreation

- IMPACT 4.16-1 (Kilarc): The Proposed Project could physically degrade or diminish existing recreational resources.

Due to the Proposed Project's specifying PG&E's decommissioning of the Kilarc Development and the Cow Creek Development facilities—including forebays, diversion dams, and canals—and the resulting ceasing of water diversions and operations at the developments, no mitigation measures are available to lessen these impacts to the Abbott Ditch area or to the Kilarc Forebay recreation area under the Proposed Project. However, the Final EIR analyzed potential alternatives for the purpose of exploring whether other changes or alterations could avoid or substantially lessen these impacts.

16. The Final EIR analyzed Alternative 2, which envisioned decommissioning the Kilarc Development and Cow Creek Development hydropower operations while maintaining or replacing the existing water supplies and artificial flows to Abbott Ditch through several potential means. The Final EIR found that all four options evaluated for Alternative 2—Options A, B, C, and D, also referred in the Final EIR as Alternatives 2A, 2B, 2C, and 2D—could potentially avoid the significant impacts to agricultural resources in the Abbott Ditch area, IMPACTS 4.4-6 and 4.4-10, which would be unavoidable even with feasible mitigation under the Proposed Project. The Final EIR also found that all Alternative 2 options could obviate most mitigation measures identified in the Final EIR for reducing the Proposed Project's otherwise significant impacts on terrestrial species and associated habitat in the Abbott Ditch area. As discussed in Section 5.5.6 of the Final EIR, the State Water Board has identified Alternative 2, Options B, C, or D as the environmentally superior alternatives because they would avoid these significant impacts and also restore natural water and sediment flows to the currently dammed and bypass reaches of the Old Cow Creek and South Cow Creek watersheds.
17. The Final EIR also analyzed Alternative 1, which envisioned decommissioning the Kilarc Development and Cow Creek Development hydropower operations while maintaining water diversion, conveyance, and storage infrastructure and related facilities for recreation at Kilarc Forebay. The Final EIR found that Alternative 1 could avoid the additional remaining significant impact to

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recreational resources at Kilarc Forebay, IMPACT 4.16-1, that would be unavoidable even with mitigation under the Proposed Project. Rather than decommissioning, dewatering, and backfilling Kilarc Forebay as under the Proposed Project, Alternative 1 would instead involve decommissioning the Kilarc Development hydropower operations while maintaining the existing water supplies and recreational facilities of Kilarc Forebay.

18. If both Alternative 1 and an Alternative 2 option were feasibly implemented, in conjunction with other still-relevant Project features and mitigation measures as described and analyzed under the Proposed Project, the resulting project would not have a significant impact on the environment.

19. Alternative 1 is infeasible for the following reasons:

As stated in Section 3.3.1 of the Final EIR, Alternative 1 assumes that an interested entity with adequate technical, managerial, and financial resources can be immediately identified to take over operation and maintenance of the remaining Kilarc facilities that are not decommissioned by PG&E, implement improvements for exclusion of fish entrainment, and conduct any monitoring required by Federal and State resource agencies. To date, no such entity has been identified. Although the EIR's analysis of Alternative 1 was useful both for satisfying the requirements of CEQA and for analyzing the impacts of a potential project that maintained the Kilarc Main Diversion Dam, Kilarc Forebay, and other related infrastructure and activities, there has been no feasible or adequately detailed proposal for such a project. Additionally, Alternative 1 specifies continuing conveyance of at least a substantial portion of the existing Kilarc Development water diversions into Kilarc Forebay for recreational purposes. Since Alternative 1 would preclude removing diversion dam infrastructure and fully returning natural instream flows to the existing bypass reach of Old Cow Creek for the benefit of native fish and wildlife, Alternative 1 would undermine basic Proposed Project objectives and desired conditions.

Absent a mutually acceptable transfer of ownership and responsibility to a third party, PG&E will decommission, secure, and backfill the Kilarc Forebay rather than maintain it as a recreational lake. PG&E has not indicated that it has any intent to enter into an agreement by which another entity could purchase or operate PG&E's current Kilarc Development facilities or a portion thereof. Alternative 1 is therefore legally and technically infeasible.

20. Alternative 2, Options A, B, C, and D, are infeasible for the following reasons:

PG&E and certain local landowners and water users, commonly referred to as Tetrick Ranch and the Abbott Ditch Users, remain in dispute over the impacts to water rights and water supplies related to PG&E's ceasing its Cow Creek Development diversions and operations. Representatives of Tetrick Ranch and the Abbott Ditch Users have asserted that the Proposed Project, by ceasing artificial water flows through the Cow Creek Development into Hooten Gulch,

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would not only impact existing agricultural, domestic, and fish and wildlife uses of water but would also injure water rights. PG&E, on the other hand, has asserted that it is under no obligation to continue its Cow Creek Development diversions or tailrace discharges, or to provide alternative water supplies to those who currently use these artificial flows in Hooten Gulch.

As acknowledged in the Final EIR, by ceasing Cow Creek Development diversions and year-round tailrace discharges into Hooten Gulch, the Proposed Project would result in significant impacts compared to baseline conditions, including the potential unavoidable loss and conversion of farmland in the Abbott Ditch area. The State Water Board does not assume, as PG&E appears to have, that these impacts are merely speculative because affected water users will simply relocate their diversions to South Cow Creek to avoid any related impacts. To the contrary, it is reasonably foreseeable that the Abbott Ditch area would be significantly impacted by PG&E's decommissioning of the Cow Creek Development because the Abbott Ditch water supply alternatives are not presently technically, economically, or legally feasible.

Similar to Alternative 1, as stated in Section 3.3.2.1 of the Final EIR, Alternative 2, Option A assumes that an interested entity with adequate technical, managerial, and financial resources can be immediately identified to take over operation and maintenance of the remaining Cow Creek facilities that are not decommissioned by PG&E, implement improvements for fish passage and for exclusion of fish entrainment, and conduct any monitoring required by Federal and State resource agencies. To date, no such entity has been identified. PG&E has not indicated that it has any intent to enter into an agreement by which another entity could purchase or operate PG&E's current Cow Creek Development facilities or a portion thereof. Additionally, Alternative 2, Option A specifies continuing water diversions through the Cow Creek Development sufficient to provide at least 13.13 cubic feet per second of water to Abbott Ditch. Since Alternative 2, Option A would preclude removing diversion dam infrastructure and fully returning natural instream flows to the existing bypass reach of South Cow Creek, Alternative 2, Option A would undermine basic Proposed Project objectives and desired conditions.

Alternative 2, Options B, C, and D would not involve continued operation of Project infrastructure but would nonetheless require significant additional planning and funding, as well as resolution of an ongoing dispute regarding legal and financial responsibility for any alternative water diversion or delivery mechanism for water users along Hooten Gulch.

At present, only a more specific proposal for Alternative 2, Option B has materialized. Steve and Bonnie Tetrick, owners of Tetrick Ranch, attached to their May 23, 2019 comments on the Draft EIR an expanded description of Tetrick Ranch and the Abbott Ditch Users' proposed "technical solution," which is analyzed in the Final EIR as Alternative 2, Option B. Alternative 2, Option B involves the construction of a new rock weir along the east banks of South Cow

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Creek and the rewatering and multifaceted restoration of the historical “east channel” of South Cow Creek, which was reportedly dammed-off over 40 years ago for flood protection purposes. Stakeholders previously commented to FERC that pursuing and implementing an alternative water supply for Abbott Ditch could cost \$2 million or more for design, securing property rights and permits, and construction. Therefore, significant questions and uncertainty remain regarding economic feasibility of the alternative, in addition to the ongoing dispute over various parties’ responsibility or obligation to fund and implement it.

In exercising its certification authority under Section 401, the State Water Board declines to order or compel PG&E to implement any option of Alternative 2. The State Water Board reserves its separate authorities to regulate, investigate, and enforce matters related to proprietary water rights. But, as discussed in further detail in the certification, the record indicates that PG&E’s ceasing diversions and tailrace discharges under the Proposed Project would not result in an injury to decreed water rights. Rather, the water rights dispute raised by Tetrick Ranch and the Abbott Ditch Users appears to be based on a purported agreement between the parties’ predecessors prior to construction of the Project in the early 20th century. In an attachment to their comments on the Draft EIR, Mr. and Mrs. Tetrick specifically noted that they seek the State Water Board’s guidance as to “[w]hether the technical solution and its expanded components can be achieved through settlement negotiation or through mandatory mitigation” The State Water Board responds that the Hooten Gulch and Abbott Ditch water supply issue is a dispute to resolve, whether voluntarily or through separate legal action in a court of law, outside of this certification process.

Section 3, Statement of Overriding Considerations:

21. The lead agency may approve a project with significant and unavoidable adverse environmental effects only when it finds, based on the Final EIR and other information in the record, that specific economic, legal, social, technological, or other benefits of the proposed project outweigh those effects. (CEQA, § 21081, subd. (b); CEQA Guidelines, §§ 15092, subd. (b)(2)(b) & 15093.) Section 15093 of the CEQA Guidelines requires the lead agency to document and substantiate any such determination in a written “statement of overriding considerations” as part of the record.
22. As stated in Section 2 of these Findings, the Final EIR identified significant environmental effects of the Proposed Project that cannot feasibly be mitigated to a less-than-significant level:

Agriculture and Forestry Resources

- IMPACT 4.4-6 (Cow Creek): The Proposed Project could convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

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- IMPACT 4.4-10 (Cow Creek): The Proposed Project could involve other changes in the existing environment which could result in conversion of Farmland to non-agricultural use.

Recreation

- IMPACT 4.16-1 (Kilarc): The Proposed Project could physically degrade or diminish existing recreational resources.

23. As explained in Section 2 of these Findings, Alternatives 1 and 2, which were analyzed for the purpose of potentially avoiding the identified significant impacts that cannot feasibly be mitigated to a less-than-significant level under the Proposed Project, are themselves not presently feasible. The Proposed Project does not, however, preclude the separate development and implementation of an alternative water supply for Abbott Ditch and Hooten Gulch such as the Options B, C, or D examined under Alternative 2.

24. The State Water Board finds that the following cumulative benefits and, in many cases, individual benefits listed below would occur as a result of the Proposed Project:

- i. The Proposed Project would restore natural stream flows to portions of North Canyon Creek, South Canyon Creek, Old Cow Creek, Mill Creek, and South Cow Creek that are currently bypassed¹ under diversions and operations of the Project. PG&E has committed to abandoning its water rights associated with the Project, following license surrender and Project decommissioning, to benefit fish and wildlife resources. The Proposed Project would also remove PG&E's diversion dams and other associated structural barriers to fish migration and to sediment and gravel passage in North Canyon Creek, South Canyon Creek, Old Cow Creek, Mill Creek, and South Cow Creek. Beneficial results of the increased flows and barrier removal include improved spawning habitat, migration, and rearing conditions for native fish species.
- ii. The Proposed Project's return of portions of the Old Cow Creek and South Cow Creek watersheds to natural conditions would also improve the delivery of surface and subsurface flows to the regional groundwater basin.
- iii. The Proposed Project would also result in a long-term net beneficial reduction in greenhouse gas emissions due to revegetation of former facilities, ceasing of operations and maintenance commuting to the

¹ North Canyon Creek and South Canyon Creek diversions have been out of service for several years and are not used to divert water.

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facilities, and the backfilling of the Kilarc Forebay and Cow Creek Forebay.

- iv. A primary purpose and objective of the Proposed Project is to decommission the Project, which PG&E states is no longer economically viable. PG&E has stated that the economic costs associated with continuing operation of the Project outweigh the costs associated with surrendering the operating license and decommissioning the Project. PG&E states that there would be long-term cost savings to PG&E and its ratepayers from decommissioning the Project.

25. The State Water Board also finds that, should the Proposed Project not proceed to approval and implementation, with the described mitigation measures and other conditions of certification, the most likely result would be akin to the No Project Alternative analyzed in the Final EIR. The No Project Alternative would result in significant impacts to the environment and would not satisfy basic Proposed Project objectives. PG&E has expressed that, if its License Surrender Application is not granted by FERC, PG&E could possibly continue to operate the Project under annual licenses for a period of time, but that it would eventually abandon the Kilarc Development and Cow Creek Development in place. While abandonment could involve some measures to cease water diversions and hydropower operations and to secure facilities, it would not necessarily include the Proposed Project design and environmental measures included as part of PG&E's License Surrender Application, the Final EIR's mitigation measures, or the certification conditions. Abandonment of the hydropower developments may result in some benefits similar to those of the Proposed Project, but it would also have many of the same or worse significant impacts. Following abandonment of the hydroelectric projects, natural flows would return to the current bypass reaches of the Old Cow Creek and South Cow Creek watersheds, but the diversion dams and associated infrastructure would likely continue to impede natural fish and sediment migration. Artificial flows to Hooten Gulch and Abbott Ditch would cease following abandonment, as they would under license surrender and decommissioning, but likely without the same measures to reduce the environmental impacts of dewatering as under the Proposed Project. Under abandonment, Kilarc Forebay would not be backfilled as under the Proposed Project, but it would nonetheless be lost as a recreational site due to the decline in water supply and fish stock, degradation of other facilities due to PG&E's ceasing operation and maintenance, and PG&E's foreseeable total closure of access to the facilities.

26. The State Water Board has adopted and imposed all feasible mitigation measures for the Proposed Project. The State Water Board has considered other project alternatives and has found them infeasible. Additionally, the State Water Board has balanced the effects of the Proposed Project against its benefits. The State Water Board finds that the Proposed Project offers specific environmental and economic benefits that outweigh its unavoidable adverse

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environmental effects. In compliance with section 15093 of the CEQA Guidelines, the State Water Board adopts this statement of overriding considerations for the Proposed Project's above-listed significant and unavoidable impacts to recreation and to agricultural resources.