

INFORMATION PROCEDURE 12.47 KV SYSTEM: CIRCUIT DISCONNECT LOCATIONS

APPLICATION

For use by Facilities Division electricians. This procedure is part of the operations manual for the 12-KV power system. See ADMN-056 for an overview of the manual's contents, including related procedures.

This procedure should be carried out ONLY by a qualified electrician who has been instructed and trained to work on the 12.47 kV system. Any Facilities personnel performing this procedure must be familiar with the general operating and information procedures regarding this system.

PURPOSE

12.47 kV system circuit disconnect locations.

TABLE 1 GRIZZLY SUBSTATION SW-A1	
NAME	PURPOSE
52-A101	Main 12.47 kV Incoming Line - Transformer Bank No. 1
52-A102	Main 12.47 kV Incoming Line - Transformer Bank No. 2
52-A103	12 kV Bus Tie Breaker
52-A104	UC/LBNL 12.47 kV Tie Line No. 1 (to Hill Area Substation Breaker 52-H104)
52-A105	12.47 kV Feeder to Blackberry Canyon Switching Station SW-A6, 52-A601 Bus No. 1 Main
52-A106	12.47 kV Feeder to ALS Switching Station SW-A3, 52-A301: Bus No. 1 Main
52-A107	Spare Breaker
52-A108	12.47 kV Feeder to Original Labsite Switching Station, SW-A4, 52-A401: Bus No. 1 Main
52-A109	12.47 kV Feeder to East Canyon Switching Station. SW-A5, 52-A501: Bus No. 1 Main
52-A110	Spare Breaker
52-A111	12.47 kV Feeder to Grizzly Switching Station SW-A2: Bus No. 1 Main
52-A112	12.47 kV Feeder to Grizzly Switching Station SW-A2: Bus No. 2 Main
52-A113	12.47 kV Feeder to East Canyon Switching Station SW-A5, 52-A502, Bus No. 2 Main
52-A114	12.47 kV Feeder to Original Labsite Switching Station, SW-A4, 52-A401: Bus No. 2 Main
52-A115	Spare Breaker
52-A116	Spare Breaker
52-A117	12.47 kV Feeder to ALS Switching Station SW-A3, 52-A302: Bus No. 2 Main
52-A118	12.47 kV Feeder to Blackberry Canyon Switching Station SW-A6, 52-A602, Bus No. 2 Main
52-A119	UC/LBNL 12.47 kV Tie Line No. 2 (to Hill Area Substation Breaker 52-H114)

TABLE 2 GRIZZLY SWITCHING STATION SW-A2	
NAME	PURPOSE
Incoming Line 1	12.47 kV Bus 1 Main Incoming Line, from SW-A1, Breaker 52-A111
Incoming Line 2	12.47 kV Bus 2 Main Incoming Line, from SW-A1, Breaker 52-A112
52-A201	12.47 kV Bus Tie Breaker
52-A202	12.47 kV Breaker Space
52-A203	12.47 kV Feeder to Bank 217 (ADF-1-69-Line 1): Bldgs 69, 75, 76 & 78
52-A204	12.47 kV Breaker Space
52-A205	12.47 kV Feeder to Bank 72 (ADF-1-77- Line 1): Bldgs 31, 61, 77, 77A, 78, & 79
52-A206	Spare Breaker
52-A207	12.47 kV Feeder to Bank 217 (ADF-1-69- Line 2): Bldgs 69, 75, 76 & 78
52-A208	12.47 kV Breaker Space
52-A209	12.47 kV Feeder to Bank 72 (ADF-1-77- Line 2): Bldgs 31, 61, 77, 77A, 78, & 79

TABLE 3 BLDG 6 (ALS) SWITCHING STATION SW-A3	
NAME	PURPOSE
52-A301	12.47 kV Bus No. 1 Main Incoming Line from SW-A1, Breaker 52-A106
52-A302	12.47 kV Bus No. 2 Main Incoming Line from SW-A1, Breaker 52-A117
52-A303	12.47 kV Bus Tie Breaker
52-A304	12.47 kV Feeder to Transformer Bank No. 303: Booster Ring
52-A305	Spare
52-A306	Spare
52-A307	12.47 kV Feeder to Transformer Bank No. 302: Storage Ring and Linac.
52-A308	12.47 kV Feeder to Transformer Bank No. 301: Storage Ring Magnet.
52-A309	12.47 kV Feeder to Transformer Bank No. 304: Experimental Hall.
52-A310	12.47 kV Feeder to Transformer Bank No. 307: RF Power.
52-A311	12.47 kV Feeder to Transformer Bank No. 305: Bldg 10 & 80.
52-A312	12.47 kV Feeder to Transformer Bank No. 306: Bldg 4, 5, 7, 14, 41, 48.
52-A313	Spare Breaker
52-A314	Spare Breaker

TABLE 3 BLDG 6 (ALS) SWITCHING STATION SW-A3 <i>Continued from the previous page</i>	
52-A315	Spare Breaker
52-A316	Spare Breaker

TABLE 4 ORIGINAL LABSITE (OLS) SWITCHING STATION SW-A4	
NAME	PURPOSE
52-A401	12.47 kV Bus No. 1 Main Incoming Line from SW-A1, Breaker No. 52-A108
52-A402	12.47 kV Bus No. 2 Main Incoming Line from SW-A1, Breaker No. 52-A114
52-A403	12.47 kV Bus Tie Breaker
52-A404	Empty space
52-A405	12.47 kV Feeder to Transformer Bank No. 218 (ADF-2-37, Line 1), & Bank 309 (ADF-1-34, Line 1): Bldg 34, 37, & 43
52-A406	Spare
52-A407	12.47 kV Feeder to Transformer Bank No. 10 (ADF-10-16, Line 1), Bank 14 (ADF-1-25, Line 1), Bank 15 (ADF-15-16, Line 1), Bank 16 (ADF-16-16, Line 1): Bldg 16, 17, 25, 25A, 26, 27, 28, 44, 44A, 44B, 52, 52A, & 53
52-A408	12.47 kV Feeder to Transformer Bank No. 237 (ADF-1-2, Line 1) & Bank 238 (ADF-3-2, Line 1): Bldg 2, 2A & 29 Trailers
52-A409	12.47 kV Feeder to Transformer Bank No. 36 (ADF-1-58, Line 1), Bank 49 (ADF-1-46, Line 1), Bank 158 (ADF-1-58A, Line 1): Bldg 46, 46A, 46C, 46D, 47, 53, 53A, 58, & 58A
52-A410	12.47 kV Feeder to Transformer Bank No. 218 (ADF-3-37, Line 2), & Bank 309 (ADF-1-34, Line 2): Bldg 34, 37 & 43
52-A411	12.47 kV Feeder to Transformer Bank No. 10 (ADF-10-16, Line 2), Bank 14 (ADF-1-25, Line 2), Bank 15 (ADF-15-16, Line 2), & Bank 16 (ADF-16-16, Line 2): Bldg 16, 17, 25, 25A, 26, 27, 28, 44, 44A, 44B, 52, 52A, & 53
52-A412	12.47 kV Feeder to Transformer Bank No. 237 (ADF-2-2, Line 2), & Bank 238 (ADF-4-2, Line 2): Bldg 2, 2A & 29 Trailers
52-A413	Spare
52-A414	12.47 kV Feeder to Transformer Bank No. 36 (ADF-1-58, Line 2), Bank 49 (ADF-1-46, Line 2), & Bank 158 (ADF-1-58, Line 2): Bldg 46, 46A, 46C, 46D, 47, 53, 53A, 58, & 58A
52-A415	Empty space
52-A416	Equipped space
52-A417	Equipped space

TABLE 5 EAST CANYON SWITCHING STATION SW-A5	
NAME	PURPOSE
52-A501	12.47 kV Bus No. 1 Main Incoming Line from SW-A1, Breaker No. 52-A109
52-A502	12.47 kV Bus No. 2 Main Incoming Line from SW-A1, Breaker No. 52-A113
52-A503	12.47 kV Bus Tie Breaker

TABLE 5 EAST CANYON SWITCHING STATION SW-A5 <i>Continued from the previous page</i>	
52-A504	12.47 kV Feeder to GS-1-62 Feeding Transformer Bank No. 66 (ADF-1-62, Line 1), Transformer Bank 215 (ADF-1-66, Line 1), Transformer Bank 550 (ADF-1-67, Line 1) and Transformer Bank 551 (ADF-2-67, Line 1): Bldg 62, 66, 67, & 73
52-A505	12.47 kV Feeder to Transformer Bank No. 420 (ADF-1-72, Line 1): Bldg 72, 72A, 72B, & 72C
52-A506	12.47 kV Feeder to GS-1-EC feeding Transformer Bank No. 47 (ADF-1-74, Line 1), Bank 357 (ADF-1-85, Line 1), and Bank 460 (ADF-1-84, Line 1): Bldg 74, 83, 83A, 84, & 85
52-A507	Equipped space
52-A508	Equipped space
52-A509	12.47 kV Feeder to GS-2-62 Feeding Transformer Bank No. 66 (ADF-1-62, Line 2), Transformer Bank 215 (ADF-1-66, Line 2), Transformer Bank 550 (ADF-1-67, Line 2) and Transformer Bank 551 (ADF-2-67, Line 2): Bldg 62, 66, 67, & 73
52-A510	12.47 kV Feeder to Transformer Bank No. 420 (ADF-1-72, Line 2): Bldg 72, 72A, 72B, & 72C
52-A511	12.47 kV Feeder to GS-2-EC Feeding Transformer Bank No. 47 (ADF-1-74, Line 2), Bank 357 (ADF-1-85, Line 2), and Bank 460 (ADF-1-84, Line 2): Bldg 74, 83, 83A, 84, & 85
52-A512	Spare
52-A513	Equipped space

TABLE 6 BLACKBERRY CANYON SWITCHING STATION SW-A6	
NAME	PURPOSE
52-A601	12.47 kV Bus No. 1 Main Incoming Line from SW-A1, Breaker No. 52-A105
52-A602	12.47 kV Bus No. 2 Main Incoming Line from SW-A1, Breaker No. 52-A118
52-A603	12.47 kV Bus Tie Breaker.
52-A604	12.47 kV Feeder to GS-1-70 feeding Transformer Bank No. 25 (ADF-1-50, line 1), Bank 30 (ADF-1-70, Line 1), Bank 70 (ADF-2-70, Line 1), Bank 31 (ADF-1-70A, Line 1): Bldg 50, 54, 70, & 70A
52-A605	12.47 kV Feeder to Transformer Bank No. 513 (ADF-1-55, Line 1): Bldg 55, 55A, 56, 60, 71, & Blackberry Canyon trailers
52-A606	12.47 kV Feeder to GS-1-50B feeding Transformer Bank No. 35 (ADF-1-50A, Line 1), Bank 38 (ADF-1-50B, Line 1), and Bank 420 (ADF-2-50B, Line 1): Bldg 50A, 50B, 50C, 50D, 50E, & 50F
52-A607	12.47 kV Feeder to Disconnect/Selector Switch AD-1-88 Line 1, feeding Transformer Bank No. 80 (ADF-3-88), B88 Rectifier (ADF-2-88) & Transformer Bank No. 198 (ADF-4-88): Bldg 65, 65A, 65B & 88
52-A608	12.47 kV Feeder to Transformer Bank No. 511 (ADF-1-51, Line 1) & Bank 512 (ADF-2-51, Line 1): Bldg 51, 51A, 51B, & 64
52-A609	12.47 kV Feeder to GS-1-71 feeding Transformer Bank No. 90 (ADF-1-90, Line 1), and Bank 514 (ADF-1-71, Line 1): Bldg 71, 71A, 71B, 71 trailers. 90, & 90 trailers
52-A610	Equipped space
52-A611	2 MW Diesel Generator: EG-107-64C

TABLE 6 BLACKBERRY CANYON SWITCHING STATION SW-A6 <i>Continued from the previous page</i>	
52-A614	12.47 kV Feeder to GS-2-70 feeding Transformer Bank No. 25 (ADF-1-50, Line 2), Bank 30 (ADF-1-70, Line 2), Bank 70 (ADF-2-70, Line 2), Bank 31 (ADF-1-70A, Line 2): Bldg 50, 54, 70 & 70A.
52-A615	12.47 kV Feeder to Transformer Bank No. 513 (ADF-1-55, Line 2): Bldg 55, 55A, 56, 60, 63, 71, & Blackberry Canyon trailers
52-A616	12.47 kV Feeder to GS-1-50A feeding Transformer Bank No. 35 (ADF-1-50A, Line 2), Bank 38 (ADF-1-50B, Line 2), and Bank 420 (ADF-2-50B, Line 2): Bldg 50A, 50B, 50C, 50D, 50E, & 50F
52-A617	12.47 kV Feeder to Disconnect/Selector Switch AD-1-88, Line 2, feeding Transformer Bank No. 80 (ADF-3-88), B88 Rectifier (ADF-2-88) & Transformer Bank No. 198 (ADF-4-88): Bldg 65, 65A, 65B & 88
52-A618	12.47 kV Feeder to Transformer Bank No. 511 (ADF-1-51, Line 2) & Bank 512 (ADF-2-51, Line 2): Bldg 51, 51A, 51B, & 64
52-A619	12.47 kV Feeder to GS-2-71 feeding Transformer Bank No. 90 (ADF-1-90, Line 2), and Bank 514 (ADF-1-71, Line 2): Bldg 71, 71A, 71B, 71 trailers. 90, & 90 trailers
52-A620	Spare
52-A621	Equipped space

TABLE 7 CIRCUIT DISCONNECT LOCATIONS BY BUILDING	
BLDG NAME	DESCRIPTION
Bldg 2	Outside: 12 kV VCB 52-A408 & A412 Original Lab Site Switching Station SW-A4 Inside: 12 kV ADF-1-2, ADF-2-2, ADF-3-2, ADF-4-2, Room 129C Inside: 480 Volt CB 237A & 238A Electrical Distribution Room, 129C Standby Power: EG-68-02 disconnect in Room 129B Generator Crash Off at East end of Corridor 183
Bldg 4	Outside: CB#343A1 in Load Center 306A1A between Bldg 4 & 5 Inside: Corridor 100 1st floor Panel 343A1A "Main"
Bldg 5	Outside: CB 343A2 in Load Center 306A1A between Bldg 4 & 5 Inside: Room 112 Panel 343A2A "Main" & Panel 343A2B "Main", Room 100 Panel 343A2C "Main"
Bldg 7	Outside: CB 306A2 in Unit Substation 306 at Bldg 6 Substation Yard SW-A3 Inside: Load Center 306A2A "Main", CB 344A1 Room 101
Bldg 10	Two (2) sources of power: 1 Outside: CB 341A1 240/120 Volt Load Center 305A1A North of High Bay Inside: PNL 341A1A "Main" Corridor 196 2 Outside: 480 Volt CB 305A1 and CB 305A2 in Unit Substation 305 at Bldg 6 Substation Yard SW-A3
Bldg 14	Outside: CB 343A3 in Load Center 306A1A between Bldg 4 & 5 Inside: Panel 343A3A "Main" Room 134 inside main door on West side of Bldg
Bldg 16	Two (2) sources of power. The 12 kV's are located on transformer pad, East side of Bldg 16: 1 Bank 10, 12kV: ADF-10-16 which provides power to Bldg 16, 17, 27, 52, 53 2 Bank 15, 12kV: ADF-15-16 which provides power to Bldg 16, 52, 52A, 53 Note: Disconnects inside are scattered and in difficult locations. These would not be practical to use in an emergency.

TABLE 7 CIRCUIT DISCONNECT LOCATIONS BY BUILDING <i>Continued from the previous page</i>	
Bldg 17	Outside: PNL 10A9A, CB 13, Bldg 16 transformer pad East side of building, also shuts off power to Bldg 27 Inside: PNL 33B "Main" is on South wall Room 101
Bldg 25	Outside: PNL 14A "Main" (480 Volt) or ADF-1-25 (12 kV), located on Bldg 25A transformer pad, West side of building Inside: Bldg 25 & 25A feeders are parallel to 6 different panels. In Bldg 25 these are: • PNL 118A, Room 136; PNL 118B, Room 128; PNL 118C, Room 126; PNL 14A, Room 174 In Bldg 25A these are: • PNL 12A, Room 174; PNL 12B, Room 131. Note: Bldg 26 is powered from Bldg 25, transformer pad CB 14A4
Bldg 26	Outside: PNL 14A on Bldg 25 transformer pad. CB 14A4 Inside: PNL 14A4A "Main" is in Room 090 (basement) Standby Power: EG-100-48 disconnect at generator pad near Bldg 48
Bldg 27	Outside: CB 13 in PNL 10A9A located on transformer pad East side of Bldg 16 (Also shuts off power to Bldg 17) Inside: PNL 10A9A13A "Main" and PNL 10A9A13B "Main" Room 101
Bldg 29 Trailers	Outside: PNL 236A, North of trailer B29A
Bldg 31	Outside: CB 16 in PNL 72A2A in Bldg 77 Welding Shop Inside: Panel 72A2A16A "Main" in Room 109
Bldg 34	Outside: VCB 405 & 410 at Original Lab Site Switching Station SW-A4, also turns of Bldg 37 Inside: 12kV ADF-1-34 Inside: PNL 309A "Main" in Room 101 Standby Power: Bldg 37 Room 101 Panel EG73A, CB 34
Bldg 37	Outside: ADF-2-37 or ADF-3-37 switches (12 kV) on transformer pad Inside: PNL 218A Main Standby Power: Bldg 37 Room 101 Panel EG73A, CB 33
Bldg 40 Bldg 41	Outside: CB 306A3 in Unit Substation 306 at Bldg 6 Substation Yard SW-A3 Inside: PNL 306A3A "Main" in Bldg 41, Room 101
Bldg 43	Outside: CB 3H in MCC 218A2A, Bldg 37 Room 202 Standby Power: EG-72-43 disconnect in Bldg 43
Bldg 44	Outside: CB 5 in PNL 15A, located on transformer pad East side of Bldg 16 Inside: PNL 15A5A "Main" is inside North door Room 101A
Bldg 44 Trailers	Outside: is in Bldg 25A, Room 131 (Southwest corner), PNL 12B • Trailer B44A is CB 12 • Trailer B44B is CB 13 & 14
Bldg 45	Outside: CB 4 in PNL 306A in Unit Substation 306 at Bldg 6 Substation Yard SW-A3 (Also disconnects Bldg 48) Outside: Disconnect 155B "Main" in Bldg 48 Room 103 Inside: PNL 155B "Main" South East Corner Room 101
Bldg 46	Outside: ADF-I-46 (12 kV) located outside South end of Bldg and Bank 49 "Main" Inside: PNL 49A2A (South wall Room 172). PNL 49A3A (Hall, Room 164) Other secondary disconnects (PNL 253A, B & C) are located at Transformer Bank 253 outside the loading dock
Bldg 46A	Outside: CB 49A2 located outside south end of Bldg 46 in Bank 49 Switchgear Inside: PNL 49A2A CB 5 (south wall Room 172A) disconnect for PNL 147A1A

TABLE 7 CIRCUIT DISCONNECT LOCATIONS BY BUILDING <i>Continued from the previous page</i>	
Bldg 46 Trailers	<p>Outside:</p> <ul style="list-style-type: none"> • Trailer "B": CB 2 in PNL 49A2A2A, Room 137 main door across from Trailer B • Trailer "C": CB 28 & CB 32 in PNL 253B1A located in Bldg 46, Room 161A • Trailer "D": CB 40 in PNL 253B1A, located in Bldg 46 Room 161A
Bldg 47	<p>Outside: CB 49A1 located outside South end of Bldg 46 in Bank 49 Switchgear</p> <p>Inside: PNL 262A "Main" on First floor Room 010</p>
Bldg 48	<p>Outside: CB 306A4 in Unit Substation 306 at Bldg 6 Substation Yard SW-A3. (Also disconnects Bldg 45)</p> <p>Inside: PNL 306A4A "Main" in Room 103</p> <p>Standby Power: EG-100-48 disconnect at generator pad near Bldg 48</p>
Bldg 50	<p>Outside: 12 kV ADF-1-50, on pad East of Bldg or Transformer Bank 25 "Main" on pad East side of building next to the road</p> <p>Inside: Switchboard 25A "Main" is located in Room 109 (Boiler Room)</p>
Bldg 50A	<p>Outside: GS-1-50A (12 kV) at West entrance to building and GS-1-50B located under building 50F</p> <p>Inside: ADF-1-50A (12 kV) and PNL 35A "Main" located in Room 0135</p> <p>Standby Power: EG-101-50A disconnect west of Bldg 50B</p>
Bldg 50B	<p>Outside: GS-1-50B (12 kV) under Bldg 50F and GS-1-50A (12kV) at west entrance of Bldg 50A. Also disconnects power to Transformer Bank 480, Bldgs 50D & 50F</p> <p>Inside: ADF-1-50B (12 kV) and PNL 38A "Main" located in Room 0243</p> <p>Outside: ADF-2-50B (12kV) or Switchgear 480A "Main" located at Substation Pad, south of Bldg 50B & 50F, PNL 480A5A21A - Main located under 50F garage</p> <p>Standby Power: EG-95-50B disconnect west of Bldg 50B</p>
Bldg 50C	<p>Outside: CB 35B4 in Bldg 50A Room 0135</p> <p>No inside disconnect</p>
Bldg 50D	<p>Outside: CB 38A3 in Bldg 50B, Room 0243. (Also shuts off power to PNL 38A3A on 4th floor in telephone closet Room 4219)</p> <p>Inside Bldg 50D, Room 110, PNL 38A3B "Main"</p>
Bldg 50E	<p>Outside: CB 35B16 in Bldg 50A, Room 0135</p> <p>Inside: Panels 35B6A & B Main Circuit Breakers</p>
Bldg 50F	<p>Outside: CB 12, PNL 38A located in Bldg 50B switchgear room</p> <p>Inside: PNL 38A12 "Main" Room 101</p>
Bldg 51	<p>Two (2) sources of 12 kV power:</p> <p>1 Outside: Transformer Bank 511 (ADF-1-51), feeder breakers CB 4, 5, 7 & 9 at Switchgear 511A</p> <p>2 Outside: Transformer Bank 512 (ADF-2-51), feeder breakers CB 2, 3, 4, 6, 7, 8, & 9 at Switchgear 512A</p>
Bldg 52	<p>Outside: CB 6 & 7 in PNL 15A, on Transformer Pad near Bldg 52</p> <p>Outside: Panel 10A9A - CB 17 at Transformer Pad near Bldg 52</p> <p>Inside: PNL 15A6A "Main", and PNL 15A7A "Main" Room 100</p> <p>Inside: Enclosed breakers for controlled power source PNL 10A9A17A2 Room 100</p>
Bldg 53	<p>Outside: CB 15 in PNL 15A on Transformer Pad near Bldg 52, 480 Volt power from Bldg 58, Transformer Bank 36, CB 3</p> <p>Inside: PNL 15A15A "Main", North Room 004</p> <p>Inside: PNL 36A3A "Main" on West wall of Bldg 53, Room 101</p>

TABLE 7 CIRCUIT DISCONNECT LOCATIONS BY BUILDING <i>Continued from the previous page</i>	
Bldg 54	Outside: CB 1 in Switchgear 70A, Bldg 70 Transformer Pad Inside: PNL 70A1A "Main", Lower Level, Switchgear Room 002A
Bldg 55	Outside: CB 7 in Switchgear 513A located at Blackberry Substation #2 Inside: PNL 513A7A "Main" in Room 131 Standby Power: EG-69-55 disconnect Southeast of Bldg 90
Bldg 55A	Outside: Transformer Bank 212 Secondary "Main" located on transformer pad on East side of Bldg 60 Inside: PNL 212A "Main" in Bldg 55A, Room 102
Bldg 56	Outside: CB 2 in Switchgear 513A located at Blackberry Substation #2 Inside: PNL 513A2A (old 112A2A2) Circuit Breaker to Bank 410 Inside: Switchboard 410A "Main" Standby Power: EG-69-55 disconnect Southeast of Bldg 90
Bldg 58	There are two (2) sources of power to Bldg 58 and Bldg 58A. Outside: 480 volt Bank 36 secondary Main , Bank 158 secondary main , and 12KV ADF-1-58 and ADF-1-58A located on transformer pad at South end of building Inside: PNL 260A Main, PNL 261A "Main", and PNL 263A "Main" shutoff power from Transformer Bank 20, PNL 36A 2A Main on south wall High Bay Helium compressor B58 Room 105: Outside CB 36A11 located on Transformer pad at South end of the building
Bldg 60	Outside: CB 1 in Switchgear 513A located at Blackberry Substation #2 Inside: Panel 513A1A "Main" on west wall
Bldg 62	Outside: ADF-1-62 (12 kV) located at transformer pad, Northwest corner of building Inside: PNL 66A "Main" in Machinery Room 033 (NOTE: These switches also shut off power to Bldg 62A, 62B and Bldg 73) Standby Power: EG-102-62 Generator crashoff at bottom of stairway 195
Bldg 62A Trailer	Outside: PNL 376A1A "Main" at transformer located at Southwest corner of trailer Inside: 66A2A, CB 5 to Bank 376 High Bay Room 100
Bldg 62B (ICS)	Outside: Bank 363 - Panel 66A4A4A, CB 10, B62 Machine Room 33 Inside: Panel 363A1A "Main" and Panel 437A-UPS Standby Power: EG-81-62B Disconnect
Bldg 63	Outside: CB 13 PNL 513A1A in Bldg 60 west wall Inside: PNL 513A1A13A "Main" Room 101
Bldg 64	Outside: CB 7 in Switchgear 512A at Bldg 51 Substation Pad or "Main" CB at Switchboard 512A7A on east side, center Standby Power: EG-79-64 Disconnect east side, center
Bldg 65	Outside: CB 4 Panel 80A3A17A , located in basement Bldg 88, next to generator transfer switch. (Also powers Bldg 65 Trailers.) Inside: PNL 65A "Main" in Room 004
Bldg 65 Trailers	Nearest outside disconnect is located on North end of each trailer unit
Bldg 66	Outside: ADF-1-66 (12 kV) on transformer pad Inside: Transformer Bank 215 secondary "Main" in Room 114 Standby Power: EG-109-66 Disconnect west side

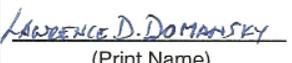
TABLE 7 CIRCUIT DISCONNECT LOCATIONS BY BUILDING <i>Continued from the previous page</i>	
Bldg 67	<p>Outside: GS-1-62 (12kV) and GS-2-62 (12kV) south of building adjacent to B62B</p> <p>Inside: ADF-1-67 (12kV), ADF-2-67 (12kV), SWGR 550A Main and SWGR 551A Main located in Utility Center, Room 202</p> <p>Standby Power: EG-110-67 disconnect at EG in Utility Center, Room 104</p>
Bldg 68	<p>Outside: CB 9 in PNL 217A2AIA in Bldg 75, Room 120</p> <p>Inside: Disconnect is on West wall. (Fire Pump 1)</p>
Bldg 69	<p>Outside: CB 217A1 on transformer pad, Northeast side of Bldg 75</p> <p>Inside: Switchboard 217A1A "Main" is located in Room 150 by roll up door</p>
Bldg 70	<p>Two (2) sources of power to Bldg 70:</p> <p>Outside: ADF-1-70 (12kV), and ADF-2-70 (12 kV), located on transformer pad, east side of building by stairs, opposite Room 130 (Also turns power off to Bldg 54 and panel 70A4A in Bldg 70A)</p> <p>Outside: CB 2 & 3, PNL 70A (480 Volt), located on transformer pad east side of building by stairs, opposite Room 130.</p> <p>Inside: CB 1, 2, 3, 4, 5 in PNL 30A in Room 130</p> <p>Standby Power: EG-106-70 at generator on transformer pad</p>
Bldg 70A	<p>Two (2) sources of power to Bldg 70A:</p> <p>Outside: ADF-1-70A, located below 3rd floor dock, East side</p> <p>Inside: Switchboard 31A "Main", located in Room 3329 (Boiler Room), just off 3rd floor loading dock</p> <p>Outside: CB 70A4 (480 Volt) in the Bldg 70 Substation Bank 70</p> <p>Inside: PNL 70A4A "Main" (480 Volt), located in Room 2235</p> <p>Standby Power: EG-17-70A in Room 3329</p> <p>Generator crashoff switch on loading dock 3rd floor entrance</p>
Bldg 71 Bldg 71A	<p>Outside: 12 kV ADF-1- 71 , Bank 514 Feeder, disconnect located at the Bldg 71 substation pad on the north side</p> <p>Outside: Main CB of Switchgear 514A</p>
Bldg 71 Trailers	<p>Outside: "Mains" are on the Northwest side of Trailer B71P, PNL 172A and PNL 354A "Main" for Trailers 71A, H, and J</p>
Bldg 72	<p>Outside: 12kV ADF-1-72 for Bank 420 and Switchgear 420A "Main" at Bldg 72 Unit Substation</p> <p>Outside: Bldg 72: CB 420A4A disconnect on southwest corner of B72 for Bank 39</p> <p>Outside: Bldg 72A: CB 420A6A disconnect on southwest corner of Bldg 72 for PNL 420A6A1A disconnect</p> <p>Outside: Bldg 72B: CB 420A7A disconnect in can on southwest corner of Bldg 72 for PNL 420A7A1A</p> <p>Inside: Bldg 72C: Panel 420A8A "Main"</p> <p>Standby Power: EG-098-72 disconnect at D/G Unit under transformer pad Bank 420 and at PNL E420A10A1A "Main" in Bank 420 switchgear</p>
Bldg 73	<p>Outside: CB 7 in PNL 66A in basement of Bldg 62, Room 033</p> <p>Inside: PNL 66A7A Main, located in Utility Bldg 73A, West of main building</p>
Bldg 74	<p>Outside: 12kV ADF-1-74 PNL 47A "Main" at transformer pad Bank 47 Bldg 84 Room 109, also turns off Bldg 83 and 83A</p> <p>Inside: PNL E47A2A2A "Main", PNL 47A5A "Main" Room 111, PNL E47A2A7A "Main", PNL 47A3A "Main" Room 177</p> <p>Standby Power: Bldg 74 Disconnect in EPP61 Bldg 84 Room 109</p>

TABLE 7 CIRCUIT DISCONNECT LOCATIONS BY BUILDING <i>Continued from the previous page</i>	
Bldg 75	Outside: CB 2 in PNL 217A at transformer pad Bank 217 Inside: PNL 217A2A "Main" in Room 120 (Equipment Room). (Also interrupts power to Bldg 75A, B, C; Bldg 68; and guard kiosk (Bldg 33C) Standby Power: EG-89-75 disconnect at West end of Bldg 75
Bldg 75B (Trailers)	Outside: CB 4 and CB 27 in PNL 217A2A1A in Bldg 75, Roo120 or Bank 404 "Main" and Bank 405 "Main" located North of the trailers
Bldg 75C	Outside: CB 49 in PNL E37A in Bldg 75, Roo120
Bldg 75D	Outside: CB 29 in PNL E37A at Bldg 75, Roo120
Bldg 76	Outside: CB 3 in Switchgear 217A, at transformer pad Bank 217 Inside: PNL 217A3A "Main" in Room 129 (1st floor), also power to B78 Standby Power: EG-100-48 disconnect at EPP100 by Generator
Bldg 76 (Trailers)	Outside: 76K, Bank 421 primary disconnect outside W. 76 PNL 72B6C, CB 3 Inside: No inside disconnects
Bldg 77	Outside: ADF-1-77 (12 kV) is on transformer pad on North side of building. This also interrupts power to Bldg 31, 61, 77A, 78 Inside: PNL 72A, "Main" in hallway just outside of Welding Shop, PNL 72C "Main" Welding Shop by roll up door Standby Power: EG-94-77 disconnect at East end of Bldg 77 in EPP94
Bldg 77 Trailers	Outside: CB 9 in PNL 85B located in Bldg 77, Room 141
Bldg 77A Bldg 77B	Outside: CB 72D on Bldg 77 transformer pad Inside: PNL 72D "Main" Room 103
Bldg 78	Outside: CB 22 in PNL 217A3A2A in Bldg 76, 2nd floor conference room Inside: 480 Volt disconnect 217A3A2A22A located on East wall of building
Bldg 79	Outside: CB 11 in PNL 72A in Bldg 77 Hallway just outside Welding Shop Inside: Panel 72A11A "Main" on East wall
Bldg 80	Outside: 305A4A "Main" in load center west of Bldg 80 Inside: PNL 342A1A "Main" Corridor 194, 305A4A1A "Main" Outside Room 224, 305A4A2A "Main" Room 021, 305A4A5A "Main" Room 163, and, 305A4A6A "Main" Room 163 Standby Power: CB4 in PNL EG73A in Bldg 37 Room 202
Bldg 81 Gas Storage	Outside: CB 40 in PNL 73B located in Bldg 71. Also turns off B82 fire pump Inside: PNL 73B40 "Main" located inside fence on Southeast side of Liquid Gas Storage Bldg 81
Bldg 82 Fire Pump	Outside: PNL 73B40 "Main" located inside the fence on the Southwest side of Liquid Gas Storage Building 81 (Also Main for Bldg 81) Inside: PNL 391A "Main"
Bldg 83	Outside: CB1 in PNL 47A located Bank 47 Bldg 84 Room 109 Inside: PNL 47A1A "Main" located in Rm 150 Standby Power: Bldg 83 Disconnect in EPP61 Bldg 84 Room 109
Bldg 84	Outside: GS-1-EC (12KV) WAY C, GS-2-EC WAY C Inside: ADF-1-84 (12 kV) disconnect in Electrical Room and Switchgear 460A Main Circuit Breaker Standby Power: EG-99-84 located in utility Bldg 84A

TABLE 7 CIRCUIT DISCONNECT LOCATIONS BY BUILDING <i>Continued from the previous page</i>	
Bldg 85	<p>Outside: 12 KV Disconnect Switch (ADF-1-85) and 480 volt, "Main" CB at Switchgear 357A, located outside of Bldg 85 in Unit Substation</p> <p>Inside: PNL 357A1A "Main" in Room 102</p> <p>Standby Power: EG-96-85 Disconnect at EG on Bank 357 transformer pad</p>
Bldg 86	<p>Outside: SWGR 357A, Circuit Breaker 3 (480V) on Bldg 85 Substation Pad.</p> <p>Inside: SWBD 357A3A Main (480V) in Room 113.</p> <p>Standby Power: Fed from EG-96-85. Disconnect at Motor Control Center EM357A1A7A1A, Circuit Breaker C2 in Bldg. 85, Room 102</p>
Bldg 88	<p>Outside: AD-1-88 (for Transformer Banks RV-1-88, 80, and 198, located on transformer pad, West side of Bldg 88</p> <p>NOTE: AD-1-88 also disconnects Bldg 65.</p> <p>Outside: PNL 80A "Main" (480 Volt) and PNL 198A "Main" (480 Volt), also located on transformer pad</p> <p>Standby Power: EG-90-88 disconnect by cooling tower</p>
Bldg 90	<p>Outside: ADF-1-90 (12 kV) for Transformer Bank 90 located on transformer pad on East side of BLDG 90</p> <p>Inside: PNL 90A "Main" located in Room 0026F</p> <p>Standby Power: EG-69-55 disconnect Southeast of Bldg 90</p>
Bldg 90 Trailers	<p>For Trailer C: Breaker 90A4A3B for Bank 177</p> <p>For Trailers B, F, J, & G: 480 Volt Breaker 90A4A4A for Bank 232, at North end of Trailer F. Individual Trailer breakers are in 208 Volt PNL 232A. (Each trailer section also has a disconnect on the North end.)</p> <p>For Trailers H, K, P, Q, & R: 480 Volt Breaker 90A4A3A for Bank 176 in Trailer R. Individual Trailer breakers are in 208 Volt PNL 176A. (Each trailer section also has a disconnect on the North end.)</p>

RESPONSIBILITIES AND CONTROLS

Completion of the following signature lines constitutes approval of this procedure:

REV NO.	SME	REVIEWED BY	APPROVED BY / DATE	REVISION DATE
3			 5/30/07	4/18/07
	Elec Shop Supv  (Print Name)	Chief Elec Eng  (Print Name)	Plant Ops Mgr  (Print Name)	INFO-052