

DOCKETED

Docket Number:	23-AFC-01
Project Title:	Morton Bay Geothermal Project (MBGP)
TN #:	259554
Document Title:	IID Responses to CEC Inquiry on Electrical Infrastructure Upgrades Associated with the MBGP, ENGP, and BRGP
Description:	N/A
Filer:	Marichka Haws
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	10/16/2024 11:47:53 AM
Docketed Date:	10/16/2024



CEC-BHE RFI # 01

Date: 09/24/2024

INFORMATION REQUEST:

Questions for IID Related to Electrical Infrastructure Upgrades Associated with the Morton Bay, Elmore North and Black Rock Geothermal Projects.

A) Category of Upgrade: The approximately 70-mile transmission line between the to-be constructed Sinclair switching station and the existing Coachella Valley substation. The upgrade of the lines connecting the southern Salton Sea area to Coachella Valley and the ISO has been identified in past interconnection studies and the IID 2014 Strategic Transmission Investment Plan. Please provide any environmental review that was completed when these upgrades were identified.

1) Please describe the general nature of the transmission line project including the estimated total number and distance of existing towers that will be used and the total number and distance of towers that will be installed. What is the approximate tower spacing?

A new transmission line has previously been identified as a need to increase transfer capability from the IV area to the CV area. Previous iterations of the system impact study show that existing transmission lines are being overloaded. Restudies are required that will confirm whether a new transmission line will still be necessary.

2) What types/style/size of towers will be used?

IID is anticipating the utilization of both steel monopoles and steel lattice structures.

3) What is the typical size of any vegetation removal around the towers?

There is no typical size of vegetation removal, it depends on the specific geographic location of the towers.

4) Will any access roads need to be constructed?

Yes, access roads will be needed to properly patrol and maintain the lines.

5) What is the typical method of construction for the towers? How deep will pylons or poles go into the ground? Is pile driving expected? How is the conductor strung?

Has not been defined at this point.

6) What is the estimated period to complete the project? What is the number of workers that will be deployed for the project? Daily average? Peak?

Has not been defined at this point.

7) Can any of the three geothermal projects operate before this transmission line is complete?

No, unless they operate at a reduced capacity and revise their Point of Interconnection. Will be subject to restudies to confirm.

8) Can you confirm this transmission line has the capacity to also serve other energy generating projects?

The transmission line will be designed to allow for more transfer capacity than just the projects in question. The new transmission towers will also be designed to allow for a 2nd circuit to be strung once triggered by additional interconnections.

9) Does IID own or have an easement/right-of-way for the entire length of the transmission line?

No, only approximately 8-9 miles of the new line will run on existing structures which IID has easements for. The rest of the line will require new easements/ROW.

10) What type of land/habitat will the towers be in, farmland? Graded road? Orchards? Wetlands?

A combination of farmland (25%) and barren desert (75%).

11) When designing the layout of the towers, is there some flexibility to shift towers to avoid sensitive areas?

Yes, transmission line route has not been finalized. Restudies are still being performed.

12) Does IID build transmission lines in-house or utilize a contractor?

A project of this magnitude will be performed utilizing a contractor.

13) In IID's experience in constructing and operating transmission lines, what are the most common types of environmental impacts that arise?

Biological and cultural resource impacts.

14) Does IID have a set of standard construction and operation mitigation measures such as best practices to reduce dust, noise, use of biological or tribal monitors where appropriate, and worker training? Can you provide an example of mitigation measures for your transmission line projects?

IID doesn't have standard mitigation measures; these are determined on the basis of the specific geographic location and characteristics of the project.

B) Category of Upgrade: The approximately 20-mile transmission line between the existing Coachella Valley substation and the existing Ramon substation.

1) Please describe the general nature of the transmission line project including the estimated total number and distance of any existing towers that will be used and the total number and distance of towers that will be installed. What is the approximate tower spacing?

A new transmission line has previously been identified as a need to increase transfer capability and increase reliability from the IID area to the SCE area. Previous iterations of the system impact study show that existing transmission lines are being overloaded. Restudies are required that will confirm whether a new transmission line will still be necessary.

2) What types/style/size of towers will be used?

IID is anticipating the utilization of both steel monopoles and steel lattice structures.

3) What is the typical size of any vegetation removal around the towers?

There is no typical size of vegetation removal, it depends on the specific geographic location of the towers.

4) Will any access roads need to be constructed?

Yes, access roads will be needed to properly patrol and maintain the lines.

5) What is the typical method of construction for the towers? How deep will pylons or poles go into the ground? Is pile driving expected? How is the conductor strung?

Has not been defined at this point.

6) What is the estimated period to complete the project? What is the number of workers that will be deployed for the project? Daily average? Peak?

Has not been defined at this point.

7) Can any of the three geothermal projects operate before this transmission line is complete?

No, unless they operate at a reduced capacity and revise their Point of Interconnection. Will be subject to restudies to confirm.

8) Can you confirm this transmission line has the capacity to also serve other energy generating projects?

The transmission line will be designed to allow for more transfer capacity than just the projects in question. The new transmission towers will also be designed to allow for a 2nd circuit to be strung once triggered by additional interconnections.

9) Does IID own or have an easement/right-of-way for the entire length of the transmission line? No, IID will require new easements/ROW.

10) What type of land/habitat will the towers be in, farmland? Graded road? Orchards? Wetlands? Barren Desert.

11) When designing the layout of the towers, is there some flexibility to shift towers to avoid sensitive areas?

Yes, transmission line route has not been finalized. Restudies are still being performed.

C) Category of Upgrade: The approximately 15-mile transmission line between the existing Coachella Valley Ramon substation and existing Devers substation.

1) Please describe the general nature of the transmission line project including the estimated total number and distance of existing towers that will be used and the total number and distance of towers that will be installed. What is the approximate tower spacing?

A new transmission line has previously been identified as a need to increase transfer capability and increase reliability from the IID area to the SCE area. Previous iterations of the system impact study show that existing transmission lines are being overloaded. Restudies are required that will confirm whether a new transmission line will still be necessary.

2) Because the Devers substation is owned by SCE will SCE be involved with the construction of this transmission line? If so, does the CPUC have a role in this project?

IID will be ultimately responsible for the transmission line to Devers. SCE will be responsible for all construction activities within its fence line.

3) What types/style/size of towers will be used?

IID is anticipating the utilization of both steel monopoles and steel lattice structures.

4) What is the typical size of any vegetation removal around the towers?

There is no typical size of vegetation removal, it depends on the specific geographic location of the towers.

5) Will any access roads need to be constructed?

Yes, access roads will be needed to properly patrol and maintain the lines.

6) What is the typical method of construction for the towers? How deep will pylons or poles go into the ground? Is pile driving expected? How is the conductor strung?

Has not been defined at this point.

7) What is the estimated period to complete the project? What is the number of workers that will be deployed for the project? Daily average? Peak?

Has not been defined at this point.

8) Can any of the three geothermal projects operate before this transmission line is complete?

No, unless they operate at a reduced capacity and revise their Point of Interconnection. Will be subject to restudies to confirm.

9) Can you confirm this transmission line has the capacity to also serve other energy generating projects?

The transmission line will be designed to allow for more transfer capacity than just the projects in question. The new transmission towers will also be designed to allow for a 2nd circuit to be strung once triggered by additional interconnections.

10) Does IID own or have an easement/right-of-way for the entire length of the transmission line?

No, IID will require new easements/ROW.

11) What type of land/habitat will the towers be in, farmland? Graded road? Orchards? Wetlands? Barren Desert.

12) When designing the layout of the towers, is there some flexibility to shift towers to avoid sensitive areas?

Yes, transmission line route has not been finalized. Restudies are still being performed.

D) Category of Upgrade: The distribution system supplying Morton Bay, Elmore North, and Black Rock with electricity.

1) Please describe the general nature of the distribution line project including the estimated total number and distance of existing poles that will be used and the total number and distance of towers that will be installed. What is the approximate tower spacing?

Several distribution lines would need to be built around the three proposed geothermal plants, totaling approximately 47,000 feet based on a high-level estimate. The size of the spans will vary, but an average would be 200 ft.

2) What types/style/size of any new poles that must be installed?

Single wood poles will be utilized, Douglas fir Class 2 and class 3 with sizes varying from 45 to 50 ft. tall.

3) What is the typical size of any vegetation removal around the poles?

For 12.5 kV distribution lines, vegetation is required to be approx. 10 ft. radius away from the ends of the crossarm.

4) Will any access roads need to be constructed?

Yes, roads are needed for transportation and construction purposes as well for future maintenance. Roads are to be built by the customer (BHE), not IID.

5) What is the typical method of construction for the poles? How deep will pylons or poles go into the ground? Is pile driving expected? How is the conductor strung?

Wood poles are direct embedded, 10 percent of the length plus two feet. Holes are drilled with an auger mounted on a digger truck. No pile driving will be used. Conductor is installed with bucket trucks, rollers on top of the poles and pulling cable from a conductor reel mounted on a special trailer connected to a utility truck.

6) What is the estimated period to complete the project? What is the number of workers that will be deployed for the project? Daily average? Peak?

Typically, IID will utilize two crews of five men each, with an average of eight hours working at the job site daily. A high-level estimate to complete the job would be 6 months.

7) Does IID own or have an easement/right-of-way for the entire length of the transmission line?

No, for the new distribution line extensions rights-of-ways and easements shall be in a form acceptable to and no cost to IID for installation, operation, and maintenance of all electrical facilities. Applicant shall provide a surveyed legal description and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID as necessary to accommodate the project electrical infrastructure. Please contact IID Real Estate department for all inquiries.

8) What type of land/habitat will any new poles be in, farmland? Graded road? Orchards? Wetlands?

Agricultural land.

9) When designing the layout of new poles, is there some flexibility to shift poles to avoid sensitive areas?

Yes, that can be done.

10) Does IID build transmission lines in house or utilize a contractor?

Typically, IID will utilize their own construction crews to build these **distribution lines**. In some cases, IID utilizes contractors depending on the work load and resource availability of IID construction staff.

11) For installation of new distribution poles does IID have a set of standard construction mitigation measures such as best practices to reduce dust, noise, use biological or tribal monitors where appropriate, worker training? Can you provide an example of mitigation measures for your distribution line projects?

IID crews utilize water trucks for dust control when needed, IID will also utilize environmental monitors if needed. IID has an internal Environmental Compliance section that provides the necessary training to IID Construction Crews if needed.