

# SAPP TRANSFER LIMITS SUMMARY REPORT FOR 2016 (SOUTH TO NORTH) - PEAK CASE

PERIOD : (1 MAY 2016 TO 31 AUGUST 2016)

No.	Countries	Utility From - To	Interconnection From - To	Voltage kV	No. of lines	Contingency	Reason for Limit	Transfer Limit, MW
1	Zambia - DRC	ZESCO - SNEL	-Michelo- Kasumbalesa -Karavia - Luano -Karavia - Michelo	220	1	Karavia-Michelo outage	Voltage collapse in Kitwe & Katanga areas	483
2	Zambia	CEC - ZESCO	Luano - Kabwe			Luano - Karavia outage	Voltage collapse in Katanga area	483
3	Namibia - Zambia	NAM - ZESCO	Zambezi -Livingstone	220	1	1 x 200 MVA Zambezi transformer outage	Voltage collapse in Livingstone	190
4	Zimbabwe-Zambia	ZESA - ZESCO	Kariba South - Kariba North	330	2	Outage of one of the Kariba South -Kariba North 330 kV lines	Voltage collapse in Lepords Hill	642
5	Zimbabwe	ZESA	Kariba South - Kariba North	330		Alaska Sherwood 330 kV outage	Voltage collapse in Orange Grove	400
6	Botswana - Zimbabwe	BPC - ZESA	Phokoje - Insukamini	400	1	Alaska Sherwood 330 kV outage	Transient Stability problems within ZESA system, Voltage drop at Phokoje	327
7	RSA - Botswana	ESKOM-BPC	Spitskop - Gaborone South, Spitskop - Segoditshane	132	2	Phokoje - Matimba outage	Voltage collapses at Segoditshane, Thamaga & Isang	243
8	Botswana - Zimbabwe	BPC - ZESA	Francistown - Bulawayo	220	1	Insukamini - Phokoje outage	Thermal limit	95
9	RSA - Botswana	ESKOM - BPC	Matimba - Phokoje	400	1	Morupule-Phokoje 400kV line outage	Voltage collapses at Segoditshane, Thamaga & Isang	477
10	RSA - Botswana	ESKOM - BPC	Dwaalboom -Derderport	132	1	Spitskop – Dwaalboom 132 kV line	Voltage collapses at Segoditshane, Thamaga & Isang	420
11	Namibia - RSA	NAM -ESKOM	Aggeneis – Harib	220	2	Aries-Kokerboom 400kV outage	Voltage collapse in Kokerboom area	530
12	Zimbabwe - Mozambique	ZESA - HCB	Bindura - Songo	400	1	Alaska Sherwood 330 kV outage	Voltage collapse at Orange Grove	142
13	Mozambique - Zimbabwe	EDM_N - ZESA	Chicamba - Mutare	110	1	Bindura - Dema 330 kV outage	Low voltages in Mutare and Middle Sabi	35
14	Mozambique - RSA	EDM_S - ESKOM	Ressano Garcia - Komati	275	1	Maputo - Matola outage and tripping of generation at Ressano Garcia	Under voltage in Maputo area	105
15	Mozambique - Swaziland	EDM_S - SEC	Maputo - Edwaleni	400	1	Camden-Edwaleni 400kV line outage	Voltage collapse in Edwaleni area	146
16	Lesotho - RSA	LEC - ESKOM	Maseru - Tweespruit	132	2	Harvard-Merapi 275kV line outage	Line thermal limit	81
17	Swaziland - RSA	SEC - ESKOM	Nhlangano - Normardie	132	1	Camden - Edwaleni 400 KV line outage	Voltage collapses in Normadie	65
18	Mozambique - Zambia	HCB - ZESCO	Songo - Kariba North	400	1	Alaska Sherwood 330 kV outage	Voltage below 0.95pu at Orange Grove	300