Pacific Gas and Electric Company

Power Generation

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January 30, 2026

Via Electronic Submittal (E-File)

Debbie-Anne Reese, Secretary
Federal Energy Regulatory Commission
Division of Hydropower Administration and Compliance
888 First Street, N.E.
Washington, DC 20426

RE: Potter Valley Hydroelectric Project, FERC No. 77
Water Year 2026 Temporary Minimum Instream Flow Amendment Request

Dear Secretary Reese:

This letter presents a request for a Temporary Flow Amendment (Variance) for Pacific Gas and Electric Company's (PG&E) Potter Valley Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) No. 77. FERC's Order Amending License, issued January 28, 2004, requires PG&E to comply with Article 52(a) and Appendix A of the license.

Since 2004, it has become increasingly challenging for PG&E to maintain compliance under Article 52. From 2013 to 2022, PG&E operated under variances in 7 out of 10 years due to insufficient water supply.

In 2023, PG&E determined that the seismic risk to Scott Dam is greater than previously understood. To reduce the potential seismic risk to Scott Dam, a 10-ft elevation restriction was placed on Lake Pillsbury reservoir indefinitely, reducing the water storage capacity from approximately 70,800 acre-ft (AF) to 52,600 AF based on 2023 bathymetric surveys[1]. This loss of 18,200 AF of potential storage above the spillway further compounds the challenges to meet license-required flows.

The 2023 Lake Pillsbury reservoir elevation restriction and associated loss of capacity, combined with uncertain spring runoff has resulted in PG&E requesting

[1]2023 Bathymetry Survey Report for Lake Pillsbury, FERC Accession Number 20240319-5033

annual temporary flow amendments in 2023-2025 that reduced minimum instream flow requirements on the East Branch Russian River (EBRR) during summer months. Temporary flow amendments, when approved in a timely manner, would enable PG&E to achieve the two goals of (1) ensuring Scott Dam safety by conserving storage in Lake Pillsbury[2] and (2) minimizing impacts to the Lake Pillsbury cool-water pool and subsequent elevated release temperatures to the Eel River that negatively affect aquatic resources. The cumulative number of and repetitiveness of these variance requests has demonstrated that the combination of the current flow regime under Article 52 and the 2023 10-ft reservoir elevation restriction does not provide adequate dam safety or resource protection within the operational limitations and factors affecting the Project's existing operations.

On July 31, 2023, PG&E submitted a request for a long-term amendment of the minimum flow requirements beginning in 2024 and continuing until decommissioning of the Project[3]. On October 4, 2023, FERC issued a Request for Additional Information in response to PG&E's July 31, 2023, long-term amendment request[4]. In that letter, FERC requested that PG&E initiate the license amendment process to incorporate the modified flows into the license. On January 30, 2025, PG&E filed with FERC its license amendment application to reduce minimum instream flows below Scott Dam and the EBRR[5], and provided notification that it would be supplementing the license amendment application on December 19, 2025.

While the license amendment application is being processed, PG&E is requesting a Variance from the current license requirements for 2026. The 2026 Variance would reduce EBRR flows to proactively manage reservoir storage in a manner that is both protective of Scott Dam and minimizes potential impacts to federally Endangered Species Act (ESA)-listed salmonid species and other aquatic resources that inhabit the Eel River.

PG&E requests that FERC approve this Variance no later than May 15, 2026, to allow PG&E to implement the flexible flow management strategy in coordination

[2] As a condition of a prior Variance for the Project issued on July 15, 2016, FERC required PG&E to "determine the current low level operation constraints at Lake Pillsbury reservoir (beyond operator recommendations) that support a low reservoir elevation level." To address this requirement, PG&E submitted a technical memorandum to FERC on April 3, 2017, that identified and evaluated potential dam safety and operational constraints on lowering the operating level. As described in the TM, a high potential of bank sloughing exists when storage is between 12,000 AF and 5,000 AF; the degree of bank sloughing partially depends on the drawdown rate of the reservoir. Since this analysis was performed, PG&E has used 12,000 AF as the Lake Pillsbury storage minimum for water management planning.

[3] 7/31/2023 Request for Long Term amendment to Potter Valley License, FERC Accession Number 20230731-5111

[4] 10/04/2023 Letter to PG&E requesting additional information, FERC Accession Number 20231004-3041

[5] 1/30/2025 Application to Amend Potter Valley License, FERC Accession Number 20250130-5282

with the Drought Working Group (DWG). When Variances are approved after May 15 (when EBRR flows increase to 75 cubic feet per second [cfs] in a Normal Water Year [WY]), it reduces the ability of the Project to achieve the goals of dam safety and aquatic resource protection. In recent years, delayed implementation of the Variance has required PG&E to take urgent action to reduce EBRR flows immediately after FERC approval of the Variance to the minimum allowable to prevent Lake Pillsbury reservoir from reaching critical storage levels and impacting dam safety. In addition, the delayed approval and associated elevated EBRR diversions drain the cool-water pool through the summer, elevating Scott Dam release water temperatures and negatively impacting aquatic resources in the Eel River.

This 2026 Variance request has been developed in consultation with NMFS, California Department of Fish and Wildlife (CDFW), Round Valley Indian Tribes (RVIT) and United States Fish and Wildlife Service (USFWS) (hereafter Agencies).

Current License Requirement

The Project license includes requirements for the minimum instream flows released by the Project. Table 1 below provides a summary of the WY-dependent license-required flows in the absence of a Variance. The required flows for Eel River below Scott Dam (gaging station E-2) and EBRR (gaging station E-16) are simple, seasonally varying minimum instream flows[6]. Likewise, in August and September, the required flows for Eel River below Cape Horn Dam (gaging station E-11) are simple minimum instream flows. However, outside those late summer base flow months, the flow requirement for E-11 changes daily, tracking Project inflows (Index Flow in the Project license), subject to a seasonally varying floor (Floor) and cap (Cap). The level of the Floor in the winter and spring depends on inflows into Lake Pillsbury reservoir; if inflows are extremely low, the Floor remains at 25 cfs rather increasing to 100 cfs.

The WY type classifications are inflow-dependent and are evaluated once per year on May 15th for E-11 and monthly from January to June for E-2 and EBRR. Figure 1 shows the final WY type classification thresholds for the different compliance points. Thresholds reflect cumulative Lake Pillsbury reservoir inflows (CLP) from October 1 through each listed date.

[6] Except when Lake Pillsbury reservoir storage is below the applicable Target Storage Curve value. In that case, EBRR minimum flows are also the maximum flows.

The E-11 classification is determined by WY cumulative inflow to Lake Pillsbury reservoir as of May 15th. E-2 and E-16 share WY type classifications, and the final classification is determined by WY cumulative inflow to Lake Pillsbury reservoir as of June 1st.

Table 1: Potter Valley License Minimum Instream Flow Requirements

Compliance point	WY Type[2]	Jan. 1st	Apr. 1st	Apr. 15th	May 1st	May 15th	May 16th	June 1st	Aug. 1st	Sept. 16th	Oct. 1st	Nov. 1st	Dec. 1st
E-2	Critical	20 cfs[3]											
	Dry	40 cfs											
	Normal	100 cfs						60 cfs					100 cfs
E-11	Very Dry	Value depends on Eel Index Flow with 100 cfs Floor[4] and 140 cfs Cap	Value depends on Eel Index Flow with 100 cfs Floor[4] and 200 cfs Cap				Value depends on Eel Index Flow with spring recession Floor and Cap		3 cfs		Value depends on Eel Index Flow with fall ramp up Floor and Cap	Value depends on Eel Index Flow with 25-30 cfs Floor and 140 cfs Cap	Value depends on Eel Index Flow with 100 cfs Floor[4] and 140 cfs Cap
	Dry								9 cfs				
	Wet								15 cfs				
	Very Wet								30 cfs				
E-16[1]	Critical	5 cfs											
	Dry	35 cfs		25 cfs						35 cfs			
	Dry Spring Exception	35 cfs				75 cfs		40 cfs		35 cfs			
	Normal	35 cfs				75 cfs				35 cfs			

Notes:
[1] E-16 refers to East Branch Russian River flows, referred to as MF-16 in the license
[2] Final Water Year classifications are determined May 15th for E-11 and June 1st for E-2 & E-16
[3] Actual E-2 flow set by release for E-11 and E-16 with Floor of ~35 cfs due to low-level outlet (facility limitation)
[4] 25 cfs in the Exceptionally Low Inflow (EXCL) condition
cfs = cubic feet per second

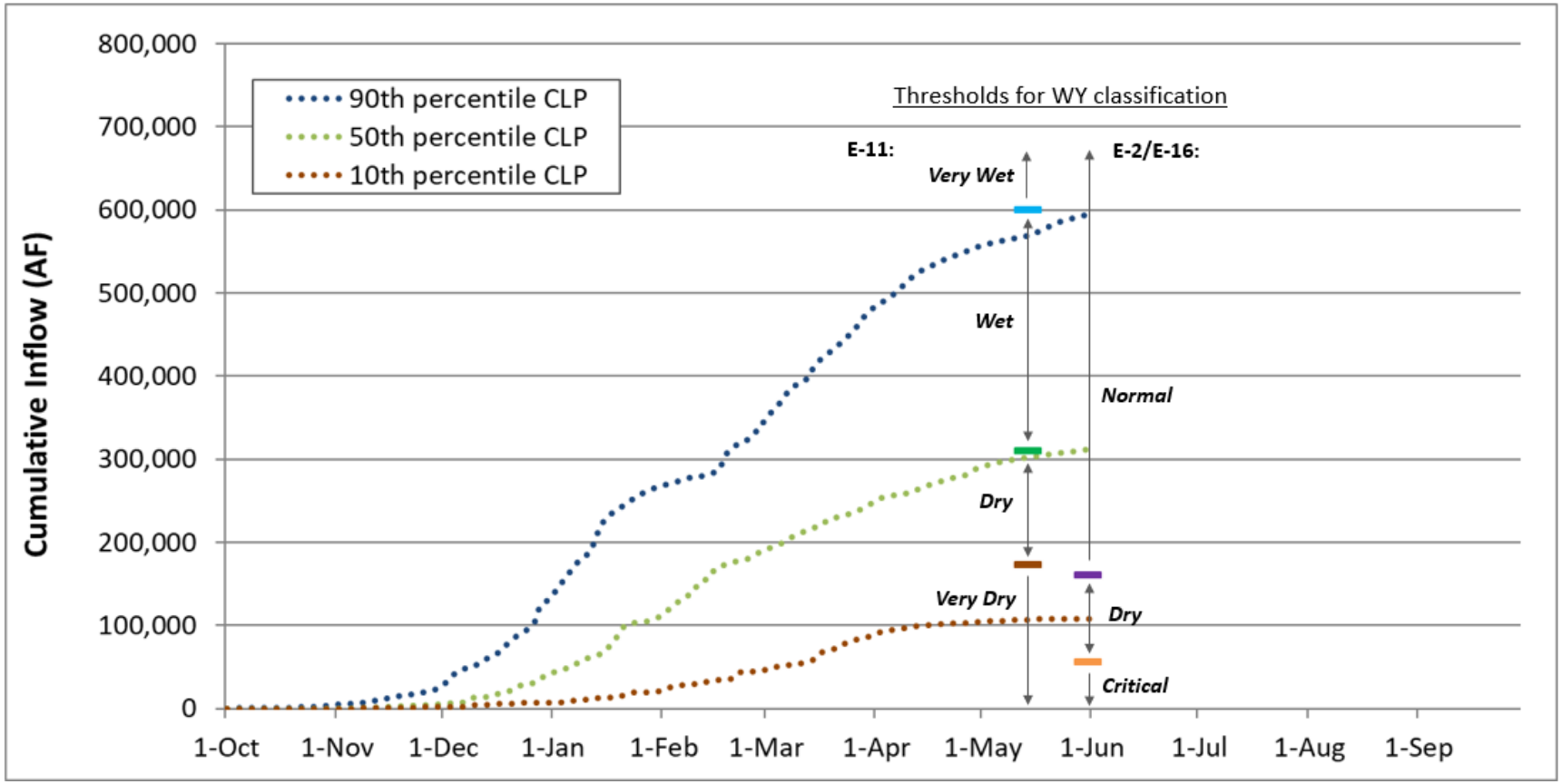


Figure 1. Select cumulative inflow to Lake Pillsbury statistics (WY1971-2024) as compared against thresholds for final Water Year classifications for Project compliance points

Proposed Flexible Management Flow Release Strategy

With the reduction in Lake Pillsbury storage capacity and cool-water pool storage, PG&E's strategy will be to manage EBRR diversions to (1) ensure dam safety, and (2) minimize impacts to the Lake Pillsbury reservoir cool-water pool and subsequent elevated release temperatures to the Eel River. Accordingly, PG&E will retain the range of spring/summer/fall EBRR diversions in the 2026 Variance as has been used in recent years (25-5 cfs). If hydrologic conditions are favorable from a dam safety standpoint and cool-water pool impacts appear minimal, PG&E, in consultation with the Agencies and the DWG, may keep EBRR releases at 25 cfs, or reduce to as low as the 5 cfs minimum depending on reservoir storage projections and water temperature conditions. As a dam safety measure in the event of a delayed wet season, PG&E will aim to maintain a storage target of at least 25,000 AF on October 1, 2026.

After September 30, EBRR releases will continue to range between 25-5 cfs until Lake Pillsbury reservoir storage exceeds 36,000 ac-ft, ending the Variance. Thereafter, EBRR flow releases will return to the license-required flows (35 cfs in Normal and Dry years, 5 cfs in Critical years). The 36,000 AF storage threshold would support the reservoir meeting minimum flow obligations through January 2027, including a possible Block Water release in the late fall/early winter 2026 if needed, if inflow is extremely low in late fall/early winter.

Flows will be calculated at a 24-hour average measured at E-11 rather than the current instantaneous measurement. This will allow for a tighter compliance buffer on minimum E-11 flows.

Lastly, Block Water has been used over the post-2023 period by keeping it in Lake Pillsbury reservoir to support the cool-water pool, to be potentially released in the late fall/early winter to facilitate fall-run Chinook salmon (*Oncorhynchus tshawytscha*) migration if precipitation and runoff from downstream watershed is insufficient to naturally allow migration to the upper Eel River. PG&E proposes shifting Block Water from a WY basis to a calendar year basis to allow Agencies to hold back Block Water in storage over the summer and release it in the fall to support migration.

PG&E will continue to use available hydrologic forecasting tools and runoff forecasts to inform Lake Pillsbury reservoir storage forecasts and ensure dam safety thresholds are maintained. PG&E will also use historical water temperature data and past CE-QUAL-W2 water temperature modeling results (see Enclosure 1), and additional model runs, as needed, to inform how EBRR diversions will impact the Lake Pillsbury reservoir cool-water pool. Water temperature of releases to the Eel River are measured at E-2 during the summer. When Scott Dam stops spilling after May 15, PG&E will begin meeting with

the Agencies and the DWG to determine if diversions to the EBRR, as measured at E-16 (minus Potter Valley Irrigation District [PVID] deliveries), should be adjusted in support of preserving water storage for cooler release water temperatures and to protect dam safety.

As noted above, in coordination with the Agencies and the DWG, PG&E will adjust flows in EBRR between 25 cfs and 5 cfs, as needed to target at least 25,000 AF storage on October 1, to protect the facilities and preserve cooler water temperatures in the reservoir for subsequent release to the Eel River. PG&E will share the results of any monitoring and modeling information above with the DWG to provide the technical basis of Project flow management during the Variance.

Requested Temporary Flow Amendment (Variance)

The following Variance conditions are requested for 2026 (Tables 2 and 3), and will be implemented once approved by FERC, ideally before May 15, 2026, to allow optimal implementation of the requested flexible release strategy:

- E-2 will be reclassified as a Critical Water Year Type (Table 3). In practice, the E-2 flows will be the combined releases for E-11, EBRR, and PVID contract water, with a floor set by the minimum opening of the low-level outlet (approximately 35 cfs).
- If Lake Pillsbury is spilling (water surface elevation above 1,900.00 ft, PG&E datum), EBRR diversions will follow license flows based on E-2/E-16 WY types.
- Once Lake Pillsbury spill ends, EBRR diversions will be set initially at 25 cfs and then will be adjusted between 25 and 5 cfs based on the flexible management flow release strategy described above. EBRR diversions for Critical WY types will remain at 5 cfs.
- PG&E will use hydrologic forecasting tools to monitor the late fall and winter reservoir storage forecast for potential encroachment into the low-storage dam safety risk threshold (12,000 AF) and may further reduce E-16 releases accordingly.
- PG&E will aim to maintain at least 25,000 AF storage on October 1, 2026.
- Flows will be calculated at a 24-hour average measured at E-11 rather than the current instantaneous measurement.
- The Block Water allocation will be adjusted from water year to calendar year.

- The Variance will end when Lake Pillsbury reservoir storage exceeds 36,000 AF after September 30, 2026, or is superseded.
- The DWG will meet monthly (or more frequently as needed) during the Variance period to review and discuss forecasted Lake Pillsbury reservoir storage levels, release flow rates, water temperature profiles, release temperatures, and estimated release temperature projections at E-2.
- PG&E will submit monthly water storage and temperature reports to FERC.

Table 2: Requested East Branch Russian River Flows under 2026 Variance

Period		Classification		
From	**Through**	**Normal**	**Dry**	**Critical**
April 15	May 14	***Scott Dam in Spill Condition[1]:***		
		35 cfs	25 cfs	5 cfs
		Scott Dam not in Spill Condition[1]:		
		25-5 cfs	25-5 cfs	5 cfs
May 15	June 30	***Scott Dam in Spill Condition[1]:***		
		75 cfs	25 cfs	5 cfs
		Scott Dam not in Spill Condition[1]:		
		25-5 cfs	25-5 cfs	5 cfs
July 1	September 30	25-5 cfs	25-5 cfs	5 cfs
October 1	April 14	***Lake Pillsbury Storage above 36,000 ac-ft***		
		35 cfs	35 cfs	5 cfs
		Lake Pillsbury Storage below 36,000 ac-ft		
		5 cfs	5 cfs	5 cfs

[1] Scott Dam spill is defined as when Lake Pillsbury reservoir water surface elevation is above an elevation of 1,900.0 feet, based on the PG&E datum.

Table 3: Requested Eel River Flows under 2026 Variance

Compliance Point	Allowed Range: Minimum/Maximum	Water Year Classification	Notes
Eel River below Scott Dam (E-2)	20 cfs[1]/No max	Critical	Adjusted minimum flow classification to Critical
Eel River below Cape Horn Dam (E-11)	TBD[2]/No max	TBD**	No change from license

cfs = cubic feet per second; TBD = to be determined on May 15

[1] In practice, assumed 35 cfs based on low level outlet minimum release (facility limitation)

[2] Water Year Type for E-11 determined May 15 of each year

Biological Impacts

PG&E biologists have reviewed this Variance request and conclude that conserving water in Lake Pillsbury reservoir, providing adequate flow releases, and providing suitable water

quality conditions will provide long-term protection of federally ESA-listed salmonids within the Eel River watershed. The biological analysis is provided in the following subsections.

Eel River Below Lake Pillsbury and Van Arsdale Reservoirs

The primary federally and state ESA-listed salmonid species affected by the Project are Chinook salmon and steelhead trout (*O. mykiss*). The life stages of these species that could potentially be in the river and whose habitat conditions are influenced by Project operations during the requested Variance period are adult steelhead trout (pre- and post-spawn), juvenile Chinook salmon, and juvenile steelhead trout. If the flow amendment extends beyond October, adult Chinook salmon will be present as well.

Adult winter-run steelhead trout migrate into the upper Eel River watershed to spawn primarily from January through April and may remain in the watershed post-spawn. Summer-run steelhead trout may migrate into the upper Eel River watershed later; however, the Project area lacks suitable habitat for over-summering. The requested Variance would not reduce minimum instream flows in the Eel River for adult steelhead trout migration and spawning. Juvenile Chinook salmon remain in the river for several weeks after hatching and then migrate to the ocean during spring (typically April–June), as flows decline, and water temperatures increase. Juvenile steelhead trout, which typically spend one or more years in the river before migrating to the ocean during late winter and spring (typically February–June), also require suitable habitat conditions throughout the summer. Available spring rearing habitat in the Eel River for juvenile salmon and steelhead trout would not be affected by the requested Variance. An increase in spring flows followed by a decrease to summer levels, as prescribed by the license, would still occur, thus providing important migration cues for downstream migrating juvenile fish.

Lower flows during mid- to late summer in the Eel River between Scott and Cape Horn Dams would result under the requested Variance because diversion flows to the EBRR would be reduced. However, the requested Variance would support improved habitat conditions for summer-rearing juvenile steelhead trout by reducing withdrawals from Lake Pillsbury reservoir, which preserves cool-water pool and minimizes water temperature increases in late summer (see Enclosure 1). Lower water temperatures would improve conditions for summer-rearing juvenile steelhead trout by reducing thermal stress from acute and chronic water temperatures above 20°C. For example, juvenile *O. mykiss* growth rates rapidly decrease with elevated water temperatures above 21°C, and mortality risk increases as water temperatures exceed 23°C (Sullivan et al. 2000[7]). Sacramento pikeminnow (*Ptychocheilus grandis*) is a predator and competitor of juvenile salmonids in

[7] Sullivan, K., Martin, D.J., Cardwell, R.D., Toll, J.E., and S. Duke. 2000. *An analysis of the effects of temperature on salmonids of the Pacific Northwest with implications for selecting temperature criteria*. Sustainable Ecosystems Institute, Portland, OR. December 2000.

the Eel River Basin. In laboratory streams, interspecific competition has been found to have a negligible effect on juvenile steelhead at water temperatures less than 18°C, while pikeminnow outcompete juvenile steelhead at temperatures 20-23°C (Reese and Harvey 2002[8]). Under the requested Variance, PG&E would begin meeting with the Agencies and the DWG when Lake Pillsbury reservoir stops spilling to manage withdrawals from Lake Pillsbury reservoir to minimize the duration juvenile steelhead trout are exposed to water temperatures above 20°C in late summer.

As mentioned above, the requested Variance would reduce minimum flows in the reach between Scott Dam and Cape Horn Dams to preserve storage in Lake Pillsbury reservoir. While this may temporarily reduce the volume of available summer rearing habitat for juvenile steelhead trout between the dams, minimum flows would remain above the E-2 "Critical" classification as prescribed by the license and assessed in NMFS' 2002 Biological Opinion. However, habitat conditions during mid- to late summer would be expected to improve accessible habitat for steelhead trout by maintaining suitable water temperatures. If cooler water temperatures are not maintained during mid- to late summer, habitat conditions between the dams are likely to become increasingly stressful for steelhead trout due to the presence of pikeminnow. Summertime flow requirements at E-11 under the requested Variance would remain unchanged from the license-prescribed summer flow classification to be determined on May 15, 2026 (Table 1).

The requested Variance is also the prudent action in fall and winter, given the potential for Lake Pillsbury reservoir to reach critically low water levels in years with dry fall/early winter inflow conditions. Low reservoir levels could limit PG&E's ability to release water from Scott Dam, impacting downstream aquatic resources (including Chinook salmon and steelhead trout). Additionally, critically low Lake Pillsbury reservoir storage levels could also impact downstream aquatic resources, with possible high levels of turbidity and sedimentation due to reservoir bank erosion.

Adult Chinook salmon primarily migrate into the upper Eel River mid-October through mid-December, but their migration is highly dependent on late fall/early winter storms and runoff. Targeting at least 25,000 AF of storage on October 1 would better enable the Agencies to release the annual Block Water allotment provided under the license during the fall/winter adult Chinook salmon migration and spawning season to supplement flows, if needed, given hydrologic conditions in the Eel River watershed.

[8] Reese, C.D., and B.C. Harvey. 2002. Temperature-Dependent Interactions between Juvenile Steelhead and Sacramento Pikeminnow in Laboratory Streams. Transactions of the American Fisheries Society. 131:599-606.

Overall, the requested Variance would not reduce flows in the Eel River below what has been assessed in NMFS' 2002 Biological Opinion. Therefore, no further impacts to ESA-listed fish species are anticipated.

East Branch Russian River

The primary fish species of interest in the EBRR downstream of the Potter Valley Powerhouse is resident rainbow trout, which are not ESA listed. Both natural origin and hatchery rainbow trout inhabit this stream reach. CDFW historically planted catchable resident rainbow trout to support the local sport fishery; however, planting activities have been reduced in recent years because of persisting drought conditions and lower flows. Under the requested Variance, flows in the EBRR would be reduced from Normal to between Dry and Critical WY classifications (75 cfs to 25–5 cfs), resulting in a reduction in habitat for rainbow trout and other aquatic species. In turn, this would result in the continuation of reduced sport fishing opportunities for the duration of the flow amendment.

Agency Consultation and Conclusion

PG&E and agency correspondence is listed below:

November 21, 2025: PG&E met with the Agencies to discuss the needs for a Variance for 2026
December 11, 2025: PG&E provided the Agencies with a draft Variance proposal.
December 12, 2025: PG&E met with the Agencies to review the draft Variance.
December 23, 2025: PG&E provided a revised draft Variance for review.
January 8, 2026: PG&E met with the Agencies to finalize edits to the revised draft Variance.
January 16, 2026: PG&E discussed revisions to the draft with the Agencies.
January 23, 2026: PG&E provided a draft final of the Variance to the Agencies based on discussions from the previous meeting and provided a final version of the Variance.

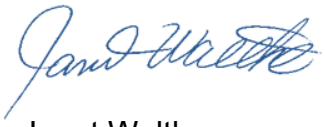
The USFWS, CDFW, and RVIT provided emails documentation of their review following PG&E's revisions to the draft temporary flow amendment. These emails are provided as Enclosure 2.

As part of the consultation process with the Agencies for this Variance, PG&E introduced modified E-11 exceptionally low inflow (EXCL) thresholds (Table A.10 of License Appendix A) to be more protective. It was recognized that the timeline for approving the 2026 Variance precluded the inclusion of EXCL revisions. PG&E intends to include modified EXCL thresholds in its forthcoming license amendment supplemental.

Given the risk that providing Project license–required flows with the reduced Lake Pillsbury reservoir storage will lead to destabilizing drawdown rates and, in the worst case, reaching critical minimum pool at Lake Pillsbury reservoir, PG&E urgently requests that FERC approves the Variance by May 15, 2026. This will allow PG&E to implement the revised flow requirements in a manner that provides flexible water delivery to the EBRR while providing adequate reservoir storage to protect dam safety while providing cooler water to ESA species in the Eel River downstream of Scott Dam.

If you have questions, concerns, or comments, please contact Chadwick McCready, senior license coordinator for PG&E at (530) 685-5710.

Sincerely,



Janet Walther
Director, Hydro Licensing

Enclosures:
1. Water Temperature Analysis
2. Agency Response Record

cc: via email w/enclosures
Joshua Fuller, Coastal California Branch Supervisor, National Marine Fisheries Service - joshua.fuller@noaa.gov
Matt Goldsworthy, Fisheries Biologist, National Marine Fisheries Service - Matt.Goldsworthy@noaa.gov
Matt Myers, FERC Coordinator Region 1, Department of Fish and Wildlife - Matt.Myers@wildlife.ca.gov
Allan Renger, California Department of Fish and Wildlife - Allan.Renger@wildlife.ca.gov
Scott McBain, Applied River Sciences, Consultant to the Round Valley Indian Tribes- scott@riversciences.com
Wyatt Smith, Fisheries Program Coordinator, Round Valley Indian Tribes - WSmith@RVIT.org
Josh Boyce, Supervisory Fish Biologist, United States Fish and Wildlife Service - josh_boyce@fws.gov

ENCLOSURE 1

Enclosure 1

Summary of Water Temperature Evaluation and Model Results

2023 Water Temperature Evaluation

In response to PG&E's *2022 Flow Variance Request Due to Limited Water Availability,* submitted May 13, 2022, FERC ordered PG&E to continue water quality monitoring in Lake Pillsbury reservoir. FERC also ordered PG&E to develop scenarios for water temperature modeling, which would allow PG&E to evaluate the potential benefits of cooler reservoir temperatures and water storage that support federal Endangered Species Act (ESA)-listed salmonids during the dry season. PG&E evaluated 12 years of historical water temperature data collected under Article 52a of the license (license required flows) to develop a regression model and satisfy FERC's July 27, 2022, order[1].

The conclusion of the PG&E water temperature evaluation was that there are limited options for mitigating high water temperature releases from Lake Pillsbury reservoir in the late-summer and early-fall months when median water temperature exceeds 20 degrees Celsius (°C; Figure 1). The limited options are caused by the relatively shallow reservoir (small deep-water volume), minimal spring/summer reservoir inflow that is typically warm, and summer withdrawals that are made from a low-level outlet that mixes the warm, upper layers of the reservoir throughout the water column. The regression-based analysis of existing water temperature data indicated a very predictable pattern based solely on calendar date and suggests that this analysis could be used as a guidance curve to compare current releases to usage patterns from other, similar water years. Two guidance curves were developed; one based on all water-year types with the second based only on dry water-year types. A proposed or ongoing reservoir release pattern is compared with the statistically derived guidance curves. This approach allows PG&E to compare the current strategy for water year releases to previous patterns, which informs operational decisions regarding increasing or decreasing release volumes. This approach provides a practical tool to determine how current spring and summer flow-release decisions may influence late-summer release water temperatures.

[1] 2023 Flow Variance Request Due to Limited Storage Capacity, Enclosure 2, Potter Valley Project – Water Temperature Evaluation, 2023.

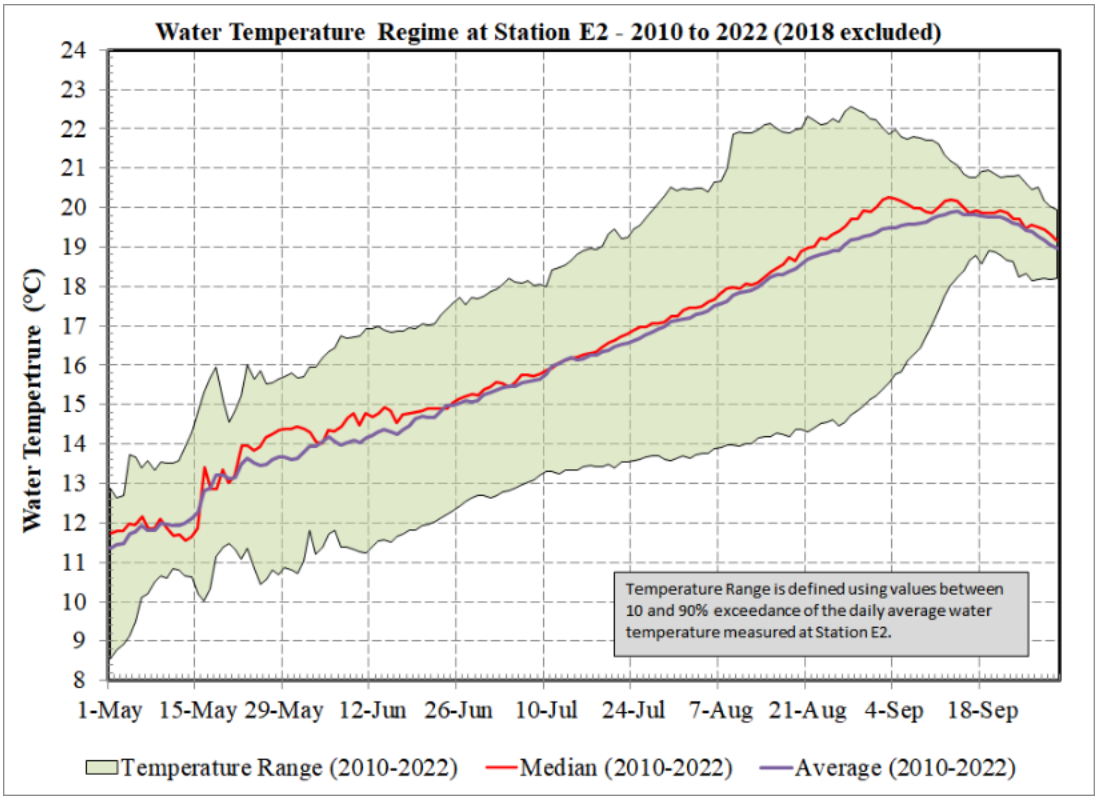


Figure 1: Summary of Median, Average, and 10–90 Percent Exceedance Range of Water Temperatures at E-2 between May and September, using 2010–2022 Data

FERC's July 27, 2022, order approving PG&E's temporary amendment demonstrated the potential benefit of using reservoir release management to influence water temperature in late summer. The order went into effect and reduced E-16 flows from 75 to 5 cubic feet per second (cfs), and the water temperature benefits of this flow reduction were readily observable. As shown in Figure 2, water temperatures in the Eel River below Scott Dam (E-2) were increasing as expected based on historical water temperature data (i.e., regression-based guidance curves) until withdrawals from the reservoir were reduced under the temporary flow amendment (variance). Consequently, water temperature at E-2 decreased and remained stable until withdrawals from the reservoir increased again to support a Blockwater release in late September 2022. Further analysis of flow and temperature data from 2022 indicates that the flow reduction in late July cooled release temperatures as much as 1.6°C during the approximately 2-month flow-reduction period (Figure 3).

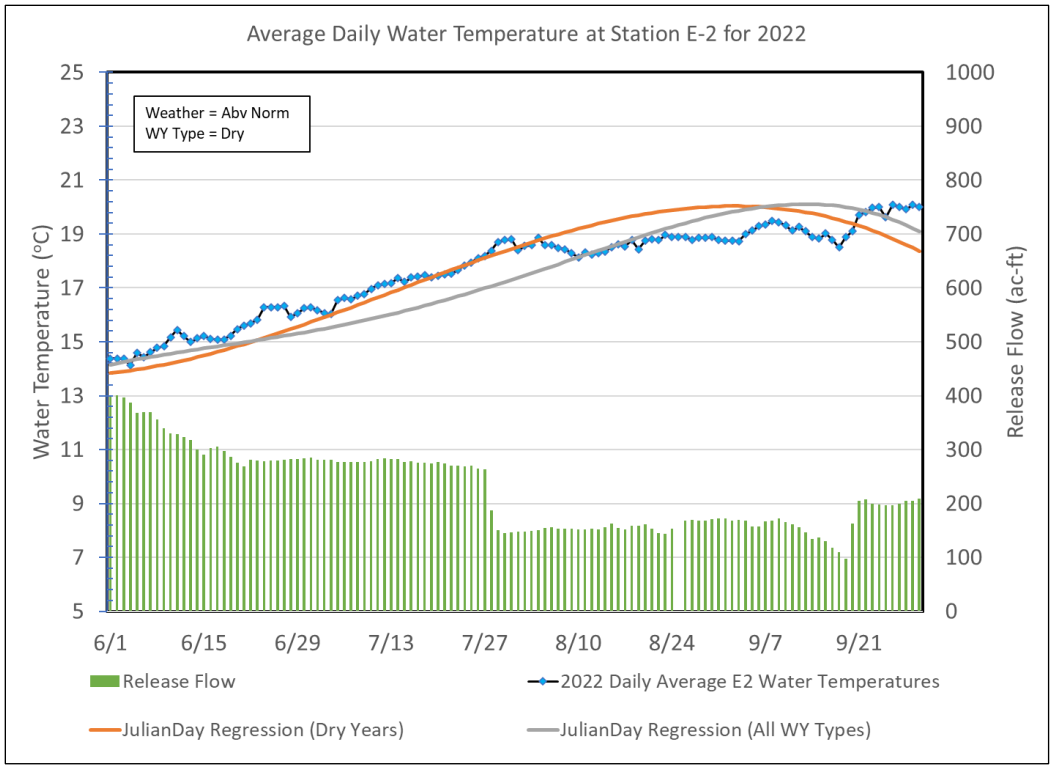


Figure 2: Average Daily Water Temperature at Gaging Station E-2 and release flow for 2022.

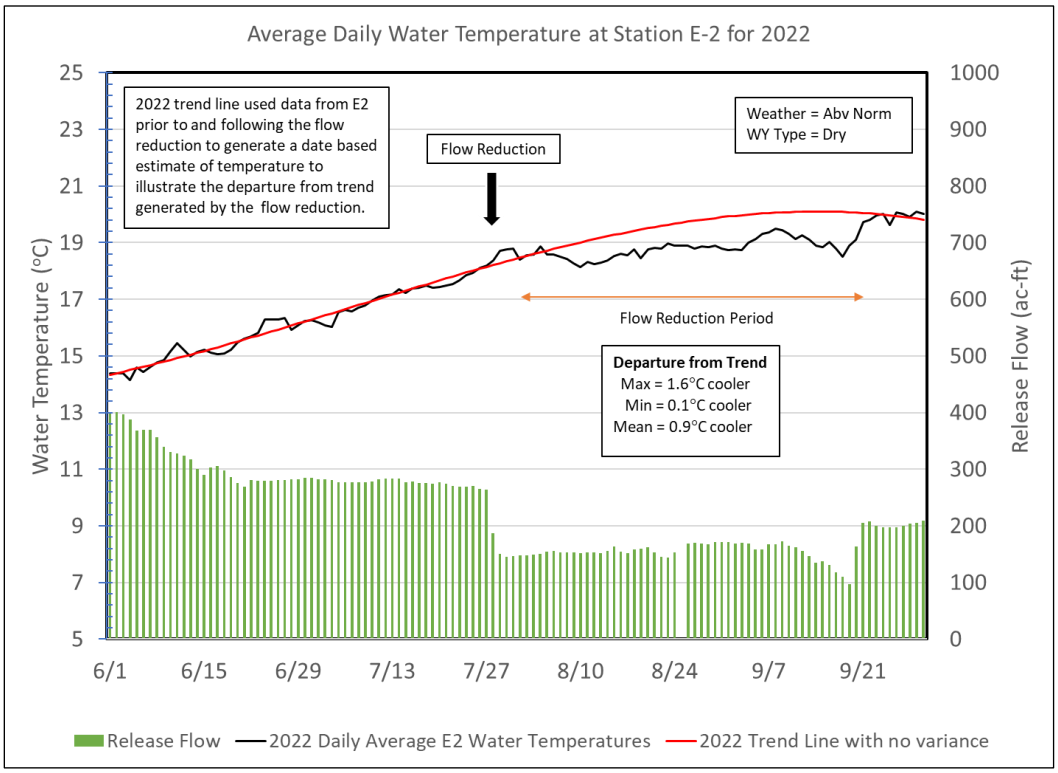


Figure 3: Average Daily Water Temperature at Gaging Station E-2 with 2022 trend line.

Based on the observations above, and in coordination with Agencies, PG&E developed a flexible reservoir release management strategy for the 2023 Variance request that could better support cooler water temperatures for ESA-listed salmonids rearing in the Eel River downstream of Scott Dam. The strategy was included in PG&E's 2023 Variance request submitted to FERC on May 22, 2023, and approved on October 2, 2023. However, because the 2023 Variance started much later than in previous years, reservoir withdrawals remained elevated during the summer period, depleting the cool water pool and resulting in increased water temperature above what was predicted by the guidance curves (Figure 4).

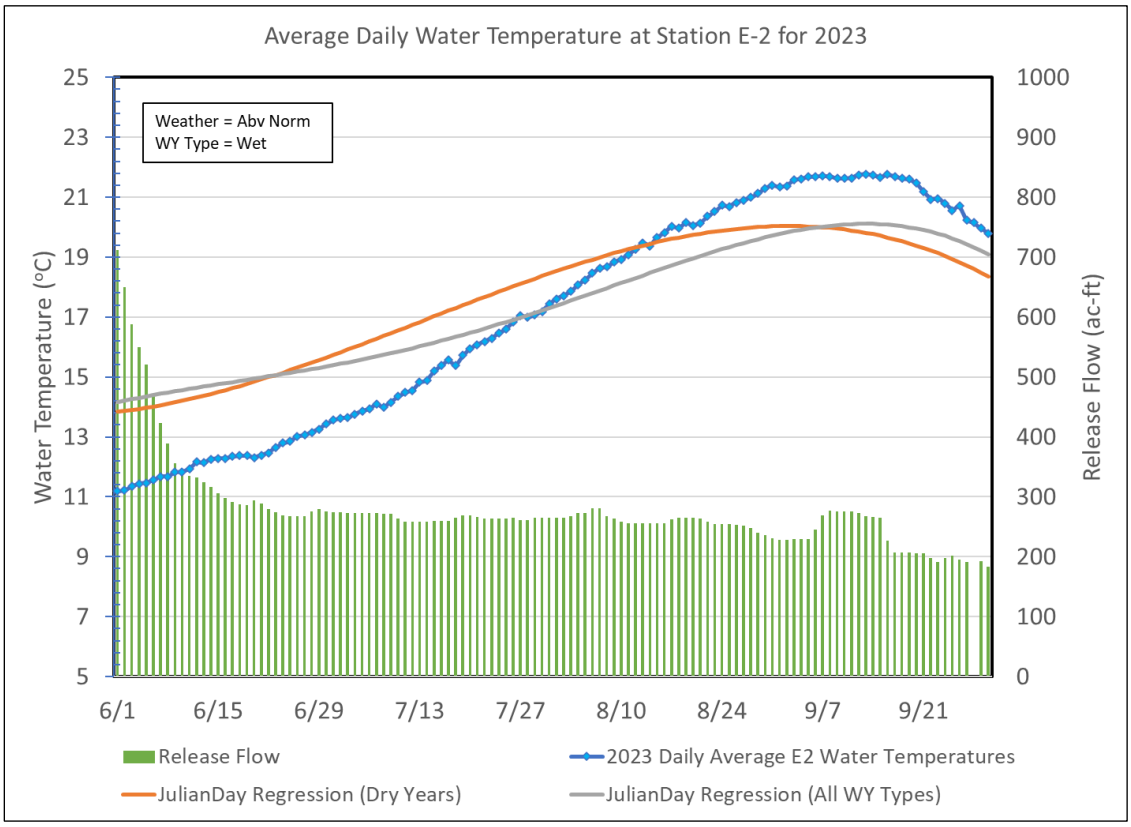


Figure 4: Average Daily Water Temperature at Gaging Station E-2 and Release Flow for 2023

A comparison of water temperature and release flow data from 2022 and 2023 supports the findings of PG&E's water temperature analysis, with the result that the delayed implementation of the 2023 Variance likely contributed to a 2.5 °C warmer maximum release temperature than in 2022, despite 2023 being a much wetter year. As shown in Figure 5, continued elevated withdrawals through the summer in 2023 accelerated the depletion of cooler water in Lake Pillsbury. This resulted in elevated release water temperature in late summer as compared to 2022, even though release water temperatures in early July were approximately 2°C cooler in 2023. Based on our understanding of the relationship between release volume and water temperature, it is likely that release water temperature in 2023 would have been minimized by the proposed flexible management release strategy outlined in PG&E's 2023 Variance request.

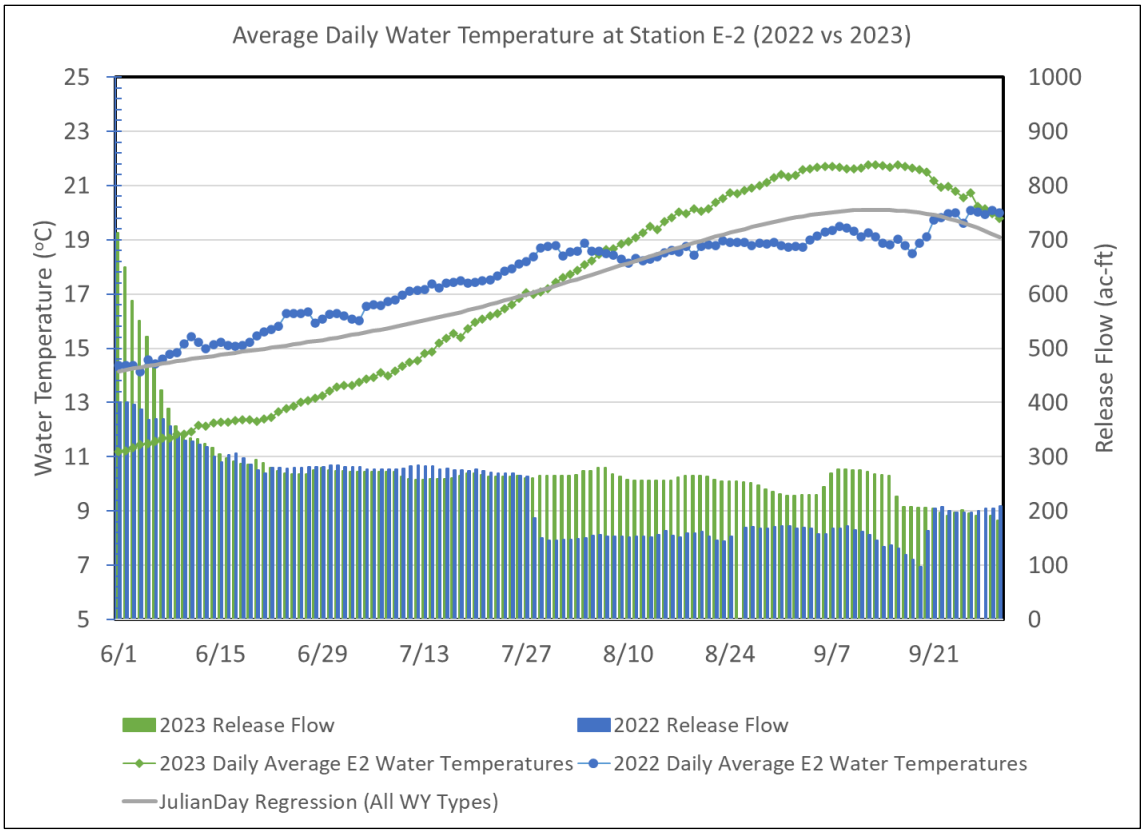


Figure 5. Comparison of Average Daily Water Temperatures at Station E-2.

2024 Water Temperature Modeling Results

As part of the 2024 Variance request approved by FERC on June 27, 2024, PG&E agreed to implement additional monitoring measures, including completing and using the Lake Pillsbury CE-QUAL water temperature model (Model) to explore adaptive management opportunities in coordination with Agencies. The Model used for scenario runs was developed for PG&E by Stantec/Kleinschmidt and was originally calibrated to data collected between 2010 and 2022 (Martinez, 2024[2]).

The model was used to predict water temperatures below Scott Dam without a Variance and with the flows approved in the variance on July 1, 2024, under cool, average, and warm meteorological conditions. Comparison of Baseline and Proposed variance scenarios showed an average decrease in maximum summer temperature of about 1.2°C across all meteorological conditions due to the flow variance beginning on July 1. The average monthly temperatures for July, August and September are 0.8°C, 2.0°C, and 0.1°C lower respectively due to the flow variance (Figure 6, Table1).

[2] Martinez, V., and Addley, C. 2024. Technical Memorandum: Lake Pillsbury CE-QUAL-W2 Water Temperature Model, 2010-2022 Calibration Report – Final. March 7, 2024.

Table 1: Model Variance Temperature Results below Scott Dam

Model Scenario	Maximum Summer Temperature (°C)	Average July Temperature (°C)	Average August Temperature (°C)	Average September Temperature (°C)
Scenario 1, Baseline cool met	23.6	18.9	22.1	21.7
Scenario 2, Baseline average met	23.4	19.0	22.0	21.1
Scenario 3, Baseline warm met	24.1	19.7	22.7	22.2
Scenario 1, Proposed Variance-cool met	22.1	18.0	19.9	21.3
Scenario 2, Proposed Variance -average met	22.1	18.2	20.0	21.1
Scenario 3, Proposed Variance -warm met	23.3	19.0	21.0	22.2

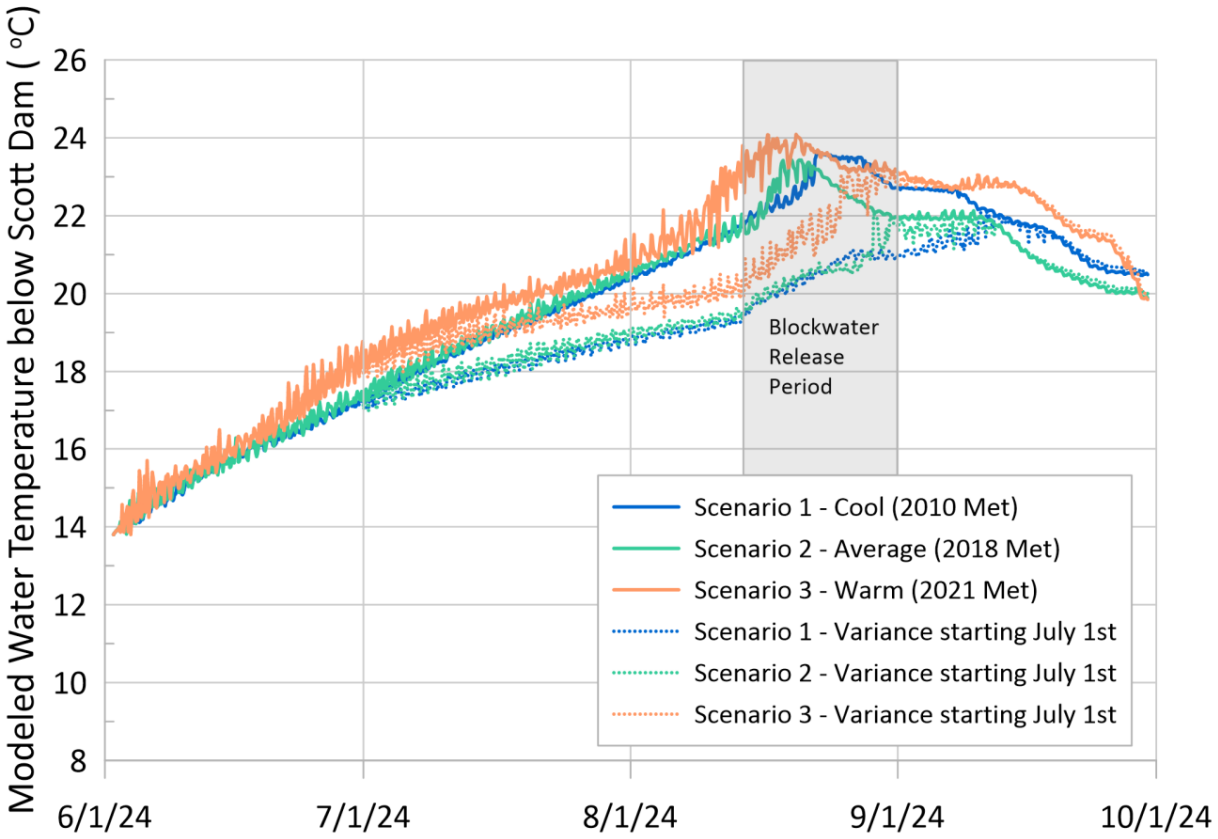


Figure 6. Water Temperatures below Scott Dam (Baseline and Proposed Variance Scenarios).

In January 2025, PG&E used the Model to show that implementing the 2024 Variance improved habitat conditions for ESA-listed species by reducing summertime water temperature in the Eel River downstream of Scott Dam. The water temperature modeling compared the 2024 Variance scenario with the license required flow scenario from May 31, 2024, through September 31, 2024. The license required flow scenario is a simulation of water temperature as if FERC had not approved PG&E's 2024 Variance request and license required flows were released in 2024. Additionally, a validation of the model was carried out to confirm that the model accurately simulated measured 2024 water temperatures.

Comparison of the 2024 Variance flow scenario and the license required flow scenario show an average decrease in maximum summer temperature of about 1.8°C due to the variance (implemented on 6/27/24). The average monthly temperatures for July, August, and September would have been 0.8°C, 2.3°C, and 0.3°C higher, respectively, had the variance not been approved and license required flows been released (Table 2, Figure 7). In addition, the number of days above 20°C decreased by 17 days (from 69 to 52) and the timing of peak water temperatures also shifted 21 days later, from August 20 under the license required flow scenario to September 10 under the variance scenario.

Table 2: Model Variance and License Required Flow Scenario Water Temperature Results below Scott Dam

Model Scenario	Maximum Summer Temperature (°C)	Average July Temperature (°C)	Average August Temperature (°C)	Average September Temperature (°C)
Variance Scenario (2024 Historical Operations)	22.3	18.6	20.4	21.3
License Required Flow Scenario	24.1	19.4	22.6	21.6
Average Temperature Difference between Scenarios	1.8	0.8	2.3	0.3

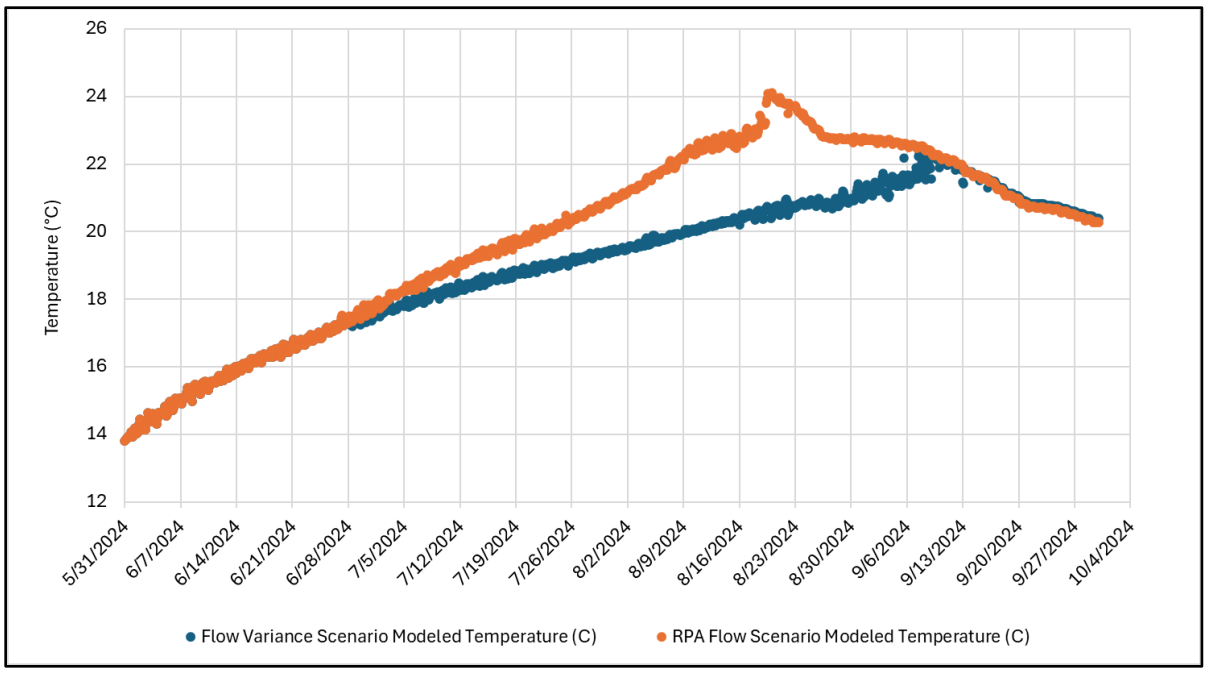


Figure 7. Modeled Water Temperature below Scott Dam for the Variance and License Required Flow Scenario

2025 Water Temperature Modeling Results

Results of the CE-QUAL-W2 model were presented as a supplemental filing to the 2025 Variance submitted by PG&E on June 24, 2025. The model predicted water temperatures below Scott Dam with license required flows, with the variance approved on July 1, and with the variance approved on August 1, 2025. The model showed that a July 1 variance approval would reduce maximum temperature by an average of 1.10°C (Figure 8, Table 3) and the duration of water temperatures above 22°C would be reduced by one month compared to license required flow releases. An August 1 variance approval would reduce maximum summer temperature by 0.26°C (Table 3) and the duration of days above 22°C would not change.

Table 3: Model Scenario Water Temperature Results below Scott Dam – 50% Hydrology Forecast

Model Scenario	Maximum Summer Temperature (°C)	Average July Temperature (°C)	Average August Temperature (°C)	Average September Temperature (°C)
Scenario 1, Baseline 2010 met (cool)	24.19	20.96	23.39	21.80
Scenario 2, Baseline 2018 met (average)	23.88	21.30	23.22	21.16
Scenario 3, Baseline 2021 met (warm)	24.89	21.80	23.94	22.25

Scenario 1, Proposed Variance July 1st	22.65	19.89	21.72	21.75
Scenario 2, Proposed Variance July 1st	22.94	20.05	21.95	21.23
Scenario 3, Proposed Variance July 1st	24.09	20.78	22.93	22.32
Scenario 1, Proposed Variance Aug 1st	23.52	21.08	22.96	21.78
Scenario 2, Proposed Variance Aug 1st	23.78	21.29	23.05	21.19
Scenario 3, Proposed Variance Aug 1st	24.89	21.8	23.83	22.29

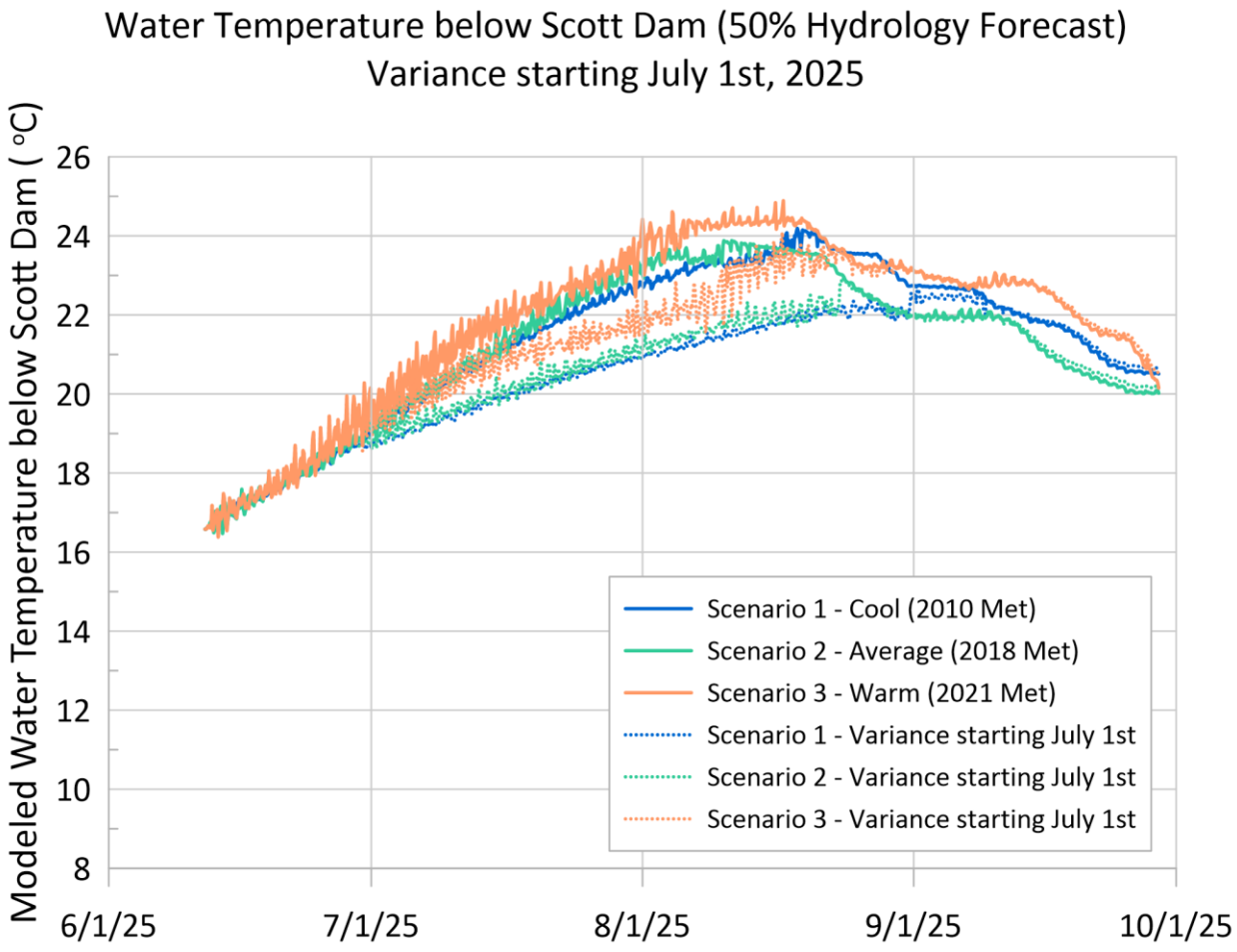


Figure 8. Water Temperatures below Scott Dam (Baseline and Proposed Variance Scenarios).

ENCLOSURE 2

From:	Joshua Fuller - NOAA Federal
To:	McCready, Chadwick
Cc:	Boyce, Josh; Chris Ramsey; Matt Goldsworthy - NOAA Federal; Matt Myers; Renger, Allan@Wildlife; Scott McBain; Wyatt Smith; Lent, Michelle; Anderson, Andrew; Urias, Anna; Gigliotti, Tony; Joseph, Matthew; Williamshen, Brian
Subject:	Re: For Review and Concurrence: Potter Valley 2026 Flow Variance Request
Date:	Thursday, January 29, 2026 2:50:25 PM

Dear Mr. McCready,

Thank you for the opportunity to review and comment on PG&E's Potter Valley Hydroelectric Project (FERC No. 77-CA) Water Year 2026 Minimum Instream Temporary Flow Amendment Request, received via email on January 23, 2026.

The National Marine Fisheries Service has reviewed this amendment request and has no comments.

Best regards,

Joshua Fuller

On Fri, Jan 23, 2026 at 12:16 PM McCready, Chadwick <COMM@pge.com> wrote:

> Greetings Agencies,
>
> Thanks for meeting again today to review the revised variance request. Attached is our final version of the 2026 flow variance request, as well as the accompanying water temperature analysis (Enclosure 1). Please review and provide concurrence on the variance request at your earliest convenience. PG&E intends to file the variance request with FERC by the end of the month.
>
> Please let me know if you have any questions or concerns.
>
> Thanks,

From: Myers, Matt@Wildlife
To: McCready, Chadwick
Cc: Lent, Michelle; Anderson, Andrew; Urias, Anna; Gigliotti, Tony; Joseph, Matthew; Williamshen, Brian; Matt Goldsworthy - NOAA Federal; Boyce, Josh; Ramsey, Chris@Wildlife; Wyatt Smith; Scott McBain; Renger, Allan@Wildlife; Joshua Fuller - NOAA Federal; McKannay, Adam@Wildlife; Kormos, Brett@Wildlife
Subject: RE: For Review and Concurrence: Potter Valley 2026 Flow Variance Request
Date: Tuesday, January 27, 2026 8:45:34 AM

Chadwick McCready,

The California Department of Fish and Wildlife (CDFW) has reviewed and provided input to PG&E's Potter Valley Water Year 2026 Minimum Instream Temporary Flow Amendment Request (2026 Variance), and we have no additional comments. The PG&E proposed variance flow schedule is designed to conserve cold water in Lake Pillsbury for the release of cold water during the summer to provide improved Eel River habitat conditions for federally ESA listed salmonids. CDFW encourages PG&E's submittal of the 2026 Variance to FERC as soon as possible. This email can be cited as CDFW support for submittal. Thank you for the opportunity to coordinate and comment on the request.

Please direct questions to Matt Myers at Matt.Myers@wildlife.ca.gov or Allan Renger at Allan.Renger@wildlife.ca.gov .

Matt Myers
Senior Environmental Scientist
California Department of Fish and Wildlife

From: McCready, Chadwick <COMM@pge.com>
Sent: Friday, January 23, 2026 12:14 PM
To: Boyce, Josh <josh_boyce@fws.gov>; Ramsey, Chris@Wildlife <Chris.Ramsey@wildlife.ca.gov>; Joshua Fuller - NOAA Federal <joshua.fuller@noaa.gov>; Matt Goldsworthy - NOAA Federal <matt.goldsworthy@noaa.gov>; Myers, Matt@Wildlife <Matt.Myers@wildlife.ca.gov>; Renger, Allan@Wildlife <Allan.Renger@wildlife.ca.gov>; Scott McBain <scott@mcbainassociates.com>; Wyatt Smith <wsmith@rvit.org>
Cc: Lent, Michelle <M4LQ@pge.com>; Anderson, Andrew <A5AK@pge.com>; Urias, Anna <AXUS@pge.com>; Gigliotti, Tony <T1GF@pge.com>; Joseph, Matthew <MWJA@pge.com>; Williamshen, Brian <BOW2@pge.com>

Subject: For Review and Concurrence: Potter Valley 2026 Flow Variance Request

Greetings Agencies,

Thanks for meeting again today to review the revised variance request. Attached is our final version of the 2026 flow variance request, as well as the accompanying water temperature analysis (Enclosure 1). Please review and provide concurrence on the variance request at your earliest convenience. PG&E intends to file the variance request with FERC by the end of the month.

Please let me know if you have any questions or concerns.

Thanks,

Chadwick McCready
Senior Hydro License Coordinator| Power Generation
Pacific Gas & Electric Company
C: (530) 685-5710 | e: Chadwick.Mccready@pge.com

From: Boyce, Josh
To: McCready, Chadwick
Subject: Re: [EXTERNAL] RE: For Review and Concurrence: Potter Valley 2026 Flow Variance Request
Date: Wednesday, January 28, 2026 10:19:06 AM

Mr. McCready,

Thank you for the opportunity to review and comment on PG&E's Potter Valley Hydroelectric Project (FERC No. 77-CA) Water Year 2026 Minimum Instream Temporary Flow Amendment Request, received on January 23, 2026.

The United States Fish and Wildlife Service has reviewed this amendment request and has no comments.

Sincerely,

Josh Boyce

Josh Boyce, Ph.D.
Supervisory Fish Biologist, USFWS
Arcata, CA
707-825-5193 (office)
707-298-5725 (cell)

From: Myers, Matt@Wildlife <Matt.Myers@wildlife.ca.gov>
Sent: Tuesday, January 27, 2026 8:45 AM
To: McCready, Chadwick <COMM@pge.com>
Cc: Lent, Michelle <M4LQ@pge.com>; Anderson, Andrew <A5AK@pge.com>; Urias, Anna <AXUS@pge.com>; Gigliotti, Tony <T1GF@pge.com>; Joseph, Matthew <MWJA@pge.com>; Williamshen, Brian <BOW2@pge.com>; FW8 Arcata FWO NOAA - Matt Goldsworthy <matt.goldsworthy@noaa.gov>; Boyce, Josh <josh_boyce@fws.gov>; Ramsey, Chris@Wildlife <Chris.Ramsey@wildlife.ca.gov>; Wyatt Smith <wsmith@rvit.org>; Scott McBain

<scott@mcbainassociates.com>; Renger, Allan@Wildlife <Allan.Renger@wildlife.ca.gov>; Joshua Fuller - NOAA Federal <joshua.fuller@noaa.gov>; McKannay, Adam@Wildlife <Adam.McKannay@wildlife.ca.gov>; Kormos, Brett@Wildlife <Brett.Kormos@wildlife.ca.gov>
Subject: [EXTERNAL] RE: For Review and Concurrence: Potter Valley 2026 Flow Variance Request

Chadwick McCready,

The California Department of Fish and Wildlife (CDFW) has reviewed and provided input to PG&E's Potter Valley Water Year 2026 Minimum Instream Temporary Flow Amendment Request (2026 Variance), and we have no additional comments. The PG&E proposed variance flow schedule is designed to conserve cold water in Lake Pillsbury for the release of cold water during the summer to provide improved Eel River habitat conditions for federally ESA listed salmonids. CDFW encourages PG&E's submittal of the 2026 Variance to FERC as soon as possible. This email can be cited as CDFW support for submittal. Thank you for the opportunity to coordinate and comment on the request.

Please direct questions to Matt Myers at Matt.Myers@wildlife.ca.gov or Allan Renger at Allan.Renger@wildlife.ca.gov .

Matt Myers
Senior Environmental Scientist
California Department of Fish and Wildlife

From: McCready, Chadwick <COMM@pge.com>
Sent: Friday, January 23, 2026 12:14 PM
To: Boyce, Josh <josh_boyce@fws.gov>; Ramsey, Chris@Wildlife <Chris.Ramsey@wildlife.ca.gov>; Joshua Fuller - NOAA Federal <joshua.fuller@noaa.gov>; Matt Goldsworthy - NOAA Federal <matt.goldsworthy@noaa.gov>; Myers, Matt@Wildlife <Matt.Myers@wildlife.ca.gov>; Renger, Allan@Wildlife <Allan.Renger@wildlife.ca.gov>; Scott McBain <scott@mcbainassociates.com>; Wyatt Smith <wsmith@rvit.org>
Cc: Lent, Michelle <M4LQ@pge.com>; Anderson, Andrew <A5AK@pge.com>; Urias, Anna <AXUS@pge.com>; Gigliotti, Tony <T1GF@pge.com>; Joseph, Matthew <MWJA@pge.com>; Williamshen, Brian <BOW2@pge.com>
Subject: For Review and Concurrence: Potter Valley 2026 Flow Variance Request

From:	Wyatt Smith
To:	McCready, Chadwick; Scott McBain; Boyce, Josh; Chris Ramsey; Joshua Fuller - NOAA Federal; Matt Goldsworthy - NOAA Federal; Matt Myers; Renger, Allan@Wildlife
Cc:	Lent, Michelle; Anderson, Andrew; Urias, Anna; Gigliotti, Tony; Joseph, Matthew; Williamshen, Brian
Subject:	Re: For Review and Concurrence: Potter Valley 2026 Flow Variance Request
Date:	Wednesday, January 28, 2026 5:09:53 PM

Mr. McCready,

On behalf of the Round Valley Indian Tribes, I have reviewed PG&E's Potter Valley 2026 Minimum Instream Temporary Flow Amendment Request (2026 Variance), and we have no additional technical comments. Thank you for the effort that PG&E has put into the analyses to support the 2026 Flow Amendment Request. In addition, I appreciate the coordination with the Agencies to develop this Variance request. The RVIT Tribal Council is strongly committed to the Eel River and request that PG&E proceed with the 2026 Variance and encourage submittal to FERC as soon as possible for desired implementation by May 15, 2026.
Thank you,
Wyatt

From: McCready, Chadwick <COMM@pge.com>
Sent: Friday, January 23, 2026 1:54:36 PM
To: Scott McBain <scott@mcbainassociates.com>; Boyce, Josh <josh_boyce@fws.gov>; Chris Ramsey <chris.ramsey@wildlife.ca.gov>; Joshua Fuller - NOAA Federal <joshua.fuller@noaa.gov>; Matt Goldsworthy - NOAA Federal <matt.goldsworthy@noaa.gov>; Matt Myers <Matt.Myers@wildlife.ca.gov>; Renger, Allan@Wildlife <Allan.Renger@wildlife.ca.gov>; Wyatt Smith <wsmith@rvit.org>
Cc: Lent, Michelle <M4LQ@pge.com>; Anderson, Andrew <A5AK@pge.com>; Urias, Anna <AXUS@pge.com>; Gigliotti, Tony <T1GF@pge.com>; Joseph, Matthew <MWJA@pge.com>; Williamshen, Brian <BOW2@pge.com>
Subject: RE: For Review and Concurrence: Potter Valley 2026 Flow Variance Request

Thanks for the edits Scott. We will go through them and adjust as needed. Just a quick note for everyone, I will add a brief section that notes enclosure 2 contains agency concurrence emails once we receive them. Good catch.

Chadwick McCready
Senior Hydro License Coordinator| Power Generation
Pacific Gas & Electric Company
C: (530) 685-5710 | e: Chadwick.Mccready@pge.com

From: Scott McBain <scott@mcbainassociates.com>
Sent: Friday, January 23, 2026 1:45 PM
To: McCready, Chadwick <COMM@pge.com>; Boyce, Josh <josh_boyce@fws.gov>; Chris Ramsey <chris.ramsey@wildlife.ca.gov>; Joshua Fuller - NOAA Federal <joshua.fuller@noaa.gov>; Matt Goldsworthy - NOAA Federal <matt.goldsworthy@noaa.gov>; Matt Myers <Matt.Myers@wildlife.ca.gov>; Renger, Allan@Wildlife <Allan.Renger@wildlife.ca.gov>; Wyatt Smith <wsmith@rvit.org>
Cc: Lent, Michelle <M4LQ@pge.com>; Anderson, Andrew <A5AK@pge.com>; Urias, Anna <AXUS@pge.com>; Gigliotti, Tony <T1GF@pge.com>; Joseph, Matthew <MWJA@pge.com>; Williamshen, Brian <BOW2@pge.com>
Subject: RE: For Review and Concurrence: Potter Valley 2026 Flow Variance Request

Thanks Chadwick, attached are a few minor comments/edits, caught a couple of typos. Take em or leave em, thanks for all you/staff's hard work on this!

Scott

From: McCready, Chadwick <COMM@pge.com>
Sent: Friday, January 23, 2026 12:14 PM
To: Boyce, Josh <josh_boyce@fws.gov>; Chris Ramsey <chris.ramsey@wildlife.ca.gov>; Joshua Fuller - NOAA Federal <joshua.fuller@noaa.gov>; Matt Goldsworthy - NOAA Federal <matt.goldsworthy@noaa.gov>; Matt Myers <Matt.Myers@wildlife.ca.gov>; Renger, Allan@Wildlife <Allan.Renger@wildlife.ca.gov>; Scott McBain <scott@mcbainassociates.com>; Wyatt Smith <wsmith@rvit.org>
Cc: Lent, Michelle <M4LQ@pge.com>; Anderson, Andrew <A5AK@pge.com>; Urias, Anna <AXUS@pge.com>; Gigliotti, Tony <T1GF@pge.com>; Joseph, Matthew <MWJA@pge.com>; Williamshen, Brian <BOW2@pge.com>
Subject: For Review and Concurrence: Potter Valley 2026 Flow Variance Request

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temperature analysis (Enclosure 1). Please review and provide concurrence on the variance request at your earliest convenience. PG&E intends to file the variance request with FERC by the end of the month.

Please let me know if you have any questions or concerns.

Thanks,

Chadwick McCready
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Pacific Gas & Electric Company
C: (530) 685-5710 | e: Chadwick.Mccready@pge.com