

Southern California Edison
WODUP A.13-10-020

DATA REQUEST SET A.13-10-020 WODUP ED-SCE-13

To: ENERGY DIVISION
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Dated: 02/12/2015

Question ALT-23:

ALT-23 Follow-up to SCE response on ALT-19a.

Based on the present maximum normal and emergency operating temperatures that are in place for the existing 220 kV circuits on the existing double circuit towers that are using 1033.5 ACSR, please add the calculated ampacities at the present maximum normal and emergency operating temperatures to the table provided with SCE response to ALT-19a.

Response to Question ALT-23:

The conductor ampacity table provided as an attachment to SCE's previous response to Data Request Question No. ALT-19.a has been updated to include the current ratings used for the various existing transmission lines supported by the double-circuit towers within the WOD corridor. Please reference the attached table for the updated information.

CALCULATED CONDUCTOR RATED AMPACITY (AMPS)

CONDUCTOR TYPE

		Single-conductor Curlew 1033.5 kcmil ACSR (existing D-V#2)		Double-bundled Curlew 1033.5 kcmil ACSR		Single-conductor Lapwing 1590 kcmil ACSR		Single-conductor Drake 795 ACCR		Single-conductor Bittern 1272 ACCR		Double-bundled Dove 557 ACCR		Double-bundled Drake 795 ACCR		Double-bundled Curlew 1033 ACCR	
		Temp	Amps	Temp	Amps	Temp	Amps	Temp	Amps	Temp	Amps	Temp	Amps	Temp	Amps	Temp	Amps
CALCULATED AMPACITY	NORMAL	201 F	1240	194 F	2480	194 F	1615	410 F	1902	410 F	2425	410 F	3005	410 F	3804	410 F	4355
	EMERGENCY	201 F	1240	275 F	3340	275 F	2180	464 F	2037	464 F	2602	464 F	3214	464 F	4074	464 F	4668

Note: Ampacity values calculated here reflect SCE standard parameters, which are different than typical manufacturers' calculations using IEEE Standard 738-2006.

For Reference (Temperature Conversions):
 167 F = 75 C
 194 F = 90 C
 201 F = 94 C
 275 F = 135 C
 410 F = 210 C
 464 F = 240 C