Memorandum

To: Tertia Speiser, U.S. Department of Energy
Andrew Ulmer, California Independent System Operator Corporation

From: Ronke Luke, ICF

CC: Neil Sullivan, ICF
David Ernst, ICF
Anna Booth, ICF
Juanita Haydel, ICF

Date: September 15, 2022

Re: Special Environmental Analysis of the California Independent System Operator Corporation (CAISO), Generating Units during Department of Energy Emergency Order (Section 202(c)) between September 10, 2021, and November 9, 2021

1 Introduction

On September 10, 2021, U.S. Department of Energy (DOE) issued Order No. 202-21-2 that permitted the California Independent System Operator Corporation (CAISO) to operate under Federal Power Act Section 202(c) conditions for a limited period. DOE found that an emergency existed "in California due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance" of an Emergency Order would "meet the emergency and serve the public interest." Under the Order CAISO was authorized to test and operate specific electric generating resources (Covered Resources) located within California at their maximum generation output levels when directed to do so by the CAISO, notwithstanding air quality or other permit limitations.

Six covered resources were included in the order:

- Midway Sunset Cogeneration Facility Unit C in Fellows, California (Midway Sunset Unit C)
- The Alamitos Energy Center in Long Beach, California
- The Huntington Beach Energy Project in Huntington Beach, California
- The Walnut Creek Energy Park in the City of Industry, California
- Greenleaf Unit 1 in Yuba City, California (Greenleaf Unit 1); and
- The Roseville Energy Park in Roseville, California (Roseville Energy Park)

In its application, the CAISO anticipated that the emergency order it requested "may result in exceedance of National Ambient Air Quality Standards (NAAQS) under the Clean Air Act."

The Order also required CAISO to inform all affected communities where covered resources operate and clearly explain what the Order allowed CAISO to do.

The Order was limited to a 60-day period and expired on November 9, 2021.

CAISO was required to submit a report documenting operations of the covered resources under the emergency order. That report was filed on January 7, 2022,

This document summarizes ICF's review of documents CAISO provided to DOE regarding its operations under Section 202(c) emergency orders pursuant to the Federal Power Act between September 10, 2021 and November 9, 2021[1](the "order period"). Specifically, ICF reviewed:

- emissions data from covered generating units to determine whether any emissions during testing and commissioning would have caused ambient pollutant concentrations in the region to exceed any National Ambient Air Quality Standards (NAAQS)
- submitted information to confirm no commercial operations of covered generating units occurred; and the
- the robustness of community engagement plans

2 Emissions Evaluation

2.1 Approach

ICF has reviewed the information DOE supplied for the CAISO generating facilities[2] and presents our findings below:

The reporting period for the 202(c) emergency order was September 10, 2021, through November 9, 2021, and the Order applied to the six generating units listed in Table 1. Three generating units were operated for testing and commissioning purposes[3] but were not in commercial operation[4]. The remaining three units covered by the emergency order operated but did not exceed any permit limits during the period the Emergency Order was in effect (shaded rows in Table 1).

[1] The documents reviewed are posted on the Department of Energy's (DOE) web site at the following link: Federal Power Act Section 202(c): CAISO, September 2021 | Department of Energy

[2] CAISO did not provide DOE all emissions data. DOE followed up to get data. However, CAISO indicated it did not have the requested data.

[3] During the order period the units operated the combustion turbines for the purposes of testing and commissioning. They did not generate electricity for sale to the grid.

[4] The units did not operate commercially, i.e., they did not run to generate electricity for sale to the grid.

Table 1 Generating Units Covered by DOE 202(c) Emergency Order

Facility Name	Location	County	Air District	Type of Operation During Order Period	Permit Limit Exceedances During Order Period
Alamitos Energy Center	Long Beach, CA	Los Angeles	South Coast AQMD	Commercial	No
Calpine Greenleaf Unit 1	Yuba City, CA	Sutter	Feather River AQMD	Commissioning	Yes
Huntington Beach Energy Project	Huntington Beach, CA	Orange	South Coast AQMD	Commercial	No
Midway Sunset Cogeneration Facility, Unit C	Fellows, CA	Kern	San Joaquin Valley APCD	Commissioning	Yes
Roseville Energy Park	Roseville, CA	Placer	Placer County APCD	Commissioning	Yes
Walnut Creek Energy Park	City of Industry, CA	Los Angeles	South Coast AQMD	Commercial	No

Gray shading indicates unit did not exceed emission limits during the Order period.
APCD = Air Pollution Control District, AQMD = Air quality management district

The sections below summarize emissions information provided by CAISO for those hours during which emissions exceeded the limits in the units' respective air quality permits. The permitted limits on emissions are set on a unit-by-unit basis by the respective air districts in which the units are located (Table 1) at levels that are intended to ensure that ambient concentrations will not violate the National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS). The permit limits shown in the tables apply to normal operations. The permits also set limits for startup and shutdown events; however, the information provided was not sufficient to distinguish emissions and their durations during individual startups and shutdowns.

Emissions were reported for carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter of 10 microns diameter and smaller (PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC). Permit limits were exceeded only for NO_X and CO.

2.2 Analysis of Emissions by Facility

2.2.1 Calpine Greenleaf Unit 1

Greenleaf Unit 1 consists of two combustion turbine generators (CTGs). Each unit exceeded its emission limits for NO_X and CO during several hours during the Order period as shown in Table 2.

Table 2 Exceedances of Permitted Emissions Limits at Greenleaf Unit 1

Pollutant	Number of Hours[2] in Which an Exceedance Occurred (Both CTGs Combined)	Maximum Emissions (lb/hr[1])			
		CTG 1	CTG 2	Permit Limit	Maximum Exceedance Amount Above Permit Limit
NO_x	18	23.91	25.22	2.71	22.51
CO	16	13.68	9.25	2.64	11.04
PM_{10}	0	No data	No data	4.0	--
VOC	0	1.15	0.83	2.3	--
SO_2	0	0.27	0.064	0.20	--

Source: Letter from Andrew Gundershaug (Calpine) to Joanne Bradley (CAISO), November 23, 2021, Source Test Reports and Monthly Emissions & Operations Reports attachments

[1] For hours in which a unit ran for less than the full hour, the lb/hr emission rates are expressed as the equivalent hourly rates.

[2] Includes hours in which a unit ran for less than the full hour and an exceedance occurred.

CTG =combustion turbine generator

lb/hr = pounds per hour

The nearest air quality monitor to Greenleaf is located in Yuba City, CA, 7.2 miles to the northeast (EPA AQS Site ID: 61010003). This monitor measures nitrogen dioxide (NO_2), ozone, PM_{10}, and particulate matter of 2.5 microns diameter and smaller ($PM_{2.5}$). It did not record any exceedances of the NAAQS or CAAQS for NO_2 during the Order period. Because of the distance between Greenleaf and the monitoring site, it is unlikely that any impacts due to Greenleaf would be discernible at this monitor.

The behavior of the emissions plume in the atmosphere has a crucial influence on the air quality impacts, i.e., the changes in pollutant concentrations that would occur at ground level beyond the facility site. A taller stack, higher velocity of exhaust from the stack exit, and higher exhaust temperature all lead to greater plume dispersion and lower ground-level concentrations. Conversely, a shorter stack, lower exhaust velocity, and lower exhaust temperature lead to higher ground-level concentrations. Each CTG has a stack height of 26 feet 1¼ inches which is a moderate height, an exhaust velocity of 190 feet per second which is relatively high, and an exhaust temperature of 884 degrees Fahrenheit which is relatively high. These values indicate relatively good dispersion of the emissions and thus relatively low concentrations. These values combined with the reported NO_X and CO emission rates suggest that the maximum concentrations that occurred during the period of the Order were unlikely to have exceeded the NAAQS or CAAQS for NO_X and CO.

2.2.2 Midway Sunset Cogeneration Facility, Unit C

Midway Unit C consists of one CTG. During the Order period it exceeded the emission limit only for NO_X as shown in Table 3.

Table 3 Exceedances of Permitted Emissions Limits at Midway Unit C

Pollutant	Number of Hours in Which an Exceedance Occurred	Maximum Emissions (lb/hr)		
		Unit C CTG	Permit Limit	Maximum Exceedance Amount Above Permit Limit
NO_x	1	29.73	17.66	12.07
CO	0	23.85	54.9	--
PM_{10}	0	0.462	9.98	--
VOC	0	<1.14	9	--
SO_2	0	0.327	0.92	--

Source: Email from Greg Jans (Midway Sunset Cogeneration Facility) to Joanne Bradley (CAISO), November 17, 2021, spreadsheet attachment.
lb/hr = pounds per hour
CTG =combustion turbine generator
< = less than

The nearest air quality monitor to Midway is located in Shafter, CA, about 27 miles to the northeast (EPA AQS Site ID: 60296001). This monitor measures NO_2 and ozone. It did not record any exceedances of the NAAQS or CAAQS for NO_2 during the Order period. Because of the distance between Midway and the monitoring site, it is unlikely that any impacts due to Midway would be discernible at this monitor.

As noted above, the behavior of the emissions plume in the atmosphere has a crucial influence on the air quality impacts. The CTG has a stack height of 37.7 feet which is moderate height, and an exhaust temperature of 992 degrees Fahrenheit which is relatively high. The exhaust velocity was not reported. Nevertheless, these values indicate a likelihood of relatively good dispersion of the emissions and thus relatively low concentrations. These values, combined with the reported NO_X emission rate, suggest that the maximum concentrations that occurred during the period of the Order were unlikely to have exceeded the NAAQS or CAAQS for NO_X.

2.2.3 Roseville Energy Park

The covered units in the Roseville Energy Park consists of two CTGs. Together they exceeded emission limits for NOx and CO during several hours during the Order period as shown in Table 4.

Table 4 Exceedances of Permitted Emissions Limits at Roseville Covered Units

Pollutant	Number of Hours in Which an Exceedance Occurred (Both CTGs Combined)	Maximum Emissions (lb/hr)			
		CTG 5	CTG 6	Permit Limit	Maximum Exceedance Amount Above Permit Limit
NO_x	17	26.82	26.84	2.71	26.84
CO	17	33.35	33.37	2.64	33.37
PM_{10}	10	4.01	4.01	4.0	4.01
VOC	10	2.31	2.31	0.66	2.31
SO_2	17	0.21	0.21	0.20	0.21

Source: Email from William Forsythe (City of Roseville, CA) to Joanne Bradley (CAISO), November 22, 2021, spreadsheets and Compliance Source Test attachments.
CTG =combustion turbine generator
lb/hr = pounds per hour

The nearest air quality monitor to the Roseville Energy Park is located in Roseville, CA, about 7 miles to the east-southeast (EPA AQS Site ID: 61010006). This monitor measures NO_2. It did not record any exceedances of the NAAQS or CAAQS for NO_2 during the Order period. Because of the distance between Roseville Energy Park and the monitoring site, it is unlikely that any impacts due to covered units at Roseville Energy Park would be discernible at this monitor.

As noted above, the behavior of the emissions plume in the atmosphere has a crucial influence on the air quality impacts. The CTG has a stack height of 26 feet 1¼ inches which is a moderate height, and an exhaust temperature of 1,045 degrees Fahrenheit which is relatively high. The exhaust velocity was not reported. Nevertheless, these values indicate a likelihood of relatively good dispersion of the emissions and thus relatively low concentrations. These values combined with the reported NO_X and CO emission rates suggest that the maximum concentrations that occurred during the period of the Order were unlikely to have exceeded the NAAQS or CAAQS for NO_X and CO.

2.3 Conclusions

Based on the reported emissions, it appears unlikely that the amounts of emissions that exceeded permit limits at Greenleaf 1, Midway Sunset, and Roseville would have increased ambient concentrations enough to cause or worsen a violation of the NAAQS or CAAQS. Further evaluation could support this preliminary conclusion. Such evaluation could include review of measured ambient levels of NO_X and CO at additional monitoring stations during the reporting period in the region around the generating facilities, review of meteorological conditions during the reporting period, and dispersion modeling of ambient concentrations in the region.

3 Review of CAISO's Community Engagement Plans

Order No. 202-21-2 required CAISO to "inform all affected communities where all Covered Resources operate that the CAISO has been issued this Order, in a manner that ensures that as many members of the community as possible are aware of the Order and explains clearly what the Order allows the CAISO to do. The CAISO shall describe the actions taken to comply with this paragraph in the reports delivered to the Department."

Emergency communications consist of four main components: 1) pre-emergency activities and preparations, 2) creating holding statement(s) during the emergency, 3) monitoring media and stakeholders during the emergency and 4) post-emergency evaluations. ICF reviewed CAISO's summary community outreach efforts related to the order period against this four-part framework. Our review, per the Statement of Work, was limited to documents provided by DOE and available on at the following link: Federal Power Act Section 202(c): CAISO, September 2021 | Department of Energy. The only document we identified on this site relative to CAISO's community outreach is a two-page document with file name - 08. CAISO 202(c) Covered Resource - Overview of Community Outreach Efforts_1 (see Appendix). Our comments are based on these documents. CAISO states that in this document that its "[c]ommunications team developed and implemented a plan to inform communities in which the Covered Resources identified by the Emergency Order are located." We did not have access to this plan and cannot comment on it.

3.1 Review of CAISO's Community Engagement

In the summary of its outreach plan, CAISO indicates that its "plan to inform communities in which the Covered Resources identified by the Emergency Order are located … included leveraging existing communication channels and outreach to new communication channels in those communities." CAISO lists entities in seven categories covering a wide range of public and private stakeholders and seven local newspapers through which it distributed its plans. In the case of environmental and environmental justice organizations, CAISO also asked these groups to leverage their communications channels such as "member email databases, websites, newsletters or blogs to increase awareness of the DOE Emergency Order."

Based upon a review of CAISO's community outreach efforts in support of DOE's Emergency Order No. 202-21-2, we found the approach — shown in the Appendix — to be adequate.

In reviewing the communications and outreach channels that CAISO planned to use to inform the impacted citizens of the Emergency Order, it is our assessment that the plan serves to reach a large portion of the impacted stakeholders – working through state and local governments, utilities, air quality management divisions, owners of covered plants, environmental organizations, environmental justice groups, and local newspapers. However, it is unclear if there were additional plans to offer highly targeted outreach, such as in-language communications, community event outreach, or communications specifically targeted at hard-to-reach or disadvantaged communities.

We also reviewed California Air Resources Board's (CARB) Climate Heat Impact Response Program (CHIRP) report that included information about CARB's community engagement.

According to the CHIRP report, “CARB staff conducted a public meeting on September 16th to engage communities and other stakeholders in a discussion on our proposed program goals and draft plan.” It is unclear whether this meeting discussed CAISO seeking permission for Covered Resources under Section 202 (c) as the meeting fell within Order No. 202-21-2 active period. It is also unclear whether CAISO participated in this meeting.

3.1.1 Strengthening Community Engagement

CAISO’s outreach effort appears to be only “one-way” communications. The Overview of Community Outreach Efforts[5], nor any of the associated documents, did not detail any methods or channels for feedback or discussion among the communicating parties. Our typical recommendation would be to include some follow-up with stakeholders to ensure they received and were able to, and did, disseminate the Emergency Order information. These Partner organizations may also have events and other opportunities in which CASIO could participate to best reach affected communities. In one case, the City of Roseville, there is documentation on how this CAISO partner further disseminated the Emergency Order[6]. It is not clear whether this information about the City of Roseville dissemination was obtained through a formal follow up process with all the communications channels or an ad hoc event.

Further, none of the proposed communication tactics identified modes or timing for stakeholder feedback or dialogue, for example, contacting environmental justice organizations every two weeks after initial outreach, or contacting local government weekly after initial outreach. CAISO may have planned to solicit such feedback through the listed communication channels[7] or in a separate effort, but nothing in CAISO’s community outreach summary noted that any ongoing feedback or dialogue with stakeholders would happen. This kind of continuous two-way dialogue is helpful in ensuring the impacted communities 1) understand the details of the Emergency Order, and 2) are given an opportunity to ask questions and provide feedback. CASIO may have also considered holding community meetings in the impacted areas to allow for stakeholder input; such meetings would also likely garner media coverage.

Additional channels that may add important coverage would be to leverage more of the commercial media market – using public access television channels, as well submitting press releases and information to radio and television networks, in an effort to gain earned media coverage that would reach a broader segment of the impacted communities.

There may be language or cultural considerations for reaching the impacted communities that CAISO needs to consider in its outreach plans. This was unclear in the current outreach plan information.

3.1.2 Reinforcing Efforts to reach “Historically Affected Parties”

In support of CAISO’s application, California Air Resources Board (CARB) had written “[f]urther, the CARB will gather local perspectives on how best to mitigate the effects of local

[53] Climate Heat Impact Response Program (CHIRP)
[4] The CAISO, 08. CAISO 202(c) Covered Resource - Overview of Community Outreach Efforts_1, 2021
[6] The City of Roseville posted a copy of the CAISO’s summary on its website and distributed notices in the communities located adjacent to the Roseville Energy Park
[7] For example, through listed social media posts on Twitter and Facebook or newspaper advertisements

increases of emissions to potential and historically affected parties[8]." From the materials available on "Federal Power Act Section 202(c): CAISO, September 2021,"it is not clear if or how any of CAISO's communication was targeted at these "historically affected parties." It may be the case that communication with state and local government, the environmental groups, local papers, etc. filters down to these communities, but nothing is explicitly stated that discusses this identified stakeholder group. It would be good practice to pay attention to and reinforce efforts to reach historically affected parties.

3.2 Additional Best Practices for Community Engagement during Emergencies

CAISO references a "plan to inform communities in which the Covered Resources identified by the Emergency Order are located." That plan is not available for review. As we mentioned earlier best-practice for Emergency Communications typically outline four main communications steps: 1) pre-emergency preparations, 2) creating a holding statement, 3) monitoring media and stakeholders during the emergency and 4) post-emergency evaluations. We offer the following observations based on these standard practices in emergency communications.

3.2.1 Pre-emergency Preparatory Activities

Primarily, it is recommended to have several systems and approaches developed prior to crisis events, so that when emergencies occur there are previously approved procedures and communications at the ready, saving time and expediting responses.

For the sake of speed, an organization should proactively draw up a template with potential emergency scenarios, designate the appropriate channels for communication, and then plug in the necessary information if the actual incident occurs. Emergency response communications generally need to be sent to various people in multiple departments. Potential audiences include government agencies and offices (state and local), specific companies or industries impacted by the incident, media, the community, elected officials and other authorities. Need for cultural considerations e.g., language or manner of contact, are also identified. Modes and processes for follow-up with the various stakeholders during the emergency are also determined, acknowledging the need for flexibility during the event. Certainly, there are unique features of each emergency that may require some communications to be tailored to that event. It is certainly possible that CAISO had pre-prepared lists of entities that it tailored when it informed the community in which the covered resources are located about the emergency order. Based on best practice, we make the following recommendations:

- **Recommendation:** CAISO should review its emergency call or email notification protocol and management should send out an automated messaging test on an annual basis.

[8] U.S. Department of Energy, "EXEC-2021-005025 - Order 202-21-2 - signed 9-10-21" 2021

- **Recommendation:** Ensure all stakeholder contact information is confirmed and updated regularly. During an incident, core messages should remain consistent across the different audiences.

3.2.2 Create a Holding Statement

None of the CAISO materials indicated that it had pre-prepared holding statements for this emergency order. In an emergency, when minutes count, saying “no comment” in the first wave of press coverage is not an option. To avoid a panic situation when crafting and securing internal approval for an initial response to media or community inquiries, the best practice is to have a holding statement at the ready.

The holding statement does not need to be lengthy, nor does it need to address all aspects of what the media is seeking. A few brief sentences grounded in accuracy, CAISO’s values, and empathy should be the framework for the statement—and it should be issued quickly. Being timely is critical to controlling the narrative.

You may not have all the information you need, but you can let the media and public know that more information will be shared as it becomes available. This approach will buy you valuable time and buy you credibility with key reporters and important stakeholders. The key is to communicate that you’re on top of the situation and not making the situation worse.

To implement this strategy, a set of holding statements that address the most likely issues or emergencies should be drafted and pre-cleared through leadership. This will compress the amount of time needed to modify and secure final approval for the statement when the emergency occurs.

Increasingly, organizations communicate directly with affected communities through social media. Similar holding statements created for social media channels and directed at these communities could be developed and pre-cleared through leadership.

3.2.3 Media and Stakeholder Monitoring

It is not apparent that CAISO established in advance of the emergency guidance on how media and community stakeholder monitoring would be executed. Once CAISO executed its media plan, it would have had to start monitoring the media and communities’ responses.

It is vital that a protocol be established in advance of any significant issue or emergency that guides how media and stakeholder monitoring/listening will be executed. Being able to evaluate and review the statements and information being articulated by stakeholders and presented through media channels will inform sound decision making as to whether to issue a holding statement, conduct a press interview, post an update on social media—or not comment publicly.

Each monitoring report should capture and summarize the sources, key articles and stories, amplification, tone/sentiment, reach of the journalists and stakeholders, and patterns of coverage from one report to the next. As social media becomes increasingly important and by-

passes traditional media, it is also important to monitor the social media channels of communities affected by the emergency order. It is very possible that CAISO had such established monitoring plans, however, they were not included in the materials available for us to monitor.

3.2.4 Analyzing Effectiveness of Communication

It is not apparent that CAISO had a plan to analyze the effectiveness of its communication plan post-emergency. We did not have any materials that discussed whether or how such analysis was done.

It is useful to analyze the effectiveness of communications and engagement during the emergency (as possible) and certainly after the event. During the emergency media coverage and stakeholder/community feedback on social media or through other channels could give CAISO information on the effectiveness of its outreach. Such information received in a timely manner could allow for changes in outreach plans.

After an emergency, CAISO should evaluate the effectiveness of its outreach. How did the communities and stakeholders feel about the communications? Did they feel informed in a timely manner? Were all the people impacted reached with the information they needed? What was done well? What could have been better? New insights from this post-emergency analysis that lead to improvements should be incorporated into subsequent emergency outreach plans.

3.3 Conclusions

Based on our review, we found CAISO's outreach plan summary[9] for DOE Order No. 202-21-2 to be adequate. We recommend that a formal emergency communications plan be created to establish protocols for managing emergency situations. This will help establish clear protocols for quickly developing an effective and comprehensive plan to engage the necessary communities and stakeholders for such an event.

The listed distribution channels were adequate but could have included more public access and earned media channels. It was also unclear if the executed channels effectively reached "historically affected parties."

It is possible that CAISO has a detailed outreach and/or emergency communications plan (not included in the package of materials posted on the DOE website) that covers the suggestions that we provide, above. Tailored robust media, stakeholder and community engagement is an important component of successful emergency operations.

[9] Available on the site "Federal Power Act Section 202(c): CAISO, September 2021"

4 Appendix

The following information replicates in its entirety a document posted on the U,S. DOE website, Federal Power Act Section 202(c): CAISO, September 2021 | Department of Energy The information presents a summary of CAISO's outreach plans[10].

Summary of California ISO community outreach efforts in connection with Department of Energy (DOE) Emergency Order dated September 10, 2021

Upon the issuance of the DOE's Emergency Order on September 10, 2021, the CAISO Communications team developed and implemented a plan to inform communities in which the Covered Resources identified by the Emergency Order are located. This effort included leveraging existing communication channels and outreach to new communication channels in those communities.

The CAISO notified communications personnel for the following entities of DOE's Emergency Order and requested their assistance and support in distributing a summary of the authority the order granted the CAISO via targeted electronic mail, newsletter content, and website banners.

- ***California Executive Branch and State Agencies:*** The CAISO conducted outreach to California Governor's Office, California Public Utilities Commission, California Energy Commission, California Department of Water Resources, California Office of Emergency Services, California Air Resources Board, and California Resources Agency.)

- ***California Legislature:*** – The CAISO contacted the offices of State Assemblymembers and State Senators in whose districts the Covered Resources are located.

- ***Local governments and elected officials in each affected area:*** The CAISO conducted outreach to representatives of local governments list below, including municipal city councils and county boards of supervisors, elected officials, and staff.

    - City of Roseville. [*The City of Roseville posted a copy of the CAISO's summary on its website and distributed notices in the communities located adjacent to the Roseville Energy Park.*]
    - Placer County
    - Orange County
    - Kern County
    - City of Long Beach
    - City of Industry
    - Bakersfield
    - Yuba City

- ***Air quality management and pollution control districts in each community:*** The CAISO conducted outreach to the Feather River Air Quality Management District, San Joaquin Valley Air District, South Coast Air Quality Management District, and Placer

[10] See file 08. CAISO 202(c) Covered Resource - Overview of Community Outreach Efforts_1

County Air Quality Management District.

- ***Owners of each Covered Resource:*** The CAISO conducted outreach to Midway Sunset Cogeneration Facility; the Alamitos Energy Center; the Huntington Beach Energy Project; the Walnut Creek Energy Park; Greenleaf Unit 1 in Yuba City, California; and the Roseville Energy Park.

- ***Electric distribution utilities in each of the communities where the covered Resources are located:*** The CAISO conducted outreach to Pacific Gas & Electric, Southern California Edison and Roseville Electric.

- ***Environmental and environmental justice organizations:*** The CAISO contacted the following environmental and environmental justice groups and consultants regarding the issuance of DOE's Emergency Order and requested these groups leverage any communications channels in place, such as member email databases, websites, newsletters or blogs to increase awareness of the DOE Emergency Order

    - California Environmental Justice Association
    - Greenlining Institute
    - Asian Pacific Environmental Network 4 Environmental Justice
    - Communities for a Better Environment
    - Environmental Defense Fund
    - National Resource Defense Council
    - Union of Concerned Scientists

The CAISO also posted a summary of the DOE Emergency Order to the California ISO News webpage, with a homepage banner linking to this summary, and pushed social media posts (*e.g.* Twitter and Facebook) with a link to the summary. Finally, the CAISO placed paid print and digital ads in newspapers in each of the six communities:

- Bakersfield Californian
- Yuba – Sutter Appeal-Democrat
- Roseville Press-Tribune (Gold Country Media)
- Southern California News Group (SCNG)
- Long Beach Press Telegram
- Orange County Register
- San Gabriel Valley Tribune