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### A4NR's Comments on January 20, 2023 Lead Commissioner Workshop on SB 846 Reliability Assessment

Please find attached the Comments of the Alliance for Nuclear Responsibility on the January 20, 2023 Lead Commissioner Workshop. These Comments were emailed to Docket 21-ESR-01 on February 1, 2023 but erroneously not posted until now.

Additional submitted attachment is included below.



February 1, 2023

Mr. Siva Gunda, Vice Chair California Energy Commission 715 P Street Sacramento, CA 95814

### TRANSMITTED BY EMAIL

Re: A4NR Comments on 21-ESR-01 Workshop held on January 20, 2023.

Dear Vice Chair Gunda:

On behalf of my client, the Alliance for Nuclear Responsibility ("A4NR"), I submit these comments on your January 20, 2023 Lead Commissioner Workshop's overview of the Energy Commission's preliminary reliability analysis for Senate Bill 846. Insofar as the Energy Commission reliability report originally scheduled for December 2022 appears to have been delayed, it is not clear that the concerns expressed in A4NR's November 8, 2022 comments on your October 28, 2022 workshop have been or will be addressed. I ask that you consider those earlier comments as if they were repeated again in this letter.

# 1. The Energy Commission assessment of "the prudency of extending Diablo Canyon"<sup>1</sup> must be sufficiently thorough.

A striking feature of the staff presentation at the January 20 workshop was the repeated reference to examining "prudency" questions surrounding the potential extended operation of the Diablo Canyon Nuclear Power Plant (DCNPP"). The words "prudent" or "imprudent" appear in SB 846 four times:

- the Energy Commission is tasked in Public Resources Code § 25233.2 (c) with making a determination by March 1, 2023 "whether extending operations of the Diablo Canyon powerplant to at least 2030 is *prudent* to ensure reliability in light of any potential for supply deficiency, and is consistent with the emissions reduction goals of Section 454.53 of the Public Utilities Code;"
- the Legislature finds and declares in Public Resources Code § 25548 (b) that "it is the policy of the Legislature that seeking to extend the Diablo Canyon powerplant's operations for a renewed license term is *prudent*, cost effective,

1

<sup>&</sup>lt;sup>1</sup> Docket: 21-ESR-01, TN # 248455, "SB 846 - Diablo Canyon Extension and CERIP Presentation," pp. 45 – 49.

and in the best interests of all California electricity customers. The Legislature anticipates that this stopgap measure will not be needed for more than five years beyond the current expiration dates;"

- the Legislature additionally finds and declares in Public Resources Code § 25548 (f) that all "relevant state agencies" and PG&E "must act quickly and in coordination to take all actions necessary and *prudent* to extend Diablo Canyon powerplant operations;"
- and Public Resources Code § 25548.3 (c) (5) (C) identifies, as an event "that would trigger a suspension or early termination" of the \$1.4 billion General Fund loan agreement, a "determination by the Public Utilities Commission that an extension of the Diablo Canyon powerplant is not cost effective or *imprudent*, or both."

The March 1 deadline for the Energy Commission's determination requires, at a minimum, the careful assembly of an analytic framework that can be revisited throughout 2023 as additional information becomes available. The placeholder wording articulated on a "preliminary" basis at the January 20 workshop ("Staff conclude that it would be prudent to continue to pursue Diablo Canyon extension until necessary resources are online or assessment of viable alternatives is clearly established"<sup>2</sup>) is unlikely to prove satisfactory without a robust commitment to ongoing, evidence-based assessment. Endorsing "continue to pursue" is no more dispositive than the Legislature's embrace of "seeking to extend" in § 25548 (b). Considerably more is rightfully expected of the Energy Commission's analyses.

# 2. The Energy Commission should acknowledge the highly contingent nature of DCNPP's availability after the 2024/25 license expirations.

The attached January 24, 2023 letter to PG&E from the Nuclear Regulatory Commission ("NRC") staff declines to initiate or resume review of PG&E's previously withdrawn license renewal application, and also indicates that there must be an opportunity for public hearings on any **new application** PG&E submits. Additionally, the NRC staff's letter defers to March 2023 a response to PG&E's request for an exemption from the deadline in 10 CFR 2.109(b), which provides that if a nuclear power plant licensee files a sufficient license renewal application "**at least 5 years before the expiration** of the existing license, the existing license will not be deemed to have expired until the application has been finally determined."

<sup>&</sup>lt;sup>2</sup> *Id.,* p. 48.

Each of these NRC developments might delay the start of any extended operations period for DCNPP, as well as the commencement of the potential funding under the Department of Energy ("DOE") Civil Nuclear Credit program that ostensibly serves as the basis for SB 846 and the \$1.4 billion General Fund Ioan to PG&E. DOE has tied the start of the four-year DCNPP Award Period to the completion of the "the Final Environmental Impact Statement prepared for the Selected Nuclear Reactor by the NRC."<sup>3</sup> PG&E said in a public presentation to the NRC on December 8, 2022 that it did not expect the NRC to have completed its process until 2026 or 2027 (already *past* the existing license expiration dates), and this was an estimate it made *prior* to the NRC staff's January 24, 2023 letter.

The Energy Commission's March 1, 2023 prudency determination should evaluate the likelihood of DCNPP availability if relicensing of each Unit is not completed before expiration of its current license. The analysis should also address the potential impacts on DCNPP availability if PG&E is not successful in obtaining a waiver from 10 CFR 2.109(b). Even if PG&E obtains a waiver, what new provisions for payment of DCNPP costs will be necessary to enable operation during the interim period **before** an NRC decision on the relicensing applications?

### **3.** Better understanding of the prospects for General Fund repayment may also jeopardize the post-2024/25 availability of DCNPP.

During the Legislature's abbreviated consideration of SB 846, assurances were made that the \$1.4 billion General Fund Ioan would be fully offset by the DOE grant – "federal funds that we believe will offset the entirety of the Ioan that we are proposing,"<sup>4</sup> in the words of Cabinet Secretary Ana Matosantos. As explained in a written statement issued by Senator John Laird when SB 846 was brought to the Senate floor, "The \$1.4 billion Ioan expenditure will be matched with \$1.4 billion in federal revenue, which limits the requirement of any ratepayer or taxpayer money for that purpose. By January the eligibility of that money will be established, and thus will allow for a status check at that time on this issue."<sup>5</sup> These assertions were undercut within a day of SB 846's legislative enactment by PG&E's September 2, 2022 application for only \$1.2 billion, and diminished further by DOE's award of only \$1.1 billion on November 21, 2022. The extended timing now projected for receipt of grant funds exacerbates this problem.

Paragraph 7.a.i. of the October 18, 2022 loan agreement with PG&E anticipates a

<sup>&</sup>lt;sup>3</sup> https://www.energy.gov/sites/default/files/2022-06/US DOE CNC Guidance-Revision 1-June 2022.pdf, p. 41.

<sup>&</sup>lt;sup>4</sup> https://www.assembly.ca.gov/media/assembly-utilities-energy-committee-20220826/video at 1:04:12.

<sup>&</sup>lt;sup>5</sup> https://sd17.senate.ca.gov/news/statement-state-sen-john-laird-d-santa-cruz-sb-846-dodd

potential General Fund repayment in December 2027, but this would come only after the grant's four-year Award Period was followed by a one-year DOE Recapture Period. Based upon the afore-mentioned DOE written statement that the Award Period cannot begin until *after* the NRC has adopted a Final Environmental Impact Statement for the DCNPP license extension, and the NRC staff's January 24, 2023 refusal to initiate or resume review of PG&E's previously withdrawn license renewal application, a projected 2027 repayment appears undeniably impossible. The characterization of the General Fund Ioan during your October 28, 2022 workshop as "bridge funding"<sup>6</sup> is not credible.

Of course, receipt of **any** DOE grant proceeds will be dependent upon DOE's afterthe-fact verification that DCNPP operated at an economic loss during the four-year Award Period, whenever it commences. If the revenues DCNPP receives from the CAISO market continue to be correlated to the volatile price of natural gas, confidence in the accuracy of such projections likely diminishes as the four-year Award Period slides further into the future.

A strongarm provision in Paragraph 7.a.iii. of the October 18, 2022 loan agreement with PG&E attempts to force the Legislature into making the \$800 million second appropriation discussed in SB 846. If this appropriation is not made by September 30, 2023, then the first \$800 million (minus the amount of any second appropriation) received from DOE will be transferred from the loan repayment escrow "to PG&E for PG&E's use in accordance with the DOE award agreement." The Energy Commission should objectively assess, now that DOE has confirmed PG&E's eligibility for up to \$1.1 billion under the Civil Nuclear Credit program – the limited risk that the General Fund loan was intended to absorb under SB 846 – whether the DCNPP extension project would proceed in the absence of this second appropriation. Given the clearly reduced prospects for timely repayment, the Legislature could reasonably decline to expand the risk exposure of the General Fund.

The timing of specific funding needs for the DCNPP extension project is unclear. I have attached to these comments the projected expenditures spreadsheet obtained from a Public Records Act request to the Department of Water Resources. As you can see, each item is redacted except for the \$162.75 million in fees payable to PG&E thru December 2023.

<sup>&</sup>lt;sup>6</sup> Docket: 21-ESR-01, TN # 247345, "Transcript on 10-28-22 Lead Commissioner Workshop on Clean Energy Alternatives for Reliability - Session 1," p. 55, line 8.

Passive conversion of the \$1.4 billion General Fund "*loan*"<sup>7</sup> – demonstrably underwater when compared to the prospective \$1.1 billion DOE repayment source, and likely to become more so if a second appropriation is made – into a de facto General Fund *grant* could also adversely affect DCNPP's availability after 2024/25. Public Resources Code § 25548.3 (c) (5) identifies several "(e)vents that would trigger a suspension or early termination of the loan agreement." These include a determination by the Department of Water Resources "that permitted timeframes are not viable to accomplish the purposes of this chapter," or "that repayment is less likely than initially anticipated." Under such circumstances, PG&E is required under § 25548.3 (c) (6) to repay "any unspent or uncommitted" loan proceeds and lender forgiveness of such amounts is forbidden.

Just as banking regulations attach a prudent lender standard to the availability of federal deposit insurance, Public Resources Code § 25548 (f) imposes a prudency requirement on PG&E and "all relevant state agencies" in their actions to extend DCNPP operations. Assuming that, if state agencies simply **wish** it to be, DCNPP **will** be available after 2024/25 may prove to be grossly imprudent planning as adverse post-SB 846 developments continue to accumulate.

Sincerely,

/s/ John L. Geesman

DICKSON GEESMAN LLP Attorney for ALLIANCE FOR NUCLEAR RESPONSIBILITY

Attachments: January 24, 2023 NRC letter to Paula Gerfen, PG&E Chief Nuclear Officer; PG&E forecast of disbursements (DWR Public Records Act response)

<sup>&</sup>lt;sup>7</sup> Public Resources Code § 25548.3 (a) states: "It is the intent of the Legislature to make available a one billion four hundred million dollar (\$1,400,000,000) *loan* from the General Fund …" (emphasis added)



#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

Ms. Paula Gerfen Senior Vice President, Generation and Chief Nuclear Officer Pacific Gas and Electric Company Diablo Canyon Power Plant P.O. Box 56 Mail Code 104/6 Avila Beach, CA 93424

#### SUBJECT: DIABLO CANYON POWER PLANT, UNITS 1 AND 2 – STAFF DECISION TO NOT RESUME REVIEW OF WITHDRAWN LICENSE RENEWAL APPLICATION

Dear Ms. Gerfen:

The NRC staff is responding to your letter dated October 31, 2022, in which you request that the NRC resume its review of a license renewal application you voluntarily withdrew and terminated in 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22304A691). In November 2009, Pacific Gas and Electric Company (PG&E) submitted a license renewal application for Diablo Canyon Power Plant (DCPP), Units 1 and 2, and was in timely renewal under 10 CFR 2.109(b) because the application was submitted more than five years before the expiration dates of the operating licenses for the units (ML093340086). In 2011, PG&E requested that the NRC delay its decision on the DCPP license renewal application (ML111010592), and in 2016, PG&E requested that the NRC suspend its review of the DCPP license renewal application (ML16173A454). By letter dated March 7, 2018 (ML18066A937), PG&E requested to withdraw the license renewal application "based on the determination that continued baseload operation of the two DCPP units beyond their currently approved operating periods is not necessary to meet California's projected energy demand requirements." On April 16, 2018 (ML18093A115), the NRC granted the withdrawal (83 FR 17688), terminated its review, and closed the docket.

In your October 31, 2022, letter, you state that "the State of California has revisited its current and projected energy needs, including the role of DCPP in the State's energy future" and request that the NRC confirm that you were (and are again) in timely renewal under 10 CFR 2.109(b), and you request that the NRC resume its review of the previously submitted and subsequently withdrawn license renewal application (ML22304A691). You propose "that the NRC staff 'resume its review of the application as it existed' when the review ceased in 2016, including all associated correspondence and commitments." As part of your request to resume the review of the withdrawn application, you propose that the "NRC staff would determine what information it needs to continue its review and, eventually, submit an RAI [request for additional information]" to you. In parallel, you state you would "develop and submit an amendment" to the previously withdrawn license renewal application that identifies changes to the current licensing basis that materially affect the contents of the withdrawn application. In addition, you state that you would submit "supplemental information relevant to both the safety and environmental reviews to account for any material new information and guidance updates" since the cessation In the alternative, you request an exemption from 10 CFR 2.109(b), which provides that if a nuclear power plant licensee files a sufficient license renewal application "at least 5 years before the expiration of the existing license, the existing license will not be deemed to have expired until the application has been finally determined." Specifically, you request timely renewal protection under 10 CFR 2.109(b) if you submit a new license renewal application for DCPP, Units 1 and 2 by December 31, 2023. The current operating licenses for DCPP, Units 1 and 2 expire on November 2, 2024, and August 26, 2025, respectively.

The purpose of this letter is to respond to your request that the NRC resume the review of the withdrawn DCPP license renewal application. After review of your request that the NRC resume the review of the withdrawn application, the NRC staff has determined that resuming this review would not be consistent with our regulations or the Principles of Good Regulation and that there is no compelling precedent to support your request to resume the review of your withdrawn application. The NRC staff is evaluating your alternative request for an exemption from 10 CFR 2.109(b) and will respond to that request in a separate letter.

NRC regulations require an applicant or licensee to provide sufficient information in its application to support the requested action. As you acknowledge in your October 31, 2022, letter requesting that the NRC staff "resume its review of the application as it existed" in 2016, "including all associated correspondence and commitments," additional information is needed to bring the withdrawn application up to date. That information includes new information that would have been required in annual updates in accordance with 10 CFR 54.21(b) if the application had not been withdrawn and remained under NRC staff review. The last such update was submitted in December 2015 (ML16004A149). The additional information that is needed also includes addressing material new information and guidance updates since the cessation of the staff's review for both the safety and environmental reviews. In parallel, you request that the "NRC staff would determine what information it needs to continue its review and, eventually, submit an RAI" to you. But, as the applicant, it is necessary for you to identify the specific correspondence and commitments you intend to include in your application and conform with the requirement for the submission of a sufficient license renewal application under oath or affirmation for the staff to conduct its review.

Resuming the review of the withdrawn application also would be inconsistent with the Efficiency Principle of Good Regulation. The staff's substantive review cannot be conducted efficiently until you submit the additional information you identify in your October 31, 2022, letter, which you state you will provide no later than the end of the calendar year 2023. Based on your letter, this additional information is expected to include an amendment to the withdrawn application that identifies material changes to the current licensing basis and "supplemental information relevant to both the safety and environmental reviews to account for any material new information and guidance updates." It would not be effective or efficient for the NRC staff to start the review without this new information. Any requests for information that the staff might develop based on the re-docketed withdrawn application between now and the submission of this additional information that is provided. Additionally, the staff notes that it does not have to resume the review of the withdrawn application in order to leverage previous review work.

Further, you suggest in your October 31, 2022, letter that the NRC resume the review of the withdrawn application without providing a new opportunity for a hearing. Consistent with current

practice, the NRC publishes a notice of opportunity for hearing for license renewal applications. The NRC values public participation and strives to make the process for public participation transparent and reliable. See the Principles of Good Regulation (Openness) and NUREG-1614, Volume 8, Strategic Plan, Goal 3 (ML22067A170). The NRC staff does not believe relying on the original notice for hearing (75 FR 3493; January 21, 2010) is consistent with these values.

Last, the NRC staff did not find any compelling precedent that supports your request for the staff to resume the review of your withdrawn application. In your October 31, 2022, letter, you state that there is abundant precedent supporting your request, citing the reactor license renewal review for the Aerotest Radiography and Research Reactor (Aerotest), which does not support your request. Aerotest involved an applicant's demand for hearing on the NRC's denial of a license renewal application and license transfer application with complex and important procedural history (ML13226A407, ML13226A412, ML15357A201). Unlike here, at no time did the Aerotest applicant withdraw its license renewal application; instead, the applicant resolved the deficiencies on which the denial of the applications for license renewal and license transfer were based. Once the applicant resolved the deficiencies in its application and eliminated the basis for the staff's denial of the license renewal application, the staff withdrew its denial and resumed its review of the Aerotest license renewal application (ML17138A309, ML17138A306, ML17303B111).

Although not cited in your letter, the staff also considered whether the principles supporting reinstatement of the Bellefonte construction permits (ML090490838) or the reactivation of the Watts Bar Unit 2 construction (ML072060688) might support your request to resume the review of the withdrawn DCPP license renewal application. The Commission considered those situations on a case-by-case basis and relied on the Policy Statement on Deferred Plants (52 FR 38077; October 14, 1987) to make its determinations regarding the reinstatement of the Bellefonte construction permits (ML090500374) and reactivation of the Watts Barr Unit 2 construction (ML072080173). The Commission's Policy Statement on Deferred Plants does not address PG&E's voluntary withdrawal and termination of its license renewal application and the staff identified no other support for your request.

Therefore, as described above, based on NRC regulations, NRC's Principles of Good Regulation, the lack of sufficient information to support your request that the staff resume its review of the withdrawn application, and the lack of relevant precedent to support that request, the NRC staff will not initiate or resume the review of the withdrawn DCPP application. This decision does not prohibit you from resubmitting your license renewal application under oath and affirmation, referencing information previously submitted, and providing any updated or new information to support the staff's review. The NRC staff has not made a determination on your request for an exemption from 10 CFR 2.109(b), which is included in your October 31, 2022, letter. The NRC staff is evaluating that exemption request and expects to provide a response in March 2023.

If you have any questions, please contact Brian Harris at 301-415-2277 or via e-mail at Brian.Harris2@nrc.gov.

Sincerely, Lamen Kete Billion

Lauren K. Gibson, Chief License Renewal Projects Branch Division of New and Renewed Licenses Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

cc: Listserv

#### P. Gerfen

SUBJECT: DIABLO CANYON POWER PLANT, UNITS 1 AND 2 – STAFF DECISION TO NOT RESUME REVIEW OF WITHDRAWN LICENSE RENEWAL APPLICATION DATED: JANUARY 24, 2023

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NRR-106

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Training Urgades Support and Tofkeral Review Support       403       10/12/02/1       10/12/02/0         Tofker Formiting Tarian       440       10/12/02/0       10/12/02/0       10/12/02/0         Consultants       440       10/12/02/0       10/12/02/0       10/12/02/0       10/12/02/0         Consultants       440       10/12/02/0       10/12/02/0       10/12/02/0       10/12/02/0       10/12/02/0         Consultants       444       10/12/02/0       10/12/0       10/12/0       10/12/0       10/12/0       10/12/02/0       10/12/02/0       10/12/02/0       10/12/0	License Renewal Permitting																			
Field Permitting Toim         440         101/15/2022         11/29/1023           Goodbands         440         101/15/2022         11/29/1023           Conservation         444         101/10/202         11/29/1023           Pick in signers         444         101/2021         11/29/1023           Adv indementation         444         101/2021         11/29/1024           Adv indementation Rescored         100         101/2025           Users         Finang, Development, and ingementation Rescored         100           Toring, Development, and ingementation Rescored         100         101/2021           Parsing, Development, and ingementation Rescored         100         101/2021           Parsing, Development, and ingementation Rescored         100         101/2021           Parsing, Development, and ingementation Rescored         100         101/2021           Toring, Development, and ingelementation Rescored         100         101/		1053	11/14/2022	10/2/2025																
Consultant         440         507,5702         17/29/2033           Usage Reveal Inglementation Fridatting ISC storest Process         444         9/1/2002         17/29/2033           Trick Engenering Team         454         19/1/2002         11/2/2002           AMD Inglementation Costs and Activities         77.93         11/1/2002         11/2/2002           Reveal Inglementation Costs and Activities         77.93         11/1/2002         11/2/2002           Vision Encounding Development, and Inglementation Forsonel         109         109/1/2002         11/1/2002           Starting Development, and Inglementation Forsonel         109         10/1/2002         11/1/2002           Frid Ugrades         7         11/1/2002         11/1/2002         11/1/2002           Find Ugrades         7         11/1/2002         11/1/2002         11/1/2002           Find Ugrades         7         11/1/2002         11/1/2002         11/1/2002           Use Cycle Managereri Studies         200         10/1/2002         11/1/2002         11/1/2002           Use Cycle Managereri Studies         200         10/1/2002         11/1/2002         11/1/2002           Use Cycle Managereri Studies         200         10/1/2002         11/1/2002         11/1/2002           Obiococon																				
Initiality II Contract Process       444       9/1/002       11/29/2023         AMP Implementation Resonnel       595       11/1/2022       11/29/2024         AMP Implementation Resonnel       109       10/1/2022       11/29/2024         Multi Resonance       755       11/1/2022       11/29/2024         Multi Resonance       755       11/1/2022       11/29/2024         Multi Resonance       755       11/1/2022       11/29/2024         Statistic       755       11/1/2022       11/29/2024         Resonance       755       11/1/2022       11/29/2024         Resonance       755       11/1/2022       11/29/2024         Resonance       755       11/1/2022       11/2/2023         Statistic       755       11/1/2023       11/2/2023         Resonance Resonance       124       11/1/2023       11/2/2023         Resonance Resonance       129       10/1/2023       11/2/2023         Resonance Resonance       120       10/1/2023       11/2/2023         Resonance Resonance       129       10/1/2023       11/2/2023         Resonance Resonance       129       10/1/2023       11/2/2023         Resonance Resonance       129       10/1/2023	-																			
Initiality II Contract Process       444       9/1/002       11/29/2023         AMP Implementation Resonnel       595       11/1/2022       11/29/2024         AMP Implementation Resonnel       109       10/1/2022       11/29/2024         Multi Resonance       755       11/1/2022       11/29/2024         Multi Resonance       755       11/1/2022       11/29/2024         Multi Resonance       755       11/1/2022       11/29/2024         Statistic       755       11/1/2022       11/29/2024         Resonance       755       11/1/2022       11/29/2024         Resonance       755       11/1/2022       11/29/2024         Resonance       755       11/1/2022       11/2/2023         Statistic       755       11/1/2023       11/2/2023         Resonance Resonance       124       11/1/2023       11/2/2023         Resonance Resonance       129       10/1/2023       11/2/2023         Resonance Resonance       120       10/1/2023       11/2/2023         Resonance Resonance       129       10/1/2023       11/2/2023         Resonance Resonance       129       10/1/2023       11/2/2023         Resonance Resonance       129       10/1/2023	License Renewal Engineering																			
P68E Engineering Team         44         10//P022         12/297/2023           PMP Indementation Octs and Activities         759         11//P022         12/297/2024           Planning Development, and Implementation Personnel         1095         10/3/2022         11/297/2024           Planning Development, and Implementation Personnel         1095         10/3/2022         11/297/2024           Planning Development, and Implementation Personnel         1095         10/3/2022         10/3/2022           Site Staffing         1124         10/3/2022         10/3/2022         10/3/2022           Incremental Staffing         1124         10/3/2022         10/3/2022         10/3/2022           Planning Development, and Implementation Personnel         109         10/3/2022         1/3/2025           Planning Development, and Implementation Personnel         109         10/3/2022         1/3/2022           Planning Development, and Implementation Personnel         109         10/3/2022         1/3/2022           Voctor Staffing         1124         10/3/2022         1/3/2022           Iufor Cycle Management Studies         270         10/3/2022         1/3/2023           Cincing Staffing         110/3/2022         1/3/2023         1/3/3/2023           Cincing Staffing         10/3/2022		484	9/1/2022	12/29/2023																
AMP implementation Costs and Activities       79       11/12/022       11/12/022       11/12/022       11/12/02	-																			
Planning. Development, and Implementation Personnel       1093       10/3/2022       10/2/2023         MAP Indementation Cds and Activities       759       11/1/2022       11/2/2024         Planning. Development, and Implementation Personnel       1095       10/3/2022       10/2/2025         Site Staffing       1124       10/3/2022       10/3/2022       10/3/2025         Incremental Staffing       1124       10/3/2022       10/3/2025       11/20/2026         Version Peatcor Operator Classes       1419       11/3/2022       11/20/2026         Planning. Development, and Implementation Personnel       1509       10/3/2022       11/20/2026         Plant Upgrades       700       10/3/2022       11/20/2026       11/20/2026         Using Tem Planning, Development, and Implementation Personnel       1509       10/3/2022       1/3/2028         Using Tem Planning Development, and Implementation Personnel       1509       10/3/2022       1/3/2028         CirkLia Spare Piscurements and/or Repairs       454       10/3/2022       1/3/1/2028         CirkLia Spare Piscurements and/or Repairs       454       10/3/2022       1/3/1/2028         Secondary Staren Sde Relability       406       11/20/2028       1/3/1/2028         Secondary Staren Sde Relabibility       406       11/																				
AMP implementation Costs and Activities       799       11/1/2022       11/2/2024         Planning, Development, and Implementation Personnel       1091       10/3/2022       10/3/2024         Incremental Staffing       1124       10/1/2025       10/3/2024         New Senior Reactor Operator Classes       1419       11/1/2023       11/2/2024         Planning, Development, and Implementation Personnel       1509       10/3/2022       11/2/2025         Planning, Development, and Implementation Personnel       1509       10/3/2022       11/2/2023         Und Cycle Management       300       11/1/2023       11/2/2023         Contral Spare Procurements and/or Realins       444       10/3/2022       11/3/1/2023         Obsolectioner Management       305       11/1/2023       11/3/1/2023         Obsolectioner Management       335       11/1/2023       11/3/1/2023         Secondary Steam Site Reliability       464       10/3/2022       11/3/1/2023         Secondary Steam Site Reliability       406       11/2/2022       11/3/1/2023         Secondary Steam Site Reliability       406       11/2/2022       11/3/1/2023         Secondary Steam Site Reliability       406       11/2/2022       11/3/1/2023         Per Megawatt Hour Fee       1089 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>																				
AMP implementation Costs and Activities       799       11/1/2022       11/2/2024         Planning, Development, and Implementation Personnel       1091       10/3/2022       10/3/2024         Incremental Staffing       1124       10/1/2025       10/3/2024         New Senior Reactor Operator Classes       1419       11/1/2023       11/2/2024         Planning, Development, and Implementation Personnel       1509       10/3/2022       11/2/2025         Planning, Development, and Implementation Personnel       1509       10/3/2022       11/2/2023         Und Cycle Management       300       11/1/2023       11/2/2023         Contral Spare Procurements and/or Realins       444       10/3/2022       11/3/1/2023         Obsolectioner Management       305       11/1/2023       11/3/1/2023         Obsolectioner Management       335       11/1/2023       11/3/1/2023         Secondary Steam Site Reliability       464       10/3/2022       11/3/1/2023         Secondary Steam Site Reliability       406       11/2/2022       11/3/1/2023         Secondary Steam Site Reliability       406       11/2/2022       11/3/1/2023         Secondary Steam Site Reliability       406       11/2/2022       11/3/1/2023         Per Megawatt Hour Fee       1089 <td< td=""><td>License Renewal Implementation</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	License Renewal Implementation																			
Planning. Development, and Implementation Personnel       1095       10/3/2022       10/2/2025         Site Staffing       1124       11/3/2022       10/3/2022       10/3/2025         Incremental Staffing       1124       11/2/2023       11/20/2026         Flanning. Development, and Implementation Personnel       1095       10/3/2022       11/20/2026         Planning. Development, and Implementation Personnel       1009       10/3/2022       6/30/2023         Life Cycle Management Studies       270       10/3/2022       6/30/2023         Life Cycle Management Studies       270       10/3/2022       6/30/2023         Obsolescence Management Studies       303       11/1/2023       11/3/2023         Obsolescence Management       395       12/1/2023       11/3/2023         Other Projects       333       2/1/2023       11/3/1/2023         Tanition Fee       Tenet       1089       9/1/2022       8/25/2025       162,750,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000       10,500,000	· · · · · · · · · · · · · · · · · · ·	759	11/1/2022	11/29/2024																
Incremental Staffing       1124       10/2/2022       10/3/2022         New Senior Reactor Operator Classes       1419       1/1/2002         Planning, Development, and Implementation Personnel       1509       10/3/2022       11/20/202         Uff Cycle Management Studies       270       10/3/2022       6/3/2023         Critical Spare Procurements and/or Repairs       454       10/3/2022       18/31/2023         Obsolescence Management       395       12/1/2022       12/31/2023         Other Projects       333       2/1/2023       12/31/2023         Tansition Fee       -       -         Per Megawatt Hour Fee       1089       9/1/2022       8/25/2025       162,750,000       10,500,000       <																				
Incremental Staffing       1124       10/2/2022       10/3/2022         New Senior Reactor Operator Classes       1419       1/1/2002         Planning, Development, and Implementation Personnel       1509       10/3/2022       11/20/202         Uff Cycle Management Studies       270       10/3/2022       6/3/2023         Critical Spare Procurements and/or Repairs       454       10/3/2022       18/31/2023         Obsolescence Management       395       12/1/2022       12/31/2023         Other Projects       333       2/1/2023       12/31/2023         Tansition Fee       -       -         Per Megawatt Hour Fee       1089       9/1/2022       8/25/2025       162,750,000       10,500,000       <	Site Staffing																			
New Senior Reactor Operator Classes         1419         1/1/2023         1/1/2023           Planting, Development, and Implementation Personnel         1509         10/3/2022         11/2/0/202           Planning, Development, and Implementation Personnel         1509         10/3/2022         11/2/0/202           Ling Cycle Management Studies         2700         10/3/2022         8/31/2023           Critical Spare Procurements and/or Repairs         454         10/3/2022         1/2/31/2023           Obsolscence Management Studies         395         11/2/2022         1/2/31/2023           Secondary Steam Side Reliability         406         11/2/2022         1/2/31/2023           Other Projects         333         2/1/2023         1/2/31/2023           Per Megawatt Hour Fee         1089         9/1/2022         8/25/2025         162,750,000         10,500,000		1124	10/3/2022	10/31/2025																
Planning, Development, and Implementation Personnel       1509       10/3/2022       11/2/2026         Life Cycle Management Studies       270       10/3/2022       6/3/2023         Long Term Plan Strategies       303       11/1/2022       8/31/2023         Critical Spare Procurements and/or Repairs       454       10/3/2022       12/31/2023         Obsolescence Management       395       11/2/2022       12/31/2023         Secondary Steam Side Reliability       406       11/2/2/2023       12/31/2023         Other Projects       333       2/1/2023       12/31/2023         Fransition Fee       Transition Fee       Total       31,000,000       10,500,000       <																				
Planning, Development, and Implementation Personnel       1509       10/3/2022       11/20/2026         Life Cycle Management Studies       270       10/3/2022       6/3/2023         Long Term Plan Strategies       303       11/1/2022       8/31/2023         Critical Spare Procurements and/or Repairs       454       10/3/2022       12/31/2023         Obsolescence Management       395       11/2/2022       12/31/2023         Secondary Steam Side Reliability       406       11/2/2022       12/31/2023         Other Projects       333       2/1/2023       12/31/2023         Transition Fee         Per Megawatt Hour Fee       1089       9/1/2022       8/25/2025       162,750,000       10,500,000	Plant I Ingrades																			
Life Cycle Management Studies       270       10/3/2022       6/30/2023         Long Term Plan Strategies       303       11/1/2022       8/31/2023         Critical Spare Procurements and/or Repairs       454       10/3/2022       12/31/2023         Obsolescence Management       395       12/1/2022       12/31/2023         Secondary Steam Side Reliability       406       11/20/2022       12/31/2023         Other Projects       333       2/1/2023       12/31/2023         Transition Fee       -       -       -         Per Megawatt Hour Fee       10/89       9/1/2022       8/25/2025       162,750,000       10,500,000		1509	10/3/2022	11/20/2026																
Long Term Plan Strategies       303       11/1/2022       8/31/2023         Oftical Spare Procurements and/or Repairs       454       10/3/2022       12/31/2023         Obsolescence Management       395       12/1/2022       12/31/2023         Secondary Steam Side Reliability       406       11/20/2022       12/31/2023         Other Projects       333       2/1/2023       12/31/2023         Transition Fee       -       -       -         Per Megawatt Hour Fee       10.89       9/1/2022       162,750,000       10,500,000       10,																				
Critical Spare Procurements and/or Repairs       454       10/3/2022       12/31/2023         Obsolescence Management       395       12/1/2022       12/31/2023         Secondary Steam Side Reliability       406       11/20/2022       12/31/2023         Other Projects       333       2/1/2023       12/31/2023 <b>Transition Fee</b> Per Megawatt Hour Fee       9/1/2022       8/25/2025       162,750,000       10,500,000																				
Obsolescence Management       395       12/1/2022       12/31/2023         Secondary Steam Side Reliability       406       11/20/2022       12/31/2023         Other Projects       333       2/1/2023       12/31/2023         Transition Fee       -       -       -         Per Megawatt Hour Fee       1089       9/1/2022       8/25/2025       162,750,000       10,500,000																				
Secondary Steam Side Reliability       406       11/20/2022       12/31/2023         Other Projects       333       2/1/2023       12/31/2023         Transition Fee       9       9/1/2022       8/25/2025       162,750,000       10,500,000 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																				
Other Projects       333       2/1/2023       12/31/2023         Transition Fee       9/1/2023       8/25/2025       162,750,000       10,500,000       <																				
Per Megawatt Hour Fee       1089       9/1/2022       8/25/2025       162,750,000       31,000,000       10,500,000																				
Per Megawatt Hour Fee       1089       9/1/2022       8/25/2025       162,750,000       31,000,000       10,500,000	Transition Fee																			
Total		1089	9/1/2022	8/25/2025	162.750.00	0	31.000.000	10.500.000	10.500.000	10.500.000	10.500.000	10.500.000	10.500.000	10.500.000	10.500.000	10.500.000	10.500.000	10.500.000	5.750.000	10.500.000
		1005	51 1/2022	5, 25, 2025	, 50,00		51,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	5,, 50,000	10,000,000
Running Total -					Tot	al -														
					Running Tot	al -														

Task Name	Duration	Start	Finish	Cost	Sep/2022	Oct/2022	Nov/2022	Dec/2022	Jan/2023	Feb/2023	Mar/2023	Apr/2023	May/2023	Jun/2023	Jul/2023	Aug/2023	Sep/2023	Oct/2023	Nov/2023	Dec/2023
Fuel Procurement Cycle 25 Extension	715 days	9/2/2022	5/30/2025																	· · · · · ·
New Nuclear Fuel Contract Process	86 days	9/2/2022	12/30/2022	\$0																, ,
Nuclear Fuel Procurement Commitment: Unit 1 Extended Cycle 25 Ops	0 days	12/15/2022	12/15/2022																	
Nuclear Fuel Procurement: Cycle 25 (Payment)	0 days	6/21/2023	6/21/2023	\$0																1
Nuclear Fuel Procurement: Cycle 25 (Payment)	0 days	7/27/2023	7/27/2023	\$0																
Unit 1 Fuel Fabrication Complete: Cycle 25	0 days	8/25/2023	8/25/2023																	
Dry Cask Storage Process	759 days	9/1/2022	7/30/2025																	1
New Dry Cask Storage Contract Process	22 days	9/1/2022	9/30/2022	\$0																1
Dry Cask Storage Material Procurement Begins (payment)	0 days	11/15/2022	11/15/2022																	
Dry Cask System Cask Commitment	0 days	12/7/2022	12/7/2022																	
Dry Cask System Fabrication Begins	0 days	12/7/2023	12/7/2023	\$0																1
Dry Cask Storage System On-Site Receipt Complete	0 days	11/29/2024	11/29/2024	\$0																1
Dry Cask Storage System Loading Campaign Complete	0 days	7/30/2025	7/30/2025	\$0																1