

DOCKETED

Docket Number:	23-AFC-01
Project Title:	Morton Bay Geothermal Project (MBGP)
TN #:	256708
Document Title:	ROC - CEC Staff Email Conversation with IID Regarding Water Supply Concerns for Three Proposed Geothermal Projects
Description:	N/A
Filer:	Marichka Haws
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	6/5/2024 4:36:35 PM
Docketed Date:	6/5/2024



*Siting, Transmission
 and Environmental
 Protection Division*

FILE:

PROJECT TITLE: Elmore North GP

Docket: 23-AFC-02

TECHNICAL AREA(S): Water Resources

Telephone

Meeting Location: Email

NAME: Eric Veerkamp, James Ackerman

DATE: February 27, 2024

TIME: 16:47

WITH: Justina Gamboa-Acre

SUBJECT: CEC staff email conversation with IID regarding water supply concerns for three proposed geothermal projects

COMMENTS:

CEC staff requested a (virtual) meeting with Imperial Irrigation District (IID) to discuss water supply concerns for the three proposed geothermal projects: Morton Bay, Elmore North, and Black Rock geothermal projects. CEC and IID staff exchanged some questions and answers through a series of emails in preparation for the meeting. The purpose of this ROC is to document the email exchange (attached) between the CEC and IID to discuss concerns regarding IID's ability to provide non-agricultural water supply to the Morton Bay, Elmore North and Black Rock geothermal projects.

Ackerman, James@Energy

From: Veerkamp, Eric@Energy
Sent: Tuesday, February 27, 2024 4:51 PM
To: Abulaban, Abdel-Karim@Energy; Ackerman, James@Energy; White, Adam@Energy; Hughes, Joseph@Energy; Knight, Eric@Energy; Anderson, Kari@Energy; Babula, Jared@Energy; Kelsey, Tanner@Energy; Mayer, Alex@Energy; Pinkerton, Matthew@Energy; Ponce, Mariah@Energy; Ziff, Briana@Energy
Subject: FW: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

Follow Up Flag: Follow up
Flag Status: Completed

Good afternoon,
Please see a reply and responses to our questions from IID.

Eric W. Veerkamp
Project Manager
STEP Division
California Energy Commission
916-661-8458
Eric.Veerkamp@energy.ca.gov
www.energy.ca.gov



From: Gamboa-Arce, Justina <jgamboarce@IID.com>
Sent: Tuesday, February 27, 2024 4:47 PM
To: Veerkamp, Eric@Energy <Eric.Veerkamp@energy.ca.gov>
Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

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Hello Eric,

Thanks for being so patient. It looks like next Thursday works. Here are some of our answers in advance. We can absolutely discuss them further at the meeting:

1. As of May 2023, IID had issued two water supply agreements under the Interim Water Supply Policy (IWSP) that total 5,380 AFY, leaving a balance of 19,620 AFY for additional non-agricultural water supply agreements under the IWSP. The estimated operational water demand for all three proposed BHER geothermal projects of 13,165 AFY constitutes about 67 percent, or two-thirds, of the non-

agricultural project water supply allocation. The applicant stated in the response to Data Request 32 of the Data Request Set 4 for Morton Bay (DR-Set-4), that if the non-agricultural set-aside was depleted prior to project certification, IID would need to complete an additional environmental document to create a new set-aside. How long could this further delay the project?

As of January 2024, IID has issued two water supply agreement and one “Will-Serve Letter” under the IWSP for 6,380 AFY, leaving a balance of 18,620 AFY of potential water supply available for additional conservation and contracting under the IWSP.

In 2009 IID performed a CEQA analysis for the Interim Water Supply Policy strictly on the adoption and implementation of the proposed policy that sets aside up to 25,000 AFY for conservation of water supply for non-agricultural projects. The environmental impacts of the 25,000 AFY would have on IID’s water supply was what was considered by the Board. If those 25,000 AFY are fully committed to permitted projects, the IID Board may need to assess and consider any amount beyond the 25,000 AFY, under updated hydrological conditions and obligations.

The Water Supply Assessment template provided to BHE identifies options should the 25,000 AFY targeted for conservation be exceeded. “These options include (1) tracking water yield from temporary land conversion from agricultural to non-agricultural land uses (renewable solar energy); and (2) only if necessary, developing conservation projects to expand the size of the district’s water supply portfolio.” Please note that developing a new conservation project would have its own CEQA compliance requirements. Please see Question No. 5 regarding Option (1) and be advised the TLCF conserved water is only satisfactorily mitigated when it is used for transfer obligations and covered by the QSA EIR/EIS and related environmental permits.

2. There are indications that delivery reductions that could result from revisions to the *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* (2007 Interim Guidelines). Please explain how these reductions would be addressed with respect to the BHER geothermal project water supply and whether there are contingencies to avoid plant shutdown in the case of drastic reductions.

As stated in the Water Supply Assessment template, should reductions to IID’s water supply be ordered or directed from a governmental authority having appropriate jurisdiction, the project may be required to reduce its water supply demand by a proportionate reduction of the total volume of water available to IID (apportionment reduction). The draft template calls for BHE’s identification of additional BMP’s the project would incorporate under potential curtailment. These have yet to be satisfactorily addressed by BHE, but are in progress. Nonetheless, IID operates a Clearinghouse that is available to all water user’s when additional water supplies (beyond those apportioned to the water user for the year) are needed. The water user may access the Clearinghouse to purchase water for the project. This information is available under IID’s Equitable Distribution Plan which may be found at [Equitable Distribution | Imperial Irrigation District \(iid.com\)](https://www.iid.com/equitable-distribution) and is also an attachment (Attachment B) to the Water Supply Assessment.

3. The Executive Summary of the Water Supply Assessment (WSA) stated “*Thus, the proposed Project’s estimated water demand, combined with other development anticipated in the area is likely to adversely affect IID’s ability to provide water to other users in IID’s water service area.*” Please elaborate how this observation could be mitigated by IID to ensure water supply to the proposed geothermal projects and existing agricultural users.

Please see response from 2 above and see further detail in the EDP.

4. The WSA Project Description describes proposed Best Management Practices (BMPs) for water use efficiency such as: use of fresh water supplied by IID shall not exceed the agreed-upon amount. In

addition, it states that the project will comply with California Water Code (CWC) Section 461. Please explain how not exceeding the agreed-upon amount of fresh water will result in water use efficiency and discuss alternate BMPs that would result in verifiable water use efficiency.

The information referenced was incorporated and provided by BHE for each of the subject projects and has not been found acceptable by IID or Imperial County. IID is awaiting an updated draft.

5. Does the conservation yield calculated for the Temporary Land Conversion Following Policy (TLCFP) assume 100% consumption by crops, or are losses due to evapotranspiration or groundwater infiltration considered?

The conservation yield calculated for the TLCFP acreage is based on a historical, district wide average of total water delivery for agricultural production per irrigated acre. Losses due to evapotranspiration or groundwater infiltration are not a factor. Please note that the conserved water generated from the TLCFP is limited by law for use towards transfer or environmental purposes. By satisfying multiple district objectives the TLCFP also serves to reduce the conservation and water use demands on other IID water users. A copy of the full policy may be found here: [TLCFP \(iid.com\)](http://iid.com). Use of this conserved water by industrial projects would require policy changes and a robust acreage participation under the TLCFP.

6. Appendix J of the Imperial Integrated Regional Water Management Plan (IRWMP) states that IID will provide the Lead Agency with a written statement regarding WSA for incorporation into the Draft EIR for its initial review as part of the CEQA process. When would CEC receive the written statement from IID?

At the time that IID finds the Water Supply Assessment technically acceptable, a statement to that effect is provided via email to the Lead Agency so that the lead agency's governing body can consider findings of water supply adequacy over the 20-year planning period. Generally speaking the draft Water Supply Assessment is circulated with the CEQA document.

7. In response to Data Request 40, DR-Set-4, the applicant stated that a water supply agreement will be executed between IID and the applicant which will be tied to Imperial County's issuance of a Conditional Use Permit (CUP). Will the County issue a Conditional Use Permit?

It is IID's understanding that the project will necessitate a Conditional Use Permit through the County. Imperial County is best suited to answer the question on whether a CUP will be issued or not. However, it is an accurate statement to say that the CUP would need to be referenced in any approved Water Supply Agreement if a CUP is required by Imperial County. A Water Supply Agreement would not be entered into until the following approvals have been obtained by an applicant (as applicable): CEQA Certification, Conditional Use Permit, Purchase Power Agreement, IID Encroachment Permit(s).

8. Typically, a WSA would be prepared by the water supplier per SB 610. However, in this instance there is no water supplier other than IID and the lead agency that could step into the role is the CEC, which would not be appropriate as the WSA preparer. While SB 610 requires a public water system to prepare the WSA, it does provide for the Lead Agency to step into this role when there is no public water system. As stated in Appendix J of the IRWMP, IID should be consulted during WSA preparation as the regional wholesale water supplier. In what capacity has IID supported the preparation of the WSAs for the BHER geothermal projects?

IID provides technical review of the water supply assessment. As the CEC may be aware, SB 610 requires that all cumulative projects anticipated by the Lead Agency be considered when determining water supply "adequacy" over a 20-year planning period. IID has no land use authority

and no control over what projects will, or will not, be permitted by Imperial County or any other agency with land use authority within IID's water service area. For these reasons, IID only provides technical review over the water supply assessments. The water supply assessment template was developed in coordination with Imperial County and designed so that the Lead Agency makes the water supply findings.

9. Section 5.1 of the WSA states "The Revised 2022 EDP also establishes a water exchange clearinghouse to facilitate the movement of water supply between all water users and water user categories". Please clarify how the movement of water supply will be conducted through the clearinghouse, and how these measures will address potential delivery shortages over the life of the BHER geothermal projects.

This is another area that is pending update by BHE as the most current EDP is dated May 2023.

IID's Clearinghouse is available to all water user's to either offer or request water. If additional water supplies are needed by a water user (beyond those apportioned for the year) the water user may purchase the additional water, up to the contracted amount, through the Clearinghouse. Industrial Water Users, such as BHE, would be able to request additional water up to the contracted water supply amount. The IID Clearinghouse is two-tiered: each Water User category has a reserve account available through the third quarter of each calendar year for its respective class on a first-come first-serve basis; in the final quarter, any remaining reserve is transferred to the General Clearinghouse where the water then becomes available to all categories of users on a first-come, first-serve basis. Additional information may be found under IID's 2023 EDP.

Best Regards,



Justina Gamboa-Arce
Senior Water Resources Planner
IMPERIAL IRRIGATION DISTRICT
333 E. Barioni Boulevard, Imperial CA 92251
(760) 339-9085 | email: jgamboaarce@iid.com
Mobile (760) 791-1888

From: Veerkamp, Eric@Energy <Eric.Veerkamp@energy.ca.gov>
Sent: Tuesday, 27 February, 2024 2:53 PM
To: Gamboa-Arce, Justina <jgamboaarce@IID.com>
Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

Hi Justina,
Are there any concerns about the responses to our questions that we should be aware of?

Also, I hope the meeting works for all on your end, March 7 at 9:30.

TY.

Eric W. Veerkamp
Project Manager

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California Energy Commission
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Eric.Veerkamp@energy.ca.gov
www.energy.ca.gov



From: Gamboa-Arce, Justina <jgamboaarce@IID.com>
Sent: Thursday, February 22, 2024 2:16 PM
To: Veerkamp, Eric@Energy <Eric.Veerkamp@energy.ca.gov>
Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

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Hi Eric,

Our offices are closed this Friday. However, it looks like Thursday March 7 would work in the morning for our team (except that our Deputy Counsel is not available, should we need to add legal staff). Next Friday (March 8) in the afternoon is open for the full team as of right now . . .

Best Regards,

Justina

From: Veerkamp, Eric@Energy <Eric.Veerkamp@energy.ca.gov>
Sent: Thursday, 22 February, 2024 2:10 PM
To: Gamboa-Arce, Justina <jgamboaarce@IID.com>
Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

Hi Justina,

I have been trying to figure out how to shoehorn in a meeting before Thursday to meet everyone's schedules. As a fall back, there is an outside chance we could try for Friday, but I am going to make an executive decision to try for a date the first week of March. Would that work for you just as well?

Thanks so much.

Eric W. Veerkamp
Project Manager
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916-661-8458
Eric.Veerkamp@energy.ca.gov



From: Gamboa-Arce, Justina <jgamboarce@IID.com>

Sent: Thursday, February 22, 2024 12:23 PM

To: Veerkamp, Eric@Energy <Eric.Veerkamp@energy.ca.gov>

Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

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It is likely that Joanna Hoff Smith (Deputy Counsel) might just attend on our end she is generally the lead on the final water supply agreements.

Tina is booked all day Wednesday and traveling on Thursday (bad timing with Colorado River meetings going on practically every day), however, she has more flexibility on Tuesday if you can provide some timeframes.

Best Regards,

Justina

From: Veerkamp, Eric@Energy <Eric.Veerkamp@energy.ca.gov>

Sent: Thursday, 22 February, 2024 12:07 PM

To: Gamboa-Arce, Justina <jgamboarce@IID.com>

Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

Ok, thank you for the information, I will look for the response in a couple days.

We are planning an internal discussion next week on Thursday Feb. 29 to continue to discuss for resolution our issue areas; a meeting with you and our water folks prior to the 29th could be extremely helpful.

I could send a meeting request with a couple dates, Wednesday looks good for us possibly, or Thursday morning.

What do you think of the idea of counsel attending? Just asking the question.

Eric W. Veerkamp

Project Manager

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From: Gamboa-Arce, Justina <jgamboaarce@IID.com>

Sent: Thursday, February 22, 2024 11:10 AM

To: Veerkamp, Eric@Energy <Eric.Veerkamp@energy.ca.gov>

Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

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Good morning Eric,

Everything's been responded to. Tina wanted to mull over the environmental requirement question a bit, so it may be next week before you get a written response. We can however schedule the requested meeting in the interim. Do you have any limitations for next week?

Best Regards,

Justina

From: Veerkamp, Eric@Energy <Eric.Veerkamp@energy.ca.gov>

Sent: Thursday, 22 February, 2024 10:58 AM

To: Gamboa-Arce, Justina <jgamboaarce@IID.com>

Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

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Hi Justina,

Now it's my turn to send a quick note 😊

Are you running into something unanticipated responding to the new question 5?

Eric W. Veerkamp

Project Manager

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From: Veerkamp, Eric@Energy
Sent: Wednesday, February 21, 2024 1:36 PM
To: Gamboa-Arce, Justina <jgamboaarce@IID.com>
Subject: RE: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

Hi Justina,
Please see the revised, reconstituted question 5.

TY.

Eric W. Veerkamp
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Eric.Veerkamp@energy.ca.gov
www.energy.ca.gov



From: Veerkamp, Eric@Energy
Sent: Tuesday, February 20, 2024 3:11 PM
To: Gamboa-Arce, Justina <jgamboaarce@IID.com>; tshields@IID.com
Cc: Abulaban, Abdel-Karim@Energy <Abdel-Karim.Abulaban@energy.ca.gov>; Ackerman, James@Energy <james.ackerman@energy.ca.gov>; White, Adam@Energy <Adam.White@energy.ca.gov>; Knight, Eric@Energy <Eric.Knight@energy.ca.gov>
Subject: CEC staff requesting a meeting to discuss water supply concerns for proposed Morton Bay, Elmore North and Black geothermal projects

Hello,
CEC project staff met internally last week to discuss issues surrounding water supply and reliability for the geothermal projects proposed by subsidiaries of Berkshire Hathaway Energy. This after considering the information in the Water Supply Analysis and the project applicant's responses to our requests for information (Data Requests Set 4) released in January 2024.

We are requesting that you review the following questions/concerns for possible responses. We will plan for a possible follow up meeting in the next week to discuss in more detail.

Thank you for your help in this matter.

1. As of May 2023, IID had issued two water supply agreements under the Interim Water Supply Policy (IWSP) that total 5,380 AFY, leaving a balance of 19,620 AFY for additional non-agricultural water supply agreements under the IWSP. The estimated operational water demand for all three proposed BHER geothermal projects of 13,165 AFY constitutes about 67 percent, or two-thirds, of the non-agricultural project water supply allocation. The applicant stated in the response to Data Request 32 of the Data Request Set 4 for Morton Bay (DR-Set-4), that if the non-agricultural set-aside was depleted prior to project certification, IID would need to complete an additional environmental document to create a new set-aside. How long could this further delay the project?
2. There are indications that delivery reductions that could result from revisions to the *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* (2007 Interim Guidelines). Please explain how these reductions would be addressed with respect to the BHER geothermal project water supply and whether there are contingencies to avoid plant shutdown in the case of drastic reductions.
3. The Executive Summary of the Water Supply Assessment (WSA) stated “*Thus, the proposed Project’s estimated water demand, combined with other development anticipated in the area is likely to adversely affect IID’s ability to provide water to other users in IID’s water service area.*” Please elaborate how this observation could be mitigated by IID to ensure water supply to the proposed geothermal projects and existing agricultural users.
4. The WSA Project Description describes proposed Best Management Practices (BMPs) for water use efficiency such as: use of fresh water supplied by IID shall not exceed the agreed-upon amount. In addition, it states that the project will comply with California Water Code (CWC) Section 461. Please explain how not exceeding the agreed-upon amount of fresh water will result in water use efficiency and discuss alternate BMPs that would result in verifiable water use efficiency.
5. Does the conservation yield calculated for the Temporary Land Conversion Following Policy (TLCFP) assume 100% water consumption by crops, or are losses due to evapotranspiration or groundwater infiltration considered?
6. Appendix J of the Imperial Integrated Regional Water Management Plan (IRWMP) states that IID will provide the Lead Agency with a written statement regarding WSA for incorporation into the Draft EIR for its initial review as part of the CEQA process. When would CEC receive the written statement from IID?
7. In response to Data Request 40, DR-Set-4, the applicant stated that a water supply agreement will be executed between IID and the applicant which will be tied to Imperial County’s issuance of a Conditional Use Permit (CUP). Will the County issue a Conditional Use Permit?
8. Typically, a WSA would be prepared by the water supplier per SB 610. However, in this instance there is no water supplier other than IID and the lead agency that could step into the role is the CEC, which would not be appropriate as the WSA preparer. While SB 610 requires a public water system to prepare the WSA, it does provide for the Lead Agency to step into this role when there is no public water system. As stated in Appendix J of the IRWMP, IID should be consulted during WSA preparation as the regional wholesale water supplier. In what capacity has IID supported the preparation of the WSAs for the BHER geothermal projects?
9. Section 5.1 of the WSA states “*The Revised 2022 EDP also establishes a water exchange clearinghouse to facilitate the movement of water supply between all water users and water user categories*”. Please clarify how the movement of water supply will be conducted through the clearinghouse, and how these measures will address potential delivery shortages over the life of the BHER geothermal projects.

Thanks again, please feel free to contact me at any time.

Eric W. Veerkamp

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