

**Final Draft**

*The following format shall be used for applications of all Distribution Utilities for approval of caps on the recoverable rate of Distribution System Losses which shall also be published in a newspaper of general circulation in the same locality of their franchise area pursuant to Sec. 4(e), Rule 3 of the IRR of R.A. 9136.*

**APPLICATION FORMAT**

**PARAGRAPH 1:** Should include a brief introduction/background about the applicant, such as its organization, company name, office address, the General Manager, contact person responsible for preparing this application, contact person's telephone number and facsimile number and e-mail address.

**PARAGRAPH 2:** Should include the proposed segregated system loss caps being prayed for by the applicant for a five (5) year period.

- a) Proposed Administrative Loss Cap (expressed in kilowatt-hour)
- b) Proposed Technical Loss Cap (expressed in percentage of the electric Energy input to the Distribution System)
- c) Proposed 5-year declining Non-Technical Loss Cap (expressed in percentage of the electric Energy input to the Distribution System)

**PARAGRAPH 3:** Should include the test year segregated system loss.

**Table 1: Test Year Segregated Distribution System Losses**

Month	Energy Input (KWH)	Energy Output (KWH)	Total System Loss (KWH)	Admin. Loss (KWH)	Technical Loss (KWH)	Non-Technical Loss (KWH)	Total System Loss (%)	Admin. Loss (%)	Technical Loss (%)	Non-Technical Loss (%)
January										
February										
March										
April										
May										
June										
July										
August										
September										
October										
November										
December										
Average										

Table 2: Test Year Segregated Technical Loss (in kilowatt-hours)

Month	Total Technical Losses (KWH)	Sub-Transmission Line Losses (KWH)	Power Transformers Load Losses (KWH)	Power Transformer No-load Losses (KWH)	Primary Distribution Line Losses (KWH)	Voltage Regulators Load Losses (KWH)	Voltage Regulators No-load Losses (KWH)
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
Total							

Month	Capacitor Losses (KWH)	Reactor Losses (KWH)	Distribution Transformers Load Losses (KWH)	Distribution Transformers No-Load Losses (KWH)	Secondary Distribution Line Losses (KWH)	Secondary Service Drop Losses (KWH)	Metering Losses (KWH)
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
Total							

Table 3: Test Year Segregated Technical Loss (in percentage)

Month	Total Technical Losses (KWH)	Sub-Transmission Lines (%)	Power Transformers Load Loss (%)	Power Transformer No-load Loss (%)	Primary Distribution Lines (%)	Voltage Regulators Load Loss (%)	Voltage Regulators No-load Loss (%)
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
Total							

Month	Capacitor Losses (%)	Reactor Losses (%)	Distribution Transformers Load Losses (%)	Distribution Transformers No-Load Losses (%)	Secondary Distribution Lines (%)	Secondary Service Drops (%)	Metering (%)	Total Technical Loss (%)
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
Total								

**PARAGRAPH 4:** Should include the DU's estimates of its segregated system loss for the succeeding five (5) years using the information specified in its DDP.

Table 4-A: 5-Year Forecasted Segregated System Loss (in kilowatt-hours)

Year	Energy Input (KWH)	Energy Output (KWH)	Total System Loss (KWH)	Admin. Loss (KWH)	Technical Loss (KWH)	Non-Technical Loss (KWH)
1 <sup>st</sup> Year						
2 <sup>nd</sup> Year						
3 <sup>rd</sup> Year						
4 <sup>th</sup> Year						
5 <sup>th</sup> Year						

Table 4-B: 5-Year Forecasted Segregated System Loss (in percentage)

Year	Energy Input (KWH)	Energy Output (KWH)	Total System Loss (%)	Admin. Loss (%)	Technical Loss (%)	Non-Technical Loss (%)
1 <sup>st</sup> Year						
2 <sup>nd</sup> Year						
3 <sup>rd</sup> Year						
4 <sup>th</sup> Year						
5 <sup>th</sup> Year						

Table 5: 5-Year Forecasted Segregated Technical Loss (in percentage)

Year	Total Technical Losses (KWH)	Sub-transmission Line Losses (%)	Power transformers Load Losses (%)	Power Transformers No-load Losses (%)	Primary Distribution Line Losses (%)	Voltage Regulators Load Losses (%)	Voltage regulators No-load Losses (%)
1 <sup>st</sup> Year							
2 <sup>nd</sup> Year							
3 <sup>rd</sup> Year							
4 <sup>th</sup> Year							
5 <sup>th</sup> Year							

Year	Capacitor Losses (%)	Reactor Losses (%)	Distribution Transformers Load Losses (%)	Distribution Transformers No-Load Losses (%)	Secondary Distribution Lines (%)	Secondary Service Drops (%)	Metering Losses (%)	Total Technical Loss (%)
1 <sup>st</sup> Year								
2 <sup>nd</sup> Year								
3 <sup>rd</sup> Year								
4 <sup>th</sup> Year								
5 <sup>th</sup> Year								

**PARAGRAPH 5:** Should include the proposed program for the reduction of the Technical Loss which should be consistent with the DDP. The proposed program should include technical, financial, and economic analysis.

Table 7: Targeted Percent Reduction of Technical Loss

Year	Program	Cost	Targeted % Reduction of Technical Loss
1 <sup>st</sup> Year			
2 <sup>nd</sup> Year			
3 <sup>rd</sup> Year			
4 <sup>th</sup> Year			
5 <sup>th</sup> Year			

**PARAGRAPH 6:** Should include the proposed program for the reduction of the Non-Technical Loss. The program should include financial and economic analysis.

Table 8: Targeted Percent Reduction of Non-Technical Loss

Year	Program	Cost	Targeted % Reduction of Non-Technical Loss
1 <sup>st</sup> Year			
2 <sup>nd</sup> Year			
3 <sup>rd</sup> year			
4 <sup>th</sup> Year			
5 <sup>th</sup> Year			

**PARAGRAPH 7:** Confirmation that applicant has submitted four CD-ROM electronic copies (2 in Portable Document Format, and 2 in either Text File or Microsoft Excel File) of the following information using the templates shown in Annex B of the "Guidelines for the Application and Approval of Caps on the recoverable Rate of Distribution System Losses":

- a) ERC-DSL-01 Administrative Load data;
- b) ERC-DSL-02 Customer Data;
- c) ERC-DSL-03 Billing Cycle Data;
- d) ERC-DSL-04 Customer Energy Consumption Data;
- e) ERC-DSL-05 Load Curve Data;
- f) ERC-DSL-06 Bus Data;
- g) ERC-DSL-07 Sub-transmission Line Data – Overhead;
- h) ERC-DSL-08 Sub-transmission Line Data- Underground/Submarine Cable;
- i) ERC-DSL-09 Substation Power Transformer Data – Two Winding;
- j) ERC-DSL-10 Substation Power Transformer Data – Three Winding;
- k) ERC-DSL-11 Primary Distribution Line Data – Overhead;

- |    |            |  |
|----|------------|--|
| l) | ERC-DSL-12 | Primary Distribution Line Data –<br>Underground Cable;     |
| m) | ERC-DSL-13 | Primary Customer Service Drop<br>Data – Overhead;          |
| n) | ERC-DSL-14 | Primary Customer Service Drop<br>Data – Underground Cable; |
| o) | ERC-DSL-15 | Distribution Transformer Data;                             |
| p) | ERC-DSL-16 | Secondary Distribution Line Data;                          |
| r) | ERC-DSL-17 | Secondary Customer Service<br>Drop Data;                   |
| s) | ERC-DSL-18 | Voltage Regulator Data;                                    |
| t) | ERC-DSL-19 | Shunt Capacitor Data;                                      |
| u) | ERC-DSL-20 | Shunt Inductor Data;                                       |
| v) | ERC-DSL-21 | Series Inductor Data;                                      |
| w) | ERC-DSL-22 | Energy Sales Data; and                                     |
| x) | ERC-DSL-23 | Other Technical Data.                                      |

NOTE: Information on ERC-DSL-22 and ERC-DSL-23 shall be accomplished on historical year 2001 to 2005.

**PARAGRAPH 8:** Confirmation that applicant has submitted the following information:

- Distribution System Map consistent with the data submitted using the templates shown in Annex B of the "Guidelines for the Application and Approval of Caps on the Recoverable Rate of Distribution System Losses".
- Simulated System Voltage Profile for the Historical Test Year and the five (5) years forecasted segregated distribution system losses. (Please see attached sample format)
- Historical Technical Analysis including but not limited to internal meter loss testing and calculation, metering losses computation, power transformer losses computation, sensitivity analysis
- Forecast Technical Analysis including but not limited to forecasted number of consumers/meters internal meter loss testing and calculation, metering losses computation, power transformer losses computation, sensitivity analysis, forecasted energy sales and peak demand

- Non-Technical Loss Reduction Analysis including but not limited to the details of non-technical loss reduction program, technical and economic cost benefit analysis
- Technical Loss Reduction Analysis, if any -- including but not limited to the details of technical loss reduction program, technical and economic cost benefit analysis.

Note: All of the above items shall be submitted both in two (2) hard copies and two (2) electronic copies in Microsoft Excel or any executable programs.

**PARAGRAPH 9:** PRAYER by the DU.

(For Forecasted 5 Years)

SAMPLE FORMAT ONLY

(YEAR) MINIMUM PRIMARY VOLTAGE

Metering Point	Length (Circuit Km)	Peak Demand	Energy Sales	Nominal Primary Voltage	Primary Voltage			(% of Nominal)			Average per Phase
					Phase AB	Phase BC	Phase CA	Phase AB	Phase BC	Phase CA	
Substation 1											
Feeder 1											
Feeder 2											
Substation 2											
Feeder 3											
Feeder 4											
Substation 3											
Feeder 5											
Feeder 6											
Substation 4											
Feeder 7											
Feeder 8											
Feeder 9											
Feeder 10											
Substation 5											
Circuit 1											
Circuit 2											
Substation 6											
Circuit 3											
Circuit 4											

(YEAR) MINIMUM SECONDARY VOLTAGE

Metering Point	Length* (Circuit Km)	Peak Demand	Energy Sales	Nominal Secondary Voltage	Secondary Voltage			(% of Nominal)			Average per Phase
					Phase AB	Phase BC	Phase CA	Phase AB	Phase BC	Phase CA	
Substation 1											
Feeder 1											
Feeder 2											
Substation 2											
Feeder 3											
Feeder 4											
Substation 3											
Feeder 5											
Feeder 6											
Substation 4											
Feeder 7											
Feeder 8											
Feeder 9											
Feeder 10											
Substation 5											
Circuit 1											
Circuit 2											
Substation 6											
Circuit 3											
Circuit 4											

NOTE: \*Total length including lateral

(For Historical Test Year)

SAMPLE FORMAT ONLY

(YEAR) MINIMUM PRIMARY VOLTAGE

Metering Point	Length (Circuit Km)	Peak Demand	Energy Sales	Nominal Primary Voltage	Primary Voltage			(% of Nominal)			Average per Phase
					Phase AB	Phase BC	Phase CA	Phase AB	Phase BC	Phase CA	
Substation 1											
Feeder 1											
Feeder 2											
Substation 2											
Feeder 3											
Feeder 4											
Substation 3											
Feeder 5											
Feeder 6											
Substation 4											
Feeder 7											
Feeder 8											
Feeder 9											
Feeder 10											
Substation 5											
Circuit 1											
Circuit 2											
Substation 6											
Circuit 3											
Circuit 4											

(YEAR) MINIMUM SECONDARY VOLTAGE

Metering Point	Length* (Circuit Km)	Peak Demand	Energy Sales	Nominal Secondary Voltage	Secondary Voltage			(% of Nominal)			Average per Phase
					Phase AB	Phase BC	Phase CA	Phase AB	Phase BC	Phase CA	
Substation 1											
Feeder 1											
Feeder 2											
Substation 2											
Feeder 3											
Feeder 4											
Substation 3											
Feeder 5											
Feeder 6											
Substation 4											
Feeder 7											
Feeder 8											
Feeder 9											
Feeder 10											
Substation 5											
Circuit 1											
Circuit 2											
Substation 6											
Circuit 3											
Circuit 4											

NOTE: \*Total length including lateral