INSTRUCTIONS

a. Provide all information in your possession, custody, or control, or the possession, custody, and/or control of your affiliates or agents, that is responsive to these data requests by the due date identified above.

b. Responses and documents may be produced and served electronically, but they must be fully machine-readable and searchable.

c. If you have any questions about the meaning or scope of the data requests herein, direct such questions to the Energy Safety staff identified as the "Originator" of this request at your earliest opportunity.

    i. Lack of clarity on meaning or scope of requests without prior request for clarification from the "Originator" will not be a permissible reason for incomplete responses and will be regarded as non-compliance with the request.

d. Identify the personnel (e.g., employees, consultants, agents, etc.) who provided information responsive to each of the data requests below. As used in this context herein, "identify" means to provide the full name, business address, and title of each employee, consultant, or agent who provided such information.

e. If you do not know the exact answer to any of the requests below, please so indicate and provide your best estimate.

f. Provide data in its original format (e.g., PDF, Excel, GIS shapefile, etc.), unless otherwise specified in the request.

g. Submit your response to the 2023-2025 WMP Data Requests docket (#2023-2025-WMP-DRs) and note the requirements for confidential submissions. Please also email the response to Jessica McHale (jessica.mchale@energysafety.ca.gov), copying:

    i. Nicole Dunlap (nicole.dunlap@energysafety.ca.gov)
    ii. Jolynne Flores (jolynne.flores@energysafety.ca.gov)
    iii. Colin Lang (colin.lang@energysafety.ca.gov)
    iv. Andie Biggs (andie.biggs@energysafety.ca.gov)
    v. Ethan Campos (ethan.campos@energysafety.ca.gov)

REQUEST

Q01. Regarding Vegetation Management and Inspection Performance Metrics:

a. On page 185 of its WMP, PacifiCorp states that it is unable to provide vegetation management performance metrics. As such, the performance metrics listed in Table 8-17 of its WMP ("vegetation-caused ignitions" and "vegetation-caused outages") are missing actuals and projections. However, in its Q4 2022 Quarterly Data Report (Revision 2, submitted on June 29, 2023) and Q1 (Revision 1) and Q2 2023 Quarterly Data Reports (submitted June 21 and August 1, 2023, respectively), PacifiCorp does provide actual and projected performance metrics for vegetation-caused outages and ignitions.
   i. From which QDR(s) are these performance metrics correct?
      (1) Please populate and provide an updated version of PacifiCorp's WMP Table 8-17 with this information, including actuals, projections, and applicable methods of verification.

Q02. Regarding Grid Design, Operations, and Maintenance Performance Metrics:

a. On page 136 of its WMP, PacifiCorp states that it is unable to provide performance metrics for grid design, operations, and maintenance. As such, the performance metrics listed in Table 8-5 of its WMP (equipment-caused ignitions, equipment-caused outages, grid inspection findings, and open work orders [tags]) are missing actuals and projections. However, in its Q4 2022 Quarterly Data Report (Revision 2, submitted on June 29, 2023) and Q1 (Revision 1) and Q2 2023 Quarterly Data Reports (submitted June 21 and August 1, 2023, respectively), PacifiCorp does provide actual and projected performance metrics for grid design, operations, and maintenance.
   i. From which QDR(s) are these performance metrics correct?
      (1) Please populate and provide an updated version of PacifiCorp's WMP Table 8-5 with this information, including actuals, projections, and applicable methods of verification.

END OF REQUEST

OEIS Data Request 4.1

Regarding Risk Spend Efficiency (RSE) - In its WMP, PacifiCorp provides hypothetical examples of how it calculates RSE. Please explain how PacifiCorp calculates RSE values in practice.

i. Are mitigation values based on percentage rules of thumb or another means?

Response to OEIS Data Request 4.1

PacifiCorp is currently developing the application to implement the general framework described in its 2023 Wildfire Mitigation Plan (WMP). The specific calculations to determine risk reduction effectiveness are in development based on inputs from PacifiCorp subject matter experts, benchmarking with other utilities, and technical planning with Technosylva. PacifiCorp plans to provide additional information on its risk reduction effectiveness calculations in its 2024 WMP following completion of this work.

OEIS Data Request 4.2

Regarding Mitigation Rankings - Please provide a table of ranked mitigations as well as an explanation of any instances where PacifiCorp has made mitigation decisions or choices that did not follow this ranking, including the justification for these decisions if applicable.

Response to OEIS Data Request 4.2

PacifiCorp intends to use its Risk-Spend Efficiency (RSE) calculations to evaluate and rank potential mitigation projects as an input into its project selection and prioritization process. PacifiCorp is currently developing the application to implement the general RSE framework described in its 2023 Wildfire Mitigation Plan (WMP). PacifiCorp plans to provide additional information on its RSE methodology and calculations including application to project selection and prioritization in its 2024 WMP update.

Specific project scope is defined based on engineering, accounting for the unique characteristics of each job location including risk drivers and risk model outputs, environmental factors, and feasibility. Line rebuilds generally include:

- Replacement of all bare primary conductor with covered conductor, replacement with underground conductor, or removal of overhead bare conductor
- Installation of covers or other protective devices where possible to cover portions of the primary conductor system where cover has been removed (e.g., stirrups, jumpers, taps)
- Evaluation of pole strength
- Replacement of identified poles with non-wood alternatives
- Replacement of fuses, arrestors, and other equipment not compliant with the "California Power Line Fire Prevention Field Guide" 2021 Edition with equipment that is compliant with the field guide

OEIS Data Request 4.3

Regarding PSPS Decision-Making

(a) It appears PacifiCorp is not able to use data or analytics to support PSPS decisions at this time. Is this an accurate assertion?

i. If not, please elaborate on what drives PacifiCorp's PSPS decision-making.

a) What are the criteria?

b) Does PacifiCorp use checklists, scorecards, or other metrics?

Response to OEIS Data Request 4.3

The assertion that PacifiCorp is not able to use data or analytics to support Public Safety Power Shutoff (PSPS) decisions is inaccurate. PacifiCorp does use a wide variety of data and analytics to support PSPS decisions from both public and company sources including the Geographic Area Coordination Center (GACC), National Weather Service (NWS), PacifiCorp's Weather Research and Forecast (WRF) model, and wildfire modeling software.

a) PacifiCorp's PSPS decision-making criteria is as follows:
    1. PacifiCorp Meteorology has determined the wildfire risk to be "Extreme" as defined in 8.3.6.1 of PacifiCorp's 2023 Wildfire Mitigation Plan (WMP) and,
    2. Maximum wind gusts at or above the 99th percentile except 95th percentile for circuits in areas of complex fuel & terrain

b) PacifiCorp also considers data from tools currently in testing (to be included in the 2024 WMP filing) which includes a circuit-level Probability of Failure model, Fire Potential Index, and a modified Hot-Dry-Windy Index.

OEIS Data Request 4.4

Regarding Emergency Preparedness Performance Metrics - In Table 8-35 of its WMP (page 251), PacifiCorp lists "n/a" for 2020, 2021, and 2022 for its performance metric "Percentage of Wildfire/PSPS events followed by an After-Action Review or feedback process."

i. Please confirm whether "n/a" is applicable here (i.e., no wildfire or Public Safety Power Shutoff (PSPS) events were followed by an After-Action Review (AAR) or other feedback process in 2020, 2021, or 2022).

(1) If this was an error and AARs were performed following wildfire or PSPS events in 2020, 2021, and/or 2022, please provide an updated Table 8-35 with the correct information. Please also provide any AAR documentation or reports, if applicable.

Response to OEIS Data Request 4.4

i. The table entry is incorrect due to a misinterpretation of the metrics requested. There were After-Action Review (AARs) performed with each of the two PSPS events and the 1 Public Safety Power Shutoff (PSPS) watch in 2020 and 2021. PacifiCorp has not conducted any other PSPS events. Wildfire AARs are performed following each event. Please refer to attachment OEIS 4.4 which provides the following requested documents:

(1) AAR CA PSPS Event 09.13.2020 Watch Event 09.17.2020.pdf
(2) AAR CA PSPS Watch Event Oct 2020.pdf
(3) AAR CA PSPS Event Aug 2021.pdf
(4) AAR CA McKinney and Yeti Complex Fires July 2022.pdf
(5) AAR CA Mill and Mountain Fires Sept 2022.pdf

The corrected Table 8.35 is provided below:

Performance Metrics	2020	2021	2022	2023 Projected	2024 Projected	2025 Projected	Method of Verification (e.g., third-party evaluation, QDR)
Percentage of Wildfire/PSPS events followed by an After-Action Review or feedback process	100%	100%	100%	100%	100%	100%	After Action Reports

OEIS Data Request 4.5

Regarding Internal Exercises for Emergency Events - In Table 8-41 of its WMP (pages 263-264), PacifiCorp lists internal exercises for different types of emergency events, most of which are discussion-based.

i. Does PacifiCorp conduct any internal exercises specific to wildfire events?

(1) If so, please provide these exercises, providing details for each as required by Table 8-41 (e.g., category, exercise title and type, purpose, etc.).

(2) If not, do PacifiCorp's internal exercises for its or "ECC" events pertain to all emergency events, including wildfire, PSPS, etc.?

ii. Are all exercises listed in PacifiCorp's Table 8-41 hosted/conducted by PacifiCorp?

(1) If not, please list any exercises for which PacifiCorp participates in but does host/conduct.

Response to OEIS Data Request 4.5

i. PacifiCorp did not include standalone wildfire exercises in the 2022 exercise series. PacifiCorp responded to and had active Emergency Coordination Center (ECCs) in several wildfire events across our service territory in 2022.

(1) Not applicable.

(2) ECC exercises include a variety of hazards impacting our service territory, including wildfires, severe storms and manmade disruptions (i.e. Cyber or physical). Based on feedback received from Office of Energy Infrastructure Safety (OEIS), PacifiCorp plans to incorporate wildfire into the severe weather exercise series in the upcoming exercise plan.

ii. PacifiCorp conducts and hosts all exercises listed in table 8-41 Internal Drill, Simulation and Tabletop Exercise Program.

(1) Not applicable.

OEIS Data Request 4.6

Regarding Protocols for Emergency Communication to Stakeholder Groups - In Table 8-49 of PacifiCorp's WMP (pages 282-284), most of the "Means to Verify Message Receipt" column is filled in as "N/A".

i. For those that are filled in as "N/A", is it a correct assumption that PacifiCorp does not have a means to verify receipt of these emergency communications?

(1) If this is correct, does PacifiCorp have plans to verify message receipt for these communications in the future? If so, please elaborate on these plans.

(2) If not a correct assumption, please provide an updated Table 8-49 with the correct information.

Response to OEIS Data Request 4.6

i. The initial table includes all methods combined into one cell. It was not clear if rows could be further broken out as means to verify varies by type of communication method.

(1) Not applicable.

(2) Please refer to Attachment OEIS 4.6which provides the communications methods broken out further by types of verification available.

OEIS Data Request 4.7

Regarding PacifiCorp's Planned Covered Conductor Projects - For all covered conductor projects PacifiCorp currently has planned, provide the following information via spreadsheet:

i. Circuit or circuit segment ID
ii. HFTD Tier (Non-HFTD, Tier 2, or Tier 3)
iii. Associated circuit risk score
iv. Associated circuit risk ranking
v. Length of project in miles
vi. Current project status (engineering, design, construction, etc.)
vii. Expected year of completion
viii. Initial planned year of completion, if project was delayed
ix. Reason for project delay, if applicable (permitting, supply chain, etc.)

Response to OEIS Data Request 4.7

Please refer to Attachment OEIS 4.7.

For subparts iii and iv of Q07.a, PacifiCorp provides circuit risk scores and rankings under two distinct risk models: the Localized Risk Assessment Model (LRAM) and the Wildfire Risk Reduction Model (WRRM) described in section 6.2 of PacifiCorp's Wildfire Mitigation Plan. LRAM is included because this model was used to inform project selection and prioritization for the provided list of covered conductor projects.

The circuit risk rankings are rankings within the total number of distribution circuits within the three-state service territory of Pacific Power. The circuit risk scores are calculated averages of separate outputs from LRAM and WRRM. Due to the variation of risk scores within a particular circuit based on various factors including terrain, fuel type, and vegetation proximity, average circuit risk scores are not necessarily representative of the risk at a specific project location. For example, a circuit segment may be identified for covered conductor installation because that segment has higher risk associated with vegetation in a park compared to the portions of the circuit over pavement upstream and downstream of that segment. This may result in an overall low average circuit risk score although the risk associated with that project location is high.

Circuit risk scores and circuit risk rankings from LRAM and WRRM cannot be directly compared due to differences in source data, modeling methodology and calculations, and the recency of the input data used. PacifiCorp will replace LRAM with WRRM in 2023 for future project selection and prioritization.

OEIS Data Request 5.1

Regarding Vegetation Management and Inspection Performance Metrics:

On page 185 of its WMP, PacifiCorp states that it is unable to provide vegetation management performance metrics. As such, the performance metrics listed in Table 8-17 of its WMP ("vegetation-caused ignitions" and "vegetation-caused outages") are missing actuals and projections. However, in its Q4 2022 Quarterly Data Report (Revision 2, submitted on June 29, 2023) and Q1 (Revision 1) and Q2 2023 Quarterly Data Reports (submitted June 21 and August 1, 2023, respectively), PacifiCorp does provide actual and projected performance metrics for vegetation-caused outages and ignitions.

i. From which QDR(s) are these performance metrics correct?

(1) Please populate and provide an updated version of PacifiCorp's WMP Table 8-17 with this information, including actuals, projections, and applicable methods of verification.

Response to OEIS Data Request 5.1

i. PacifiCorp's Q2 2023 Quarterly Data Report (QDR) is correct.

(1) Please refer to the table provided below:

Performance Metrics	2020	2021	2022	2023 Projected	2024 Projected	2025 Projected	Method of Verification (e.g., third-party evaluation, QDR)
Vegetation-caused ignitions	5	4	4	5	5	5	QDR
Vegetation-caused outages	119	181	157	170	170	170	QDR

OEIS Data Request 5.2

Regarding Grid Design, Operations, and Maintenance Performance Metrics:

On page 136 of its WMP, PacifiCorp states that it is unable to provide performance metrics for grid design, operations, and maintenance. As such, the performance metrics listed in Table 8-5 of its WMP (equipment-caused ignitions, equipment-caused outages, grid inspection findings, and open work orders [tags]) are missing actuals and projections. However, in its Q4 2022 Quarterly Data Report (Revision 2, submitted on June 29, 2023) and Q1 (Revision 1) and Q2 2023 Quarterly Data Reports (submitted June 21 and August 1, 2023, respectively), PacifiCorp does provide actual and projected performance metrics for grid design, operations, and maintenance.

i. From which QDR(s) are these performance metrics correct?

(1) Please populate and provide an updated version of PacifiCorp's WMP Table 8-5 with this information, including actuals, projections, and applicable methods of verification.

Response to OEIS Data Request 5.2

i. PacifiCorp's Q2 2023 Quarterly Data Report (QDR) is correct.

(1) Please refer to the table provided below:

Performance Metrics	2020	2021	2022	2023 Projected	2024 Projected	2025 Projected	Method of Verification (e.g., third-party evaluation, QDR)
Equipment-caused ignitions	5	3	4	4	4	4	QDR
Equipment-caused outages	317	361	349	359	359	359	QDR
Grid inspection findings	8,071	7,487	8,202	--	--	--	QDR
Open work orders (tags)	--	--	12,161	--	--	--	QDR

Stakeholder Group	Event Type	Method(s) for Communicating
General public	Wildfire	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
General public	Wildfire-related outage	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
General public	PSPS-related outage	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
General public	Restoration of service	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
Priority essential services	Wildfire	Emergency Management personnel, Public Safety Partners, ESF12, RBMs
Priority essential services	Wildfire-related outage	Emergency Management personnel, Public Safety Partners, ESF12, RBMs
Priority essential services	PSPS-related outage	Emergency Management personnel, Public Safety Partners, ESF12, RBMs
Priority essential services	Restoration of service	Emergency Management personnel, Public Safety Partners, ESF12, RBMs
AFN populations	Wildfire	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
		Media release, interviews, social media, website, radio

AFN populations	Wildfire-related outage	Direct customer communication via email, text, and phone calls
AFN populations	PSPS-related outage	Personal phone call, welfare check if unable to reach via phone call
AFN populations	Restoration of service	Personal phone call, welfare check if unable to reach via phone call
Populations with limited English proficiency	Wildfire	Via same methods as general public with translated content in key languages: English, Spanish, Chinese traditional, Chinese simplified, German, Hmong, Mixteco, Vietnamese and Tagalog
Populations with limited English proficiency	Wildfire-related outage	Via same methods as general public with translated content in key languages: English, Spanish, Chinese traditional, Chinese simplified, German, Hmong, Mixteco, Vietnamese and Tagalog
Populations with limited English proficiency	PSPS-related outage	Via same methods as general public with translated content in key languages: English, Spanish, Chinese traditional, Chinese simplified, German, Hmong, Mixteco, Vietnamese and Tagalog

Populations with limited English proficiency	Restoration of service	Via same methods as general public with translated content in key languages: English, Spanish, Chinese traditional, Chinese simplified, German, Hmong, Mixteco, Vietnamese and Tagalog
Tribes	Wildfire	Emergency Management personnel, Public Safety Partners, ESF12, RBMs,
		Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
Tribes	Wildfire-related outage	Emergency Management personnel, Public Safety Partners, ESF12, RBMs,
		Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
Tribes	PSPS-related outage	Emergency Management personnel, Public Safety Partners, ESF12, RBMs,
		Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
Tribes	Restoration of service	Emergency Management personnel, Public Safety Partners, ESF12, RBMs,
		Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls

People in remote areas	Wildfire	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
People in remote areas	Wildfire-related outage	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
People in remote areas	PSPS-related outage	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls
People in remote areas	Restoration of service	Media release, interviews, social media, website, radio
		Direct customer communication via email, text, and phone calls

Means to Verify Message Receipt
No verification method available
Confirmed receipt via software
No verification method available
Confirmed receipt via software
No verification method available
Confirmed receipt via software
No verification method available
Confirmed receipt via software
Direct Coordination
Direct Coordination
Direct Coordination
Direct Coordination
No verification method available
Confirmed receipt via software
No verification method available

Confirmed receipt via software
Confirm via personal phone call or welfare check
Confirm via personal phone call or welfare check
No verification method for media release, interviews, social media, radio or website.
Confirmed receipt via software for direct customer communication via email, text, and phone calls
No verification method for media release, interviews, social media, radio or website.
Confirmed receipt via software for direct customer communication via email, text, and phone calls
No verification method for media release, interviews, social media, radio or website.
Confirmed receipt via software for direct customer communication via email, text, and phone calls

No verification method for media release, interviews, social media, radio or website.
Confirmed receipt via software for direct customer communication via email, text, and phone calls
Direct Coordination
No verification method available
Confirmed receipt via software
Direct Coordination
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No verification method available
Confirmed receipt via software

GhID	Circuit or circuit segment ID	HFTD Tier (Non-HFTD, Tier 2, or Tier 3)	Associated circuit risk score (WRRM)	Associated circuit risk ranking (WRRM)
07047081a	5G16	Tier 2	0.242310092	254
07047081b	5G16	Tier 2	0.242310092	254
07047081c	5G16	Tier 2	0.242310092	254
8003679a	5G16	Tier 2	0.242310092	254
8003679b	5G16	Tier 2	0.242310092	254
8003679c	5G16	Tier 2	0.242310092	254
8304727a	5G16	Tier 2	0.242310092	254
8077832a	5G76	Tier 2	0.242310092	336
8077832b	5G76	Tier 2	0.242310092	336
8077844a	5G76	Tier 3,Tier 2	0.242310092	336
6811768c	5G76/5G79	Tier 2		
8286040q	5G79	Tier 2	0.196896855	315
8077835a	5G79	Tier 3	0.196896855	315
8077837a	5G79	Tier 3,Tier 2	0.196896855	315
8077837b	5G79	Tier 3,Tier 2	0.196896855	315
8077846a	5G79	Tier 2	0.196896855	315
8077661	5G83	Tier 2	0.239873241	258
8077664	5G83	Tier 2	0.239873241	258
8077666	5G83	Tier 2	0.239873241	258
8077667	5G83	Tier 2	0.239873241	258
8003684a	5G83	Tier 2	0.239873241	258
8003684b	5G83	Tier 3	0.239873241	258
8003684c	5G83	Tier 2	0.239873241	258
8003685a	5G83	Tier 3,Tier 2	0.239873241	258
8003685b	5G83	Tier 2	0.239873241	258
8003692a	5G83	Tier 2	0.239873241	258
8003692b	5G83	Tier 2	0.239873241	258
8077663a	5G83	Tier 2	0.239873241	258
8077663b	5G83	Tier 2	0.239873241	258
8077663c	5G83	Tier 2	0.239873241	258
8077679a	5G83	Tier 2	0.239873241	258
8077680a	5G83	Tier 2	0.239873241	258
8077680b	5G83	Tier 2	0.239873241	258
8281692a	5G83	Tier 2	0.239873241	258
6993791	5R106	Tier 2	0.194992701	318
6810408a	7G75	Tier 2	0.223929494	280
6810408b	7G75	Tier 2	0.223929494	280
7011415	5G40	Tier 2	0.182872936	337
7011422	5G40	Tier 2	0.182872936	337
7011426	5G40	Tier 2	0.182872936	337
7011428	5G40	Tier 2	0.182872936	337
7011435	5G40	Tier 2	0.182872936	337
7011438	5G40	Tier 2	0.182872936	337

7055586	5G40	Tier 2	0.182872936	337
8077672	8G95	Tier 2	0.171945758	366
8077673	8G95	Tier 2	0.171945758	366
8077674	8G95	Tier 2	0.171945758	366
8077675	5G39	Tier 2	0.271657803	224
8077678	5G39	Tier 2	0.271657803	224
8236604	5G39	Tier 2	0.271657803	224
8236605	5G39	Tier 2	0.271657803	224
8215499	7G81	Tier 2	0.422436303	140
8222503	5G76	Tier 2	0.183635431	336
8196598	5G83	Tier 2	0.239873241	258
8231406	5G79	Tier 2	0.196896855	315

Associated circuit risk score (LRAM)	Associated circuit risk ranking (LRAM)	Length of project in miles	Current project status (engineering, design, construction, etc.)
0.789847993	24	0.3	Complete
0.789847993	24		Complete
0.789847993	24		Complete
0.789847993	24	4.4	Complete
0.789847993	24		Complete
0.789847993	24		Complete
0.789847993	24	0.4	Complete
0.817690312	16	1.3	Complete
0.817690312	16		Complete
0.817690312	16	3	Complete
		1	permitting
0.830796463	13	1.5	Complete
0.830796463	13	3.6	Complete
0.830796463	13	2.1	Construction
0.830796463	13		Construction
0.830796463	13	1.3	Complete
0.654652598	146	0.5	Materials
0.654652598	146	5	Construction
0.654652598	146	4.6	Construction
0.654652598	146	4.4	Complete
0.654652598	146	5.8	Complete
0.654652598	146		Complete
0.654652598	146		Complete
0.654652598	146	5.6	Complete
0.654652598	146		Complete
0.654652598	146	5.3	Complete
0.654652598	146		Complete
0.654652598	146	1.7	Construction
0.654652598	146		Construction
0.654652598	146		Construction
0.654652598	146	0.8	Complete
0.654652598	146	5.9	Complete
0.654652598	146		Complete
0.654652598	146	0.3	Complete
0.838485709	11	1.3	Complete
0.876699758	5	0.2	Complete
0.876699758	5		Complete
0.617166026	185	2.2	Construction
0.617166026	185	2.3	Design
0.617166026	185	4.5	permitting
0.617166026	185	2.9	permitting
0.617166026	185	3.8	permitting
0.617166026	185	3.7	permitting

0.617166026	185	5.4	Construction
0.877749033	4	2.6	Materials
0.877749033	4	3	Construction
0.877749033	4	2.5	Construction
0.779817434	27	1.4	Construction
0.779817434	27	2.7	Construction
0.779817434	27	3.9	Construction
0.779817434	27	1.8	Construction
0.67219358	119	1	Materials
0.817690312	16	2.9	Construction
0.654652598	146	3.2	Materials
0.830796463	13	2.1	Design
		112.2	

Expected year of completion	Initial planned year of completion, if project was delayed	Reason for project delay, if applicable
2023	2022	Permitting - Cal Trans
2023	2022	Permitting - Cal Trans
2023	2022	Permitting - Cal Trans
2023	2022	Permitting - Cal Trans
2023	2022	Permitting - Cal Trans
2023	2022	Permitting - Cal Trans
2023	2022	Permitting - FAA
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2023		Permitting - CPUC/Wetland
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