

Public Safety Power Shutoff for Transmission and Distribution

SUMMARY

This utility procedure effective 09/01/2022 describes a proactive response utilizing Public Safety Power Shutoff (PSPS) to reduce the potential risk for wildfires that will enable safe and efficient de-energizing and restoration of electric facilities. The purpose of this process is to reduce risk of wildfire ignition in the Pacific Gas & Electric (PG&E) territory.

Customer Resource Centers (CRCs) are not a part of this Procedure.

Level of Use: Informational Use

TARGET AUDIENCE

Electric Operations - Grid Control Center (GCC), Distribution Control Centers (DCC), Transmission Operations Engineering, Outage Coordination, Remedial Action Scheme (RAS) Operations, Distribution Operations Engineering, Operations Systems: Energy Management System (EMS), participants in Electric Transmission Emergency Center (ETEC), Substation Transmission Operations Emergency Center (STOEC), System Protection, participants in Electric Distribution Emergency Center (EDEC), Emergency Operations Center (EOC) personnel, Regional Emergency Center (REC) personnel, Operations Emergency Center (OEC) personnel, Business Applications Team (BAT), and authorized and qualified personnel who operate and work on or near PG&E-owned transmission and distribution electric lines and associated equipment.

SAFETY

Failure to follow proper PSPS, patrolling, and restoration procedures may result in employee injury, public safety exposure, and/or damage to facilities.

Perform operating, switching and restoration procedures safely and in accordance with the Company's Utility Standard SAFE-1001S, Safety and Health Program Standard and the Code of Safe Practices.

BEFORE YOU START

To reduce the risk of fires in PG&E territory, operations will de-energize and restore electric facilities on identified equipment when an actionable risk is identified.

PG&E produces a rolling [7 Day Public Safety Power Shutoff \(PSPS\) Potential](#) forecast on a daily basis. Preparations for a potential PSPS event in the forecasted areas will begin in advance of weather conditions that could trigger the decision to de-energize. While weather conditions can quickly change from the forecast, the intent is to coordinate closely and plan for efficiently executing PSPS should the decision to do so be made.

Proactively de-energizing an area can prevent PG&E assets from potentially igniting a fire.

Fault Location Isolation Service Restoration (FLISR) schemes may be affected by this procedure.

Enhanced Powerline Safety Settings (EPSS) may be affected by this procedure. For more information on EPSS see [Utility Procedure TD-2700P-26, Enhanced Powerline Safety Settings \(EPSS\) and Patrol Process](#).

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PROCEDURE STEPS

1 Scoping and Pre-event Planning

- 1.1 IF Meteorology IDENTIFIES forecast models that are not clear on potential, scope, and timing for developing R5-Plus level conditions and there is advance time before de-energization is forecasted to be required (before ~T-72 from potential de-energization),

THEN the on-call Emergency Operations Center (EOC) Commander can CALL on representatives from select sections and officers to MEET, TRACK developing conditions, PERFORM readiness tasks where possible, and when warranted MAKE a recommendation to the Officer-in-Charge (OIC) to activate the EOC for a potential PSPS event. This is called "Readiness Posture."

NOTE

"Readiness Posture" is not a requirement for the Officer-in-Charge (OIC) to activate the EOC and may not occur in all PSPS events.

- 1.2 Meteorology IDENTIFIES potential to meet Fire Potential Index (FPI) R5-Plus conditions.
- 1.3 PSPS Technical Unit Leader (EOC Planning Section) CREATES Plan A-01 and Playbook A, starting with A-01, and PROVIDES PSPS Playbook A-01 to EDEC for analysis and review of abnormal switching.

NOTE

When speaking of "Playbooks", it is recommended to use the phonetic pronunciation of the letter in the title, for example: Playbook A spoken as "Playbook Alpha".

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1.3 (continued)

NOTE

ETOR is "All-clear" + 24 hours by default.

De-energization start time (switching time) is 2 hours by default.

Switching time is adjusted with input from Operations section based on scope and timing required for switching activities including distribution switching and transmission lines with induction as required for the event.

1. PSPS Technical Unit UPDATES Playbook for incremental scope to mitigate risks due to high priority vegetation tags (Priority 1, Priority 2 trees) and/or applicable high priority Electric Compliance (EC) tags based on input from the PSPS Distribution Asset Health Specialist (DAHS)(EOC Planning Section). As the potential PSPS event evolves, information on tags is updated in all subsequent versions of the de-energization Playbook.
 - a. As soon as available after initial Meteorological scope and also after all subsequent changes to Meteorological scope, DAHS SENDS e-mail with list of prioritized EC and VM tags to Operations Chief, Deputy Operations Chief, Distribution Branch Director, and Vegetation Management Director.
 - b. Distribution Branch Director and the Vegetation Management Director PROVIDE information to DAHS on which tags can be closed out before finalization of Playbook Delta.
 - c. DAHS REVIEWS information on completion of tags to IDENTIFY which circuits can then be removed from scope.
 - d. DAHS PROVIDES updated incremental scope to PSPS Technical Unit.
 - e. Transmission Asset Health Specialist (TAHS) BEGINS initial scoping of transmission lines to ensure a preliminary scope is available for Transmission Customer Priority Notifications.
 - f. PSPS Technical Unit UPDATES Playbook version to reflect updated incremental scope.
2. PSPS Technical Unit UPDATES in Playbook affected Distribution Customer Owned Lines (COL). At this time and for all subsequent Playbook versions, the respective isolation devices are entered into the COL tab.
 - a. IF the COL identified as being in-scope and COL Source Side Device (SSD) is the same as Playbook de-energization device,

THEN the COL SSD is included both in the main body of the playbook and in COL the tab.

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1.3.2 (continued)

- b. IF the COL identified as being in-scope AND is listed as to be de-energized by Playbook de-energization device instead of COL SSD,

THEN COL SSD is listed in COL tab.

NOTE

Customer Owned Lines (COL) are defined for distribution and are separate from Foreign Transmission Lines (FTL).

NOTE

When there is not enough pre-event time to allow for creation of Playbook A during "Readiness Posture", OIC makes decision to activate EOC based on meteorological data and Playbook A is created as soon as possible after EOC activation.

- 1.4 Vice President of Emergency Preparedness and Response (EP&R) ESTABLISHES and FACILITATES a call by which the OIC (on call) follows a set agenda to make a decision that forecasted conditions warrant activating the EOC in coordination with representatives from:
- EOC Commander (on call)
 - Meteorology
 - Hazard Awareness & Warning Center (HAWC)
 - PSPS Director/delegate
 - Planning Section Chief
 - PSPS Process Lead (EOC Planning Section)(on call)
- 1.5 OIC APPROVES recommendation from Emergency Operations Center Commander (EC) and Meteorologist to activate EOC for possible PSPS event and communicate priority notification to Public Safety Partners and to Transmission customers. This decision is designated OIC "Decision A."

NOTE

Once the decision to activate the EOC is made, standard procedures outlined in the [Company Emergency Response Plan](#) (CERP) are followed to activate the EOC, Regional Emergency Center(s) (REC), and Operations Emergency Center(s)(OEC). This includes the initial filing of the PSPS State Notification Form (Cal OES Form).

- 1.6 Resource Management Unit Leader (EOC Planning Section) CONTACTS pre-identified Resource Owners of possible PSPS event.

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- 1.7 Resource Owners (e.g., System Inspections, T-Line, etc.) CONTACT all personnel and contractors to notify them of the potential event and ensures that they are ready to respond.
- 1.8 Resource Owners CONFIRM with resources that they are available and understand timing of potential PSPS event.
- 1.9 Resource Management Unit Leader CONTACTS all Regional Emergency Centers (RECs) to determine their regions' blue sky T200 and Contract Construction Management(CCM) resource plan and the number and types of those resources that can potentially travel to other Regions.
- 1.10 Resource Owners SEND EOC Planning Section/Resource Management Lead a list of total available and confirmed resources that can respond to event, including:
 1. Crew/Resource type
 2. Number of Electric Transmission and Distribution Qualified Electrical Worker (T&D QEW) available for Transmission and Distribution Patrols
 3. Total number of Full-time Employees (FTEs)
 4. Number of Flyers (with current credentials)
- 1.11 Resource Unit COMPILES list of total system resource availability and RUNS first model of FORCE tool and DOWNLOADS SOPP report.
 1. Results POSTED to EOC SharePoint for RECs to see recommended resourcing by region. Notification of posting to EOC SharePoint SENT to EOC Operations Chief and RECs.
- 1.12 Digital Strategy (CSO) COMMUNICATES to Business Applications Team (BAT) to ACTIVATE PSPS cause codes in Outage Management Tool (OMT).
- 1.13 BAT ACTIVATES PSPS cause codes in Outage Management Tool (OMT).
- 1.14 PSPS Portal Leader (EOC Planning Section) PUBLISHES PSPS Portal and Digital Strategy PUBLISHES Priority Notice website with data as assigned for each that may include the following:
 - Customer segmented data
 - Borders for specific jurisdictions
 - Event maps
 - External situation report
 - Medical Baseline doorbell rings
 - Lists of critical facilities

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- 1.15 Situation Unit (EOC Planning Section) SUBMITS Cal OES Form for Stage 1 (Activating PSPS Protocols / Potential to De-energize).

NOTE

1. PSPS Portal is updated twice daily at 0900 and 1500 until end of event, and as required for scope changes.
2. Cal OES Forms are submitted twice daily at 0700 and 1500 until end of event, and as required for stage and scope changes.

- 1.16 Advance Notification to Agencies, Public Safety Partners, and Transmission Customers (up to 3 days prior to de-energization)

1. PSPS Technical Unit CREATES and POSTS Agency and Public Safety Partner notifications to EOC SharePoint.
2. Liaison Coordinator (LNO) REVIEWS notifications and SENDS to Customer Notification Hawk (CSO).
3. Customer Notification Hawk REVIEWS Public Safety Partner notification and NOTIFIES Customer Care Emergency Contact Center (CCECC)(CSO) of notification files.
4. Critical Infrastructure Lead (CIL)(CSO) SENDS OUT notifications to affected transmission customers
 - a. Notifications include
 - (1) Estimated date and time of de-energization window
 - (2) Estimated date and time weather “all-clear”
 - (3) Estimated date and time of Restoration (ETOR)
 - (4) May include Substation name and transmission line name
5. CCECC SENDS OUT notifications to state agencies, cities, counties, tribes, and Community Choice Aggregators (CCAs).
6. CCECC SENDS OUT notifications to Public Safety Partners / Level 1 critical customers (includes water agencies, telecommunications companies, and hospitals.)
 - a. Notifications include:
 - (1) Estimated date and time of de-energization window
 - (2) Estimated date and time weather “all-clear”
 - (3) Estimated date and time of Restoration (ETOR)

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1.16 (continued)

7. LNO HOSTS once daily Systemwide Cooperators call
 - a. Call is to provide an update on the PSPS events. There is no question and answer session during this call.
 - b. Internal participants include LNO, CSO, Public Information Officer (PIO), and Meteorology.
 - c. Invitees include local and tribal elected officials, staff and emergency managers, telecom providers, water agencies, emergency hospitals, publicly-owned utilities, community choice aggregators, transportation authorities and community-based organizations within PG&E's electrical service territory, not just those in scope.
 - d. Systemwide Cooperator calls are continued daily throughout event until PG&E's EOC is de-activated.
8. LNO HOSTS once daily State Executive Briefing
 - a. Call is to provide an update on the PSPS Event. A question and answer session is open to call participants.
 - b. Internal participants include EOC Commander (EC), Liaison Officer (LNO), Customer Strategy Officer (CSO), and Public Information Officer (PIO)
 - c. Invitees include California Office of Emergency Services (OES), California Public Utilities Commission (CPUC), California Office of Energy Infrastructure Safety (OEIS), CAL FIRE, Governor's Office, U.S. Forest Service, Department of Interior and other state agencies.
 - d. State Executive Briefings are continued daily throughout event until PG&E's EOC is de-activated.

1.17 Meteorology IDENTIFIES scope of possible PSPS event and COMMUNICATES scope of possible event to EOC Planning Section.

1. IF not already notified during "Readiness Posture",

THEN Operations Section NOTIFIES Grid Control Center (GCC) and Distribution Control Centers (DCCs) leadership of a potential PSPS event to INFORM potentially impacted areas and to ALIGN on estimated timing for potential de-energization.
2. IF not already activated during Readiness Posture,

Then GCC and DCC ACTIVATE the Electric Transmission Emergency Center (ETEC) and Electric Distribution Emergency Center (EDEC) respectively; GCC notifies California Independent System Operator (CAISO).

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NOTE

Scope changes throughout this Procedure that lead to circuits being added, modified, or removed, require review by EDEC and ETEC along with EOC Planning Section creating a new Playbook with subsequent numbering.

1.18 EDEC REVIEWS Playbook A and PERFORMS the following:

1. IDENTIFIES abnormally configured distribution circuits and equipment limitations that could impact scope of the event and SENDS descriptions of both to Distribution Branch Director.
2. IDENTIFIES resource need for manual switching and PROVIDES to Distribution Branch Director.
3. WORKS with Regional Emergency Centers (RECs) to COMMUNICATE where resources are needed to execute manual devices in scope.
 - a. IF RECs IDENTIFY that they are not able to EXECUTE all manual devices in scope,

THEN they COMMUNICATE the gap to the Distribution Branch Director in the Operations Section.
 - b. The Operations Section DETERMINES and COMMUNICATES (via previously identified process) to EOC Planning Section/PSPS Technical Lead where manual execution is not possible.
 - c. Operations Section WORKS with EOC Planning Section/PSPS Technical Lead to DETERMINE what SCADA-enabled devices will need to be operated instead. This should be done as soon as possible, as new customers in scope will need to be identified and notified, and new maps will need to be generated.
 - (1) When necessary DCC RESCHEDULES or CANCELS planned work.
 - (2) REVIEWS Playbook for load transfer opportunities outside of identified event specific areas at risk that can be transferred.

1.19 EOC Operations IDENTIFIES opportunities and prioritization of the following:

- Pre-identified switching
- Temporary generation
- Microgrids

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- 1.20 PSPS Technical Unit UPDATES scope based on results of EDEC's review of abnormal circuits to CREATE Plan B-01 and Playbook B, starting with B-01, and EOC Planning Section/Situation Unit UPDATES the Situation Report.

NOTE

In many cases when Transmission lines are in scope, the evaluation of initial Transmission scope is faster than EDEC's review of abnormalities. This leads to bypassing Playbook B and advancing directly to Playbook C.

- 1.21 TAHS IDENTIFIES initial transmission directs list of T-lines in scope with a subset of lines identified for mitigation for induction, as well as a subset identified as FTLs and a subset identified for pre-patrol.

NOTE

Foreign Transmission Lines (FTL) are defined for transmission and are separate from Distribution Customer Owned Lines (COL).

- 1.22 EOC Planning Section PSPS Deputy Chief, TAHS, and Transmission Branch Director REVIEW and CONFIRM list of T-line directs and categorize a subset of lines identified for induction sorted by priority, FTLs, pre-patrol and mitigation and SEND to ETEC/ Substation Transmission Operations Emergency Center (STOEC)/GCC. ETEC PERFORMS direct impact analysis.
1. GCC outage coordination team or designee from GCC group CREATES new or UPDATES existing Outage Cards in Transmission Operations Tracking & Logging (TOTL).
 2. ETEC PRODUCES direct impact summary for tab in PSPS Playbook and SENDS to EOC Planning Section/TAHS, Transmission Branch Director, EDEC, Substation Transmission Operations Emergency Center (STOEC), System Protection.
 3. ETEC SENDS the CAISO summary template based on the Outage Cards in Transmission Operations Tracking and Logging (TOTL).
 4. GCC RESCHEDULES or CANCELS impacting planned asset maintenance in coordination with STOEC and EDEC (as needed) in order to request CAISO established Restricted Maintenance Operations (RMO) for PSPS activation period and return critical equipment.
 5. REVIEW Playbook for load transfer opportunities to see if customers from unaffected circuits can be picked-up.

- 1.23 IF applicable to event scope,

THEN ETEC INFORMS the Transmission Branch Director that islands may be triggered based on transmission lines impacted in the event.

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1.23 (continued)

1. Transmission Branch Director COORDINATES with Power Generation Branch Director/generators (for example, for Humboldt island), STOEC/substation and GCC to confirm timing of switching to island.
2. IF Islands are confirmed as operational prior to initiation of PSPS event,

THEN ETEC INCLUDES islanded Transmission lines, generators and substations in the Transmission Playbook with abbreviation 'ISL' as indicator.

1.24 TAHS REVIEWS additions and subtractions to lines recommended for de-energization for potential impacts to lines pre-identified that may have induction risk.

1. STOEC identifies one structure on each open line segment for ideal placement of 3 phase grounds.

1.25 PSPS Technical Unit UPDATES scope with direct impacts and abnormal configurations to CREATE Plan C-01 and Playbook C, starting with C-01, and EOC Planning Section Situation Unit UPDATES Situation Report. All versions of Playbook C include applicable updates to affected COL, FTL, and related incremental Electric Compliance (EC) and Vegetation Management (VM) tags.

1. EOC Planning Section INCORPORATES the following into Playbook and Situation Report:
 - Pre-identified switching
 - Temporary generation
 - Microgrids
 - Islanding

1.26 PSPS Technical Unit PROVIDES PSPS Playbook C to affected stakeholders for analysis and review of abnormal switching.

1.27 PSPS Process Lead CREATES OIC Decision Workbook based on PSPS Playbook C, which contains information used in the OIC B and OIC C decision meetings.

1.28 Situation Unit Leader (EOC Planning Section) DOWNLOADS reports and maps and UPLOADS to EOC SharePoint for Emergency Web.

1.29 PSPS Portal Unit Leader (EOC Planning Section) STAGES reports and maps for External Portal.

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- 1.30 PSPS Technical Unit CREATES and POSTS agency and customer notifications to EOC SharePoint.
 1. Liaison Coordinator REVIEWS Agency notification and SENDS to Customer Notification Hawk.
- 1.31 Customer Notification Hawk REVIEWS customer notification files.
- 1.32 Situation Unit PREPARES Cal OES Form as needed in anticipation of “OIC Decision B” meeting.
- 1.33 EDEC REVIEWS Playbook C and PERFORMS the following for change in scope to previous Playbook:
 1. IDENTIFIES abnormally configured distribution circuits and equipment limitations that could impact scope of the event and SENDS descriptions of both to Distribution Branch Director.
 2. When necessary DCC RESCHEDULES or CANCELS planned asset maintenance.

NOTE

Abnormally configured circuits require the DCC to modify applicable switching log(s) as needed to ensure those circuits are properly de-energized according to the Playbook. These will be identified in the Playbook by EOC Planning Section/PSPS Technical Lead in a tab format to ensure visibility to all.

- 1.34 DCC/GCC RESTORE circuits/lines to normal configuration, where applicable, in advance of a PSPS event.
- 1.35 The following roles REVIEW direct impacts, wildfire risks, and maps resulting in recommendation to OIC regarding the list of transmission lines used for Total Impact Analysis (i.e., power-flow studies)
 - EOC Planning Section Chief
 - EOC Planning PSPS Deputy Chief
 - Transmission Asset Health Specialist (TAHS)
 - Transmission Branch Director
 - ETEC Lead
 - EDEC Lead

NOTE

The Total Impact Analysis may be started by ETEC prior to “OIC Decision B” in order to improve the analysis cycle time. In this case OIC “Decision B” will confirm the list of lines being studied.

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- 1.36 TAHS SENDS the list of transmission lines to be studied for de-energization to the Digital Strategy Lead for staging so it can be posted to PG&E's Federal Energy Regulatory Commission (FERC) Standards of Conduct website.
- 1.37 Prior to OIC "Decisions B/C" the PSPS Process Lead SCHEDULES a call with EOC Commander, Operations Chief, Planning Section Chief, Deputy PSPS Planning Section Chief, and PSPS Technical Unit Leader to review the distribution playbook and align on the ETOR's to be included in the upcoming playbook and resulting notifications. This meeting normally occurs during the night shift and adjustments may occur during day shift.
 1. IF Standard,

THEN calculate the ETOR using the actual weather "All Clear + 24 hours."

OR
 2. IF Custom,

THEN calculate ETOR based on known facts and field intelligence (i.e., resources available, circuit miles)
 3. Once the ETOR's are agreed upon, PSPS Process Lead (night shift) DISSEMINATES the ETOR information (time & date) for the event to both the day and night EC, Operations Chiefs, Planning Section Chiefs, Deputy Planning Section PSPS Chief, Notification Hawk, and other PSPS Process Leads.
 4. After an OIC decision meeting
 - a. IF there are changes to ETOR's after the Playbook has been created and all plan collateral have been staged or finalized,

THEN the ETOR will be UPDATED during the next scope change.
- 1.38 OIC APPROVES lines-in-scope for Total Impact Analysis based on ETEC's direct impact analysis. This decision is designated "OIC Decision B."

IF ETEC has been able to previously BEGIN the Total Impact Analysis,

THEN OIC "Decision B" is USED to confirm the list of lines being studied.
- 1.39 REC DRAFTS resource plan based on the scope of the event and posts on EOC SharePoint (REC fills in template provided by EOC).
- 1.40 REC ALLOCATES in-region T200 and CCM resources as needed.
- 1.41 REC SUBMITS requests to Resource Unit Leader. for any incremental resources needed through EOC request process.

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- 1.42 EOC/Resource Management Lead ALLOCATES centralized resources (ex: Systems Inspection, GC, MPP Contract, etc.) and COMMUNICATES these moves via email to both the Resource Owner and the receiving REC.
- 1.43 The Receiving REC REPLIES back with reporting instructions per the EOC template.
- 1.44 Resource Management Leader (EOC Planning Section) SENDS out dispatch instructions for centrally allocated resources to Resource Owners and sending RECs.

NOTE

Resource requests, allocations, and crew dispatches may continue through planning, de-energization, and restoration phases based on changing scope and possible damage found.

- 1.45 OIC APPROVES sending out initial customer notifications based on direct impact analysis identified in Playbook C. This decision is designated OIC “Decision C.”
- 1.46 PSPS Portal Leader PUBLISHES PSPS Portal, Digital Strategy PUBLISHES Priority Notice PGE.com/Emergency Web (including address look-up tool), and Situation Unit SUBMITS Cal OES Form as needed.
- 1.47 Watch Notification / Initial Customer Notification (2-1 days prior to de-energization)
 1. Liaison Coordinator PREPARES notifications and SENDS to Notification Hawk.
 2. Notification Hawk SENDS OUT notifications to state agencies, cities, counties, tribes, and CCAs.
 - a. Notifications include:
 - (1) Estimated date and time of de-energization window
 - (2) Estimated date and time “weather all-clear”
 - (3) ETOR
 3. Notification Hawk SENDS OUT notifications to Public Safety Partners / Level 1 Critical Customers (includes water agencies and telecommunications companies, and hospitals), non-Medical Baseline residential customers, commercial customers, Level 2 Critical Customers, Level 1 and Level 2 Schools, Medical Baseline customers, Master Meter Medical Baseline customers, Self-Identified Vulnerable customers (SIV) and if known microgrid customers.

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1.47 (continued)

- a. Notifications include:
 - (1) Estimated date and time of de-energization window
 - (2) Estimated date and time weather “all-clear”
 - (3) ETOR
4. CIL PREPARES notification file and SENDS to Notification Hawk.
5. Notification Hawk SENDS OUT notifications to affected wholesale customers, transmission customers, and municipalities.
 - a. Notifications to wholesale customers may include:
 - (1) Substation name and transmission line name
 - (2) Listing of Counties affected by de-energization
 - (3) How to contact PG&E’s Transmission Grid Control Center
 - b. Notifications to transmission customers and municipalities may include:
 - (1) Substation name and transmission line name.
 - (2) Warning that imminent PSPS event will cause significant power flow deviations that may have an impact on the fault duty at the point of connection and potentially put protective equipment “at risk” of not operating as designed if settings are not properly adjusted.
 - (3) How to contact PG&E’s System Protection Engineering to receive anticipated fault duty needed for protection of settings.

NOTE

1. For possible scope increases Liaison Coordinator/CIL PREPARES additional files and SENDS to Notification Hawk , who then SENDS out notifications to customers not yet notified.
2. IF warranted , the Liaison Coordinator/CIL PREPARES notification files and SENDS to Notification Hawk, who then SENDS out a Cancellation Notification to customers descoped from the event.

1.48 TAHS SENDS approved list of transmission lines Total Impact Analysis to ETEC.

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- 1.49 ETEC PERFORMS Total Impact Analysis and SENDS updated Transmission Playbook to System Protection, EDEC, Transmission Branch Director, and TAHS.
 1. The results of the scenario analysis determine requirements for off-loading customers, GCC switching log-writing, and additional resource requirements for operating manual devices.
 2. ETEC and CAISO EXCHANGE insights to RECONCILE and CONFIRM additional operational requirements for implementation.
 3. ETEC REVIEWS operational requirements with GCC and provides to system protection team for Fault Duty Analysis and System Protection DOCUMENTS setting
 4. CAISO, System Protection and Transmission Operation Engineers (TOEs) AGREE on the operational requirements for the implementation of PSPS.
 5. ETEC IDENTIFIES the requirements for implementing rotating outages in-coordination with CAISO (if needed).
 6. ETEC PRODUCES Total Impact Summary for Playbook D and SHARES with EDEC, EOC, STOEC, System Protection, and CAISO.
 7. GCC, Outage Coordination or designee CREATES new or UPDATES existing outage cards via TOTL.
- 1.50 ETEC IDENTIFIES a prioritized sequence for de-energization of electric grid elements to include load, generation, and other assets, in coordination with STOEC, EDEC, and CAISO.
- 1.51 TAHS REVIEWS additions and subtractions to lines recommended for de-energization for potential impacts to lines pre-identified that may have induction risk.
- 1.52 TAHS REVIEWS Playbook and UPDATES list of induction risk lines.
- 1.53 TAHS UPDATES and RE-PRIORITIZES list of induction risk lines and SENDS to STOEC/ETEC/GCC.
- 1.54 EOC and STOEC IDENTIFY Transmission Leads to coordinate grounding on induction risk lines.
- 1.55 PSPS Portal Leader PUBLISHES PSPS Portal and / Digital Strategy PUBLISHES Priority Notice, and PGE.com/Emergency Web (including address look-up tool) as needed.
- 1.56 Watch Notification (1 day prior to de-energization)
 1. PSPS Technical NOTIFIES Notification Hawk that notification files are posted on EOC SharePoint.
 2. Liaison Coordinator PREPARES notifications and SENDS to Notification Hawk.

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1.56 (continued)

3. Notification Hawk SENDS OUT notifications to state agencies, cities, counties, tribes, and CCAs.
 - a. Notifications include:
 - (1) Estimated date and time of de-energization window
 - (2) Estimated date and time weather “all-clear”
 - (3) ETOR
4. Notification Hawk SENDS OUT notifications to Public Safety Partners / Level 1 Critical Customers (includes water agencies and telecommunications companies, and hospitals), non-medical baseline residential customers, commercial customers, Level 2 Critical Customers, Level 1 and Level 2 Schools, Medical Baseline customers, Master Meter Medical Baseline customers, Self-Identified Vulnerable (SIV), and microgrid customers.
 - a. Notifications include:
 - (1) Estimated date and time of de-energization window
 - (2) Estimated date and time weather “all-clear”
 - (3) ETOR
5. Notification Hawk/CIL SENDS OUT notifications to affected wholesale customers, transmission customers, and municipalities.
 - a. Notifications to wholesale customers may include:
 - (1) Substation name and transmission line name
 - (2) Listing of Counties affected by de-energization
 - (3) How to contact PG&E’s Transmission Grid Control Center
 - b. Notifications to transmission customers and municipalities may include:
 - (1) Substation name and transmission line name
 - (2) Warning that imminent PSPS event will cause significant power flow deviations that may have an impact on the fault duty at the point of connection and potentially put protective equipment “at risk” of not operating as designed if settings are not properly adjusted.
 - (3) How to contact PG&E’s System Protection Engineering to receive anticipated fault duty needed for protection of settings.

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NOTE

When changes to event scope are made after PSPS Watch Notifications have been sent out, Liaison Coordinator and CSO SEND OUT notifications to customers not yet notified.

IF warranted, the Liaison Coordinator and CSO SEND OUT a Cancellation Notification to those descope from the event.

- 1.57 PSPS Technical Unit UPDATES scope with indirect transmission impacts to create Plan D-01 and Playbook D, starting with D-01, and EOC Planning Section/Situation Unit Updates the Situation Report. All versions of Playbook D include applicable updates to affected COL, FTL, and related incremental EC and VM tags.
- 1.58 EDEC REVIEWS updated scope and DISCUSSES Playbook D with ETEC.
- 1.59 EDEC REVIEWS Playbook D and PERFORMS the following for changes in scope to previous Playbook:
 1. IDENTIFIES abnormally configured distribution circuits and equipment limitations that could impact scope of the event and SENDS descriptions of both to Distribution Branch Director.
 2. When necessary DCC RESCHEDULES or CANCELS planned asset maintenance.
- 1.60 PSPS Technical Unit Leader UPDATES Playbook as necessary.
- 1.61 PSPS Process Lead UPDATES the OIC Decision Workbook according to ETEC power flow analysis which contains information used in the OIC "D and E" decision meeting.
- 1.62 EOC Planning Section Chief, EOC PSPS Deputy Planning Section Chief, ETEC, EDEC, and TAHS REVIEW final scope and ALIGN on recommendation to be made to OIC regarding de-energization.
- 1.63 TAHS SENDS the list of transmission lines to be in scope for de-energization to Digital Strategy Lead for staging so that it can be posted to PG&E's FERC Standards of Conduct website following OIC "Decision D" approval.
- 1.64 PSPS Technical Unit Leader UPDATES Playbook D as needed and PROVIDES de-energization Playbook to affected Stakeholders; and EOC Planning Section/Situation Unit UPDATES the Situation Report as needed.
- 1.65 Situation Unit PREPARES the Cal OES Form as required for Stage 2 (Decision to de-energize).
- 1.66 EDEC ADVISES ETEC and EOC of jurisdictional transfer to applicable DCC(s).

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- 1.67 Prior to OIC “Decisions D/E” the PSPS Process Lead SCHEDULES a call with EOC Commander, Operations Chief, Planning Section Chief, Planning Section PSPS Deputy Chief, PSPS Tech Unit Leader to review the distribution playbook and align on the switching times and ETOR’s to be included in the upcoming playbook. This meeting may occur during the night shift and adjustments may occur during day shift.
1. IF Standard,

THEN CALCULATE the ETOR using the actual weather “All Clear + 24 hours.”
 2. OR
 3. IF Custom,

THEN CALCULATE ETOR based on known facts and field intelligence (i.e., resources available, circuit miles)
 4. Once the ETOR’s are agreed upon, PSPS Process Lead DISSEMINATES the switching time and ETOR information (number of hours per Time Place) for the event to both the day and night EC, Operations Chiefs, Planning Section Chiefs, Planning PSPS Deputy Chiefs, Notification Hawk, and other PSPS Process Leads.
 5. After an OIC decision meeting
 - a. IF there are changes to ETOR’s after the Playbook has been created and all plan collateral have been staged or finalized,

Then the ETOR will be updated during the next scope change.
- 1.68 IF meteorology scope has changed so that additional customers are impacted according to Playbook D.

THEN OIC MAKES decision to approve or deny the updated final scope and approve or deny additional customer notifications. This decision is designated in the OIC “Decision E.”
- 1.69 OIC APPROVES scope based on Playbook D. This decision is designated OIC “Decision D.”
- 1.70 EDEC PROVIDES final Playbook to DCC(s) who then PROVIDE segment guides and switching logs (if necessary) to the applicable PG&E emergency centers (REC/OEC) aligned with DCC jurisdiction.
1. Circuits IDENTIFIED as abnormally configured with regards to segmenting require additional actions/communication between the DCC and Task Force Lead (TFL).

Public Safety Power Shutoff for Transmission and Distribution

1.70 (continued)

2. IF manual devices are identified in the finalized Playbook,
THEN the OEC ASSIGNS TFLs as needed.
 - a. OECs should RESOURCE TFLs and field switching personnel commensurate with number of manual devices requiring operation in the timeframe allotted.

1.71 Subsequent to OIC "Decision D/ E" approval, Meteorology CONTINUES MONITORING weather conditions, including internal and external forecasts, observed pressure gradients, wind speeds, and HAWC observations.

1. Based on prevailing conditions, PSPS Process Lead may CONVENE a Confirm, Cancel, Delay meeting for Time Places (TPs) in scope.
2. Meteorology can MAKE a recommendation to confirm de-energization for TPs, cancel TPs if weather conditions do not meet (or are not expected to meet) minimum fire potential conditions or delay de-energization for certain TPs.
3. EOC Commander APPROVES Meteorology recommendation.
4. If used, this process may be repeated until all TPs are either approved for de-energization or are cancelled.

1.72 Section/Situation Unit DOWNLOADS updated maps and reports and UPLOADS to EOC SharePoint for Emergency Web.

1.73 PSPS Portal Leader STAGES reports and maps for External Portal.

1.74 EOC/EDEC/DCC/ETEC/GCC DETERMINE scope of restoration including prioritization of circuits/lines and available resources (field/aircraft, etc.) and PRE-DETERMINE restoration plan including resources needed to execute once PSPS has been initiated.

1.75 EOC and STOEC IDENTIFY Transmission Patrol Leads to execute/coordinate patrol efforts on circuits and lines with GCC based on scope of restoration.

NOTE

Whenever practicable, the final de-energization Playbook D should be set 12 hours in advance of possible de-energization to allow time for a safer and more efficient preparation and execution of de-energization.

Portions of the Playbook may be de-scoped as needed based on changes in Meteorological forecast versus actual observations.

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- 1.76 PSPS Portal Unit Leader PUBLISHES PSPS Portal and Digital Strategy PUBLISHES Priority Notice, and PGE.com/Emergency Web (including address look-up tool).
 1. Digital Strategy UPDATES FERC site with transmission lines to be in scope for de-energization.
- 1.77 Warning Notification (Imminent)
 1. PSPS Technical Unit NOTIFIES CSO that notification files are posted on EOC SharePoint.
 2. Liaison Coordinator PREPARES notifications and SENDS to CSO.
 3. Notification Hawk SENDS OUT notifications to state agencies, cities, counties, Tribes, and CCAs.
 - a. Notifications include:
 - (1) Estimated date and time of de-energization window
 - (2) Estimated date and time weather “all clear”
 - (3) ETOR
 4. Notifications Hawk SENDS OUT notifications to Public Safety Partners / First-level Critical Customers (includes water agencies and telecommunications companies, and hospitals), non-medical baseline residential customers, commercial customers, Level 2 Critical Customers, Level 1 and Level 2 Schools, Medical Baseline customers, Master Meter Medical Baseline customers, Self-Identified Vulnerable customers (SIV) and if applicable microgrid customers.
 - a. Notifications include:
 - (1) Estimated date and time of de-energization window
 - (2) Estimated date and time weather “all clear”
 - (3) ETOR
 - b. Cancellation notifications are sent to customers who are no longer impacted.
 5. CIL PREPARES notifications and SENDS to Notification Hawk.
 6. Notifications Hawk SENDS OUT notifications to affected wholesale customers, transmission customers (including FTL), COL, and municipalities
 - a. Notifications to wholesale customers include:
 - (1) Premise address
 - (2) Listing of Counties affected by de-energization
 - (3) How to contact PG&E’s Transmission Grid Control Center

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1.77 (continued)

7. Notification Hawk/CIL CALLS Protective Fault Duty customers.
 - a. Information provided includes:
 - (1) Warning that imminent PSPS event will cause significant power flow deviations that may have an impact on the fault duty at the point of connection and potentially put protective equipment “at risk” of not operating as designed if settings are not properly adjusted.
 - (2) How to contact PG&E’s System Protection Engineering to receive anticipated fault duty needed for protection of settings.

1.78 UPDATE Notification (if weather event is extended for all or only select Time-Places)

NOTE

An UPDATE Notification can be sent out earlier or later in the process if the weather event is extended for all or only select Time-Places or may not need to be sent at all.

1. PSPS Technical Unit NOTIFIES Notification Hawk that notification files are posted on EOC SharePoint.
2. Liaison Coordinator PREPARES notifications and SENDS to Notification Hawk.
3. Notification Hawk SENDS OUT notifications to state agencies, cities, counties, Tribes, and CCAs.
 - a. Notifications include:
 - (1) Estimated date and time weather “all-clear”
 - (2) ETOR
4. Notification Hawk SENDS OUT notifications to Public Safety Partners / Level 1 Critical Customers (includes water agencies and telecommunications companies, and hospitals), non-medical baseline residential customers, commercial customers, Level 2 Critical Customers, Level 1 and Level 2 Schools, Medical Baseline customers, Self-Identified Vulnerable customers (SIV), and Master Meter Medical Baseline customers.
 - a. Notifications include:
 - (1) Estimated date and time weather “all-clear”
 - (2) ETOR

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1.78 (continued)

5. Notification Hawk/CIL SENDS OUT notifications to affected wholesale customers, transmission customers (including FTL), COL and municipalities.

a. Notifications may include:

(1) Length of event extension

1.79 EOC Operations Chief NOTIFIES EDEC/DCC/ETEC/GCC of plan to de-energize facilities listed by Playbook D.

1.80 EDEC/DCC, ETEC/GCC, and STOEC COORDINATE efforts to promote most effective use of field personnel based on de-energization strategy.

1.81 ETEC/EDEC NOTIFIES appropriate Transmission/Distribution Branch Directors of resource need and time to perform function and COMMUNICATES customer or system impacts.

1. GCC works with Transmission Operating Engineering (TOE) and CAISO to determine limitations.

1.82 GCC confirms circuit configuration as provided by the EOC is correct and COMMUNICATES any abnormal configuration to Transmission Branch Director.

1.83 ETEC COMMUNICATES and COORDINATES with System Protection on staggered de-energization sequencing as needed throughout the event.

2 De-energization Procedure

NOTE

1. Messaging of ETOR is performed through messaging tool used for customer notifications sent out by EOC CSO before de-energization.
2. Only after weather "all clear" in Section 3 do OECs take over ETOR updating using OMT.

2.1 Situation Unit SUBMITS the Cal OES Form as required for Stage 3 (De-energization Initiated).

2.2 Distribution Branch Director NOTIFIES EDEC for DCC to PROCEED with de-energization and CONFIRMS approved Playbook D (including revision letter/number).

1. EDEC CONFIRMS approved Playbook version with applicable DCC(s) along with approval to de-energize.

2.3 Transmission Branch Director NOTIFIES GCC to proceed with de-energization and PROVIDES approved Playbook (including revision letter/number).

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- 2.4 DCC FOLLOWS procedures to sequentially de-energize facilities per approved Playbook D and COMMUNICATE to EOC/EDEC when issues arise.
1. FLISR schemes that are a part of the de-energization plan must be DISABLED at the feeder level during these events.
 2. DCC DOCUMENTS switching instructions during events on a Switching Log per [Utility Standard TD-2700S](#) and associated procedures referring to switching logs.
 - a. IF there is no switch log.

THEN DOCUMENT switching instructions in ILIS.
 3. In cases of manual devices being utilized to de-energize, the operator PROVIDES switching instructions to the TFL to PERFORM switching to OPEN devices to DE-ENERGIZE.
- 2.5 GCC FOLLOWS procedures to sequentially de-energize facilities per approved Playbook D and COMMUNICATES to ETEC when issues arise.
1. GCC DOCUMENTS switching instructions during an event per [Utility Standard TD-1400S](#) and associated procedures.
 - a. GCC COMMUNICATES to impacted transmission customers just prior to de-energization.
 - b. GCC ESTABLISHES a clearance per standard procedure for induction risk lines prior to weather start per [Utility Standard TD-1464S, Preventing and Mitigating Fires While Performing PG&E Work](#) requirements for actions that could likely result in a spark, fire or flame.

NOTE

Additional time will be required to establish clearances and install grounds on Transmission lines identified with induction risk.

- 2.6 Electric T&D QEWS REPORTS onto clearance to GCC and EXECUTES grounding per Grounding Manual guidelines and TD-1464S requirements for actions that could likely result in a spark, fire or flame at previously identified structures on induction risk lines.
1. Once line is grounded, Electric T&D QEWS REPORTS status of grounded line to STOEC.
- 2.7 STOEC COLLECTS lines grounded and REPORTS list of grounded lines to EOC and ETEC.

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- 2.8 DCC NOTIFIES EDEC and GCC NOTIFIES ETEC that de-energization is completed.
 1. EDEC NOTIFIES Distribution Branch Director or designee that de-energization per approved Playbook is completed.
 - a. EDEC NOTIFIES Distribution Branch Director or designee of deviations from Playbook including a brief description.
 - b. Distribution Branch Director or designee NOTIFIES EOC Planning Section/PSPS Technical Lead of any deviations to Playbook.
 2. ETEC NOTIFIES Transmission Branch Director or designee that de-energization approved Playbook is completed.
 - a. ETEC NOTIFIES Transmission Branch Director or designee of deviations from Playbook including a brief description.
 - b. Transmission Branch Director or designee NOTIFIES EOC Planning Section/TAHS of any deviations to Playbook.
- 2.9 Information Technology Customer Care (ITCC) NOTIFIES CSO and Liaison Coordinator that notification files are posted on EOC SharePoint by requested Time-Place.
- 2.10 De-energization Notification
 1. Liaison Coordinator PREPARES and SENDS e-mail notifications or phone notifications to state agencies, cities, counties, Tribes.
 - a. Notifications include:
 - (1) Confirmation of de-energization
 - (2) Notice of upcoming customer notification for de-energization
 - (3) Optional: ETOR and/or Estimated date and time weather “all clear”
 2. CSO SENDS OUT notifications to Public Safety Partners / First-level Critical Customers (includes water agencies and telecommunications companies, and hospitals), non-medical baseline residential customers, commercial customers, Level 2 Critical Customers, Level 1 and Level 2 Schools, Medical Baseline customers, Master Meter Medical Baseline customers, Self-Identified Vulnerable customers (SIV) and if applicable microgrid customers.
 - a. Notifications include:
 - (1) Confirmation of de-energization
 - (2) ETOR

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- 2.11 GCC operators shall LOG outages associated with this event with a Transmission Operation Tracking and Logging (TOTL) Card ENTERING the following attribute or purpose:
- “De-energized, Wildfire Mitigation with PSPS”
- 2.12 DCC operators must:
1. LOG outages associated with this event in Integrated Logging Information System (ILIS) SELECTING the following Event Outage Cause:
 - “Wildfire Mitigation”
 - “Public Safety Power Shut-off”
 2. UTILIZE DMS Open and Create PSPS feature and ILIS checkbox feature when creating PSPS outages, which auto-populates IVR Cause Code to Public Safety and adds PSPS in Assigned DO column in OMT. If not used, requires "SELECT “Public Safety” in OMT for the Interactive Voice Response (IVR) Cause Code 31.
- 2.13 DCC SEGMENTS PSPS impacted distribution circuits following de-energization based on pre-identified locations per the approved Playbook D and PSPS Circuit Segment Guides.

NOTE

1. For more information, see the [PSPS Restoration SharePoint](#) for segment guides, maps, and switching logs to obtain necessary documents.
2. Specific details apply to PSPS outage documentation regarding usage of the open and create function for segmenting. For more information, see [PSPS Restoration SharePoint](#) Training under Operator Training for details regarding Segment Guides, Logging and Switching Logs.

1. DCC WORKS with OEC to identify segmenting strategy (i.e., Manual Device/Fuse Operation).

NOTE

Distribution Customer Owned facilities identified in the de-energization Playbook (COL tab) require their associated isolation device to be opened during the segmenting or patrol process prior to re-energization. (i.e., isolated to provide for ensuring customer safety confirmation occurs prior to those facilities being re-energized.)

2. DCC Operators WORK with their respective TFL(s) when COL is involved to ENSURE isolation devices are opened prior to re-energization of those facilities.
3. OECs to input COL in the Assigned DO column when applicable for identification of outages and tracking.

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2.13 (continued)

4. Once TFLs are identified, DCC and applicable TFL(s) DISCUSS critical information such as abnormally configured circuits and their status which includes the applicable switching logs and segmenting guides to ensure both parties are aware of the necessary actions to address these circuit(s).
5. TFLs ENSURE all activities are communicated within their assigned circuit structure (i.e., segment leads) and externally to the assigned DCC and OEC Operations Section Chief.

2.14 DCC operator UTILIZES the open and create function in DMS. There will normally be one Integrated Logging Information System (ILIS) Event Number (Switching Log number) per circuit with all downstream outages on that circuit being associated to the ILIS Event Number.

1. DCC operators ENSURE that when outages are created, that the applicable level and cause are properly selected.

2.15 Situation Unit REFERENCES the most current de-energization Playbook and Plan (Situation Report iteration) to ENTER ETORs as circuits are taken offline and are reflected in OMT.

COMBINES ETORs in Situation Report by time-place and Playbook listing circuits by time-place and INPUTS ETORs into OMT by circuit.

NOTE

No handoff information needs to occur between Situation Unit and OEC.

Steps 2.16 – 2.20 only apply under the following conditions:

- 1. Occurs after de-energization but before the next grouping of weather “all clears”.
- 2. Forecasted weather “all clear” times are shifted to the next day.

2.16 PSPS Process Lead IDENTIFIES occurrence on PSPS Timeline.

2.17 Meteorology PROVIDES to PSPS Technical Unit a forecast of weather “all clears” by “All Clear Zones” approximately 3 hours before an OIC “Decision F” meeting.

1. CALLS OUT times and “All Clear Zones” where the forecast gets pushed to the next day.

2.18 PSPS Technical Unit CALCULATES the new ETOR based on the Time Place of the “All Clear Zone” and the impacted circuit.

1. IF for the Time Place the standard method was previously used,
THEN calculate the ETOR using the new weather “all clear” + 24 hours.”
OR

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2.18 (continued)

2. IF for the Time Place the custom method was previously used,
THEN CALCULATE ETOR based on the new forecasted weather “all clear” + restoration time required from previous iteration.

2.19 Situation Unit ENTERS the new ETOR per impacted circuit for any PSPS outage in OMT.

1. IF a circuit has two or more different ETORs,
THEN the Situation Unit and PSPS Technical Unit need to work together

2.20 EOC Commander, Operations Chief, Planning Section Chief, PSPS Deputy Planning Section Chief, CSO, and PSPS Process Lead should DECIDE whether or not to send an additional customer notification.

1. IF yes,
THEN the Notification Hawk and ITCC will work together to produce an UPDATE customer notification.
2. IF no,
THEN the “INSPECT” notification is the next notification customers will receive. EOC Planning Section and EDEC REVIEW switching options after de-energization for opportunities to restore customers without energizing assets at risk.
3. IF switching opportunities are available to restore customers without energizing assets at risk,
THEN with EOC Commander approval restoration may occur prior to the weather “all clear” and DETERMINE if patrol is required.

3 Restoration Procedure

3.1 Resource Owner SENDS to EOC Planning Section/Resource Unit Leader a resource roster for specific dispatch instructions.

NOTE

Step 3.1 may occur in advance of Section 3 Restoration Procedure.

3.2 Resource Owners/Providing RECs DISPATCH centrally allocated resources according to EOC dispatch orders.

3.3 Weather “All Clear”

1. Meteorology MONITORS weather conditions for weather “all-clear”.

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3.3 (continued)

2. Prior to the first OIC “Decision F” meeting, Meteorology PROVIDES the EOC Planning Section a forecast of weather “all clears” for the PSPS event.

NOTE

De-energization Playbooks end with Playbook D.

Restoration Playbooks only use Playbook F.

There is not a Playbook with the alphabetical letter “E”.

3. Based on forecast of weather “all clears”, EOC Planning Section CREATES a Restoration Playbook F00_Forecast:
 - a. A “Restoration Details” tab in the Restoration Playbook displays a column of the Meteorology “Forecasted Distribution All Clears” for each circuit source side device (SSD) impacted by the PSPS event, along with the associated segment-patrol guides
 - b. An “Approved Distribution All Clears” column in the “Restoration Details” tab displays the approved (actual) “all clears” as and when they occur, and the corresponding forecasted “all clears” are grayed out.
 - c. A separate “Restoration Summary Approved” tab in the Restoration Playbook displays sequence of “all clears” for each OIC “Decision F” “all clear” meeting.
4. EOC Planning Section/PSPS Technical Lead SHARES Restoration Playbook F-00_Forecast with the EOC Operations Chief in advance of the initial OIC Decision F meeting, by sending e-mail with a link to EOC SharePoint and attached Restoration Playbook F-00_Forecast. EOC Operations Chief shares this data with EOC Field Operations Teams.
5. EOC Operations USES Restoration Playbook F00_Forecast to pre-stage resources for patrols, so that patrolling can commence as soon as possible when OIC DECLARES weather “all clears”.
6. EOC Commander and Operations Section Chief, along with PSPS Process Lead, GAIN alignment to determine whether to revise ETOR and what method to use, standard or custom method.
 - a. IF the actual weather “all clear” changes,
THEN revise ETOR.
 - (1) IF Standard,
THEN calculate the ETOR using the actual weather “all clear + 24 hours.”

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3.3.6.a. (continued)

(2) IF Custom,

THEN CALCULATE ETOR based on known facts and field intelligence (i.e., resources available, circuit miles).

- b. Planning Section Chief or Deputy Planning Section Chief COMMUNICATES revised ETORs to PSPS Technical Unit for entry into the forecast restoration playbook (Decision F). Then PSPS Technical Unit UPDATES ETORS in PSPS Viewer and in Restoration Playbook F00_Forecast.
7. Meteorology RECOMMENDS weather “all clears” based on improved weather conditions applied to pre-defined “All Clear Zones” methodology; due to the large geographic span of some Fire Index Areas (FIA), Meteorology has divided FIAs into pre-defined boundaries to allow for varying geographic weather conditions. Meteorology also has the option to recommend weather “all clears” by TP, if weather conditions warrant such an action.
8. Based on Meteorology’s recommendations, EOC Commander RECOMMENDS to OIC to start restoration activities (i.e., weather “all clear”), for “All Clear Zones”, or globally for all areas previously de-energized for PSPS.
 - a. OIC ISSUES the weather “all clear” separately for each PSPS impacted area as applicable. This decision is designated OIC “Decision F.”

NOTE

Generally, at the first “Decision F” meeting EOC Commander seeks approval for OIC to delegate authority to clear remaining “All Clear Zones” based on safe weather conditions for remainder of the Operating Period. Once Approval is provided by OIC, EOC Commander can then approve weather “all clears” for the remaining “All Clear Zones” at each subsequent Decision F meeting, in the absence of the OIC.

- b. With the first OIC “Decision F”, the “Restoration Playbook F00_Forecast” is then renamed “Restoration Playbook F01_Approved”. This playbook notes which areas have been approved for weather “all clears” and which areas will have to be approved in subsequent OIC “Decision F” meetings.

IF OIC APPROVES weather “all clear” for all affected “All Clear Zones.”

Then there is one OIC “Decision F” meeting and only one Restoration Playbook F01_Approved.

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3.3.8 (continued)

- c. IF OIC APPROVES weather “all clears” for specific area/s only,

THEN recommendations made at subsequent OIC “Decision F” meetings will address remaining areas with subsequent Playbooks identified according to each of these meetings (i.e., F01_Approved, F02_Approved, etc.)
9. Following each OIC Decision F meeting, PSPS Recorder immediately INPUTS the approved All Clear Time and the corresponding approved “All Clear Zones” into a file in PSPS Situational Intelligence Platform (PSIP) and SAVES file.
 - a. PSPS Recorder immediately after the Decision F meeting CONFERS with PSPS Process Lead to corroborate the accuracy of the all clear approval time and the approved “All Clear Zones” before Recorder SAVES the file in PSIP.
 - b. PSPS Recorder SENDS a message to the PSPS Technical Unit Leader that this action is complete.
10. Following each OIC “Decision F”, PSPS Technical Unit USES PSIP to enter approved “All Clear Zones” and corresponding time stamps into Restoration Playbook.
11. PSPS Technical UNIT UPDATES two tabs in the “Restoration Playbook F01_Approved” to reflect the approved weather “All Clear Zones” and time stamps and SENDS the “Restoration Playbook F01_Approved” file to the EOC Operations Chief, who then CASCADES Playbook to a pre-determined list of affected stakeholders in field operations.
 - a. This process is repeated for every subsequent OIC “Decision F” meeting until all areas de-energized for PSPS have been declared weather “all clear”. At the last OIC “Decision F” meeting the Restoration Playbook F has weather “all clears” for “All Clear Zones.”
12. EOC Operations Chief SENDS e-mail with link to EOC SharePoint site and attached UPDATED “Restoration Playbook F01_Approved” file to ETEC/EDEC/ RECs), OECs, and OMT Hawks. This step is repeated for every new Playbook F that is approved.
13. RECs and OECs INTEGRATE their current distribution list to incorporate the “Restoration Playbooks F01_Approved” file and SHARE it with Task Force Leads (TFL) and restoration teams. This step is repeated for every new Playbook F that is approved.
14. Situation Unit SUBMITS Cal OES Form for Stage 4 (Initiating Re-energization Patrols) after OIC “Decision F.”

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3.4 Restoration Planning

1. EOC Operations Chief PROVIDES ETEC/EDEC and impacted REC/OECs “Restoration Playbook F01_Approved” with transmission lines and distribution circuits (or portions thereof) which require a patrol.
2. Prior to weather “all-clear” issued by OIC, ETEC INITIATES Restoration Sequence Planning and CREATES an operating plan for restoration of applicable lines to normal service including load, generation, system protection settings, and other assets.
 - a. ETEC and GCC CREATE a prioritized sequence for patrolling the de-energized transmission assets in coordination with EDEC, STOEC, System Protection, and CAISO.
 - (1) STOEC PROVIDES feedback to ETEC if transmission plan cannot be executed.
 - (2) GCC VALIDATES restoration sequence and timing with CAISO.
 - (3) ETEC COORDINATES with STOEC and EDEC to DETERMINE Transmission ETOR and SHARES with Transmission Branch Director.
 - (4) Transmission Branch Director COMMUNICATES ETOR to EOC Operations Chief.
 - (5) Operations Chief COMMUNICATES ETOR to key field groups (REC/OEC).
 - b. STOEC and REC/OEC DETERMINE and IDENTIFY resource requirements for patrol and restoration of applicable circuits/lines and COMPARE to Resource Plan provided by Planning Section. CONFIRM total resource needs with Planning Section. IF additional resources are needed, REQUEST resources from Planning Section. UPDATE ARCOS with actual resources and prepare to send or receive resources as needed.
3. PSPS Portal Leader PUBLISHES PSPS Portal and CSO/Digital Strategy PUBLISHES Priority Notice, and PGE.com (including address look-up tool).

3.5 Weather “All Clear” Notification

1. Liaison Coordinator PREPARES notifications and SENDS to CSO.
2. Notification Hawk SENDS OUT notifications to state agencies, cities, counties, Tribes, and CCAs.
3. Notification Hawk PROVIDES approval for OMT notification automation to be turned ON which will deliver notifications to Message Broadcast for delivery to impacted Public Safety Partners / First-level Critical Customers (includes water agencies and telecommunications companies, and hospitals), non-medical baseline customers, commercial customers, Level 2 Critical Customers, Level 1 and Level 2 Schools, Medical Baseline customers and any other impacted Service Point.

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3.5.3 (continued)

Notifications include notice of inspections and estimated date and time of Restoration (ETOR).

4. Notification Hawk REQUESTS BAT to enable notification automation for weather “all clear”, “ETOR Update” and “Restored”.
5. BAT ENABLES notification automation.
6. EOC Operations Chief NOTIFIES ETEC, EDEC, STOEC, REC, and OEC of approval to begin restoration (patrol and re-energize as safe to do so) on identified circuits and lines/line segments in impacted areas that have received weather “all-clear.”

NOTE

Once the weather “all-clear” has been given by the OIC for a given PSPS impacted area(s), subsequent ETOR management is no longer performed by the EOC, but is continued by the associated OEC, which uses OMT for ETOR updates.

- a. OEC CSO/DOS to monitor COL in OMT until Restoration.
7. Notification Hawk/CIL NOTIFIES COL customers to respond via Chat Bot URL (e-mail/text) acknowledging equipment is safe to restore, or more time is needed to inspect equipment and make repairs. Delay in response may hinder power restoration to you and potentially other customers
 - a. CIL MONITORS Chat and ROUTES to OEC CSO/DOS to work with Electric Operations.
 - b. CIL MONITORS and ROUTES list of COL customers not acknowledging to OEC CSO/ DOS.

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3.6 Field Operations Restoration

NOTE

Outages that occur prior to a PSPS event on circuit elements which are included in the upcoming PSPS event scope can be restored to the extent possible prior to the PSPS event de-energization switching start time for the given circuit element (as identified in the de-energization playbook).

Example 1: PSPS De-energization Playbook includes Oro Fino 1101 Circuit from CB, de-energization switching starting at 1000, to be completed by 1200. Same date, 0200 Oro Fino 1101 CB level outage occurs.

Restoration activities could continue through 1000 at which time they would be discontinued to provide for the PSPS event de-energization.

Example 2: PSPS De-energization Playbook includes Oro Fino 1101 Circuit from Field Device 1234 (downstream of CB), de-energization switching starting at 1200, to be completed by 1400.

Same date, 0200 Oro Fino 1101 CB level outage occurs (de-energizing both source and load sides of Field Device 1234). Restoration activities from the CB to Device 1234 are not impacted by the PSPS event while those efforts on the load side of Field Device 1234 would be discontinued at 1200 to provide for the PSPS event de-energization.

1. EDEC COMMUNICATES weather "All Clear" approval for appropriate Restoration Playbook F to DCC personnel.
2. OEC IC COMMUNICATES to field personnel to begin patrol and restoration of circuits approved for restoration listed in the approved restoration Playbook.
3. TFL(s) CONTACT appropriate DCC to collaborate on execution of restoration strategies.
4. OEC IC ASSIGNS "ETOR Hawk" who is responsible for ETOR Management and PROVIDES guidance to OEC support staff to ENTER ETOR updates in OMT.
5. OEC IC or delegate evaluates and determines possible updates to ETOR based on the approved Restoration Playbook F, and the restoration strategy.
 - a. IF OIC IC or delegate DETERMINES that the ETOR needs to be updated, THEN OIC IC or delegate COMMUNICATES to OEC personnel to update OMT.

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3.6 (continued)

6. OEC personnel PERFORM all three steps (a-c) in one transaction in OMT, upon receipt of Restoration Playbook F provided by the EOC for circuits cleared for patrol and restoration:
 - a. ENTER All Clear Timestamp (date/time) listed in the approved Restoration Playbook F.
 - b. ENTER an updated ETOR.
 - c. CHANGE the IVR cause to “Public Safety Patrolling” code 34. This task triggers the “All Clear” customer notification if the auto notification has been enabled in OMT by Notification Hawk.
7. OEC ETOR Hawk should actively MONITOR patrol progress and manage ETOR updates based on field intelligence provided by the TFLs.
8. OEC UPDATES the percentage of patrol complete when possible hourly in increments of 5% or 10% in OMT.
9. OEC UPDATES post weather event ETOR using OMT as follows:
 - a. Careful attention and thought should be taken when UPDATING ETORs in order to minimize customer notification fatigue and to provide an accurate ETOR.

NOTE

After initial ETOR has been entered in OMT, every time an ETOR is updated/changed triggers a system generated automatic customer notification with the updated ETOR only when the auto notification is enabled in OMT by the Notification Hawk.

ETOR communications to impacted customers are generated in OMT and SENT in batches via messaging service (for example, Message Broadcast).

- b. ETOR updates should be as accurate as possible and DEVELOPED based on real time data, field Intelligence (i.e., resources, daylight), and situational awareness acquired through patrols.
- c. ETOR accuracy is defined by the following criteria:

All customers who are restored within the following bounds:

 - (1) Restoration time is less than 120 minutes before, or 15 minutes after the communicated ETOR.

Public Safety Power Shutoff for Transmission and Distribution

3.6.9.c.(1) (continued)

- (2) A maximum of 2 updates are permitted at the OEC level, to follow an All Clear notification.
- (3) Any ETOR update must be completed before the current ETOR has expired.
- d. OEC may GROUP up to three sequential circuit segments with a common ETOR.
- e. OEC(s) ADD one additional hour when updating an ETOR to account for switching time to energize customers.
- f. IF restoration is expected to be sooner than the current ETOR,
THEN UPDATE given circuit segments ETOR based on field intelligence.
- g. IF initial ETOR is expected to expire prior to projected restoration (may include delay due to damage),
THEN UPDATE given circuit segments ETOR based on field intelligence.
- h. IF damage is FOUND on a given outage,
THEN UPDATE OMT Cause to “Public Safety Repair” Code 33,
THEN UPDATE ETOR for given circuit segments based on field intelligence.
- i. OEC shall CONSIDER downstream segments potentially impacted by damage for additional ETOR updates.

IF the OEC IC DETERMINES fire damage has occurred on circuits in a PSPS status,

THEN the OEC UPDATES cause code to “Fire” cause code.

NOTE

1. Selecting “Fire” cause code is used only when circuits have become damaged by fire. Circuits starting within the PSPS footprint that then become damaged by fire, should have the associated cause code changed from “Public Safety” or “Public Safety Patrolling” cause to “Fire” to ensure the outage is accurately identified in OMT.
2. For no access due to fire, the cause code remains “Public Safety” or “Public Safety Patrolling” and a reason code is entered for no access due to fire.

Public Safety Power Shutoff for Transmission and Distribution

3.7 OEC ETOR Hawk MONITORS circuits

1. OEC ETOR Hawk MONITORS circuits approaching the 24-hour threshold for restoration based on the weather “all clear” time.
2. OMT color-codes outages.
 - a. IF PSPS restoration outage exceeds 24 hours after weather “all clear”,

THEN OEC ENTERS a reason in the outage remarks field using the drop-down menu in OMT.

3.8 Restoration Patrol Requirements

1. All impacted transmission and distribution overhead lines that are IDENTIFIED as “event specific assets at risk” in High Fire Risk Area (HFRA) as directed by the EOC must be PATROLLED in their entirety and all found trouble must be isolated or cleared prior to energizing.
 - a. For Transmission:
 - (1) PATROL the de-energized sections of all lines with identified “event specific assets at risk” as directed by the EOC.

IF additional de-energized transmission lines not required by the EOC to be patrolled are identified at the local level (GCC/T-line) to be considered for a patrol,

THEN STOEC COMMUNICATES with Transmission Branch Director to gain approval for additional patrol from EOC Commander.

NOTE

“Event specific assets at risk” for Transmission are segments that include structures that exceed event guidance.

- b. For Distribution:
 - (1) PATROL all impacted primary (and secondary that extends beyond primary) overhead lines identified as “event specific assets at risk” as directed by the EOC. Secondary does not include service drops.

IF additional de-energized distribution lines not required by the EOC to be patrolled are identified at the local level (OEC/DCC) to be considered for a patrol,

THEN REC/EDEC COMMUNICATES with the Distribution Branch Director to gain approval for additional patrol from EOC Commander.

Public Safety Power Shutoff for Transmission and Distribution

3.8.1.b (continued)

NOTE

“Event specific assets at risk” for Distribution are assets that are in the Meteorology polygon or exceed guidance for tags in FIA/HFRA.

- (2) For joint use privately owned lines (POLs) PG&E PROVIDES a courtesy patrol of distribution POLs after the weather “all-clear” is given and prior to re-energization.

IF damage is IDENTIFIED on a POL during a patrol,

THEN patrol personnel COMPLETE and SUBMIT [TD-2014P-01-F01](#), Third Party Non-Utility Notification of Non-Conformance Form to NOTIFY owner of the need for repair and that PG&E will not re-energize until the POL owner has COMPLETED repairs.

PG&E NOTIFIES additional customers that are served off of a damaged POL of continued de-energization until damage to non-PG&E- asset(s) is REPAIRED by POL owner.

For more information on POL see [TD-2015P-02, Procedure for Privately Owned Lines \(POLs\)](#).

- (3) For customers metered at primary voltage, once the weather “all-clear” is given, PG&E PATROLS Company owned lines to the point of service with Customer-owned lines/equipment.
- Customers receive automatic messaging through messaging service that facility has been de-energized.

Automatic messaging NOTIFIES COL customer following the weather “all-clear” that the Customer is REQUIRED to verify that their equipment is both safe and ready to be energized when PG&E is able to do so. COL customer CONFIRMS to PG&E through Chat BOT that their equipment is both safe and ready to be energized when PG&E is able to do so.
 - IF additional time is necessary

THEN CIL DIRECTS specific COL to Division OEC CSO and electric partners.
 - Automatic messaging NOTIFIES COL customer that facility has been re-energized.

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3.8.1.b.(3) (continued)

- TFL RECEIVES notification from their respective OEC following the applicable weather “All Clear” when the COL owner has reported their facility is both safe and ready to be energized.

Once this takes place, the TFL will inform the DCC Operator and arrange to have the isolation device closed.

Both the TFL reporting a given COL is safe and ready to be energized and the isolation device operation(s) shall be DOCUMENTED on a switching log or at a minimum in ILIS Event Switching (if a switching log was not used for the outage).

2. For the scenario described below, a complete patrol is not required.
 - a. Circuits or segments de-energized during a PSPS event that are not “event specific assets at risk” unless the EOC DIRECTS otherwise.
3. STOEC EXECUTES Transmission patrol restoration plan on lines based on event scope.

NOTE

Inability to return critical transmission assets due to damage to conductor or other reasons may require revised review and subsequent adjustments to the Restoration Plan if grid reliability could be impacted.

4. IF additional resources are needed to support restoration activities,
THEN the appropriate party COMMUNICATES to EOC to request additional resources.
5. EOC, ETEC/GCC, EDEC/DCC, STOEC, REC, and OEC ENSURE coordination between all field resources to maximize efficiency in restoration efforts throughout the event.
6. GCC/ETEC COORDINATE PATROL of de-energized transmission lines IDENTIFIED by EOC as “event specific assets at risk” for damage to assess status for restoration/repair.
 - a. Do not ENERGIZE transmission equipment if it will energize distribution equipment that has not been isolated or patrolled.

Public Safety Power Shutoff for Transmission and Distribution

3.8 (continued)

7. DCC supported by EDEC DIRECTS distribution restoration efforts under the following guidelines.
 - a. Applicable OEC(s) IDENTIFY and UTILIZE TFLs as the single point of contact for designated distribution circuits to the appropriate DCC during the PSPS restoration process, including any needed repairs.
 - b. Operators can further SECTIONALIZE a segment beyond what is already included in the applicable Segment Guide when agreed upon with the appropriate TFL by SECTIONALIZING mainline or OPENING tap lines prior to RESTORING customers.
 - c. TFL PROVIDES operator with patrol completion status and REQUESTS approval to energize circuit segment(s) following patrols and CONFIRMS the “from and to” open points with the operator.
 - d. The OEC ETOR Hawk communicates with TFLs on expected completion of restoration of circuit segment(s).
 - (1) IF initial ETOR is expected to expire prior to projected restoration,

THEN TFL and OEC DETERMINE new ETOR and the OEC INPUTS new ETOR into OMT.

IF non-fire damage is FOUND during patrols on a given outage,

THEN OEC UPDATES PSPS OMT to “Repair” Code and UPDATES ETOR accordingly for given outage and CONSIDERS downstream outages that may be impacted for ETOR updates (i.e., no back ties or other options available to restore without the damage being repaired first).
 - e. Guidance on hazards and usage of OMT Hazards Tool for field personnel, TFLs, GCC and DCC Operators, and supervision are in [PSPS-1000P-01-Att01, Hazard Response during PSPS Events.](#)
 - f. IF damage or hazards are identified during a patrol.

THEN patrol personnel must
 - (1) COMPLETE documentation form in the Inspect App for each damage, hazard, OR if Inspect App is not available, FILL OUT one PSPS Damage Documentation Form or Pronto Form for each damage or hazard and SUBMIT to the TFL.

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3.8.7.f.(1) (continued)

IF filling out paper form,

THEN TAKE a picture of the PSPS Damage Documentation Form and
SEND picture and 3-5 photos to respective OEC/STOEC
Documentation Unit Lead to enter into the Inspect App.

- (2) CREATE a Line Corrective (LC) / Electric Corrective (EC) Notification within the Inspect App Damage Documentation form per standard processes.

- (3) SEND text or e-mail to OEC/STOEC Documentation Lead

- (4) IF CREATING an LC/EC Notification due to damaged equipment (per standard processes,

THEN UPLOAD the photos to LC/EC notification.

- (5) OEC/STOEC Documentation Unit Leads:

ENSURE all Damage Documentation Forms have been completed by the Field and entered into the Inspect App or Pronto Form and if using paper forms that all sections are filled out completely and information from the paper form is entered into the Inspect App.

ENSURE 3-5 photos have been added to the Inspect App Damage Documentation Form.

ENSURE LC/EC notification has been created for damages per standard processes.

- (6) REC Documentation Unit Leads:

REVIEW the forms for completion and follow-up with the OEC/STOEC as required.

- (7) IF a fire is IDENTIFIED,

THEN first CALL emergency services (9-1-1) to notify of fire,

THEN second CALL TFL,

THEN TFL CALLS the respective DCC,

DCC NOTIFIES the HAWC.

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3.8.7.f (continued)

- (8) IF third party damage is IDENTIFIED,

THEN follow process to fill out [TD-2014P-01-F01](#), Third Party Notification Form.
- g. Operator PERFORMS or DIRECTS TFL to PERFORM necessary switching to ENERGIZE given circuit(s) segments.
 - (1) IF EXECUTED via SCADA,
THEN operator NOTIFIES TFL when energized.
- h. Operator PROVIDES switching instructions to the TFL to PERFORM PSPS patrol of all radial or tap lines in their entirety as defined as being in scope for patrol with no trouble found, CLOSE devices to ENERGIZE (group operations permitted).
- i. The TFL REPORTS to the operator the time each individual device is CLOSED, and power CHECKED ok as soon as practical.
 - (1) IF trouble is FOUND,

THEN the TFL NOTIFIES the control center requesting further switching instructions and REMAINS the single point of contact for repairs/clearances.
 - (2) For all damages FOUND, original record from de-energization must be MAINTAINED and new record CREATED for damage.
- j. Delayed re-energization and resuming incomplete patrols:
 - (1) IF a section of line cannot be energized immediately after patrol,

THEN ENERGIZE as soon as practicable following patrol when weather conditions still support re-energization.
 - (2) IF line was not energized due to incomplete patrol (i.e., darkness),

THEN RESUME PATROL from where it left off-when weather conditions still support re-energization.
- k. DOCUMENT switching in ILIS using the Distribution Management System (DMS) "open and create" function and associating to appropriate outage event.

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3.8 (continued)

10. IF patrol is not good,
THEN grounds remain in place until repairs can be made.
11. GCC ENERGIZES and TESTS released equipment and ETEC REPORTS same to Transmission Branch Director.
 - a. GCC ISOLATES all equipment with found trouble and reports same to ETEC. ETEC NOTIFIES Transmission Branch Director.
 - b. GCC NOTIFIES DCC of line restoration and trouble location.
12. Operator ENABLES FLISR after circuits have been energized EXCEPT for circuits that have been disabled per.
13. EOC Planning Section SUBMITS Cal OES Notification Form for PSPS Stage 5 – All PSPS Lines Re-energized.
14. EOC Planning Section/ Resource Unit De-mobilization Lead DEVELOPS demobilization plan and SUBMITS to Operations Section Chief and Planning Section Chief for approval.
15. Planning Section Chief SENDS OUT approved demobilization Plan to Operations Section Chief and RECs.
16. Notification Hawk CONTACTS BAT at conclusion of the event to have BAT deactivate notification automation.
17. BAT DEACTIVATES notification automation.
18. Notification Hawk CONTACTS BAT at conclusion of the event to deactivate PSPS cause codes in OMT.
19. BAT DEACTIVATES availability of PSPS cause codes in OMT.
20. EOC Planning Section/PSPS Portal Lead PUBLISHES PSPS Portal, CSO/Digital Strategy PUBLISHES Priority Notice PGE.com/Emergency Web (including address look-up tool).

NOTE

POWER RESTORED communications to impacted customers are generated in OMT and SENT via messaging service (for example, Message Broadcast) on a pre-determined, batched frequency. Notifications include date and time of restoration.

END of Instructions

Public Safety Power Shutoff for Transmission and Distribution

DEFINITIONS

Customer Owned Lines (COL): Distribution Customers metered at primary voltage. Customer Owned Lines are third party owned and operated power lines interconnected to PG&E's system. Customer owned facilities are third party facilities on the customer's side of the meter. Customer owner(s) are responsible for maintenance and operation of their line and equipment.

Critical Customer  [2022 Internal Critical Facilities Definitions](#)

Level 1 - CPUC Critical Infrastructure Sectors & PG&E's Public Safety Partners – PSP (CC1 & TT1, TT2)

Communications Sector (TT1, TT2): Wireless/Wireline/Broadband Provider Critical Facilities

Emergency Services Sector (CC1): Police & Fire Stations, Emergency Operations Centers (Federal, State, County and Tribal)

Energy Sector (CC1): Interconnected publicly owned utilities, Electric Cooperatives, Community Choice Aggregators (CCA)

Government Facilities Sector (CC1): Government agencies critical to National Defense/Cybersecurity

Healthcare & Public Health Sector (CC1): Emergency Hospitals and Surgical Centers

Water & Wastewater Systems Sector (CC1): Critical Potable Water & Wastewater Treatment Facilities

Transmission: Attempt to notify within 48-72 hours, dependent on scoping

Level 2 - CPUC & PG&E's Critical Infrastructure Sectors (CC2, SC1, SC2)

Chemical Sector (CC2): Fuel Refineries; Chemical Plants; Hazardous Materials Facilities

Communications Sector (CC2): Radio/ TV Broadcasting Critical Facilities, Critical Data Centers

Emergency Services Sector (CC2): Non-Critical Fire and Police Stations, Evacuation Centers/Shelters

Food and Agriculture Sector (CC2): Emergency Feeding Organization (Food Banks)

Government Facilities Sector (CC2): Local/State/National Government staging sites, Homeless shelters, Schools (SC1 Universities/Higher

Education, SC2 K-12), Senior Centers, Community Centers, Voting Centers, Vote Tabulation sites, Assisted and Independent Living Centers (as

defined by the California Department of Rehabilitation), Prisons and Jails

Healthcare & Public Health Sector (CC2): General Hospitals, Hospice Centers, Skilled Nursing Facilities, Kidney Dialysis Centers, Blood Organ Banks,

Public Health Departments, Cooling/Warming Centers, Temporary Facilities established for public health emergencies

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Transportation Sector (CC2): Major Local and National Public Transportation Centers (BART, Ferries, Airports), Traffic Management Systems

Water & Wastewater Systems Sector (CC2): Non-critical potable Water and Wastewater Treatment

Level 3 - PG&E's Community Impacting Sectors (CC3, SC3)

Chemical / Industrial Sector (CC3): Manufacturing Facilities, Distribution Centers, 24-Hour Operations Facilities, Research Facilities, Biotech

Companies

Communications Sector (CC3): Call Centers, Non-Critical Radio/TV Broadcasting Facilities

Community Sector (CC3): Major Community, Town/City Facilities, Arena/Coliseums, Stadiums, Zoos

Education Sector (SC3): Pre-schools, Licensed daycares

Food and Agriculture Sector (CC3): Dairy & Livestock facilities, Food refrigeration warehouses, Food processing, Large/Primary community grocery stores

Healthcare & Public Health Sector (CC3): Doctor offices and other non-essential medical facilities and offices

Service Sector (CC3): Major Tourist Attractions, Hospitality Facilities, Shopping Centers (Not Evacuation Centers)

Event specific assets at risk: Overhead assets within the meteorological risk area(s) identified for possible de-energization in a PSPS event.

Transmission: Event specific assets at risk" for Transmission are segments that include structures that exceed event guidance.

Distribution: Event specific assets at risk" for Distribution are assets that are in the Meteorology polygon or exceed guidance for tags in FIA/HFRA.

Fault Location Isolation and Service Restoration (FLISR): Self-healing feeder automation (FA) technology schemes designed to improve service reliability on the electric distribution system. PG&E uses software that interfaces with Supervisory Control and Data Acquisition (SCADA) devices. Automatic sectionalizing equipment detects and isolates the fault and may open and close multiple devices to energize customers within 5 minutes resulting in some customers experiencing a momentary (5 minutes or less) and some customers experiencing a sustained outage (greater than 5 minutes).

Foreign Transmission Lines (FTL): Third party owned lines transmission lines electrically interconnected to PG&E's transmission system and/or physically collocated on transmission structures.

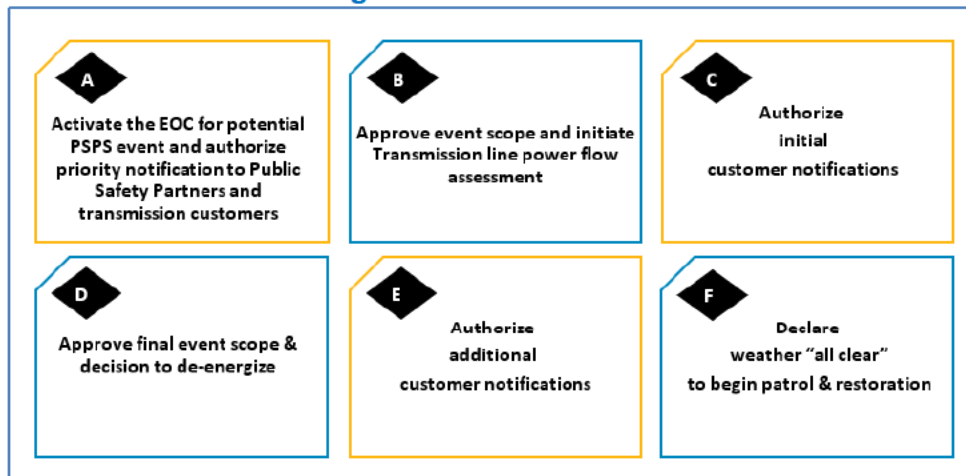
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Induction Risk Lines - CFPT Induction is a subset of the lines that are in scope for CFPT Asset which also have indicators that show a higher risk for induction related ignitions even while the line or segment is deenergized. Additional mitigations are considered for these lines.

Privately Owned Lines: Privately Owned Lines (POLs) are third party owned and operated power lines interconnected to PG&E's system. PG&E relies on these "Joint Use" POLs to deliver electricity to PG&E's revenue meters at customer premises. PG&E meters are located at the ends of the POL where the customer premises interconnect. POL owner(s) are responsible for the maintenance and operation of the line. For more information on POL see [TD-2015P-02, Procedure for Privately Owned Lines \(POLs\)](#).

Officer-in-Charge Decisions: There are six important PSPS decisions, called OIC decisions, of which the OIC is responsible for making during an event (A-F). The OIC Decisions are summarized in Figure 1.

Figure 1: OIC Decisions



Playbook

- De-energization Playbook:** The list of transmission lines and distribution circuits planned to be de-energized as part of the PSPS event. The De-Energization Playbook has 4 main versions A, B, C, D, each playbook updates the previous. Version A includes initial distribution impacts. Version B includes distribution impacts including abnormal conditions and confirmed mitigations. Version C includes distribution abnormal and transmission direct impacts, also including downstream impacted transmission lines. Version D includes distribution abnormal and transmission direct and indirect impacts including System Protection. The letter "E" is not used for playbooks.
- Restoration Playbook F:** The Restoration Playbook contains a list of all circuits by Division, impacted by the PSPS Event, along with the associated "All Clear Zones" for each circuit, Distribution ETORs and the segment/patrol guides. Prior to the first OIC Decision F meeting, Meteorology provides a forecast of Distribution weather "all clear" times for each "All Clear Zone" in the Playbook, which are then input in the Playbook. At this stage, the Restoration Playbook is named "Restoration Playbook F00_Forecast".

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Definition: Restoration Playbook F (continued)

When the first OIC “Decision F” meeting occurs, the approved All Clear times for each approved “All Clear Zone” are input in the Restoration Playbook, and the corresponding forecast times are grayed out. After the first OIC “Decision F” meeting, the Restoration Playbook F00_Forecast is then renamed “Restoration Playbook F01_Approved”. This playbook thus provides, for each “Decision F” meeting, a running tally of the “All Clear Zones” and corresponding circuits that have been approved for weather “all clears” and which areas will have to be approved in subsequent OIC “Decision F” meetings.

Public Safety Partners: First/emergency responders at the tribal, local, state, and federal level, water, wastewater, and communication service providers, affected community choice aggregators, publicly owned utilities/electrical cooperatives, the CPUC, the California Governor’s Office of Emergency Services and the California Department of Forestry and Fire Protection.

The term “emergency response providers” includes federal, state, and local governmental and nongovernmental public safety, fire, law enforcement, emergency response, emergency medical services providers (including hospital emergency facilities), and related personnel, agencies, and authorities.

PSPS Patrol: After the severe weather has passed, a PSPS patrol consists of a visual assessment of assets to identify any condition that would prevent a circuit or portion thereof from being safely energized.

Qualified Electrical Worker (QEW): A Qualified Electrical Worker is, by regulatory definition, a qualified person who has a minimum of two years of training and experience with high-voltage circuits and equipment and has demonstrated by performance, familiarity with the work to be performed and the hazards involved.

The following additional requirements only apply to Electric Transmission and Distribution employees designated as a QEW:

- 1) Journeymen Linemen classification or higher when working on or around energized facilities in excess of 600 volts
- 2) Has received training and has demonstrated the ability to competently to perform the following:
 - a. Distinguish exposed live parts from other parts of electric equipment
 - b. Determine the nominal voltage of exposed live parts
 - c. Know the minimum approach distances for the voltages exposed
 - d. Know the precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools to be used at all times when working on or near exposed energized parts of electric equipment

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Definition: Qualified Electrical Worker (continued)

e. Understand and be able to recognize all other hazards and potential hazards of working on and around high voltage equipment in excess of 600v whether or not energized parts are exposed.

Situation Report: The Situation Report is an event-based summary displaying impacts of de-energization and forecasted weather conditions. The report includes:

- User-enabled plan selection with options to select and focus on specific time-places
- Customer counts by time-places, PG&E divisions, counties, cities, zip codes, circuits, for possible de-energization
- High level customer notification metrics for critical facility, medical baseline, life support, and general customers with optional notification drilldown information.
- Automated restoration progress view.

Task Force Lead (TFL): Task Force Leads act as the single point of contact with the designated DCC and are assigned the responsibility of executing field switching (including establishing and holding necessary clearances, which is limited to TFLs that are qualified to hold a clearance. If not qualified, other arrangements with a qualified person have to be made) as directed by DCC operator. They are also responsible for patrols being completed according to patrol requirements. TFLs direct assigned Segment Leads, and Segment Leads direct assigned patrol personnel.

Time-Place (TP): A Time-Place (TP) is a portion of the PG&E grid where the impacted electric lines and geographical locations are aligned and is forecast to experience consistent timing for potential PSPS. Time-Places are identified for each PSPS event and receive consistent treatment for notifications and de-energization. Once actual weather conditions occur, weather “all clear” and service restoration times may vary due to actual weather conditions within a TP.

Weather “all clear”: Approval to start restoration on select lines. The OIC is responsible for issuing the weather “all clear” and may issue multiple weather “all clears” for separate locations in a phased approach to restore customers when conditions are safe for crews to begin patrols. . The OIC may elect to delegate the authority to issue a weather “all clear” to specified individuals for an operational period (EOC Commander(s) or Deputy OIC(s)). However, the OIC retains full accountability for the OIC decisions made under the delegation of authority.

IMPLEMENTATION RESPONSIBILITIES

The VP PSPS Operations & Execution, Director of Grid Operations, and Director of Distribution Control Center are responsible for ensuring all of their employees understand the requirements outlined in this procedure.

GOVERNING DOCUMENT

[PSPS-1000S, Public Safety Power Shutoff \(PSPS\)](#)

Public Safety Power Shutoff for Transmission and Distribution

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

[Resolution ESRB-8](#)

Records and Information Management:

Information or records generated by this procedure must be managed in accordance with the Enterprise Records and Information (ERIM) program Policy, Standards and Enterprise Records Retention Schedule (ERRS). REFER [GOV-7101S, "Enterprise Records and Information Management Standard"](#) and related standards. Management of records includes, but is not limited to:

- Integrity
- Storage
- Retention and Disposition
- Classification and Protection

REFERENCE DOCUMENTS

Developmental References:

ETEC Handbook

[Utility Procedure TD-2015S, Notification to Third-Party Non-Utility of Nonconformance](#)

Supplemental References:

[Code of Safe Practices](#)

[Utility Standard TD-1464S, Preventing and Mitigating Fires While Performing PG&E Work](#)

[Utility Procedure TD-1400P-07, System Emergencies and Responding to Alarms](#)

[Utility Procedure TD-2015P-02, Procedure for Privately Owned Lines \(POLs\).](#)

[Utility Procedure TD-2700P-04, Processing Applications for Work and Switching Logs](#)

[Utility Procedure TD-2700P-05, Operating Procedures for Fault Location Isolation & Service Restoration \(FLISR\)](#)

[Utility Procedure TD-2700P-11, Testing and Sectionalizing Distribution Equipment](#)

APPENDICES

NA

Public Safety Power Shutoff for Transmission and Distribution

ATTACHMENTS

[PSPS-1000P-01 Att-01, Hazard Response and Resolution for PSPS Events](#)

DOCUMENT REVISION

NA

DOCUMENT APPROVER

- ██████████ Vice President, Electric System Operations
- ██████████ Senior Director, Transmission System Operations
- ██████████ Director, Distribution Control Center

DOCUMENT OWNER

- ██████████ Interim Director Public Safety Power Shutoff

DOCUMENT CONTACT

- ██████████ Supervisor Electric Grid Operations Training
- ██████████ Electric Program Manager, PSPS

REVISION NOTES

Where?	What Changed?
TARGET AUDIENCE	Addition: Outage Coordination Addition: “Operations” to Remedial Action Scheme (RAS) Operations Addition: Spelling out of EMS – Energy Management System
SAFETY	Addition: “and” to or damage to facilities
BEFORE YOU START	Addition: Enhanced Powerline Safety Settings (EPSS) may be affected by this procedure.
Section 1: Scoping and Event Planning	
Former Section 1.3	Removal: EOC Commander/Ops Chief determining ETOR standard or custom.
Section 1.3	Removal: “and the Situation Report”
Section 1.3	Addition: Note on ETOR as “All-clear” + 24 hours by default. De-energization start time (switching time) is 2 hours by default and possible switching time adjustments.

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REVISION NOTES (CONTINUED)

Where?	What Changed?
Former Section 1.3.1	Removal: PSPS Unit EDITS Metadata. Default setting is now automatized and no longer manually entered in PSPS Viewer.
Section 1.3.1	Addition: TAHS BEGINS initial scoping of transmission lines to ensure a preliminary scope is available for Transmission Customer Priority Notifications.
Section 1.16.8.b	Revision: To EOC Commander (EC) from formerly Incident Commander (IC)
Section 1.20	Addition: "Plan B-01"
Section 1.21	Addition: "as well as", "and a subset identified for pre-patrol"
Section 1.22	Addition: "sorted by priority", "pre-patrol"
Section 1.22.2	Removal: "and CAISO."
Section 1.22.3	Addition: bullet - ETEC SENDS the CAISO summary template based on the Outage Cards in Transmission Operations Tracking and Logging (TOTL).
Section 1.23.1	Addition: "Power Generation Branch Director", "STOEC" Deletion: "determine"
Section 1.25	Addition: "Plan C-01"
Section 1.49.7	Revision: Removed "team" from "Outage Coordination"
Section 1.53	Addition: "and Re-PRIORITIZES"
Section 1.57	Addition: "Plan D-01"
Section 1.67	Addition: "switching times and"
Section 1.67.4	Addition: "switching time and", (number of hours per Time Place) Revision: To "night" "EC" from formerly "IC"
Section 1.69/1.70	Revision: switched sequence
Section 2: De-energization Procedure	
Section 2.5.1	Addition: NOTE on additional time required to establish clearances and install grounds on Transmission lines identified with induction risk.
Section 2.13.1	Addition: NOTE "COL facilities identified in the de-energization Playbook require their associated isolation device to be opened during the segmenting/patrol process but no later than prior to re-energization."
Section 2.13.2	Addition: bullet "DCC Operators WORK with their respective TFL(s) when COL is involved to ensure isolation devices are opened prior to re-energization of those facilities."

Public Safety Power Shutoff for Transmission and Distribution

REVISION NOTES (CONTINUED)

Where?	What Changed?
Former Section 2.16	Removal: “EOC Planning Section and EDEC IDENTIFY switching opportunities to reduce customer impact given assets at risk.”
Former Section 2.17	Removal: PSPS Technical Unit CONFIGURES the PSPS Viewer to the abnormal/normal configuration based on input from EDEC.”
Section 2.17	Revision: To “Meteorology provides to PSPS Technical Unit a forecast of weather all clears by “All Clear Zones” approximately 3 hours before an OIC “Decision F” meeting.”
Section 2.18	Revision: To “+ restoration time” from formerly “delta”
Section 2.19	Removal: at end of sentence “that has not been cleared.”
Section 3: Restoration Procedure	
Section 3.3.2.b	Revision: naming of “Restoration Details” tab to replace formerly “Forecast All Clears” tab.
Section 3.3.2.4	Revision: completed full name of Playbook F-00_Forecast
Section 3.3.7	Addition: “Meteorology also has the option to recommend weather “all clears” by TP, if weather conditions warrant such an action.”
Section 3.3.8	Removal: “FIAs”.
Section 3.3.9.a	Addition: “PSPS Recorder immediately after the “Decision F” Meeting CONFERS with PSPS Process Lead to corroborate the accuracy of the all clear approval time and the approved “All Clear Zones” before Recorder SAVES the file in PSIP.
Section 3.4.2.a.(1)	Revision: “if” to replace formerly “when”.
Former Section 3.5.7	Removal: Previous CIL instructions no longer in practice, replaced with new steps starting August. 1, 2022.
Section 3.5.7.a + b	Removal: Backup Generation Lead (BUG).
Section 3.6	Addition: new NOTE on restoring of outages prior to PSPS.
Section 3.6.1	Addition: “EDEC COMMUNICATES weather “All Clear” approval for appropriate Restoration Playbook F to DCC personnel.”
Section 3.6.3	Addition: “TFL(s) contact appropriate DCC to collaborate on execution of restoration strategies.”
Section 3.6.9.c.(2)	Addition: “at the OEC level”.
Section 3.6.9.e	Addition: “to account for” and switching “time”.
Section 3.8.1.a.(1)	Addition: new NOTE on Transmission “event specific assets at risk”.
Section 3.8.1.b.(1)	Addition: new NOTE on Distribution “event specific assets at risk.”
Former Section 3.8.1.b.(3)	Removal: Instructions for customers metered at primary voltage as now superseded by (4) in this section since August 1, 2022.

Public Safety Power Shutoff for Transmission and Distribution

REVISION NOTES (CONTINUED)

Where?	What Changed?
Section 3.8.1.b.(4) last bullet	Addition: TFL receiving notification from OEC related to COL, isolation device to be closed, and documentation.
Section 3.8.3	Addition: to NOTE – “due to damage to conductor or other reasons” and “if grid reliability could be impacted”.
Section 3.8.7.f	Revision: damage “or hazards” Removal: “near misses” Revision: “SUBMIT” to the TFL” replaces to OEC; Addition: instructions for paper form formerly in (2)
DEFINITIONS	
Critical Customer	Revision: Updated 2022 text with link.
Event Specific Assets at Risk	Revision: expanded to include separate definitions for Transmission and Distribution
Foreign Transmission Lines (FTL)	Addition: “transmission system and/or physically collocated...”
Privately Owned Lines	Revision: to Customer Owned Lines” from formerly “Joint Customer Owned Lines”. Addition: Link to TD-2015P-02, Procedure for Privately Owned Lines.
Public Safety Partners	Addition: listing “tribal”