# **Work Card - Detailed View**

PG&E	

									1	
Outage: T21-013	110				Process St	atus:	II	_SERVICE	3	
FAR/Critical:	No O	C Required	: □		ISOID:		10	) <b>426651</b>		
					EMS Trans	lation Stat	tus: S	UCCESS		
141 - I.T	CLEADAN	ICE			D-1 0		_	46		
WorkType: Jurisdiction:	CLEARAN TABLE MT				Primary Ca			ther ther		
ResourceType:	Line	JA			Secondary Emergency			uration		
		able Mounta	in		Customer			ouration		
Resource:	230 kV	able Mounta			Scheduled			7/14/2021 <i>1</i>	12:00:00	
Voltage:	230 KV				Scheduled			9/17/2021		
					Actual Star			7/14/2021		
					Actual End			9/13/2021		
					EMS Mode					
					PSPS:					
Line Or Apparatus:	Carib	ou-Table M	ountain 2	230kV line	(Caribou 115/	60kV Islan	ıd)			
PSS/AVR:		BBN In:			BBN Out:		CRR:		COE:	
EP Notification:		Fire:			Ground:		O23:		Path Derate	e: 🗆
RAS/SPS:		RTO:			SF6:		SOL:			
No Outage		Not					Cut Out	s 🗆		
Expected:	_	Process	20.70				Require			
		By CAIS	0:							
RC Outage Type:	OPPORT	UNITY	RC Prior	rity DTS:	01/01/0001	00:00:00	BA	TOP Confi	rmed:	
Emergency:			Operatio	nal:			RAS	S/SPS Red	undancy:	
Protection Zone:			Outage I	EMS/ICCP	: 🗆		RA:	S/SPS Out	Of Serivce:	
	_				. –					_
Purpose: Island Ca	ribou area d	due to "Dixie	" Fire							
Clearance Limit:										
Remarks and Additi	onal Inform	ation:								
Dispatcher Commer	ıts:									
Caribou PH RAS SW Butt Valley PH RAS										
Cut these in when isl	and is tied b	ack to the s	ystem.							
				Dogo	1 of 20				0-	nfidentiel
				rage	1 01 20				Co	nfidential

# Work Card - Detailed View



#### **Crew Special Setup:**

#### **Protection Engineer Comment:**



Per our discussion yesterday, I dont think there is any reason to need to have PACIRAS cut in at Caribou and Butt Valley while the Caribou Island is still islanded. Since they arent generating at Butt Valley I dont think it really matters either way there.

### Caribou:

Cut Out A for Caribou SW 82, Remedial Action System A Transfer Trip Relay Switch.

Cut Out B for Caribou SW 83, Remedial Action System B Transfer Trip Relay Switch.

#### Butt Valley:

Cut Out A for Butt Valley SW 60, Remedial Action System A Transfer Trip Relay Switch.

Cut Out B for Butt Valley SW 61, Remedial Action System B Transfer Trip Relay Switch.

When Caribou Island is terminated return PACIRAS to normal at Caribou and Butt Valley.

Thank you,

Have a safe day!

Principal Engineer - PG&E System Protection

Please see the requirements below:

- If the open point is Big Meadows SW87, no temporary setting is required at Westwood CB22. If the open point is Caribou CB62, then temporary settings is required at Westwood CB22: Dev 621/667NA-1 & 621/667NB-1: Change to Setting Group #2.

Thanks,



### **Operation Engineer Comment:**

Heres the OE Requirements for re-establishing LMUD load. I am assuming this set up will be just for today until Honey Lake house power can be established and return the Honey Lake unit (per my conversation with last night)

PRE-CLEARANCE REQUIRMENTS

\_\_\_\_\_

### OE ASSUMPTION:

\* Mt Lassen Power, Big Valley, and Burney is in a longer term shutdown

### OVERLAPPING CLEARANCE CONSIDERED:

- \*Pit #1 12kV CB12 and section of the 11kV bus (T21-009794) 5/5/2021-9/14/2021
- \*Caribou Island Set up due fire issue

#### CONDITIONAL REQUIREMENT:

\*Confirm Pit #1 CB02 open (normal open)

Page 2 of 20 Confidential

# Work Card - Detailed View



- \*Confirm Westwood Caps in-service
- \*Confirm Hamilton Branch SW99 and 97 open (normal open)
- \*Confirm the following as part of the existing Caribou Island set up
- -- Hamilton Branch SW39 open
- -- Westwood CB52 and 22 close
- \*Confirm the following equipment are in-service:
- --Pit #1 Bank#3
- -- Hat Creek #1-Pit#1 60kV line
- -- Hat Creek #1-Westwood 60kV line
- \*Notify LMUD regarding 9MW LMUD Load limitation.

#### HAT CREEK 60kV LINE REGULATOR

\* Confirm REG in Auto

### SWITCHING SETUP SUMMARY:

\* Hat Creek-Westwood 60kV line will serve LMUD load (limited to 9MW)

\_\_\_\_\_\_

**REAL TIME - NORMAL OPERATION** 

\_\_\_\_\_\_

- 1. Control Point #1: To monitor normal Pit #1 Bank #3
- 1a. Control Point = 28MW
- 1b.CP Calc = Pit #1 Bank #3 (Contact Pit #3 Control Center or check via EMS)
- 1c. Mitigation:
- 1c1. For flow from 11.5kV to 60kV
- \* INC Hamilton Branch
- \* INC Hat Creek #2
- \* INC Hat Creek #1
- 1c2. For flow from 60kV to 11.5 kV
- \* DEC Hamilton Branch
- \* DEC Hat Creek #2
- \* DEC Hat Creek #1
- 2. Control Point #2: To monitor LMUD Load to under 9MW
- 2a. Control Point = 9 MW
- 2b. CP Calc = Hat Creek #1-Westwood 60kV line MW (->, @Westwood CB52)
- 2c. Mitigation: No Mitigation, may need to drop load real-time to avoid any violations
- 2d. NOTE:
- --Control Point assumes PG&E system is the only soured to 9MW LMUD load
- -- Load limitation is due to potential extreme low voltage or voltage collapse in the Westwood 60kV Area

\_\_\_\_\_\_

Page 3 of 20 Confidential



# CUSTOMER AT RISK OUTAGE SUMMARY:

- \*Total Customer at Risk for Clearance: 9,766
- \*Customer dropped by largest N-1: 9,766
- \*Customers will be dropped if any of the following is lost:
  - -- Pit #1 Bank #3
- -- Hat Creek #1-Pit #1 60kV line or Hat Creek #1-Westwood 60kV line

#### CUSTOMER AT RISK OUTAGE DETAIL:

- 1. CUSTOMER AT RISK
- 1a. Outage: Pit #1 Bank #3
- 1b. Customer Impact (3,176 total customers):
- \* Burney (2,422)
- \* Hat Creek #2 PH (1)
- \* Rising River (748)
- \* Hat Creek #1 (1)
- \* Mega Hat Creek (1)
- \* Halls Flat (1)
- \* Bogard (1)
- \*LMUD (1)
- 1c. Emergency Clearance Restoration: TBD
- 2. CUSTOMER AT RISK3
- 2a. Outage: Hat Creek #1-Pit #1 60kV line or Hat Creek #1-Westwood 60kV line
- 2b. Customer Impact: 753 total customers
- \* Rising River (748)
- \* Hat Creek #1 (1)
- \* Mega Hat Creek (1)
- \* Halls Flat (1)
- \* Bogard (1)
- \*LMUD (1)
- 2c. Emergency Clearance Restoration Time: TBD

Thanks,



Customer At Risk:

**Notifications:** 

Coordinator:

**Operation Special Setup:** CAISO OMS Notes:

INT-14930 **Reference Card Numbers:** T21-008310 Reference Interruptions:

> T21-011925 T21-012472 T21-013128 T21-013411 T21-013847

> > Page 4 of 20 Confidential



T21-014848 T21-014856 T21-014857

#### Reference Logs:

06/24/2021 03:49 0334 TM reports Caribou CB 292 opened due to low air, islanding Caribou. Caribou Operator to re-parallel island back to the system. CAISO/

06/24/2021 03:53 Started INT-14930 for Caribou, N/A, Station, CARIBOU BK11

06/24/2021 03:53 Became aware of INT-14930 for Caribou, N/A, Station, CARIBOU BK11

At 06/24/2021 03:40 SDV/ NTFD at 06/24/2021 03:53 Caribou, N/A, Station, CARIBOU BK11

At 06/24/2021 04:00 DO/ NTFD at 06/24/2021 03:53 Caribou, N/A, Station, CARIBOU BK11

At 06/24/2021 04:05 TSM&C/EPAGE NTFD at 06/24/2021 03:53 Caribou, N/A, Station, CARIBOU BK11

Epage Sent: 06/24/2021 03:53 Caribou 292 OPENED ISLANDING CARIBOU 60 & 115 WITH AREA LOAD

At 06/24/2021 04:08 TSM&C/EPAGE NTFD at 06/24/2021 03:53 Caribou, N/A, Station, CARIBOU BK11

06/24/2021 04:28 0428 OE-417 form submitted for this trouble. SE results saved at 0428.

06/24/2021 03:34 Started INT-14930 for Caribou, N/A, Station, CARIBOU BK11

06/24/2021 03:34 Became aware of INT-14930 for Caribou, N/A, Station, CARIBOU BK11

06/24/2021 04:29 0404 System Protection on-call NTFD. Calling area Protection engineer.

0425 CAISO and PGE/marked agree to suspend the Code-of-Conduct due to Caribou Island formation with Caribou Units 2, 3 carrying Island.

0426 Coordinating with Honey lake to have LMUD form their own Island off larger Caribou Island.

0455 PE/ confirms that Island must be terminated due to protection inadequate.

0503 Op Sup/ to SD/ Due to inadequate protection terminate the Island and report.

06/24/2021 09:03 Actual Start Time for T21-011925

06/24/2021 08:40 Actual End Time for T21-011925

CORRECTION: 06/24/2021 04:13 Actual Start Time for T21-011925

06/24/2021 09:15 0502 TM/ OK to de-energize Caribou island due to lack of adequate protection per P.E.

0507 TM/ reports that at 0506 Butt Valley-Caribou 115kV line separated in preparation to de-energize Caribou island. Sustained interruption to Butt Valley PH (offline).

o509 TM/ reports that at 0509 Island manually de-energized. On the trouble, Caribou PH #1 separated. Caribou 115kV and 60kV busses, #11-230/115/60kV transformer bank and #2-115/60kV transformer de-energized. Caribou #2, Caribou-Plumas JCT, Caribou-Westwood and Hamilton Branch-Chester 60kV lines de-energized. Sustained interruption to Chester (1659), Collins Pine (1), Hamilton Branch (2382), Grays Flat (125), East Quincy (1572), Gansner (1730), SPI Quincy (offline), Plumas Sierra (1), Spanish Creek (922), Big Meadows 2620), Honey Lake (offline) and LMUD (1).

0509 CAISO/ notified.

0832 TM reports crew made temporary repairs to NG air compressor on Caribou CB 292, OK to return breaker to service.

0834 CAISO/ OK to restore Caribou 115/60kV system normal and report.

0836 TM to begin restoration of Caribou 115/60kV system and report.

0903 TM/ reports: 0840 Caribou CB 292 returned to service after crew made temporary repairs to NG air compressor

Page 5 of 20

Confidential

# Work Card - Detailed View



restoring Caribou 230kV bus and #11-230/115/60kV transformer bank. 0845 Caribou 115kV bus returned to service restoring Caribou #1 PH. 0846 Caribou 60kV bus energized. 0850 Caribou-Westwood 60kV line returned to service restoring Big Meadows, Hamilton Branch, Westwood, Honey Lake (offline) and LMUD. 0853 Caribou #2-60kV line returned to service restoring Spanish Creek, Grays Flat and Gansner. 0854 Caribou-Plumas JCT 60kV line returned to service restoring East Quincy, SPI Quincy (offline) and Plumas Sierra. 0857 Butt Valley-Caribou returned to service restoring Butt Valley PH (offline). 0903 Hamilton Branch-Chester 60kV line returned to service restoring Collins Pine and Chester.

0909 CAISO and notified and PG&E agreed to resume CAISO standards of conduct for Caribou area.

06/25/2021 12:07 1205 Grid Operations Director reports that she has submitted the final OE-417 report for the Caribou Islanding Event that occurred on 06/24/2021.

07/04/2021 05:29 0334 Caribou CB 292 tripped due to low air pressure. Caribou island created with Caribou PH unit #2 on frequency control. SPI Quincy and Honey Lake Power separated. 0506 Butt Valley-Caribou 115kV line de-energized in preparation to terminate Caribou island. Sustained interruption to Butt Valley PH (offline). 0509 Caribou Island manually de-energized per PE recommendation due to inadequate protection. On the trouble, Caribou #1 PH separated. Caribou 115kV and 60kV busses, #11-230/115/60kV transformer bank and #2-115/12kV transformer de-energized. Caribou #2, Caribou-Plumas JCT, Caribou-Westwood and Hamilton Branch-Chester 60kV lines de-energized. Sustained interruption to Chester, Collins Pine, Hamilton Branch, Grays Flat, East Quincy, Gansner, SPI Quincy (offline), Plumas Sierra, Spanish Creek, Big Meadows Honey Lake (offline) and LMUD. 0840 Caribou CB 292 returned to service after crew made temporary repairs to NG air compressor restoring Caribou 230kV bus and #11-230/115/60kV transformer bank. 0845 Caribou 115kV bus returned to service restoring Caribou #1 PH (offline). 0846 Caribou 60kV bus energized. 0850 Caribou-Westwood 60kV line returned to service restoring Big Meadows, Hamilton Branch, Westwood, Honey Lake (offline) and LMUD. 0853 Caribou #2-60kV line returned to service restoring Spanish Creek, Grays Flat and Gansner. 0854 Caribou-Plumas JCT 60kV line returned to service restoring East Quincy, SPI Quincy (offline) and Plumas Sierra. 0857 Butt Valley-Caribou returned to service restoring Butt Valley PH (offline). 0903 Hamilton Branch-Chester 60kV line returned to service restoring Collins Pine and Chester.

06/24/2021 03:34 Actual Start Time for T21-012472

07/04/2021 08:39 Log item 2795186 should be dated 06/24/21.

Log item created for information purposes only to track Caribou CB 292 compressor issue.

07/13/2021 06:38 "TSO - Reports all pre-clearance requirements met, and requests the OK to proceed" on T21-008310

07/13/2021 06:45 "SD - Acknowledge" on T21-008310

07/13/2021 06:45 SD - Reports all pre-clearance requirements met, and requests CAISO OK to proceed " on T21-008310

07/13/2021 06:56 "SD - Gives TSO OK to proceed" on T21-008310

07/13/2021 06:57 "TSO - Acknowledge" on T21-008310

07/13/2021 07:54 "TSO - Equipment out of service/Path interrupted " on T21-008310

07/13/2021 08:15 "SD - Acknowledge" on T21-008310

07/13/2021 08:15 "SD - Reports Out/Path interruption time to CAISO " on T21-008310

07/13/2021 08:12 "TSO - Takeout switching complete - Clearance established" on T21-008310

07/13/2021 08:34 reports 'ON' the Caribou-Westwood 60kV Line Section (Hamilton Branch-Westwood) Cleared between HAMILTON BRANCH 39, 97, 99 WESTWOOD 23, 25 with grounds applied

07/13/2021 17:27 Caribou CB 292 is no longer connected to CB 252s air compressor. It has a 6 pack of nitrogen bottles that is checked on a weekly basis. No ETOR for a new compressor.

07/14/2021 06:10 0610 – OE/ NTFD OF POSSIBLE FORCED CARIBOU ISLAND DUE TO DIXIE WILDFIRE NEAR THE CARIBOU-TABLE MOUNTAIN 230KV LINE.

0626 – NDCC/ NTFD OF PENDING FORCED CARIBOU ISLAND AND WILL MOST LIKELY NEED TEMP RLY SETTING CHANGES TO SPANISH CREEK 72 AND EAST QUINCY SW 75 WILL NEED TO BE OPEN LOCKED.

Page 6 of 20 Confidential

# Work Card - Detailed View



0627 – CARIBOU/ NTFD OF INTENT AND REPORTS CAIRBOU UNIT #1 IN AN OUTAGE AND UNAVAILABLE, UNIT #2, 3, 4 & 5 AVAILABLE FOR GENERATION SUPPORT, UNIT #2 WILL BE ISOC UNIT FOR THE PROPOSED ISLAND. BELDEN, BUTT VALLEY & HAMILTON BRANCH PH WILL BE REQUIRED TO BE OFFLINE THROUGHOUT ISLAND.

0634 – NTFD OF CARIBOU GENERATION AVAILABILITY AND STATES IF A 115KV GENERATOR IS LOST DURING THE PROPOSED ISLAND, TERMINATE THE ISLAND.

0644 - PE/LEGALE NTFD OF ITENT AND WILL REPORT BACK WITH PE REQUIREMENTS.

0702 – TLINE SUP/ NTFD OF CONDITIONS AND REPORTS TLINE EN ROUTE TO DIXIE FIRE COMMAND CENTER AND FIRE LOCATION FOR FIELD EVALUTATION.

0704 – LEFT MESSAGE FOR TO CALL BACK WITH A FIELD REPORT.

0724 - OE/MAND PE/MAND PE/MAND NTFD OF ENGINEERING REQUEST VIA EMAIL REQUESING REVIEWS ABOUT PROPOSED CARIBOU ISLAND.

0726 - REPORTS WILL NEED TO BE OFFLINE THROUGHOUT PROPOSED CARIBOU ISLAND.

0831 — REPORTS DIXIE FIRE WITHIN 200 YARDS, AND IN BETWEEN, THE CARIBOU-TABLE MOUNTAIN 230KV LINE (STRUCTURE 27/196) & THE ROCK CREEK-POE 230KV LINE (STRUCTURE 1/18), GRASS FUEL BEING BURNED RIGHT NOW, NO THREAT TO OUR ASSETS AT THIS TIME, RATE OF SPREAD SLOW PROBABLY UNTIL AFTERNOON WINDS PICK UP, FIRE FIGHTERS ARE ON SCENE AND GETTING READY TO BEGIN FIRE FIGHTING ACTIVITIES, POSSIBLE BURN TIME TO BE AT LEAST 1 WEEK DUE TO ACCESS ISSUES FOR FIRE CREWS, 0 % CONTAINED.

0848 – SDV/ NTFD OF ITEM 0831, ALSO BUCKS CREEK-ROCK CREEK-CRESTA 230KV LINE WITHIN SAME CORIDOR OF DIXIE FIRE.

0910 – REPORTS OVERHEARD ON THE RADIO COMMAND CENTER APPEARS TO BE MORE CONCERNED ABOUT THE STATUS OF THE DIXIE FIRE IN CLOSE PROXIMITY OF ENERGIZED CONDUCTORS AND THE FIRE APPEARS TO BE AGGRESSIVELY BURNING TOWARDS ENERGIZED LINES, FIRE CREWS ARE IN THE FIELD NOW, IS UNABLE TO GAIN ACCESS TO THE CARIBOU-TABLE MOUNTAIN 230KV LINE DUE TO TERRAIN CHALLENGES.

0917 – GRID OPERATIONS SUP/ DIRECTS IMPLEMENT PROTECTION AND LOAD TRANSFER REQUIREMENTS FOR CARIBOU ISLAND PREPARATION.

0923 – DIRECTS IMPLEMENT PROTECTION AND LOAD TRANSFER REQUIREMENTS FOR CARIBOU ISLAND PREPARATION TO INCLUDE EAST QUINCY BK #1 OFFLOADED WITH SW 75 OPEN LOCKED AND TEMP RLY SETTING CHANGES TO SPANISH CREEK CB 72. DO NO DROP ANY CUSTOMERS FOR THIS DIRECTIVE. DO NOT DIRECT ANY GENERATION AS PART OF THIS DIRECTIVE.

0926 – NDCC/ NTFD OF INTENT AND GIVEN DIRECTIVE TO IMPLEMENT TEMP RLY SETTING CHANGES TO SPANISH CREEK CB 72 AND HAVE EAST QUINCY BK #1 OFFLOADED WITH SW 75 OPEN LOCKED, DO NOT DROP ANY CUSTOMERS AS PART OF THIS DIRECTIVE, & REPORT.

0941 - PE/ DIRECTED TO MAKE TEMP RLY SETTING CHANGES REMOTELY TO HAMILTON BRANCH CB 12 PER ENGINEERING AND REPORT

0952 - NTFD TO HAVE EAST QUNICY BANK #1 OFFLOADED WITH SW 75 OPEN LOCKED & REPORT.

1012 – PE/ REPORTS TEMP RLY SETTING CHANGES HAVE BEEN MADE TO HAMILTON BRANCH CB 12 PER ENGINEERING.

0947 - CARIBOU CB 22 PLACED TO GROUP 3 TAGGED CAUT

0949 - CARIBOU CB 42 PLACED TO GROUP 3 TAGGED CAUT

0950 - CARIBOU CB 62 SET A GROUP 3 ENABLED TAGGED CAUT

0951 - CARIBOU CB 62 SET B GROUP 3 ENABLED TAGGED CAUT

0959 – CARIBOU/ NTFD OF INTENT AND CONFIRMED THAT CARIBOU CB 22 & 42 ARE IN GROUP 3, UNABLE TO DETERMINE IF CARIBOU CB 62 IS IN GROUP 3.

1012 – PE/ NTFD OF CONDITIONS AND REQUEST THAT HE CONFIRM CARIBOU CB 22, 42 & 62 ARE IN GROUP 3 & REPORT.

1022 – REPORTS, PER MANAGEMENT, C/OUT RECLOSING ON THE CARIBOU-TABLE MOUNTAIN 230KV LINE DUE TO FIRE IN THE AREA, & REPORT. CA ISO WILL BEGIN FLOATING THE CARIBOU-TABLE MOUNTAIN 230KV LINE IN ANTICIPATION FOR POSSIBLE RELAY ACTION.

1024 - C/OUT TABLE MTN CB 242 LINE TEST TAG CAUT

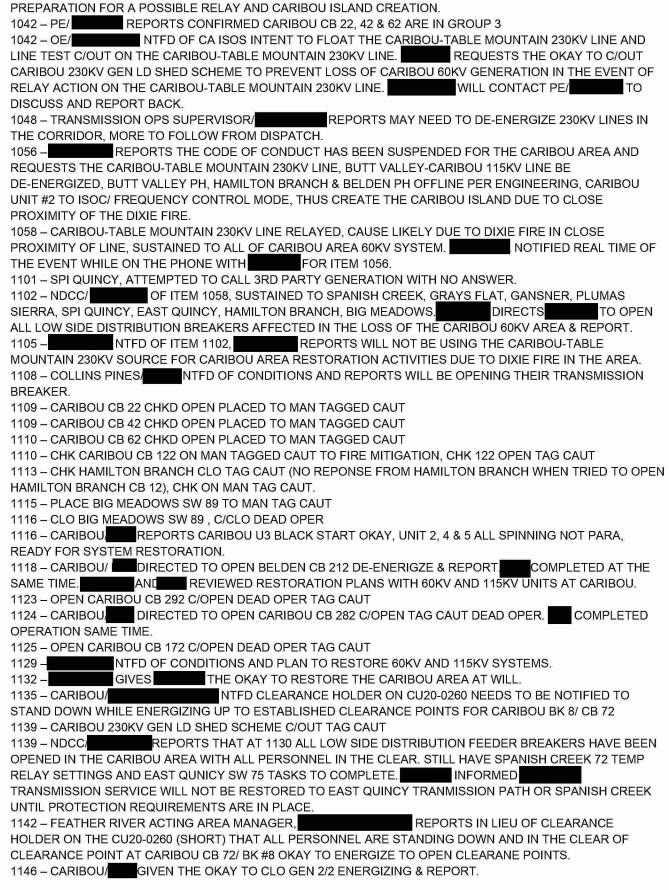
1031 – NTFD CARIBOU CB 242 LINE TEST C/OUT TAGGED CAUT.

1032 – CARIBOU/ NTFD LINE TEST C/OUT ON THE CARIBOU-TABLE MOUNTAIN 230KV LINE AND CA ISO WILL BE CONTACTING CARIBOU OPS TO FLOAT THE CARIBOU-TABLE MOUNTAIN 230KV LINE IN

Page 7 of 20 Confidential

### Work Card - Detailed View





# Work Card - Detailed View



1153 - CLEARANCE HOLDER/ REPORTS ALL PERSONNEL ARE STANDING AND ARE IN THE CLEAR ON CARIBOU-WESTWOOD 60KV LINE (T21-008310). 1157 - CARIBOU/ REPORTS HAVING DIFFICULTIES CLOSING GEN 2/2 DUE TO AUTOSYNC ISSUES. 1200 - GIVEN THE OKAY TO CLO GEN 4/2 ENERGIZING AND REPORT. 1201 - PLUMAS SIERRA/ NTFD OF CONDITIONS AND MARBLE TIE SHALL REMAIN OPEN DURING CARIBOU ISLAND. REPORTS Q02 IS OPEN AT THIS TIME. 1204 - SPI QUINCY TO REMAIN IN THE CLEAR NTFD OF CONDITIONS AND GIVES THE OKAY TO PROCEED WITH DISCUSSED 1210 - OE/ RESTORATION PLAN OF CARIBOU AREA DISCUSSED WITH CARIBOU OPERATION. ENERGIZE ALL BUSSES AND BANKS, PLACE UNIT #2 TO ISOC MODE, THEN BEGIN RESTORING 60KV PATHS AND THEN LOAD. 1234 - CARIBOU/ REPORTS HAVING ISSUES WITH CARIBOU UNIT #4, ROLLING UNIT #4 AGAIN, WILL ATTEMPT TO ENERGIZE THE 115KV BUS WITH CARIBOU UNIT #5, GIVES THE OKAY TO CLOSE **CAIRBOU GEN 5 & REPORT** REPORTS SPANISH CREEK CB 72 IS OPEN WITH TEMP RELAY SETTINGS IN PLACE; 1236 - NDCC/ DIRECTED TO C/OUT SPANISH CREEK 72 RESTORE FEATHER AND REPORT. C/OUT SPANISH CREEK 72. 1238 - CARIBOU/ REPORTS #5 GEN BREAKER CLOSED AT 1237, #4 GEN BREAKER CLOSED AT 1237 115KV BUS ENERGIZED. 1239 - CARIBOU/ DIRECTED TO CSC CLO CARIBOU CB 282 ENERGIZING 230KV BUS AND REPORT. 1241 - CARIBOU/ REPORTS CARIBOU CB 282 CLO @ 1240, CARIBOU 230KV BUS ENERGIZED 1242 - CSC CLO CARIBOU CB 292 C/CLO ENERGIZE. CHK GOOD 3 PHASE CARIBOU BK 11 POT 1244 - CSC CLO CARIBOU CB 172 ENERGIZE, CHK GOOD 3 PHASE POT ON THE BUTT VALLEY-CARIBOU 115KV LINE. CARIBOU/ NTFD OF CONDITIONS. GIVEN THE OKAY TO CLO GEN BKR #2 & #3, PLACE #2 UNIT TO ISOC/ FREQUENCY MODE, 1247 - CARIBOU C/OUT PSS ON (4) UNITS & REPORT. NTFD OF CONDITIONS, REQUESTS OBTAIN LOADING ESTIMATES 1251 - NDCC/ FOR SUBTATIONS IN THE CARIBOU AREA FOR CARIBOU ISLAND BUILDING PROCESS. 1252 - CARIBOU/ REPORTS @ 1250 GEN #3 PARA, @ 1251 GEN #2 PARA AND IN ISOC/ FREQUENCY CONTROL MODE, & PSS C/OUT ON (4) UNITS AT CARIBOU; READY TO BEGIN RESTORATION ACTIVITIES WITH UNITS 1255 -REPORTS, PER TRANSMISSION OPERATIONS MANAGER/ AND TRANSMISSION OPERATION SUPERVISOR NO NEED TO PATROL ANY CARIBOU 60KV OR 115KV LINES THAT ARE LISTED ON THE DAILY FIRE INDEX LIST. GIVES THE OKAY TO RESUME RESTORATION ACTIVITIES FOR THE CARIBOU AREA. 1256 - CSC CLO CARIBOU CB 122 C/CLO ENERGIZE THE CARIBOU-BUTT VALLEY 115KV LINE 1258 - CARIBOU/ NTFD OF ITEM 1256. 1259 - CARIBOU/ REPORTS CARIBOU UNIT #2 MAX CAPACITY OF 24MW, READY TO BEGIN PICKING UP LOAD. 1259 - CSC CLO CARIBOU CB 42 C/CLO ENERGIZE, CHK 3 PHASE POT ON NTFD OF ITEM 1259. HALFORD REPORTS 07/14/2021 10:34 1022 SDV requested CAISO, to float Caribou-Table Mountain 230kV line in preparation for loss of Caribou-Table Mountain 230kV line creating Caribou Island. 0923 SDV requests TM/ to C/OUT reclosing on Table Mountain 230kV line in preparation for line relaying due to fire. reports reclosing C/OUT on Caribou-Table Mountain 230kV line.1041 CAISO/ 07/14/2021 10:45 1046 CAISO/ reports Caribou-Table Mountain 230kV line generation adjustments made floating the line for possible relay action due to wildfire in area. 07/14/2021 10:58 Actual Start Time for T21-013110 07/14/2021 11:43 1059 TM/ report that at 1058 Caribou-Table Mountain 230kV line relayed and did not test due to automatic reclosing disabled due to Dixie Fire. On the trouble, Caribou PH #1 and #2 and SPI Quincy separated. Caribou 230kV 115kV and 60kV busses, #9-230/13.8kV transformer, #11-230/115/60kV transformer bank and #2-115/12kV transformer de-energized. Caribou #2, Caribou-Plumas JCT, Hamilton Branch-Chester 60kV lines de-energized.

Page 9 of 20

Confidential

# Work Card - Detailed View



Sustained interruption to Chester (1659), Collins Pine (1), Hamilton Branch (2382), Grays Flat (125), East Quincy (1572), Gansner (1730), SPI Quincy, Plumas Sierra (1), Spanish Creek (922) and Big Meadows (2620. Caused by Dixie fire. CAISO

Note: 1053 FERC standards of conduct were suspended in preparation of Caribou Island creation.

1129 TM/ reports Caribou units 2, 3, 4, and 5 spinning speed no load.

1132 TM OK to work with Caribou Operator to restore Caribou PH #2 and 230/115/60 kV busses and banks and then place Caribou unit #2 on ISOC for frequency control an report to SDV at which time SDV will give OK to restore 60kV lines.

07/14/2021 13:12 1309 TM reports that at 1251 Caribou PH #1 and #2, Caribou 230/115/60kV busses and transformer banks returned to service. Caribou unit #2 in isochronous mode for Island frequency control. 1255 Butt Valley-Caribou 115kV line returned to service restoring Butt valley PH (offline). 1259 Caribou #2-60kV line returned to service restoring Grays Flat (125), Gansner (1730), and Spanish Creek (922).

1310 CAISO notified.

07/14/2021 13:30 1324 TM reports that at Update:

1323 Caribou-Westwood and Hamilton Branch-Chester 60kV line returned to service restoring Big Meadows (2620), Hamilton Branch (2382) and Chester (1659) and Collins Pine (1).

1331 CAISO notified.

07/14/2021 14:06 1320 TM reports that at 1319 he de-energized Butt Valley 115kV line per P.E. set up requirements to have Caribou CB 122 open for Caribou Island.

1412 TM reports that at 1349 East Quincy SW 75 open for Caribou 115/660kV Island. 1400 East Quincy transferred to Gansner source.

1415 Caribou-Plumas JCT 60kV line returned to service restoring SPI Quincy (offline) and PSREC (1).

1430 CAISO notified.

07/14/2021 14:43 reports 'OFF' the Caribou-Westwood 60kV Line Section (Hamilton Branch-Westwood) Cleared between HAMILTON BRANCH 39, 97, 99 WESTWOOD 23, 25 with grounds removed

07/13/2021 08:34 "TSO - Crew reports ON Clearance" on T21-008310

07/14/2021 14:43 "TSO - Crew reports OFF Clearance" on T21-008310

07/14/2021 14:43 TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and requests OK to restore" on T21-008310

07/14/2021 14:47 "SD - Acknowledge" on T21-008310

07/14/2021 14:48 "SD - Requests CAISO OK to restore" on T21-008310

User UNDONE Work Step "CAISO - Gives OK to restore" for T21-008310

USER UNDONE Work Step "SD - Requests CAISO OK to restore" for T21-008310

User UNDONE Work Step "SD - Acknowledge" for T21-008310

User UNDONE Work Step "TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and requests OK to restore" for T21-008310

07/15/2021 16:54 TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and requests OK to restore" on T21-008310

Page 10 of 20 Confidential

# Work Card - Detailed View



07/15/2021 16:54 "SD - Acknowledge" on T21-008310

07/15/2021 16:54 "SD - Requests CAISO OK to restore" on T21-008310

07/15/2021 17:10 SD - Gives TSO OK to restore" on T21-008310

07/15/2021 17:28 "TSO - Acknowledge" on T21-008310

07/15/2021 18:00 1750 TM Given OK to energize and test Caribou-Westwood 60kV line (Westwood to Hamilton Branch section) from Westwood and leave in that configuration.

1800 Reports Line has been tested OK and available for service.

07/15/2021 18:00 "TSO - Equipment returned to service/Path restored " on T21-008310

07/15/2021 18:13 "TSO - Return switching complete" on T21-008310

07/15/2021 18:22 "SD - Acknowledge" on T21-008310

07/15/2021 18:22 "SD - Reports return time to CAISO " on T21-008310

07/15/2021 18:30 1830 - The Westwood Sub has been left in an abnormal condition due to the Dixie Fire and the Caribou Island. SDV and Grid Ops Sup directed to have Westwood CB 22 & Westwood CB 52 closed energizing the Caribou-Westwood 60KV line from Westwood to Hamilton Branch Sect; Open points at Hamilton Branch for the Caribou Island. Returning the Westwood sub to normal configuration shall be completed after the Caribou Island has been synched.

07/18/2021 14:18 The Final OE-417 for the Caribou Island on 7/14/21, was filed today.

07/19/2021 11:08 HONEYLAKE REPORTS PHONES SERVICE IS DOWN CONTACT NUMBERS GIVEN:

(PLANT MANAGER)

User SKIPPED Work Step "TSO - Confirms all pre-clearance requirements met, takeout switching started" for T21-013411

07/19/2021 10:58 "TSO - Equipment out of service/Path interrupted " on T21-013411

07/19/2021 11:11 SD - Acknowledge" on T21-013411

07/19/2021 11:11 "SD - Reports Out/Path interruption time to CAISO " on T21-013411

07/19/2021 11:11 1044 NS/ RPTs LMUD line patrol complete, no trouble found, personnel on site, ready for switching. Same time given OK to proceed

1100 NS/ RPTs at 1058 Westwood CB 52 open to perform disconnect switching to energize to LMUD

1110 CAISO/ NTFD of update to Caribou Island card removing Westwood CB 52 from OMS modeling to transfer it to separate card to restore LMUD. RPTs she sees both and will put new card to out state for Westwood CB 52 as of 1058

User SKIPPED Work Step "TSO - Takeout switching complete - Customer Work Started" for T21-013411

User SKIPPED Work Step "TSO - Crew reports ON Customer Work" for T21-013411

User SKIPPED Work Step "TSO - Crew reports OFF Customer Work" for T21-013411

07/19/2021 11:45 1123 NS/

1142 NS/ RPTs at 1126 LMUD energized and given OK to restore up to 9MW of load, including GEN house load to bring Honey Lake up.

1143 Super/ NTFD

User SKIPPED Work Step "TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and resumed switching to restore" for T21-013411

07/19/2021 11:26 'TSO - Equipment returned to service/Path restored " on T21-013411

07/19/2021 12:00 "SD - Acknowledge" on T21-013411

Page 11 of 20 Confidential

# Work Card - Detailed View



07/19/2021 12:01	"SD - Reports	return time to	CAISO " on	T21-013411

07/19/2021 12:29 1228- CLOSED HAMILTON BRANCH SW 39, CC&L ENERGIZING TO OPEN WESTWOOD 22

WESTWOOD 22 WILL BE THE NEW BOUNDARY FOR THE CARIBOU ISLAND PER OPS SUPERVISION

07/19/2021 16:55 HONEYLAKE REPORTS WILL NOT BE ABLE TO GENERATE UNTIL TOMORROW NIGHT 1800 AT A MINIMUM. THEY HAVE TO FLY OUT A SPECIALIS TO MAKE REPAIRS.

07/19/2021 11:26 "TSO - Return switching complete" on T21-013411

07/20/2021 09:07 0907 TM/ notified of CP #3 exceedance 9.22/9MW. 0911 CP under.

07/20/2021 14:57 1145 NS/ reports Caribou CB 292 nitrogen pack may run out and need to be replaced. Nitrogen may last until 07/22/21 once exhausted, CB 292 will open by low air.

Protection/ notified and ran study. States due to the emergency, the island can be maintained with two generators in the Caribou area, protection will be adequate for line faults but will be slow to trip for substations faults. Unable to use Caribou Unit #1 and Butt Valley.

1436 NS reports, T-line thru CALFire, the "Dixie" fire is going spread and could reach Caribou-Plumas JCT 60kV line sometime tonight, 07/20/21.



System Protection ran some faults based on your request for the Caribou Island with the current setups:

- Caribou CB42 Open (due to outage on 7/19/21)
- Grays Flat SW17 Open (due to outage on 7/19/21)
- Grays Flat SW55 Closed (restoration activities to pickup Grays Flat Sub and Gansner Sub)
- All Temporary Relay Setting changes made prior to entering the island (Caribou CB62 and CB22 are currently in Group #3 with Caribou CB42 currently open from outage on 7/19/21. No additional Temp Relay settings required)

Caribou PH Generation Unit Requirement for Island:

- System Protection requests three units online prior to entering island
- Protection in island is adequate with two units online, but not optimal. Avoid this configuration if possible due to slow clearing of faults
- Presently, Caribou units#2, 3 & 5 are in the island
- If Caribou CB292 trip open on low air, Caribou unit#5 will be separated from the island. The island is adequate with Caribou units 2 & 3 online, relays will see and clear transmission line faults, but the transformer fuses at Gansner Sub, Grays Flat Sub and Crescent Mills Sub will have slow clearing and will clear low side bus faults in 2 to 3 seconds
- If we only have Caribou units 2 & 3 online, monitor Caribou PH, If a unit trip such that only one unit is online, open Caribou CB 22, CB 42, and CB 62 until more units are available

Transfer Big Meadows, Chester, and Hamilton Branch Substations to the Hat Creek #1 - Westwood 60kV source

This set up would have LMUD separated from the grid, and an open point at big meadows switch 87

- If the open point is Big Meadows SW87, no temporary setting is required at Westwood CB22. If the open point is Caribou CB62, then temporary settings is required at Westwood CB22: Dev 621/667NA-1 & 621/667NB-1: Change to Setting Group #2.

Thanks,

Page 12 of 20 Confidential



Supervising Engineer - System Protection Pacific Gas and Electric Company 07/21/2021 09:33 0930 TM reports Spanish Creek and Crescent Mills transferred to Big Meadows source via back-ties. 07/21/2021 09:44 0929- NDCC / RPTS SPANISH CREEK AND CRESENT MILLS TRANSFERRED TO BIG MEADOWS. 07/21/2021 10:39 1029 - SDV NTFD GCC NS / OF INTENT TO TRANSFER LOAD TO THE PIT SOURCE AND TO GET PRSONNEL IN PLACE AT WESTWOOD AND BIG MEADOWS SWITCH 87. NTFD TO SEND ELECTRICIAN TO WESTWOOD SUB 1031 - TABLE MTN MAINT / 1031 - TABLE T-LINE SUP NTFD TO SEND T-MAN TO BIG MEADOWS SW 87. ON SITE. 1044- LMUD MANAGER / NTFD OF CONDITIONS, REPORTS HE HAS ELECTRICIANS AT WESTWOOD STANDING BY AT P001 AND P002 07/21/2021 20:25 2017 CAISO/ notified of PlumasREC offload. 07/21/2021 20:37 2037 CAISO/ notified that at 2028 Plumas-Sierra REC separated at Q02. 07/21/2021 21:29 1827- REPORTS SPOT FIRE UNDER CARIBOU-PLUMAS JCT @ 5/13, IC MAY REQUEST TO **DE-ENERGIZE** & SUP NTFD OF ABOVE 1925- T-LINE REPORTS UPDATE, SPOT FIRE IS THREATENING THE LINE, ESTIMATES AN HOUR UNTIL LINE WILL POTENTIALLY RELAY 1933- CARIBOU OPS & PLUMAS SIERRA REC NTFD, SUPERVISION & DISPATCH GIVE OK TO GCC NORTH STATE FOR PLUMAS SIERRA TO DROP ISLANDED LOAD IN 1 MW INCREMENTS WORKING WITH CARIBOU OPS & GCC, UPON COMPLETION OPEN Q02 & RESTORE FROM ALTERNATE SOURCE, THIS IS TO PREVENT COLLAPS OF CARIBOU ISLAND IF THE CARIBOU-PLUMAS JCT 60 KV LINE RELAYS DUE TO FIRE ACTIVITY CARIBOU 22 LD AS FOLLOWS: 1943 - 27.3 MW 1944 - 21.4 1945 - GOVERNOR IS HUNTING- STAND BY 1947 - 20.5 2007 - 13.3 2009 - 11.4 PLUMAS SIERRA REPORTS, LOAD BLOCKS OF 1.5 MW & 2.7 MW MUST BE DROPPED FOR THEM TO GO TO THEIR ALTERNATE SOURCE GCC NS GIVES OK TO DROP 1.5 MW GCC NS GIVES OK TO DROP 2.7 MW 2028- Q02 OPENED, DROPPING 1.2 MW, SEPARATING PLUMAS SIEERA REC FROM THE CARIBOU ISLAND CARIBOU REPORTS ISLAND STABLE 2028 CARIBOU 22 LD - .1 MW REPORTS, SPANISH CREEK LOAD HAS BEEN TRANSFERED, GANSNER IS ON TEMP GEN & LOW SIDE IS SEPARATED ALSO SERVING E QUINCY LOAD, GCC NTFD NDCC LINE IS LIKELY TO RELAY, GENERATION FOR GANSNER STATION SERVICE WILL BE NEEDED, GRAYS FLAT LOAD STILL PART OF CARIBOU ISLAND (.1 MW) 2054- PLUMAS SIERRA REPORTS STRANDED LD IS BEING SERVED FROM ALTERNATE SOURCE HONEYLAKE GEN REPORTS, NO TIMELINE FOR REPAIRS, TROUBLESHOOTING ONGOING BUT WILL NOT BE **READY TONIGHT** 07/21/2021 21:30 1920 TM Field personnel report Dixie fire in close proximity to Caribou-Plumas JCT 60kV line

# Work Card - Detailed View



between Caribou and Grays Flat SW 57.

2020 SDV worked with TM/ to Have Plumas Sierra dump/transfer 26MW of load while Caribou Operator managed the load drop with Caribou #2 unit on Isochronous control. No additional load on the line at this time. Caribou -Westwood 60kV line has 7MW of total load

(Big Meadows, Hamilton Branch, Chester and Collins Pine).

2044 CAISO notified.

07/21/2021 22:19 2210 CAISO reports at 2135 Marble Tie closed restoring 8.9MWs of Plumas Sierra REC load.

07/26/2021 12:54 1246 TM/ reports Caribou PH units #2, #3, #4 and #5 tripped losing the Caribou island. Sustained interruption to Caribou Sub. Ongoing "Dixie Fire" in the area. Access to the area is not allowed at his point. CAISO.

07/26/2021 13:43 1246 TM reports Caribou PH units #2, #3, #4 and #5 tripped losing the Caribou island. Sustained interruption to Caribou Sub. Ongoing "Dixie Fire" in the area. Area inaccessible due to fire danger. CAISO/

07/26/2021 12:46 Actual Start Time for T21-013847

07/27/2021 12:12 1015 TM/ reports from trouble/loss of Caribou Island: Caribou Operator reset 86E on Caribou U4, had targets of stator overcurrent and stator winding temperature alarm. units 2 and 3 tripped on excess flows.

1016 SDV gives TM OK to re-establish Caribou Island and report.

1021 Caribou CB 282 closed energizing Caribou #9-230/13.8kV transformer, #11-230/115/60kV transformer bank, #2-115/12kV transformer, 230 and 115kV busses.

1159 Caribou Island re-established with unit #3 on Isochronous/Frequency control.

1234 CAISO notified.

07/27/2021 11:59 Actual End Time for T21-013847

07/27/2021 19:38 1745 NS/ RPTs crew will clear Caribou CB 292 and BK #11 from 0900 07/29 to 1700 8/3 to perform CB 292 Mech service, replace NG compressor, inspect BK #11 and replace bolts on the bank per Enhanced inspection

07/29/2021 10:52 "TSO - Confirms all pre-clearance requirements met, takeout switching started" on T21-012472

07/29/2021 11:03 TSO - Equipment out of service/Path interrupted " on T21-012472

07/29/2021 11:17 SD - Acknowledge" on T21-012472

07/29/2021 11:17 SD - Reports Out/Path interruption time to CAISO " on T21-012472

"TSO - Takeout switching complete - Clearance established" on T21-012472

07/29/2021 11:34 'Reports Work Started' on the Caribou, 230/115 kV, Station, CARIBOU CB 292 NG compressor

Bank #11 work while island is out for T21-012472

07/29/2021 11:34 "TSO - Crew reports ON Clearance" on T21-012472

07/29/2021 11:38 1137 TM/ reports at 1133 Caribou #11-230/115/60kV transformer and CB 292 forced out service to replace hardware and NG compressor. No customer interruption. Estimated return 08/03/21.

07/29/2021 11:34 reports 'ON' the Caribou CB 292 forced between Caribou 293, 173, 91 & points applied

User SKIPPED Work Step "TSO - Reports all pre-clearance requirements met, and requests the OK to proceed" for T21-013110

Page 14 of 20 Confidential



SKIPPED Work Step "SD - Acknowledge" for T21-013110 User SKIPPED Work Step "SD - Reports all pre-clearance requirements met, and requests CAISO OK to proceed " for T21-013110 User SKIPPED Work Step "CAISO - Gives OK to proceed " for T21-013110 SKIPPED Work Step "SD - Gives TSO OK to proceed" for T21-013110 SKIPPED Work Step "TSO - Acknowledge" for T21-013110 User SKIPPED Work Step "TSO - Equipment out of service/Path interrupted " for T21-013110 User SKIPPED Work Step "SD - Acknowledge" for T21-013110 User SKIPPED Work Step "SD - Reports Out/Path interruption time to CAISO " for T21-013110 "TSO - Takeout switching complete - Clearance established" on T21-013110 08/01/2021 08:13 reports 'ON' the Caribou-Table Mountain 230kV line (Caribou 115/60kV Island) with grounds applied 08/01/2021 08:13 "TSO - Crew reports ON Clearance" on T21-013110 08/12/2021 18:25 1825 NS/ reports Hat Creek #1-Westwood 60kV line relayed and did not test due to wildfire mitigation. On the trouble, Caribou- Westwood 60kV line (Westwood to Hamilton Branch Section) and Hamilton Branch-Chester 60kV line de-energized. Sustained interruption to Mega Renewables, Halls Flat, Bogard, Hamilton Branch, Collins Pine, and Chester (offloaded to temp gen). "Dixie" fire in the area. 1831 CAISO notified. 08/12/2021 18:25 Actual Start Time for T21-014848 SKIPPED Work Step "TSO - Confirms all pre-clearance requirements met, takeout switching started" for T21-014848 08/12/2021 18:25 "TSO - Equipment out of service/Path interrupted " on T21-014848 08/13/2021 00:22 "SD - Acknowledge" on T21-014848 08/13/2021 00:22 "SD - Reports Out/Path interruption time to CAISO" on T21-014848 RPTs need to clear Caribou-Westwood 60kV line Hamilton Branch to Westwood And 08/13/2021 07:41 0715 NS/ Hamilton Branch-Chester 60kV Line. Start time can be time of trouble, no ETOR 08/13/2021 07:58 0755 Super RPTs will need to patrol any portion of Hat Creek #1-Westwood-60kV line that will be energized once Cal-Fire releases it, even though it is not in an R4 or higher. NTFD, RPTs waiting to hear from Tline/ and will inform him of patrol requirement 0802 NS/ User SKIPPED Work Step "TSO - Confirms all pre-clearance requirements met, takeout switching started" for T21-014856 08/12/2021 18:25 "TSO - Equipment out of service/Path interrupted " on T21-014856 SD - Acknowledge" on T21-014856 08/13/2021 08:01 08/13/2021 08:02 "SD - Reports Out/Path interruption time to CAISO " on T21-014856 08/13/2021 08:00 RPTS PATROL OF HAT CREEK TO BOGARD 37 SECT NEEDS TO BE PATROLLED. NTFD OF CONDITIONS. RPTS IF LINE NEEDS TO BE PATROLLED WE HAVE 0804 TLINE SUPERVISORA TO LEAVE IT DE-ENERGIZED. VISIBILITY AND MAN POWER WILL NOT ALLOW IT. NTFD OF TILINE COMMENTS. 08/13/2021 08:10 0806 NS/ RPTs Tline/ RPTs if a patrol is required, will not be able to return line due to access and visibility issues preventing a patrol. 0808 Super/ NTFD of above

Page 15 of 20

Confidential



SKIPPED Work Step "TSO - Confirms all pre-clearance requirements met, takeout switching started" for T21-014857 08/12/2021 18:25 TSO - Equipment out of service/Path interrupted " on T21-014857 08/13/2021 10:08 "SD - Acknowledge" on T21-014857 08/13/2021 10:08 "SD - Reports Out/Path interruption time to CAISO" on T21-014857 08/13/2021 10:33 RPTS OK FROM CAFIRE TO PATROL THE HAT CREEK TO BOGARD SECT OF LINE. PATROL SHOULD BE COMPLETE BY 1400 NTFD OF CONDITIONS 08/13/2021 13:29 "TSO - Takeout switching complete - Clearance established" on T21-014856 08/13/2021 13:45 TSO - Takeout switching complete - Clearance established" on T21-014848 08/13/2021 14:45 "TSO - Takeout switching complete - Clearance established" on T21-014857 08/13/2021 14:50 1445 NS/ RPTs air patrol just off ground to patrol Hat Creek #1 to Bogart section. RPTs clearance points have all been established for Bogart to Westwood section, Westwood to Ham Branch section and Ham Branch-Chester 60kV line. Tline RPTD fire activity and access will limit crews ability to verify clearance and will not be reporting on today. No ETOR for cleared sections. 08/13/2021 16:49 1649 RM/ reports t-line supervisor reports full line patrol between Hat Creek and Bogard complete with no trouble found and request line energized/tested. Cal fire Ops Chief energize. 1657 RM given OK to place one manual test on the Hat Creek #1-Westwood 60kV line (Hat Creek #1 PH to Bogard section) and report. 1702 good test. 1707 CAISO/ notified of same. 08/13/2021 17:54 1702 RM reports Hat Creek #1-Westwood 60kV line (Hat Creek to Bogard section) manually tested OK restoring transmission service to Mega Renewables (offline), Halls Flat, Bogard after line patrol completed with no trouble found. From trouble on 08/12/21 at 1828. Repeat back correct. 08/13/2021 18:51 --1844 T-LINE SUPERVISOR REPORTS TO GCC NS THE CAL FIRE CONTACT INFO FOR THE PERSON THAT GAVE PERMISSION TO ENERGIZE THE HAT CREEK-WESTWOOD 60KV LINE (HAT CREEK-BOGARD SECT). 08/14/2021 07:47 reports 'ON' the Hamilton Branch-Chester 60kV line between Hamilton Branch SW 13, 15 99 and CB 12 line POT SEC C/OUT, Collins Pine SW 25, Chester SW 75 with grounds applied "TSO - Crew reports ON Clearance" on T21-014857 08/14/2021 07:47 08/14/2021 11:04 reports 'ON' the Hat Creek #1-Westwood 60kV line (Bogard to Westwood section) between Bogard SW 39 and Westwood SW 53 & District SW 39 and District SW 39 08/15/2021 09:49 0933 NS/ Westwood-Hamilton Branch section and Hamilton Branch-Chest 60kV lines. Appears there was no damage on the Hamilton Branch-Chester 60kV line nor Westwood-Hamilton Branch section. More to follow 08/15/2021 11:42 1140 NS/ RPTs Tline RPTs due to fire activity and damage found, Ham Branch-Chester 60kV line will not be part of return today. Other two still can be restored to restore transmission to Hamilton Branch 08/15/2021 14:25 1420 NS RPTs Operations Chief Report Mark Market Report #1-Westwood 60kV line (Bogart to Westwood section) and Caribou-Westwood 60kV line (Westwood to Hamilton Branch section) back to PGAE. Same time, Tline super. RPTs line patrol of both of those sections complete, no trouble found. Switching in progress to restore both sections. 08/15/2021 14:52 reports 'OFF' the Hat Creek #1-Westwood 60kV line (Bogard to Westwood section) between Bogard SW 39 and Westwood SW 53 & Dry 55 with grounds removed 08/15/2021 14:52 "TSO - Crew reports OFF Clearance" on T21-014848

# Work Card - Detailed View



TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and 08/15/2021 14:52 resumed switching to restore" on T21-014848 SKIPPED Work Step "TSO - Crew reports ON Clearance" for T21-014856 SKIPPED Work Step "TSO - Crew reports OFF Clearance" for T21-014856 TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and 08/15/2021 15:38 resumed switching to restore" on T21-014856 08/15/2021 16:25 1618 NS/ RPTs ready to de-energize then test Hat Creek #1-Westwood 1619 SDV gives NS OK to de-energize Hat Creek #1-Westwood (Hat Creek to Bogart section) then restore line to Westwood. 1626 Line de-energized 1627 Line manually tested OK to Westwood CB 52 1629 Westwood 60kV station restored "TSO - Equipment returned to service/Path restored" on T21-014848 08/15/2021 16:27 Ended INT-14930 for Caribou, N/A, Station 08/14/2021 11:04 "TSO - Crew reports ON Clearance" on T21-014848 08/15/2021 16:41 "SD - Acknowledge" on T21-014848 08/15/2021 16:43 "SD - Reports return time to CAISO " on T21-014848 08/15/2021 16:44 "TSO - Return switching complete" on T21-014848 08/15/2021 16:46 1640 NS reports he is ready to place manual test on Caribou-Westwood 60kV line (Hamilton Branch to Westwood section). No work was done in section. 1643 Op Sup. gives NS OK to test section and report. "TSO - Equipment returned to service/Path restored " on T21-014856 08/15/2021 16:46 'TSO - Return switching complete" on T21-014856 RPTs at 1646 Caribou-Westwood (Westwood to Hamilton Branch section) manually 08/15/2021 16:55 1647 NS/ tested OK restoring transmission service to Hamilton Branch after line patrol complete, no trouble found. SD - Acknowledge" on T21-014856 08/15/2021 16:55 "SD - Reports return time to CAISO " on T21-014856 08/15/2021 16:58 User SKIPPED Work Step "TSO - Reports all pre-clearance requirements met, and requests the OK to proceed" for T21-013128 SKIPPED Work Step "SD - Acknowledge" for T21-013128 SKIPPED Work Step "SD - Reports all pre-clearance requirements met, and requests CAISO OK to proceed " for T21-013128 User SKIPPED Work Step "CAISO - Gives OK to proceed " for T21-013128 SKIPPED Work Step "SD - Gives TSO OK to proceed" for T21-013128 SKIPPED Work Step "TSO - Acknowledge" for T21-013128 07/14/2021 10:58 "TSO - Equipment out of service/Path interrupted " on T21-013128 08/14/2021 11:03 "SD - Acknowledge" on T21-013128

07/14/2021 11:07 "SD - Reports Out/Path interruption time to CAISO" on T21-013128

CORRECTION: 07/14/2021 11:00 Actual Start Time for T21-013110

Page 17 of 20 Confidential

# **Work Card - Detailed View**



08/19/2021 11:55 reports 'OFF' the Caribou CB 292 forced between Caribou 293, 173, 91 & camp; 95 with grounds removed
08/19/2021 11:55 "TSO - Crew reports OFF Clearance" on T21-012472
08/19/2021 11:55 "TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and requests OK to restore" on T21-012472
08/19/2021 12:06 "SD - Acknowledge" on T21-012472
08/19/2021 12:06 "SD - Requests CAISO OK to restore" on T21-012472
08/19/2021 12:11 "SD - Gives TSO OK to restore" on T21-012472
08/19/2021 12:15 "TSO - Acknowledge" on T21-012472
08/19/2021 13:40 TSO - Equipment returned to service/Path restored " on T21-012472
08/19/2021 13:44 "SD - Acknowledge" on T21-012472
08/19/2021 13:45 SD - Reports return time to CAISO " on T21-012472
08/19/2021 14:30 "TSO - Return switching complete" on T21-012472
08/19/2021 17:27 reports 'OFF' the Hamilton Branch-Chester 60kV line between Hamilton Branch SW 13, 15 99 and CB 12 line POT SEC C/OUT, Collins Pine SW 25, Chester SW 75 with grounds removed
08/19/2021 17:27 TSO - Crew reports OFF Clearance" on T21-014857
08/19/2021 17:27 "TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and resumed switching to restore" on T21-014857
08/19/2021 17:38 1738- TABLE TLINE SUPV REPORTS CALFIRE TEAM 3 RELEASED THE HAMILTON BRANCH-CHESTER 60KV LINE FOR SERVICE @1445. 100% LINE PATROL COMPLETE WITH NO TROUBLE FOUND. READY TO ENERGIZE.
08/19/2021 18:03 1803- OPS SUPV GIVES OK TO COMMENCE SWITCHING TO RETURN HAMILTON BRANCH-CHESTER 60KV LINE TO SERVICE
08/19/2021 17:59 1759 TM/ reports at 1445 CalFire/ released Hamilton Branch-Chester 60kV line. 1739 TLine/ released same for service following completion of 100% line patrol with no additional trouble found.  1803 Op Sup/ gives TM/ Commonwealth of the manually test and restore Hamilton Branch-Chester 60kV line and
report.  1820 TM reports at 1816 Hamilton Branch-Chester 60kV line returned to service after crew replaced poles 0/14, 8/185, 9/194, 9/197, repaired insulators at poles 7/1633, 10/210, Cal Fire release and completion of 100% line patrol with no additional trouble found, restoring Chester and Collins Pine. From trouble on 08/12/21 at 1825.  1821 CAISO notified via TOTL.
08/19/2021 18:16 "TSO - Equipment returned to service/Path restored " on T21-014857
08/19/2021 18:16 "TSO - Return switching complete" on T21-014857
08/19/2021 18:21 - "SD - Acknowledge" on T21-014857
08/19/2021 18:21 "SD - Reports return time to CAISO " on T21-014857
08/26/2021 14:50 "TSO - Takeout switching complete - Clearance established" on T21-013128
08/27/2021 10:11 reports 'ON' the Butt Valley-Caribou 115kV line with grounds applied
08/27/2021 10:11 "TSO - Crew reports ON Clearance" on T21-013128
08/31/2021 08:25 0815 North State given the OK to check Caribou RAS SW 82 and 83 (RAS System A and B) cut out, confirms same at this time via RTSCADA. Cut out Butt Valley RAS SW 60 and 61 (RAS System A and B) and report when complete.

Page 18 of 20

# Work Card - Detailed View



08/31/2021 09:01 0857 North State reports have cut out Butt Valley RAS SW 60 and 61 (RAS System A and B). 09/13/2021 18:46 reports 'OFF' the Caribou-Table Mountain 230kV line (Caribou 115/60kV Island) with grounds removed 09/13/2021 18:46 TSO - Crew reports OFF Clearance" on T21-013110 09/13/2021 19:34 "TSO - Confirms all work complete, all workers, grounds, and equipment in the clear, and requests OK to restore" on T21-013110 09/13/2021 19:35 1839 TM/ reports Caribou-Table Mountain 230kV line completely patrolled and crew found no further issue with the line after after repairs were made on the following structures: Replaced NG insulators on structures 017/124 and 28/204. Vegetation cleared on structures 007/056 and 029/211. Repeat backs correct. 09/13/2021 19:35 "SD - Acknowledge" on T21-013110 09/13/2021 19:36 "SD - Requests CAISO OK to restore" on T21-013110 09/13/2021 20:26 "SD - Gives TSO OK to restore" on T21-013110 09/13/2021 20:29 'TSO - Acknowledge" on T21-013110 09/13/2021 18:03 1803 - Table Maintenance/ reports Caribou CB 252 SF6 sample/testing completed okay. NTFD of intent to restore the Caribou-Table MTN 230KV line. states he does not have a Rover at Caribou. to follow up with the stated that we will probably need a switchman at Caribou for switching and as a precautionary measure syncing islands. 1820 - Confirmed with Grid Ops Supervisor/ that once the line patrol is completed and the clearance holders report off, we are to restore the Caribou-Table Mountain 230KV line tonight. NTFD of item 1820 and to dispatch a Rover to Caribou for island-sync support. reports ETA for Caribou Rover approximately 2033 hours. 1837 - Table Maintenance Crew Lead/ NTFD of item 1833. Will have Table Maintenance Supervisor/ for further clarification of line returning tonight vs. tomorrow. 1839 - T-line Supervisor/ reports Air Patrol Completed on the Caribou-Table Mountain 230kv line from Table Mountain to Caribou with no issues found, ready to be energized. reports repairs made: T-Line replaced contaminated insulators at towers 017/124, and 28/204 and vegetation cleared F1 and F2 hazards trees between towers and 007/056 and 029/211. 1740 - SDV/ NTFD of item 1839. 1850 confirms Caribou-Table Mountain 230KV line shall be restored tonight. 1923 forwarded Repairs Completed List. 2051 - Delay in Caribou Rover arrival to Caribou due to traffic on HWY 70. (Vehicle accident) 2134 - Caribou Island synced per switch log. Caribou RAS SW 82 & 83 C/in, Butt Valley RAS SW 60 & 61 SW still C/OUT since Butt Valley-Caribou 115kv line is still cleared under T21-013128. previously notified of intent to leave Butt Valley RAS SW 60 & 61 C/OUT after the Caribou-Table MTN 230KV line is restored; switch status. 09/13/2021 21:34 "TSO - Equipment returned to service/Path restored " on T21-013110 09/13/2021 21:47 TSO - Return switching complete" on T21-013110 09/13/2021 22:12 "SD - Acknowledge" on T21-013110 09/13/2021 22:12 "SD - Reports return time to CAISO " on T21-013110 reports Caribou-Table Mountain 230kV line returned to service after crew replaced NG 09/13/2021 23:03 2134 TM/ insulators at structures 017/124, 28/204 and removed vegetation hazard at structures 007/056 and 029/211. Line patrol found no other issues associated to the ongoing wildfire in the area. From trouble on 07/14/21 at 1058. Repeat back

Created On:	Tuesday, 09/21/2021		
	Ų	Work Card - Detailed View	PG&E
correct.			
		Page 20 of 20	Confidential