



THEME - SMARTER ELECTRIFICATION

PIESA STANDARDS – DRIVE FOR WIDER APPLICATION

AUTHOR & PRESENTER: MR. KELVIS KASONKOMONA

SENIOR MANAGER – TRANSMISSION PROJECTS (POWER REHABILITATION PROJECTS)

CO-AUTHOR: MR. DANIEL SICHELA

CHIEF ENGINEER – TECHNICAL SUPPORT SERVICES

ZESCO LIMITED, ZAMBIA

PRESENTATION OUTLINE

- ❑ BACKGROUND
- ❑ VISION STATEMENT
- ❑ GOALS AND OBJECTIVES
- ❑ PROGRESS MADE
- ❑ FRAME WORK FOR WIDER APPLICATION – MOU WITH SADCSTAN
- ❑ PROPOSED STRATEGY FOR HARMONISATION
- ❑ ENVISAGED BENEFITS FROM HARMONISATION
- ❑ PROSPECTS FOR FURTHER APPLICATION THROUGH AFSEC
- ❑ CONCLUSION

BACKGROUND

- ❑ PIESA - VOLUNTARY REGIONAL POWER UTILITY ASSOCIATION ESTABLISHED ON 28 FEBRUARY 1998.
- ❑ THE PIESA AIMS TO
 - ❑ IMPROVE ELECTRIFICATION IN EAST AND SOUTHERN AFRICA THROUGH
 - ❑ SHARING INFORMATION,
 - ❑ RESEARCH,
 - ❑ TECHNOLOGY,
 - ❑ SKILLS AND EXPERIENCES FOR THE BENEFIT OF CUSTOMERS AND SUPPLIERS IN THE ELECTRICITY DISTRIBUTION INDUSTRY.
- ❑ MAIN FOCUS IS ON
 - ❑ TECHNICAL RATIONALIZATION TO ACHIEVE ECONOMIES OF SCALE WITH LOCAL MANUFACTURERS IN AN EFFORT TO ENHANCE ELECTRIFICATION IN THE REGION.
- ❑ STRATEGIC PLAN FOR THE STANDARDIZATION WG AIMS AT ALIGNING THE ACTIVITIES OF THE WG WITH THE PIESA STRATEGIC BUSINESS PLAN

VISION STATEMENT

- ❑ TO IDENTIFY AREAS IN WHICH STANDARDIZATION COULD BE UNDERTAKEN FOR APPLICATION, WITH ADVANTAGES TO:
 - ❑ ELECTRICITY DISTRIBUTION UTILITIES AND THEIR FUNDING AGENCIES
 - ❑ MANUFACTURERS/ SUPPLIERS
- ❑ PIESA STANDARDS TO BE THE PREFERRED ESTABLISHED STANDARDS FOR ELECTRICITY DISTRIBUTION IN THE REGION.

GOALS AND OBJECTIVES

- ❑ DEVELOP HARMONIZED ELECTRICITY DISTRIBUTION INDUSTRY (EDI) STANDARDS AS PROPOSED BY MEMBER UTILITIES TO IMPLEMENT IN THEIR ENTITIES.
- ❑ MAINTAIN A MECHANISM FOR PUBLICATION OF APPROVED DOCUMENTS
- ❑ FORM A MASTER INDEX OF APPROVED DOCUMENTS.

GOALS AND OBJECTIVES

- ❑ ESTABLISH LINKS WITH LOCAL, REGIONAL, CONTINENTAL AND INTERNATIONAL STANDARDIZATION ORGANIZATIONS
- ❑ SET UP CENTRES OF EXCELLENCE BASED ON WG INTEREST TO SUPPORT RESEARCH AND TECHNOLOGY TRANSFER

PROGRESS MADE

- ❑ GENERALLY STANDARDISATION WORKING GROUP HAS BEEN ON COURSE REGARDING ITS VISION AND THE INTENDED GOALS AND OBJECTIVES
- ❑ ABOUT 24 REGIONAL STANDARDS HAVE BEEN PUBLISHED.
- ❑ STANDARDS CAN NOW BE ACCESSED BY PIESA MEMBERS VIA WEBSITE BY MEMBERS

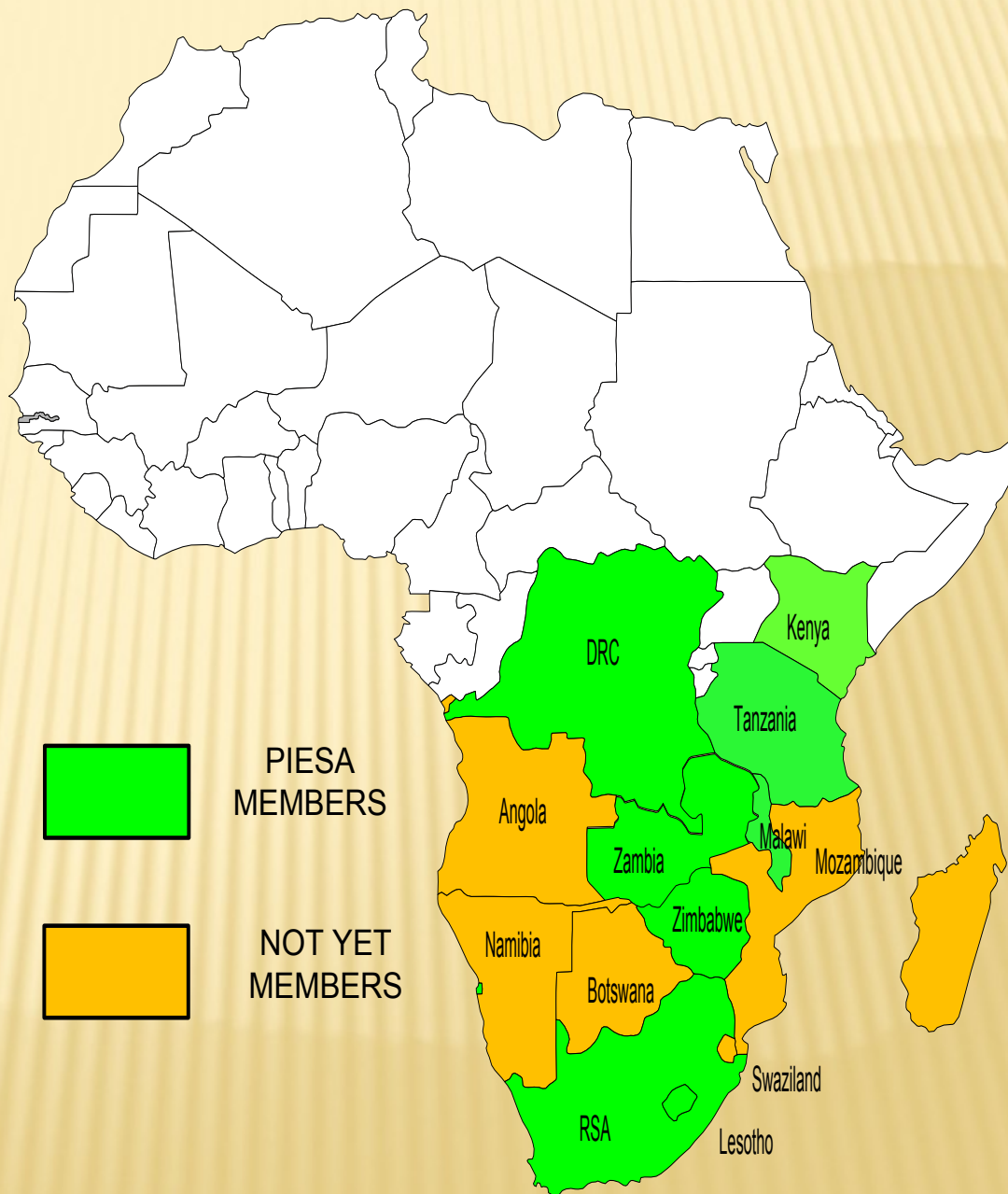
USE OF THE PIESA STANDARDS IN THE REGION

- ❑ MEMBER UTILITIES HAVE REPORTED INCREASED USE OF THE PIESA STANDARDS TO VARYING DEGREES.
- ❑ WHILE THIS IS ENCOURAGING THE PIESA STANDARDS ARE CURRENTLY CONFINED TO UTILITIES IN THE MEMBER COUNTRIES
- ❑ PIESA MEMBER COUNTRIES CONSTITUTE SLIGHTLY OVER 50% OF THE SADC MEMBERS
- ❑ THIS MEANS THAT ABOUT HALF THE COUNTRIES IN THE REGION ARE NOT PART TO THE PROCESS AND THEREFORE MAY NOT HAVE THE INTEREST TO USE THEM

UTILITY PIEASA MEMBERSHIP

- ESCOM – MALAWI
- ESKOM – SOUTH AFRICA
- KPLC - KENYA
- LEC – LESOTHO
- SNEL – DRC
- TANESCO – TANZANIA
- EMEME – UGANDA
- ZESA – ZIMBABWE
- ZESCO – ZAMBIA
- AMEU – SOUTH AFRICA

SADC MEMBERSHIP VS PIEASA MEMBERSHIP



AFFILIATE MEMBERS

- ABERDARE CABLES
- CIRCUIT BREAKER INDUSTRIES
- EMCOM GROUP
- INTEGRITY CONTROL SYSTEMS
- LANDIS & GYR
- SIEMENS
- LUCY SWITCHGEAR
- POWER TECH TRANSFORMERS
- REA – ZIMBABWE
- REA - KENYA

FRAME WORK FOR WIDER APPLICATION - MOU WITH SADCSTAN

- ❑ TO ENSURE WIDE APPLICATION OF THE STANDARDS IN THE REGION PIESA SIGNED A MEMORANDUM OF UNDERSTANDING WITH SADCTSATN (STANDARDISATION WING OF SADC)
- ❑ THE MOU PROVIDES AN EFFECTIVE AVENUE THROUGH WHICH PIESA STANDARDS COULD BE ADOPTED IN TOTAL OR WITH SOME MODIFICATION AS SADC HARMONIZED STANDARDS

PURPOSE AND APPLICATION OF THE COOPERATION

- ❑ TO RECORD AN UNDERSTANDING BETWEEN THE PARTIES ON THEIR WORKING RELATIONSHIP AND TECHNICAL COOPERATION SO AS TO ACHIEVE THE SCOPE.
- ❑ THE COOPERATION DOES NOT MAKE ANY LEGALLY BINDING OR OTHERWISE ENFORCEABLE COMMITMENTS ON BEHALF OF ANY OF THE PARTIES.

SCOPE OF THE COOPERATION

- COVERS THE RELATIONSHIP BETWEEN
 - SADCSTAN AND PIESA ON MATTERS OF TECHNICAL COOPERATION ON HARMONIZATION OF PIESA STANDARDS AS REGIONAL STANDARDS.

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AREAS OF COOPERATION & RESPONSIBILITY

- ❑ DEVELOPMENT OF STANDARDS
- ❑ PUBLICATION AND COPYRIGHT OF HARMONIZED STANDARDS
- ❑ IMPLEMENTATION AND STRUCTURES

COMMENCEMENT, TERMINATION AND PERIOD OF OPERATION

- ❑ THE MOU CAME INTO EFFECT ON 23RD MARCH 2011 AFTER ITS SIGNING BY THE RESPECTIVE CHAIRS IN GABORONE, BOTSWANA AND WILL REMAIN IN EFFECT FOR AN INITIAL PERIOD OF THREE YEARS.
- ❑ THEREAFTER THE AGREEMENT SHALL BE AUTOMATICALLY RENEWED FOR SUCCESSIVE PERIODS OF ONE YEAR, UNLESS TERMINATED OR AMENDED.
- ❑ ANY OF THE PARTIES MAY, UPON GIVING THREE (3) CALENDAR MONTHS' NOTICE IN WRITING OF ITS INTENTION TO DO SO, TERMINATE THIS COOPERATION.
- ❑ THE COOPERATION MAY BE AMENDED IF MUTUALLY AGREED UPON.
- ❑ ANY DISPUTE ARISING OUT OF THE INTERPRETATION OR IMPLEMENTATION OF THIS MEMORANDUM WILL BE SETTLED AMICABLY BY CONSULTATION BETWEEN THE PARTIES.

ENVISAGED BENEFITS

- ❑ LOWER COST OF ELECTRIFICATION DUE TO ECONOMIES OF SCALE
- ❑ SAFE AND QUALITY DISTRIBUTION SYSTEMS DUE TO IMPROVED STANDARDS
- ❑ BIGGER MARKET FOR MANUFACTURERS AND SUPPLIERS THAT COMPLY WITH REGIONAL SPECIFICATIONS
- ❑ EASY ACCESSIBILITY TO THE HARMONIZED STANDARDS
 - ❑ THROUGH NATIONAL STANDARDIZATION BODIES (ONCE ADOPTED AS NATIONAL STANDARDS)

CURRENT STATUS OF PIESA STANDARDS

- ❑ MOST OF THE PIESA STANDARDS WERE PUBLISHED MORE THAN FIVE YEARS AGO
- ❑ BY STANDARD PRACTICE A STANDARD IS REVIEWED EVERY AFTER FIVE YEARS TO TAKE ON BOARD NEW DEVELOPMENTS, OR EARLIER IF A NEED ARISES
- ❑ THIS ENTAILS THAT THERE IS NOW A LOT OF PRESSURE ON THE WORKING GROUP TO REVIEW THE EXISTING STANDARDS

HARMONIZATION - PROPOSED STRATEGY

- ❑ PRIORITIES THE REVIEW OF THE EXISTING STANDARDS OVER DEVELOPMENT OF NEW STANDARDS
 - ❑ ASSIGN PROJECT LEADERS (MEMBER OF THE WORKING GROUP) FOR EACH STANDARD TO BE REVIEWED
 - ❑ THE PROJECT LEADER TO REVIEW THE RESPECTIVE STANDARDS ASSIGNED TO THEM AND PROVIDE INITIAL COMMENTS AND PROPOSED AMENDMENTS VIA THE WEBSITE/EMAIL
 - ❑ THE WG MEMBERS TO COMMENT ON THE PROPOSALS VIA WEBSITE/EMAIL
 - ❑ THE TEAM LEADER TO DO THE DRAFT FOR ADOPTION AT THE WORKING GROUP MEETING.
 - ❑ THE ADOPTED DRAFT TO BE PRESENTED TO THE BOARD FOR APPROVAL

HARMONIZATION - PROPOSED STRATEGY CONT.

- ❑ FOR THOSE STANDARDS BEING PROPOSED FOR ADOPTION AS SADC HARMONISED STANDARDS, SADCSTAN CAN BE NOTIFIED SO THAT THEY ARE INVOLVED DURING THE REVIEW OF THE STANDARDS IN LINE WITH THE MOU GUIDE LINES.
- ❑ FOR NEW WORKS THAT BECOME OF PRIORITY
 - ❑ TO BE DONE IN CONJUNCTION WITH SADCSTAN IN LINE WITH THE MOU GUIDELINES

RESOURCE REQUIREMENTS

- ❑ BASE DOCUMENTS/REFERENCE STANDARDS
 - ❑ TO ADEQUATELY REVIEW THE STANDARDS THERE IS NEED FOR THE TEAM LEADERS TO BE AVAILED THE RESPECTIVE STANDARDS WHICH WERE INITIALLY USED AS
 - ❑ BASE DOCUMENTS (I.E. NRS, IEC, SANS, BS ETC.)
 - ❑ REFERENCE STANDARDS (NRS, IEC, BS, SANS ETC.)
 - ❑ THESE DOCUMENTS COULD BE PLACED ON THE PIESA WEBSITE AND ACCESSED USING PASSWORDS

RESOURCE REQUIREMENTS CONT.

- ❑ COLLABORATION AVENUES (WEBSITE, EMAIL , MEETINGS ETC.)
 - ❑ TEAM LEADERS EXPECTED TO COLLABORATE WITH
 - ❑ THE OTHER STANDARDIZATION WORKING GROUP MEMBERS
 - ❑ MEMBERS OF OTHER WORKING GROUPS
 - ❑ SADCSTAN NOMINEES IN THE CASE OF STANDARDS EARMARKED FOR HARMONISATION
- ❑ SPONSORSHIP OF WORKING GROUP MEMBERS
 - ❑ MEMBER UTILITIES TO SPONSOR WORKING GROUP MEMBERS TO ATTEND WORKING GROUP MEETINGS WHERE DRAFTS ARE BEING FINALIZED PRIOR TO THE WORKING GROUP VOTE AND BOARD APPROVAL

RESOURCE REQUIREMENTS CONT.

- ❑ TRAINING IN STANDARDIZATION TO ENSURE A COMMON APPROACH TO THE CONSENSUS PROCESS AS THE
 - ❑ LAST TRAINING WAS CONDUCTED IN 2007 AND SINCE THEN
 - ❑ SOME NEW MEMBERS HAVE COME ON BOARD
 - ❑ THERE HAS BEEN SOME CHANGES IN MEMBER REPRESENTATION ON THE WORKING GROUP

STATUS OF PUBLISHED PIESA STANDARDS

S/N	STANDARD	DESCRIPTION	YEAR OF PUBLICATION	BASE STANDARD/REFERENCES	REVIEW
1	PIESA 1001	WOOD POLES, CROSS ARMS & SPACERS	2004 (2 ND EDITION)	SANS 753 (1994), 754 (1994), 120 (1993), 5967 (1997), 5983 1984), 5985 (1984), 5984 (1980), 5986, (1980), 6061 (1984)	DUE FOR REVENUE BUT NOT YET DONE
2	PIESA 002 - 1	DROP OUT FUSE LINK ASSEMBLIES OR SOLID LINKS - POLE MOUNTED TYPES; FOR NOMINAL VOLTAGES UP TO & INCLUDING 33 kV	2000 (1 ST EDITION)	NRS 035: 2000 BS 2816:1989, IEC 60050:1984, IEC 60667-1:1980, IEC 60667-2:1980, IEC 61109:1992 SABS 763:1988, SABS 0214:1987, SABS 1700: SABS IEC 60186:1987, SABS IEC 60273:1990, SABS IEC 60282-2:1997, SABS IEC 60815:1986,	DUE FOR REVENUE BUT NOT YET DONE

S/N	STANDARD	DESCRIPTION	YEAR OF PUBLICATION	BASE STANDARD/REFERENCES	REVIEW
3	PIESA 002 - 2	EXPULSION FUSE LINKS ; FOR NOMINAL VOLTAGES UP TO AND INCLUDING 33 kV	2002 (1ST EDITION)	PIESA 002 – 1 (2000) IEC 60282 – 2 (1995)	DUE FOR REVENUE
4	PIESA 003: 1, 2 & 3	LOW VOLTAGE UNDERGROUND CABLES	2001 (1ST EDITION)	SANS 753 (1994), 754 (1994), 120 (1993), 5967 (1997), 5983 1984), 5985 (1984), 5984 (1980), 5986, (1980), 6061 (1984)	DUE FOR REVENUE
5	PIESA 003 - 2	LOW VOLTAGE CABLE ACCESSORIES	2000 (1ST EDITION)	NRS 035: 2000 BS 2816:1989, IEC 60050:1984, IEC 60667-1:1980, IEC 60667-2:1980, IEC 61109:1992 SABS 763:1988, SABS 0214:1987, SABS 1700: SABS IEC 60186:1987, SABS IEC 60273:1990, SABS IEC 60282-2:1997, SABS IEC 60815:1986,	

S/N	STANDARD	DESCRIPTION	YEAR OF PUBLICATION	BASE STANDARD/REFERENCES	REVIEW
6	PIESA 003: 3	LOW VOLTAGE CABLES CODE OF PRACTICE	2002 (1 ST EDITION)	IEC 60038:1997, NRS 034-1:1999,	DUE FOR REVENUE BUT NOT YET DONE
7	PIESA 1004 - 1	LOW VOLTAGE (600/1 000 V) CABLE SYSTEMS FOR OVERHEAD ELECTRICAL DISTRIBUTION - CABLES	2004 (1 ST EDITION)	IEC 60811-1-1:1993, IEC 60811-4-1:1985, NF C33-209:1996, PIESA 1062:2004, PIESA 1063:2004, SANS 1411-4:2001, SANS 1418-2:2001, SANS 5526:1980, SANS 6100:1994, SANS 6101:1986, SANS 6282-1:2002 SANS 6282-3:2002, SANS 6284-3:2000,	DUE FOR REVENUE BUT NOT YET DONE
8	PIESA 1004 - 2	LOW-VOLTAGE (600/1 000 V) CABLE SYSTEMS FOR UNDERGROUND ELECTRICAL DISTRIBUTION - ACCESSORIES	2004 (1 ST EDITION)	BS 6121: 1989, BS 6346: 1997, BS 6910: 1988, SABS 1213: 2000, SABS 1507: 1990, SABS 1803: 2001,	DUE FOR REVENUE BUT NOT YET DONE

S/N	STANDARD	DESCRIPTION	YEAR OF PUBLICATION	BASE STANDARD/REFERENCES	REVIEW
9	PIESA 1004: 3	LOW-VOLTAGE (600/1 000 V) CABLE SYSTEMS FOR UNDERGROUND ELECTRICAL DISTRIBUTION – CODE OF PRACTICE	2004 (1 ST EDITION)	IEC 60038:1997, NRS 034-1:1999,	DUE FOR REVENUE BUT NOT YET DONE
10	PIESA 1006	DISTRIBUTION TRANSFORMERS OF SIZE UP TO AND INCLUDING 500 KVA AND OPERATING AT NOMINAL VOLTAGES NOT EXCEEDING 33 KV	2004 (1 ST EDITION)	EN 22063:1994, IEC 60076-1: 2000, IEC 60076-5: 2000 IEC 60815:1986, IEC 61109:1992, ISO 1461:2000, ISO 8501-1:1988, SANS 780:2003, SANS 1091:1975, SANS 10064:1979	DUE FOR REVENUE BUT NOT YET DONE
11	PIESA 1007	STAY ASSEMBLIES			
12	PIESA 1010	METAL-CLAD SWITCHGEAR FOR RATED A.C. VOLTAGES ABOVE 1 KV AND UP TO AND INCLUDING 36 KV – GENERAL REQUIREMENTS AND METHODS OF TEST	2005	BS 3693 BS 5835 BS 7729 IEC 60044 – 1 IEC 60051 IEC 60055 IEC 60186 IEC 60216 IEC 60227 IEC 60265	DUE FOR REVENUE BUT NOT YET DONE

S/N	STANDARD	DESCRIPTION	YEAR OF PUBLICATION	BASE STANDARD/REFERENCES	REVIEW
13	PIESA 1012	CABLE TERMINATIONS AND LIVE CONDUCTORS WITHIN AIR INSULATED ENCLOSURES (INSULATION COORDINATION) FOR RATED A.C. VOLTAGES OF 7,2 KV AND UP TO AND INCLUDING 36 KV.			
14	PIESA 1018 - 2	FITTINGS AND CONNECTORS FOR LOW VOLTAGE OVERHEAD POWER LINES USING AERIAL BUNDLED CONDUCTORS PART 2: STRAIN AND SUSPENSION FITTINGS FOR INSULATED NEUTRAL SUPPORTING CONDUCTORS	2004 (1ST EDITION)	IEC 60695-2-11:1991, SANS 135:1991 SANS 61284 (SABS IEC 61284:1997), ISO 1461:2000,	DUE FOR REVENUE BUT NOT YET DONE
15	PIESA 1018 - 3	FITTINGS AND CONNECTORS FOR LOW VOLTAGE OVERHEAD POWER LINES USING AERIAL BUNDLED CONDUCTORS PART 2: STRAIN AND SUSPENSION FITTINGS FOR INSULATED NEUTRAL SUPPORTING CONDUCTORS	2004 (1ST EDITION)	IEC 60695-2-11:2000, ISO 1461:2000, IEC 61284:1997, SANS 1024-4-2:2003, SANS 1700-7-3:2003 PIESA 1018-2:2004,	DUE FOR REVENUE BUT NOT DONE
16	PIESA 1018 - 4	FITTINGS AND CONNECTORS FOR LOW VOLTAGE OVERHEAD POWER LINES USING AERIAL BUNDLED CONDUCTORS PART 4: STRAIN AND SUSPENSION FITTINGS FOR AERIAL SERVICE CABLES	2004 (1ST EDITION)	IEC 60695-2-11:1994, ISO 1461:2000 SANS 1431:2003, PIESA 1018-2:1995,	DUE FOR REVENUE BUT NOT YET DONE

S/N	STANDARD	DESCRIPTION	YEAR OF PUBLICATION	BASE STANDARD/REFERENCES	REVIEW
17	PIESA 1018 - 5	FITTINGS AND CONNECTORS FOR LOW VOLTAGE OVERHEAD POWER LINES USING AERIAL BUNDLED CONDUCTORS PART 5: CURRENT-CARRYING CONNECTORS AND JOINTS	2004 (1 ST EDITION)	IEC 60695-2-11:2000, BS 3288-1:1997, IEC 61284:1997, PIESA 1018-2:2004,	DUE FOR REVENUE BUT NOT YET DONE
18	PIESA 1020	CABLE TIES FOR USE WITH LOW VOLTAGE AERIAL BUNDLED CONDUCTORS	2004 (1 ST EDITION)	SANS 1418-1(SABS 1418-1):1986, SANS 1418-2:2001(SABS 1418-2), SANS 166:1978 (SABS SM 155),	DUE FOR REVENUE BUT NOT YET DONE
19	PIESA 1032	SERVICE DISTRIBUTION BOXES – POLE-MOUNTED TYPES FOR OVERHEAD SINGLE-PHASE A.C. SERVICE CONNECTIONS AT 230 V	2004 (1 ST EDITION)	BS 5734-2:1990, IEC 60068-2-75:1997, IEC 60695-2-11:2001, BS 5734-2:1990, SANS 141:2001, SANS 1091:1975, SANS 1186-1:2003, SANS 1433-1:1987 IEC 60529:2001, IEC 60947-21:2003 ISO 527-1:1993, ISO 1461:2000,	DUE FOR REVENUE BUT NOT YET DONE

S/N	STANDARD	DESCRIPTION	YEAR OF PUBLICATION	BASE STANDARD/REFERENCES	REVIEW
20	PIESA 1048	ELECTRICITY SUPPLY – QUALITY OF SUPPLY VOLTAGE CHARACTERISTICS, COMPATIBILITY LEVELS, LIMITS AND ASSESSMENT METHODS	2004 (1 ST EDITION)	IEC 60695-2-11:2000, BS 3288-1:1997, IEC 61284:1997, PIESA 1018-2:2004,	WILL BE DUE IN 2013
21	PIESA 1062	CONCENTRIC SINGLE-PHASE AERIAL SERVICE CABLE – FOR DOMESTIC SERVICE CONNECTIONS WITH A COMBINED NEUTRAL-EARTH CONDUCTOR	2004 (1 ST EDITION)	IEC 60189-1:1986, IEC 60811-1-1:1993, SANS 1411-1:2001, SANS 1411-4:2001 SANS 1411-7:2003, SANS 1507-1:2002, SANS 5526:1980, SANS 6282-1:2002, SANS 6282-3:2002,	DUE FOR REVENUE BUT NOT YET DONE
22	PIESA 1063	SPLIT-CONCENTRIC SINGLE-PHASE AERIAL SERVICE CABLE – FOR DOMESTIC SERVICE CONNECTIONS WITH SEPARATE NEUTRAL AND EARTH CONDUCTORS	2007 (1 ST EDITION)	IEC 60189-1:1986, SANS 1411-1:2001, SANS 1411-4:2001, SANS 1411-7:2003, SANS 1507-1:2002, IEC 60811-1-1:1993, SANS 5526:1980, SANS 6282-1: 2002 SANS 6282-3: 2002,	DUE FOR REVENUE BUT NOT YET DONE

S/N	STANDARD	DESCRIPTION	YEAR OF PUBLICATION	BASE STANDARD/REFERENCES	REVIEW
23	PIESA 1102	CORROSION PROTECTION OF NEW MILD STEEL FABRICATED EQUIPMENT.			
24	PIESA 1106	ELECTRICITY PAYMENT SYSTEMS – PREPAYMENT PASSIVE UNITS THIS DOCUMENT	2006 (1 ST EDITION)	SANS 1085, SCSSCAAJ1, IEC/TR 60083, IEC 60670-1, IEC 60884-1, IEC 60906-1,	Will be due for review in 2012

PROPOSED STANDARDS FOR HARMONISATION – YET TO BE SUBJECTED TO A CONESUS PROCESS WITHIN THE WG

S/N	PIESA STANDARD	DESCRIPTION	YEAR OF PUBLICATION	REMARKS
1	PIESA 1001	WOOD POLES, CROSS-ARMS AND SPACER BLOCKS	2004 (2 ND EDITION)	AFTER REVIEW
2	PIESA 002 - 1	DROP-OUT FUSE-LINK ASSEMBLIES OR SOLID-LINK ASSEMBLIES – POLE-MOUNTED TYPES; FOR NOMINAL A.C. VOLTAGES UP TO AND INCLUDING 33 KV	2000 (1 ST EDITION)	AFTER REVIEW
3	PIESA 002 - 2	EXPULSION FUSE-LINKS; FOR NOMINAL A.C. VOLTAGES UP TO AND INCLUDING 33 KV PREFERRED	2000 (1 ST EDITION)	AFTER REVIEW
4	PIESA 1004 - 1	LOW VOLTAGE (600/1 000 V) CABLE SYSTEMS FOR OVERHEAD ELECTRICAL DISTRIBUTION - CABLES	2004 (1 ST EDITION)	AFTER REVIEW
5	PIESA 1004 - 2	LOW-VOLTAGE (600/1 000 V) CABLE SYSTEMS FOR UNDERGROUND ELECTRICAL DISTRIBUTION - ACCESSORIES	2004 (1 ST EDITION)	AFTER REVIEW
6	PIESA 1004 - 3	LOW VOLTAGE (600/1 000 V) CABLE SYSTEMS FOR OVERHEAD ELECTRICAL DISTRIBUTION – APPLICATION GUIDE	2004 (1 ST EDITION)	AFTER REVIEW
	PIESA 1006	DISTRIBUTION TRANSFORMERS OF SIZE UP TO AND INCLUDING 500 KVA AND OPERATING AT NOMINAL VOLTAGES NOT	2004 (1 ST EDITION)	AFTER REVIEW

PIESA 1048	ELECTRICITY SUPPLY — QUALITY OF SUPPLY VOLTAGE CHARACTERISTICS, COMPATIBILITY LEVELS, LIMITS AND ASSESSMENT METHODS	2007 (1ST EDITION)	IMMEDIATE
PIESA 1010	METAL-CLAD SWITCHGEAR FOR RATED A.C. VOLTAGES ABOVE 1 KV AND UP TO AND INCLUDING 36 KV —	2005 (1ST EDITION)	AFTER REVIEW/IMMEDIATE
PIESA 1018 ALL PARTS	FITTINGS AND CONNECTORS FOR LOW VOLTAGE OVERHEAD POWER LINES USING AERIAL BUNDLED CONDUCTORS	2004 (1ST EDITION)	AFTER REVIEW/IMMEDIATE
PIESA 1020	CABLE TIES FOR USE WITH LOW VOLTAGE AERIAL BUNDLED CONDUCTORS	2004 (1ST EDITION)	AFTER REVIEW/IMMEDIATE
PIESA 1032	SERVICE DISTRIBUTION BOXES — POLE-MOUNTED TYPES FOR OVERHEAD SINGLE-PHASE A.C. SERVICE CONNECTIONS AT 230 V		AFTER REVIEW/IMMEDIATE
PIESA 1062	CONCENTRIC SINGLE-PHASE AERIAL SERVICE CABLE — FOR DOMESTIC SERVICE CONNECTIONS WITH A COMBINED NEUTRAL-EARTH CONDUCTOR	2004 (1ST EDITION)	AFTER REVIEW/IMMEDIATE
PIESA 1063	SPLIT-CONCENTRIC SINGLE-PHASE AERIAL SERVICE CABLE — FOR DOMESTIC SERVICE CONNECTIONS WITH SEPARATE NEUTRAL AND EARTH CONDUCTORS	2004 (1ST EDITION)	AFTER REVIEW/IMMEDIATE
PIESA 1007	STAY ASSEMBLIES		AFTER REVIEW/IMMEDIATE

POSSIBLE CONTRIBUTION TO AFSEC FOR WIDER APPLICATION (AFRICA)

- ❑ PIESA STANDARDS ARE ALREADY ACCEPTED IN THE PIESA MEMBER UTILITIES WHO ARE DRAWN FROM BOTH EASTERN AND SOUTHERN AFRICAN REGION
- ❑ SOME OF THESE STANDARDS WILL BECOME HARMONISED REGIONAL STANDARDS IN THE SADC REGION
- ❑ THROUGH THIS HARMONISATION PROCESS PIESA STANDARDS COULD BE MADE AVAILABLE TO AFSEC FOR HARMONISATION THROUGH AN AGREED PROCESS WHICH COULD BE DISCUSSED

CONCLUSION

- ❑ PIESA HAS SIGNIFICANT PROGRESS IN THE HARMONISATION OF STANDARDS AMONG ITS MEMBERS
- ❑ PIESA NOW SEEKS TO FLOAT ITS STANDARDS FOR POSSIBLE ADOPTION AS SADC HARMONISED STANDARDS
- ❑ A MEMORANDUM OF UNDERSTANDING FOR THE IMPLEMENTATION OF THIS PROCESS HAS NOW BEEN SIGNED
- ❑ PIESA STANDARDIZATION WORKING GROUP HAS COMMENCED THE PROCESS OF IDENTIFYING STANDARDS FOR POSSIBLE ADOPTION AS SADC HARMONISED STANDARDS
- ❑ PIESA STANDARDIZATION WG TO PRIORITIES REVIEW OF CURRENT STANDARDS TO AID THE PROCESS FOR HARMONISATION
- ❑ IT IS ENVISAGED THAT THIS COULD ALSO PAVE WAY FOR PIESA STANDARDS TO BE CONSIDERED FOR HARMONISATION AT AFSEC LEVEL.

END OF PRESENTATION

THANK FOR YOU