Annex D – Technical schedules A and B

ESKOM SAP NUMBERS: 582355 & 582362 ESKOM D-DT-3087 REV 7

PRODUCT DESCRIPTIONS: SWITCH DISCONNECTOR, COASTAL, 22 kV, 630 A & REMOVABLE SWITCHBLADE

ESKOM ENQUIRY NUMBER:			
TENDERER NAME:		TENDERER REPRESENTATIVE:	
TENDERER SIGNATURE		DATE:	

Schedule A: Eskom's specific equipment requirements

Schedule B: Guarantees and technical particulars of equipment offered by the tenderer

Item	Sub-clause of 240-68973356	Description		Schedule A	Schedule B
1		**Identification**			
		1) Name of manufacturer		xxxxxxxxxxx	_____
		2) Product code for the equipment		xxxxxxxxxxx	_____
2	**3.1:**	**General: System conditions**			
	3.1.1	1) Nominal voltage (U_n)	kV	22	_____
		2) Maximum voltage (U_m)	kV	24	_____
		3) Number of phases		Single	_____
		4) Frequency	Hz	50	_____
		5) Earthing: effective and non-effective		Yes	_____
3	**3.1.2**	**Site installation conditions**			
		1) Altitude	m	up to 1 800	_____
		2) Ambient temperature	ºC	–15 to 50	_____
		3) Relative humidity	%	Up to 100	_____
		4) Solar radiation	W/m^2	Up to 1100	_____
		5) Pollution levels		Very heavy	_____
4	**3.2:**	**Ratings: Rated current carrying capability**			
	3.2.1	1) Rated voltage	kV	24	_____
		2) Rated 3s short time withstand current	kA	12.5	_____
		3) Rated peak withstand current	kA	30	_____
		4) Rated normal current	A	630	_____

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5	**3.2.2**	**Rated insulation levels**			
		1) Nominal system voltage (U_n)	kV	22	_____
		2) Highest system voltage (U_m)	kV	24	_____
		3) Power frequency 60s wet withstand voltage	kV	50	_____
		4) Lightning impulse w/s (live terminals to earth)	kV	150	_____
		5) Lightning impulse w/s (isolating distance)	kV	172.5	_____
6	**3.3:**	**Insulator requirements**			
	3.3.1	1) Insulator profile complies to IEC/SANS 60815		Yes	_____
	3.3.2	2) Insulator fixing shall comply with clause 3.3.2		Yes	_____
	3.3.3	3) SANS 60815 pollution level		Very heavy	_____
		4) Nominal system voltage (U_n)	kV	22	_____
		5) Creepage distance	mm	744	_____
		6) Creepage (Creepage distance/U_m)	mm/kV	31	_____
7	**3.4:**	**Electrical component requirements: Current path**			
	3.4.1	1) Components used shall comply with clause 3.4.1 a)		Yes	_____
		2) The current path shall comply with clause 3.4.1 b)		Yes	_____
		3) Is proof submitted if alternative, coatings or materials are used		Yes or N/A	_____
		4) Load current paths shall comply with clause 3.4.1 d)		Yes	_____
	3.4.2	**Contacts**			
		1) Positive contact pressure shall be maintained in accordance with clause 3.4.2 a)		Yes	_____
		2) The contacts shall be silver-plated in accordance with clause 3.4.2 b)		Yes	_____
		3) The contacts shall be self-aligning		Yes	_____
		4) A positive wiping action shall take place between the fixed and movable parts of the contacts		Yes	_____
		5) The contacts shall not be subject to accumulation of dirt, moisture, or pitting		Yes	_____

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8	**3.4.3**	**Operation**		
		1) Operation using operating link-stick from ground	Yes	_____
		2) Pull to open, push to close	Yes	_____
		3) Once open, the switchblade can be removed	Yes	_____
9	**3.4.4**	**Indication of position**		
		1) Is the open or closed position visible from ground	Yes	_____
10	**3.4.5**	**Interchangeability**		
		1) Does the removable blade comply with clause 3.4.5	Yes	_____
11	**3.4.6**	**Securing of position**		
		1) Does the design comply with clause 3.4.6	Yes	_____
12	**3.4.7**	**Material**		
		1) Does the material used comply with clause 3.4.7	Yes	_____
		2) Are all bolts and nuts torque sealed after its torqued	Yes	_____
13	**3.4.8**	**Material strength**		
		1) Does the material strength comply with clause 3.4.8	Yes	_____
		2) Does the operating mechanism avert misalignment of the contacts under normal open close operations	Yes	_____
14	**3.4.9**	**Conductor terminals**		
		1) Does the conductor terminals comply to clause 3.4.9	Yes	_____
15	**3.4.10**	**Mounting**		
		1) Does the mounting comply with clause 3.4.10	Yes	_____
16	**3.4.11**	**Earthing pin**		
		1) Does the earthing pin comply with clause 3.4.11	Yes	_____
17	**4**	**Marking and packaging**		
	4.1	1) Are the products indelibly marked	Yes	_____
		2) Is evidence submitted showing the product markings	Yes	_____
	4.2	1) Does the packaging protect the components during normal handling, transport, and storage	Yes	_____
		2) Does the packaging permit identification of the items	Yes	_____
		3) Is evidence submitted showing details of the product packaging	Yes	_____