

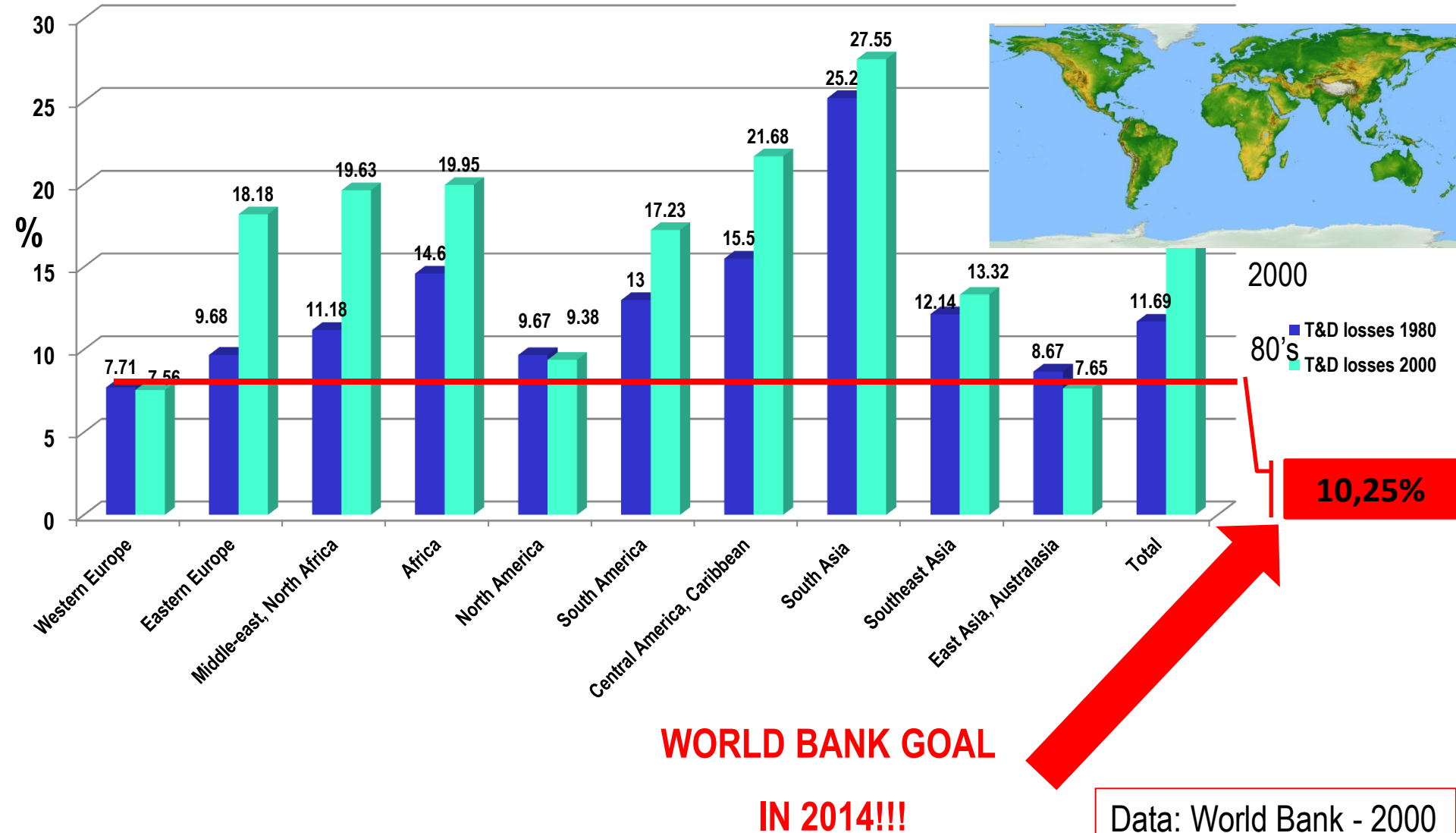
2014 IURPA/SURPA/SCRPA Conference

NON TECHNICAL LOSSES IN BRAZIL

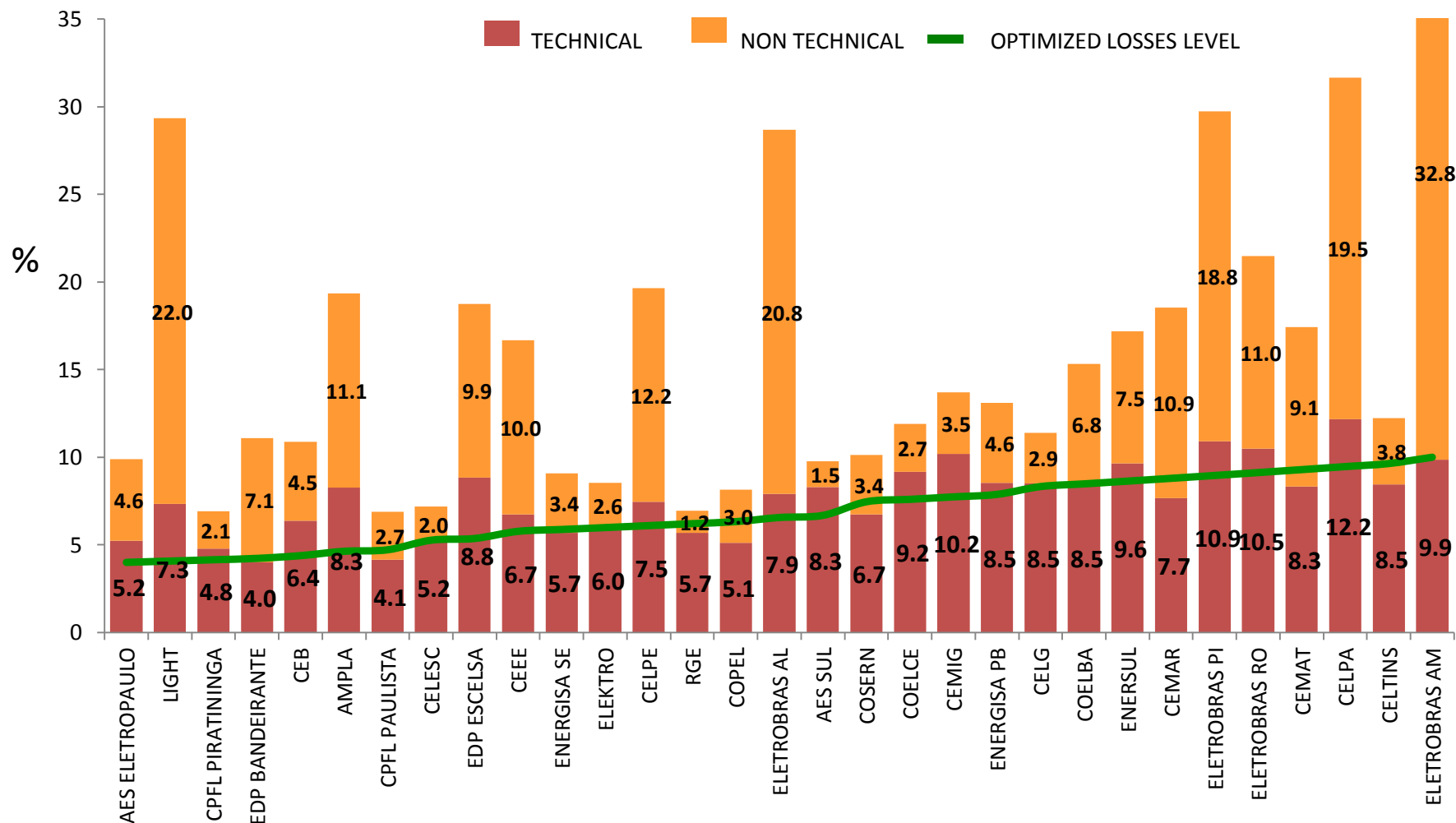
Orlando – Florida - USA

June 2014

TOTAL LOSSES AROUND THE WORLD



LOSSES IN BRAZIL -2012





NON TECHNICAL LOSSES



SOME CAUSES:

ISSUES RELATED TO POOR URBANIZATION (SLAMS)

ISSUES RELATED TO SOCIAL AND ECONOMIC LEVEL

HIGH CRIME INDEX

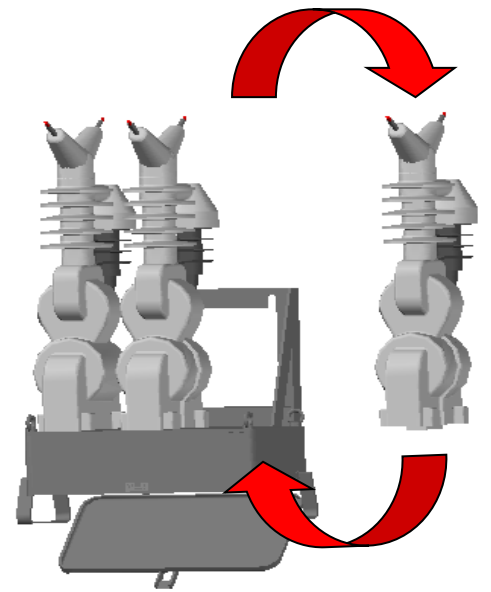
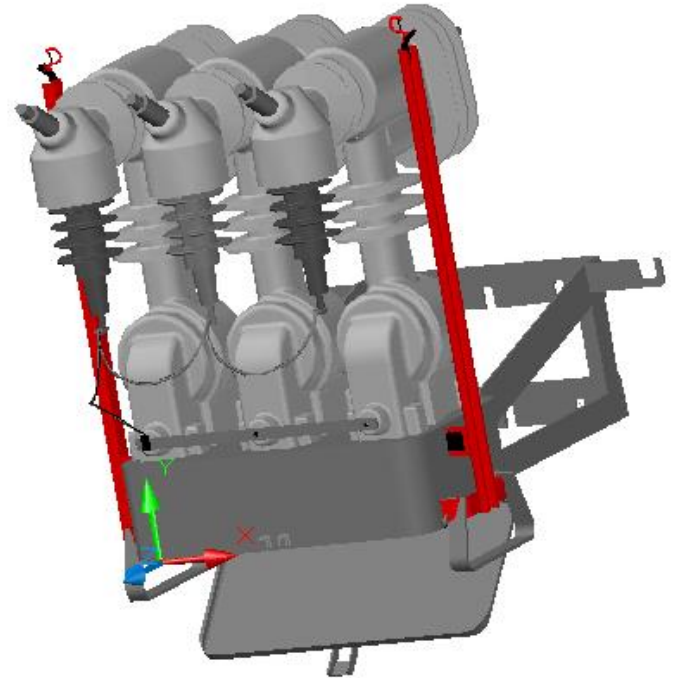
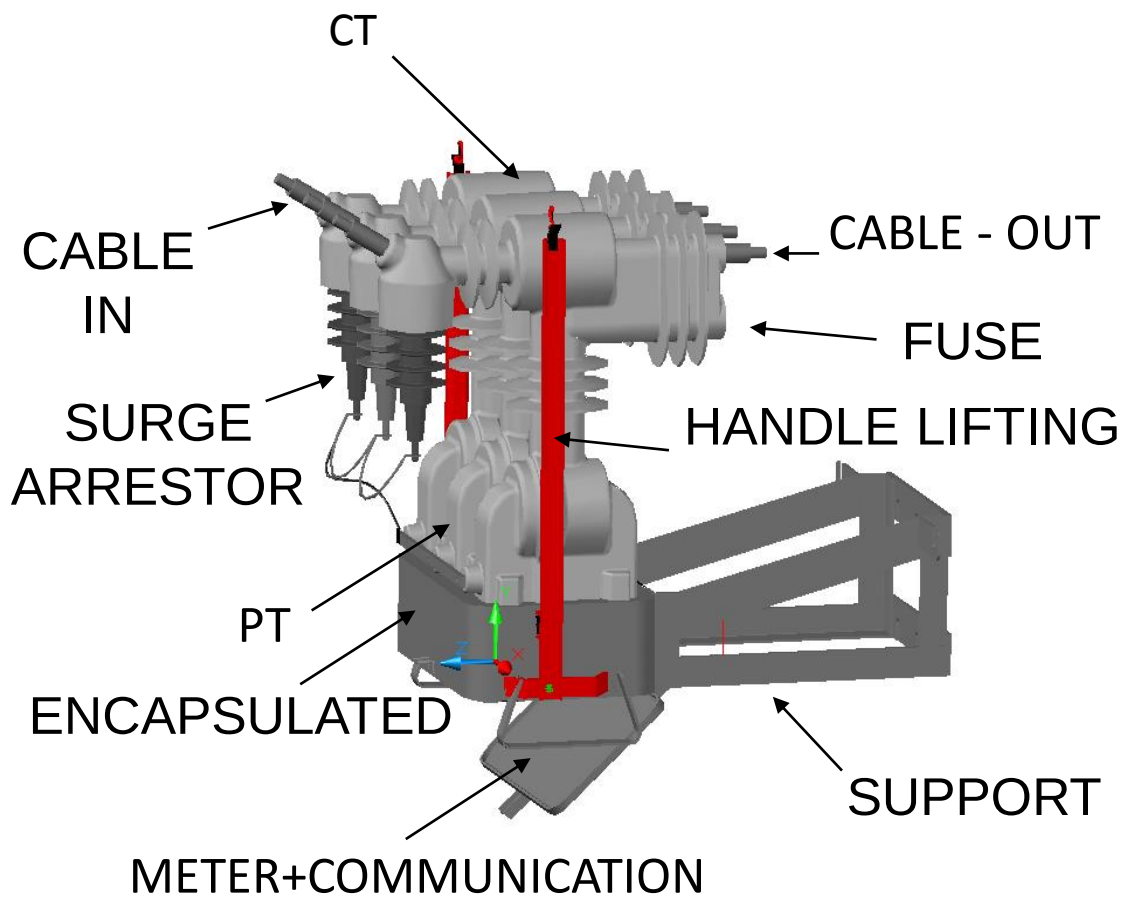
COMPLACENCY OF SOCIETY WITH ENERGY THIEVES





TECHNOLOGY - MEDIUM VOLTAGE CUSTOMERS





TECHNOLOGY - LV CUSTOMERS



TECHNOLOGY FOR LV CUSTOMERS



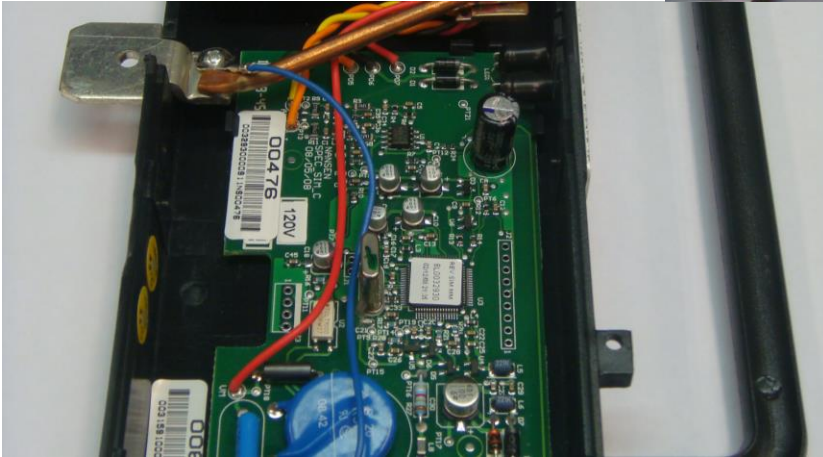
TECHNOLOGY FOR LV CUSTOMERS



TECHNOLOGY FOR LV CUSTOMERS



TECHNOLOGY LV CUSTOMERS



SOUTH AFRICA

PRE PAYMENT METERS INSIDE SAFES



ARMORED METERING BOXES









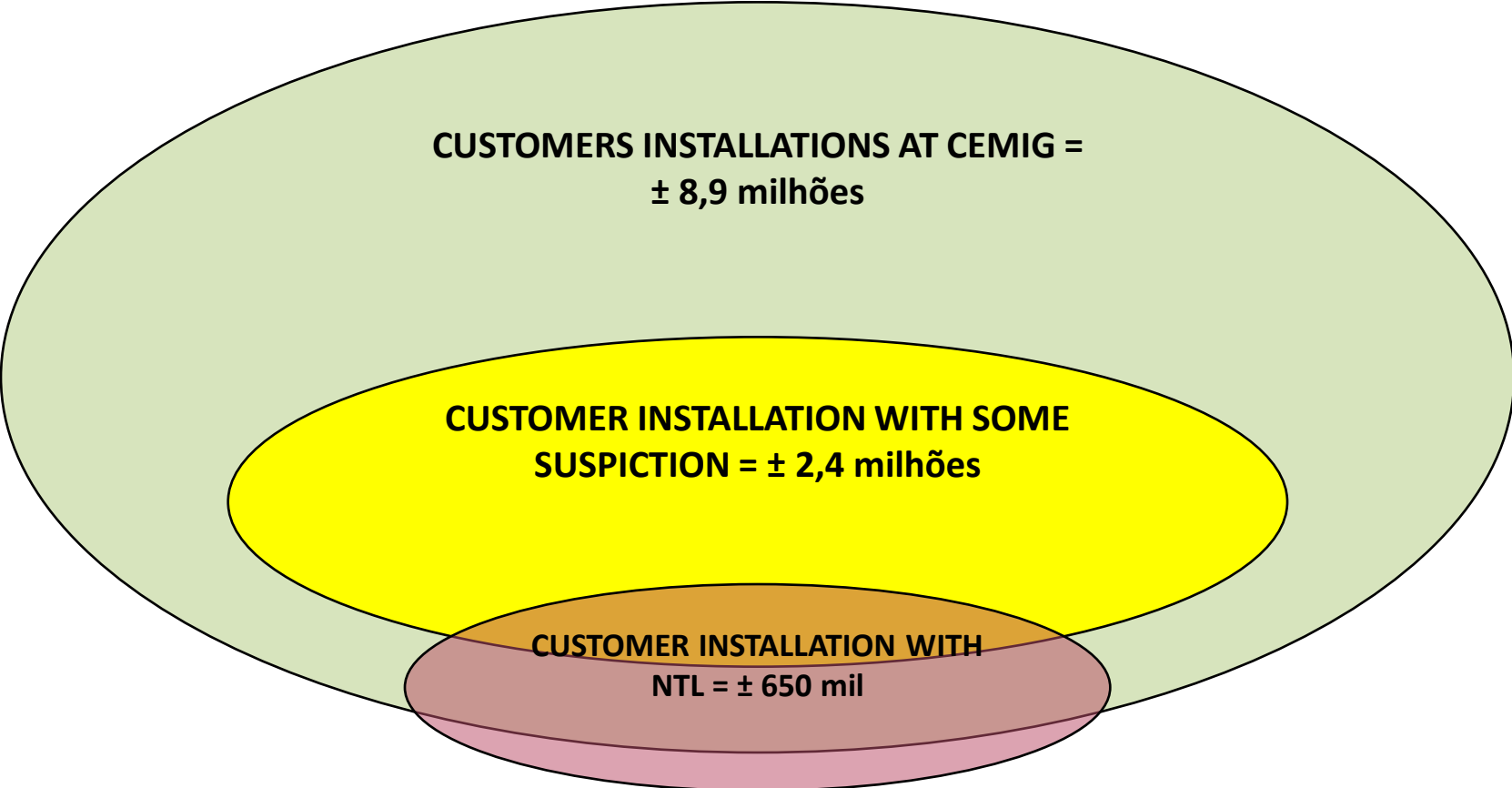
PUBLIC LIGHTING LAMP SURFER



CEMIG OVERVIEW

2013

NTL +/- 2,8 %



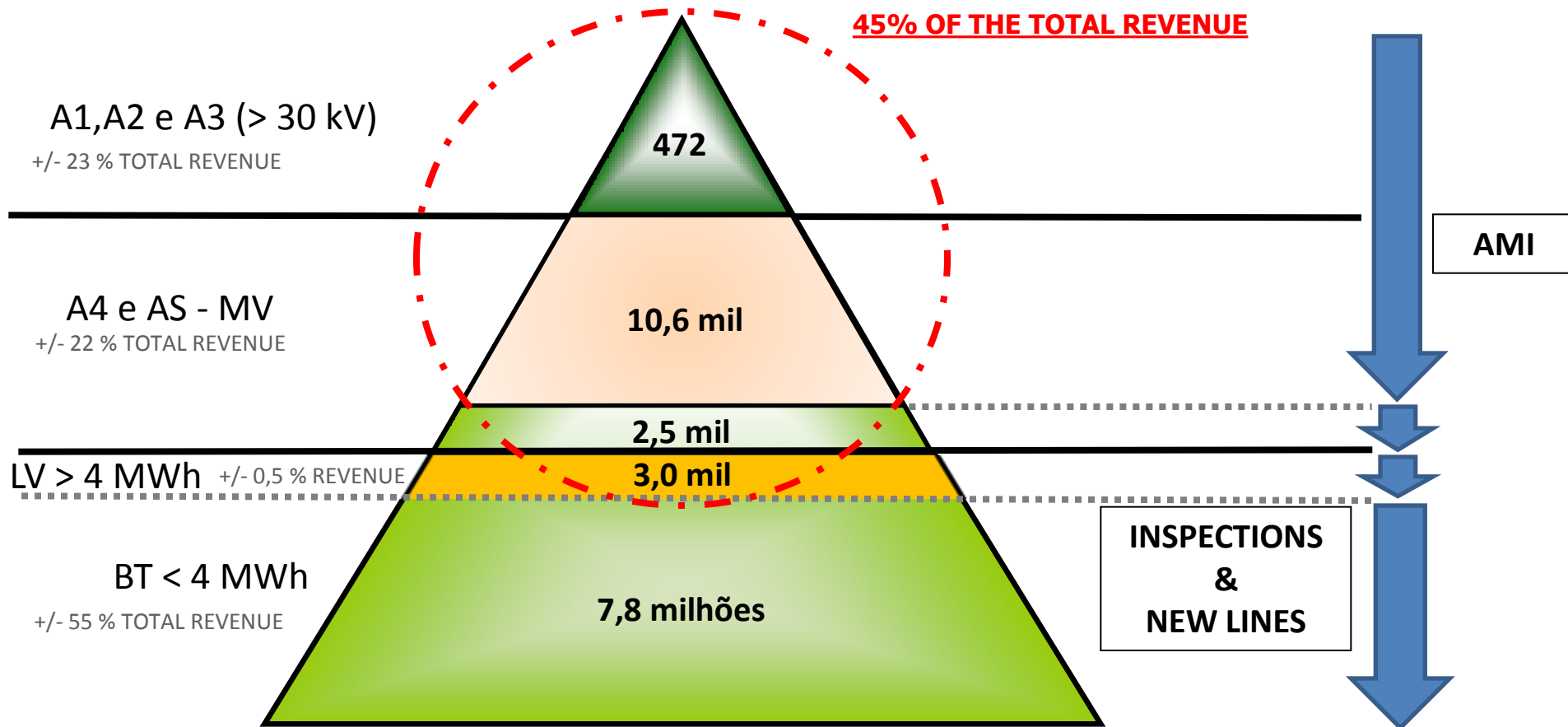
A Venn diagram consisting of three nested ellipses. The outermost ellipse is light green and contains the text 'CUSTOMERS INSTALLATIONS AT CEMIG = ± 8,9 milhões'. Inside it is a yellow ellipse containing the text 'CUSTOMER INSTALLATION WITH SOME SUSPICTION = ± 2,4 milhões'. The innermost ellipse is pinkish-brown and contains the text 'CUSTOMER INSTALLATION WITH NTL = ± 650 mil'. The ellipses are nested, with the yellow one inside the green one, and the pink one inside the yellow one.

CUSTOMERS INSTALLATIONS AT CEMIG =
± 8,9 milhões

CUSTOMER INSTALLATION WITH SOME
SUSPICTION = ± 2,4 milhões

CUSTOMER INSTALLATION WITH
NTL = ± 650 mil

REVENUE ASSURANCE



TECHNOLOGY LV CUSTOMERS

- METERING CENTER
- DEDICATED SOFTWARES INTEGRATED WITH SAP (BILLING, CRM, ...)
- ALL FEEDERS HAVE A METER
- ENERGY BALANCE – SPECIFIC INSPECTION ORDERS
- INSPECTIONS ORDERS AND REPORT ABOUT ALL CASES – RESULTS \$\$\$\$\$
- REVENUE ASSURANCE WITH AMI

METERING CENTER



REGULATORY PROBLEMS

TIME OF USING TARIFF – NOT MANDATORY

PRE PAYMENT – NOT MANDATORY

FEDERAL GOVERNMENT CHANGE RULES WITHOUT
NEGOCIATION WITH INDUSTRY

REGULATORY PROBLEMS

SOME DISCOS CAN CONSIDER ALL LOSSES AS COSTS

RULES ARE NOT THE SAME ALL OVER BRAZIL (should be!)

OUR METROLOGICAL

FEDERAL BUREAU TAKES TOO LONG TO APPROVE
NEW TECHNOLOGIES

THANKS

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