



Public Utilities Commission of Sri Lanka

OUTLOOK 2015

Projects Scheduled for 2015 and Benefits



PUCSL OUTLOOK 2015

VISION

" To create an environment for all inhabitants of Sri Lanka, and the contributors to its development, to have access to essential infrastructure and utility services in the most economical manner, within the boundaries of the sustainable development agenda of the country "

MISSION

" To regulate all utilities within the purview of the Public Utilities Commission of Sri Lanka to ensure safe, reliable and reasonably priced infrastructure services for existing as well as future consumers in the most equitable and sustainable manner "



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Introduction

Regulator Of Electricity Industry

The Public Utilities Commission of Sri Lanka (PUCSL) currently functions as the regulatory body for Sri Lanka's electricity industry. At its inception in 2002, it was entrusted with the regulatory aspects of the electricity, petroleum and water services sectors. Its present role encompasses the **economic, technical and safety regulatory functions for the island's electricity sector**.

The Commission's objectives, functions and the legal framework have been defined under the Public Utilities Commission of Sri Lanka Act, No. 35 of 2002, the Sri Lanka Electricity Act, No. 20 of 2009 and the Sri Lanka Electricity (Amendment) Act, No. 31 of 2013.

Under the powers vested on the Commission through these Acts of Parliament and policy directives from the Government, it is mandated to ensure fairness in the setting of electricity tariff and service chargers (retail and bulk); ensuring the safety of electricity to living beings and property; licensing (issuing of generation licences and monitoring activities of the transmission and distribution licensees); regulatory affairs (formulating and reviewing regulations to ensure the safety and efficiency of the electricity industry); inspection (ensuring the adequacy of the quality and safety of the electricity supply); consumer affairs (assuring protection for electricity consumers, handling consumer disputes and raising public awareness on the electricity industry); energy security, energy conservation, efficient use of electricity and mitigation of environmental concerns resulting from power sector investments; establishing the electricity market structure to promote competition; and dissemination of information on the industry to stakeholders.

Shadow Regulator of Lubricants Industry

It is also the **shadow regulator for the lubricants industry** and advises the Ministry of Power and Energy on policy and regulatory matters.

Its functions include the provision of advice and assistance to the authorities including the Ministry of Petroleum Industries on policies and regulatory aspects related to lubricants and greases. Under the provisions of the Petroleum Products (Special Provisions) Act No. 33 of 2002 and the Ceylon Petroleum Corporation Act No. 28 of 1961, the importation, exportation, blending, production, sale, supply and distribution of lubricants including greases require Government authorisation.

Outlook 2015

The Commission plans and carries out a large number of projects and deliverables in the fulfilling of its functions and objectives under the framework stipulated in the above mentioned Acts. Under Section 37 of the Public Utilities Commission of Sri Lanka Act No.35 of 2002, the Commission is required to announce the projects it has undertaken for each year.

This report outlines the plans and projects the PUCSL has undertaken to be carried out under the various goals it has set in its vision for 2020 and the benefits which would **accrue from the implementation of these projects** to various stakeholders, for the year 2015.

Power Quality

Goal 1

The electricity supplies to consumers are in compliance with the statutory quality levels, 230 V \pm 6% for voltage and 50 Hz \pm 0.5% for frequency and harmonics

As the regulator for the electricity industry, the PUCSL has to ensure the quality of the electricity supply provided to consumers by the licensees. The following are the activities which it intends to carry out during the year 2015 in order to achieve this goal.

Perspective 2015

Goal 1:

The electricity supplies to consumers are in compliance with the statutory quality levels, 230 V \pm 6% for voltage and 50 Hz \pm 0.5% for frequency and harmonics

1.1 Design and integrate electronic templates in to Licensee Information Submission System (LISS) which is required for Voltage at Maximum Power (VMP)

1.2 Measuring of harmonics which affect the power quality in energy intensive industries

1.1 Design and integrate electronic templates in to LISS which is required for VMP

LISS is the web-based system which was developed by the Commission to gather standard industry data from Licensees regarding their operations on a regular basis. The information is gathered on standard formats, verified and used to produce various periodical reports required for regulatory purposes.

| Benefits to stakeholders | | |
|---|---|--|
| Goal 1: The electricity supplies to consumers are in compliance with the statutory quality levels, 230 V \pm 6% for voltage and 50 Hz \pm 0.5% for frequency and harmonics | 1.1 Design and integrate electronic templates in to LISS (Licensee Information Submission System) which is required for VMP | 1.1.1 Ability to accommodate Distribution Licensees' submissions on VMP related data 1.1.2 Electronic platform to gather VMP related information from licensees 1.1.3 Identification of prevailing voltage levels 1.1.4 Improvement to desired levels |

1.2 Measuring of harmonics which affect the power quality in energy intensive industries

Harmonic voltages and currents in an electric power system are a result of non-linear electric loads. Harmonic frequencies in the power grid are a frequent cause of power quality problems such as electricity fluctuations. Harmonics in power systems result in increased heating in the equipment and conductors, misfiring in variable speed drives, and torque pulsations in motors. Reduction of harmonics is considered desirable by all industries.

Power Quality

The Commission has introduced many activities to study harmonics in the electricity supply. The many studies it has already conducted in the apparel industry will be used as a guideline in measuring harmonics in other industries as well. It will help many industries save their machinery and equipment from damage caused by sudden power fluctuations and harmonics and also assist Distribution Licensees (DLs) to prevent losses caused by unmeasured harmonics.

| Benefits to stakeholders | | |
|--|--|--|
| Goal 1: The electricity supplies to consumers are in compliance with the statutory quality levels, 230 V \pm 6% for voltage and 50 Hz \pm 0.5% for frequency and harmonics | 1.2 Measuring of harmonics which affect the power quality in energy intensive industries | 1.2.1 Identification of existing harmonic levels within industries' distribution systems 1.2.2 Identification of specific causes for generation of harmonics within each industry 1.2.3 Benefits for industries through identification of harmonics mitigation measures 1.2.4 Information will help study the impact of harmonics on power system 1.2.5 Reduced harmonics through regulations 1.2.6 Improved quality in electricity 1.2.7 Machinery and equipment saved from damage caused by harmonics 1.2.8 DLs helped to prevent losses caused by unmeasured harmonics |

Supply Quality

Goal 2

The System average interruption duration index is below 24 hours per consumer per year.

The Commission is also committed to ensuring that the service supplied by the licensees to the end consumers is of high quality.

Perspective 2015

Goal 2:

The System average interruption duration index is below 24 hours per consumer per year

2.1 Design and integrate electronic tables in to LISS which is required for obtaining SAIFI, SAIDI (outage related) information

2.2 Case study to identify the reasons for high SAIDI/SAIFI in a selected area as a pilot project

2.1

Design and integrate electronic tables in to LISS which is required for obtaining SAIFI, SAIDI (outage related) information

Benefits to stakeholders

Goal 2:

The System average interruption duration index is below 24 hours per consumer per year

2.1 Design and integrate electronic tables in to LISS which is required for obtaining SAIFI, SAIDI (outage related) information

- 2.1.1 Better access to data through development of LISS
- 2.1.2 Electronic platform to gather SAIFI, SAIDI related information from licensees
- 2.1.3 Ability to identify currently prevailing SAIDI / SAIFI levels
- 2.1.4 Ability to improve this to desired levels

2.2

Case study to identify the reasons for high SAIDI/SAIFI in a selected area as a pilot project

Benefits to stakeholders

Goal 2:

The System average interruption duration index is below 24 hours per consumer per year

2.2 Case study to identify the reasons for high SAIDI / SAIFI in a selected area as a pilot project

- 2.2.1 Identification of SAIDI
- 2.2.2 Identification of reasons for high SAIDI
- 2.2.3 Better informed Licensees can prepare better mechanism to improve SAIDI
- 2.2.4 Continuous, reliable power supply for consumers
- 2.2.5 Benefits for many if study is carried out in other areas

**Goal
3**

The system average interruption frequency index is below 30 occurrences per consumer per year.

Perspective 2015

Goal 3:
The System Average Interruption Frequency Index is below 30 occurrences per consumer per year

3.1 Design and integrate electronic tables in to LISS which is required for obtaining SAIFI, SAIDI (outage related) information

3.2 Case study to identify the reasons for high SAIDI/SAIFI in a selected area as a pilot project

3.1 Design and integrate electronic tables in to LISS which is required for obtaining SAIFI, SAIDI (outage related) information

Benefits to stakeholders

Goal 3:
The System Average Interruption Frequency Index is below 30 occurrences per consumer per year

3.1 Design and integrate electronic tables in to LISS which is required for obtaining SAIFI, SAIDI (outage related) information

3.1.1 Identification of SAIFI
3.1.2 Identification of reasons for high SAIFI
3.1.3 Better informed Licensees can prepare better mechanisms to improve SAIFI

3.2 Case study to identify the reasons for high SAIDI/SAIFI in a selected area as a pilot project

Benefits to stakeholders

Goal 3:
The System Average Interruption Frequency Index is below 30 occurrences per consumer per year

3.2 Case study to identify the reasons for high SAIDI / SAIFI in a selected area as a pilot project

3.2.1 Identification of SAIFI
3.2.2 Identification of reasons for high SAIFI
3.2.3 Informed Licensees can prepare better mechanisms to improve SAIFI

**Goal
4**

Establishing current level of service call restoration time by sample survey on service calls attended by the distribution licensees and benchmarking

Perspective 2015
Goal 4:

The average restoration time for consumer service line faults is below 2 hours per consumer

4.1 Establishing current level of service call restoration time by sample survey on service calls attended by the distribution licensees and benchmarking

4.1

Establishing current level of service call restoration time by sample survey on service calls attended by the distribution licensees and benchmarking

| Benefits to stakeholders | | |
|---|---|--|
| Goal 4: The average restoration time for consumer service line faults is below 2 hours per consumer | 4.1 Establishing current level of service call restoration time by sample survey on service calls attended by the distribution licensees and benchmarking | 4.1.1 Establishment of current average restoration time for service faults by DLs 4.1.2 Benchmarking of DLs' performance 4.1.3 Provision of forum to share best practices 4.1.4 Reduced service restoration times for consumers |

Service Quality

Goal 5

Information on consumer rights and obligations is made available to consumers in advance and when such information is required by them

Stakeholders in the industry including consumers and licensees are better aware of their rights, duties and responsibilities when they have better access to education. This information should encompass those on consumers' rights and obligations when receiving the service of electricity as well as the regulatory framework so that the licensees are also in a better position to provide an uninterrupted service. This in turn will help the Commission in collaborating with the Government, in framing regulations and policy guidelines which would all contribute to the betterment of the industry.

Perspective 2015

Goal 5:

Information on consumer rights and obligations is made available to consumers in advance and when such information is required by them

5.1 Capacity building to Consumer Network (CN) members on rights and obligations of consumers and regulatory framework

5.2 Publish articles/interviews on rights and obligations and regulatory framework in areas not covered in 2014 deliverables

5.3 Discussions in electronic media on rights and obligations of consumers and regulatory framework

5.4 Print 50,000 hard copies of rights and obligations of consumers statements and upload soft copies in public websites

5.1

Capacity building to Consumer Network (CN) members on rights and obligations of consumers and regulatory framework

The Consumer Network represents consumers of all licensees island-wide and is established to protect the interests of electricity consumers in all parts of the country. The project envisages better education and awareness for consumers through the empowerment of CN members. Knowing the rights and obligations of both consumers and licensees towards each other is imperative for both parties to perform their duties effectively and efficiently.

| | | Benefits to stakeholders |
|--|---|--|
| Goal 5: Information on consumer rights and obligations is made available to consumers in advance and when such information is required by them | 5.1 Capacity building to CN members on rights and obligations of consumers and regulatory framework | 5.1.1 Protection of consumer interests 5.1.2 Improvement of CN members' capacities 5.1.3 Consumers' problems related to electricity and supply resolved by making CN members available for consultation 5.1.4 Better education, awareness for consumers 5.1.5 Empowerment of consumers to exercise their rights 5.1.6 Better service for consumers 5.1.7 Conservation of electricity through better consumer awareness |

5.2

Publish articles/interviews on rights and obligations and regulatory framework in areas not covered in 2014 deliverables

Through the publication of articles in the form of interviews with the PUCSL Director General and other officials on consumer rights and obligations and the regulatory framework, such information would be made available to all stakeholders including the public. Similar programmes have already been conducted during the year 2014. Areas not covered in the previous articles will be included in the plans for 2015.

| | | Benefits to stakeholders |
|--|--|--|
| Goal 5: Information on consumer rights and obligations is made available to consumers in advance and when such information is required by them | 5.2 Publish articles/interviews on rights and obligations and regulatory framework in areas not covered in 2014 deliverables | 5.2.1 Consumer awareness through print media, on rights and obligations and electricity regulatory framework 5.2.2 Consumer awareness on how their rights should be exercised 5.2.3 Consumer awareness on the action they should take when faced with problems related to electricity and supply 5.2.4 Better interaction between consumers and service providers 5.2.5 Service providers motivated to provide better services |

5.3

Discussions in electronic media on rights and obligations of consumers and regulatory framework

Visual methods have proved to be more effective in carrying messages to the public as they are easier to understand for all segments of consumers. It has also been shown that Sri Lankans utilise the electronic media more than other forms and that it is utilised equally in all corners of the island. Thus, it is assumed that the electronic media would be a more effective tool in reaching the masses.

Goal 5:

Information on consumer rights and obligations is made available to consumers in advance and when such information is required by them

5.3 Discussions in electronic media on rights and obligations of consumers and regulatory framework

Benefits to stakeholders

- 5.3.1 Consumer awareness through electronic media, on rights and obligations and electricity regulatory framework
- 5.3.2 Awareness for all consumers on exercising their rights and resolving their problems related to electricity and electricity supply
- 5.3.3 Access to all types of consumers
- 5.2.4 Better interaction between consumers and service providers
- 5.2.5 Motivation of service providers for better service
- 5.2.6 Consumer protection ensured

5.4

Print 50,000 hard copies of Rights and Obligations of Consumers Statements and upload soft copies in public websites

This Statement to be launched by the Commission intends to make the public aware of their rights and obligations as electricity consumers. It includes segments such as Right to be informed, Right to equal treatment and Right to satisfaction of basic needs and Obligation to comply with regulatory framework, Obligation to pay all charges legitimately levied by the service provider and Obligation to ensure the safety of other electricity consumers and the public. It would be made available at the PUCSL premises and at all customer service centres and area/branch offices of the service providers.

Goal 5:

Information on consumer rights and obligations is made available to consumers in advance and when such information is required by them

5.4 Print 50,000 hard copies of Rights and Obligations of Consumers Statements and upload soft copies in public websites

Benefits to stakeholders

- 5.4.1 Easy access for consumers to Rights and Obligations of Consumers Statement
- 5.4.2 Easy access for all stakeholders to Rights and Obligations of Consumers Statement
- 5.3.3 Access to all types of consumers
- 5.2.4 Better interaction between consumers and service providers
- 5.2.5 Motivation of service providers for better service

Goal 6

The average time taken by an electricity service provider to serve consumer inquiries / requests / complaints is below 30 days

Perspective 2015**Goal 6:**

The average time taken by an electricity service provider to serve consumer inquiries / requests / complaints is below 30 days

- 6.1 Measure the average time taken to serve consumer inquiries/requests/complaints for five selected services
- 6.2 Measure the average time taken to resolve matters referred to PUCSL in 2015
- 6.3 Modifying the existing dispute resolution system software to make it compatible with the manual processing system that is being practised to resolve matters referred to PUCSL by consumers

6.1

Measure the average time taken to serve consumer inquiries/requests/complaints for five selected services.

Goal 6:

The average time taken by an electricity service provider to serve consumer inquiries / requests / complaints is below 30 days

6.1 Measure the average time taken to serve consumer inquiries/requests/complaints for five selected services

Benefits to stakeholders

- 6.1.1 Improved efficiency for service providers
- 6.1.2 Better services for consumers
- 6.1.3 Customer views available on monthly basis
- 6.1.4 Identification of Licensees' delays, if any
- 6.1.5 Improved efficiency for Licensees
- 6.1.6 Less time taken to answer customer queries

6.2

Measure the average time taken to resolve matters referred to PUCSL in 2015

| Goal 6: The average time taken by an electricity service provider to serve consumer inquiries / requests / complaints is below 30 days | 6.2 Measure the average time taken to resolve matters referred to PUCSL in 2015 | Benefits to stakeholders |
|---|---|---|
| | | 6.2.1 Quicker resolving of matters referred to PUCSL in 2015 than in 2014, towards achieving the set target of 30 days 6.2.2 Quicker service for consumers |

6.3

Modifying the existing dispute resolution system software to make it compatible with the manual processing system that is being practised to resolve matters referred to PUCSL by consumers

| Goal 6: The average time taken by an electricity service provider to serve consumer inquiries / requests / complaints is below 30 days | 6.3 Modifying the existing dispute resolution system software to make it compatible with the manual processing system that is being practised to resolve matters referred to PUCSL by consumers | Benefits to stakeholders |
|---|---|--|
| | | 6.3.1 Quicker resolving of matters referred to PUCSL in 2015 than in 2014, towards achieving the set target of 30 days 6.3.2 Quicker service for consumers 6.3.3 Identification of causes for delay 6.3.4 Contribution to development of quicker resolution process 6.3.5 Achievement of target of 30 days (average) in 2020 |

Goal 7

The average time taken by PUCSL to serve consumers is below 30 days

Perspective 2015
Goal 7:

The average time taken by PUCSL to serve consumers is below 30 days

7.1 Modifying the existing dispute resolution system software to make it compatible with the manual processing system that is being practised to resolve matters referred to PUCSL by consumers

7.1

Modifying the existing dispute resolution system software to make it compatible with the manual processing system that is being practised to resolve matters referred to PUCSL by consumers

| Benefits to stakeholders | | |
|---|---|--|
| Goal 7: The average time taken by PUCSL to serve consumers is below 30 days | 7.1 Modifying the existing dispute resolution system software to make it compatible with the manual processing system that is being practised to resolve matters referred to PUCSL by consumers | 7.1.1 Quicker resolving of matters referred to PUCSL in 2015 than in 2014, towards achieving the set target of 30 days by 2020 7.1.2 Quicker service for consumers 7.1.3 Compatibility between computer system and existing manual resolution system and processes 7.1.4 More streamlined procedure for PUCSL |

Electricity Tariff & Service Charges

Goal 8

The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)

As stated in the Sri Lanka Electricity Act, No. 20 of 2009, one of the main functions vested in the PUCSL is to regulate the electricity tariff and various service charges levied by licensees from consumers. These charges are levied by the licensees for the process of generation, transmission and distribution of electricity throughout the island. The Act stresses the need for the licensees to provide the best possible service while also ensuring them fair tariffs to sustain their businesses. The Commission will be carrying out the following activities during the year 2015 with the objective of ensuring fair tariffs and service charges.

Perspective 2015

Goal 8:

The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)

8.1 Annual audit on dispatch

8.2 Policy advice to renegotiate and extension of IPP PPAs

8.3 Study on extension of existing NCRE SPPA

8.4 Study on impacts of TOU rates introduced in 2013

8.5 Benchmarking study on network operation cost, asset management costs, network technology and expansion planning methods

8.6 Implementing Guidelines on Regulatory Accounting

8.7 Regulations on electricity trading arrangements between licensees

8.8 Policy advice on tariff setting

8.9 Regulations on disadvantaged groups of consumers

8.10 Cost (OPEX) benchmarking (Relative) of DLs for year 2013

8.11 Execution of energy audits at thermal power plants in Sri Lanka as per the prepared guidelines by PUCSL

8.12 Preparing a metering and measuring master plan

8.1

Annual audit on dispatch

Goal 8:

The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)

8.1 Annual audit on dispatch

Benefits to stakeholders

- 8.1.1 Ex-post analysis of dispatch tool
- 8.1.2 Identification of areas where dispatch can be more cost effective
- 8.1.3 Identification of gaps in technology/ tools used for dispatch decision making
- 8.1.4 Identification of information requirements to improve dispatch efficiency

8.2

Policy advice to renegotiate and extension of IPP PPAs.

The Commission advises the Government on the Independent Power Producers (IPPs) and Power Purchase Agreements (PPAs). The renegotiation and extension of these existing contracts would be carried out.

Goal 8:

The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)

8.2 Policy advice to renegotiate and extension of IPP PPAs

Benefits to stakeholders

- 8.2.1 Assessment of benefits of renegotiation
- 8.2.2 Assessment of benefits of extending expired PPAs
- 8.2.3 Identification of financial and non-financial benefits of extending expired PPAs
- 8.2.4 Basis provided to negotiate extension of PPAs
- 8.2.5 Reduced generation costs
- 8.2.6 Reasonable charges for consumes
- 8.2.7 A clear picture of power plant performance provided to Government and other stakeholders

8.3

Study on extension of existing NCRE SPPA

Non-Conventional Renewable Energy which includes power produced through sources of energy such as mini-hydro, solar, wind and dendro play an important role on PUCSL's policy. The Ceylon Electricity Board purchases power from NCRE sources through Standardised Power Purchase Agreements (SPPA). The procedure for such electricity purchases was regularised with the publication of the SPPA which included a scheme for calculating the purchase price based on the avoided cost principle. This was offered to all sources of power plants of capacity less than 10 MW Renewable energy projects have gained added importance with the government deciding to diversify the electricity sector from costly thermal power generation.

| Goal 8: | | Benefits to stakeholders |
|--|---|---|
| <p>The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)</p> | <p>8.3 Study on extension of existing NCRE SPPA</p> | <p>8.3.1 NCRE sector development through transparent mechanism to extend existing SPPAs</p> <p>8.3.2 Fair price for energy purchasing</p> <p>8.3.3 Issues to be solved will be identified through interviews with stakeholders</p> <p>8.3.4 Easy identification of solutions</p> <p>8.3.5 Int'l best practices will be considered</p> <p>8.3.6 More renewable energy sources to be used</p> <p>8.3.7 Reduced costs on use of energy</p> |

8.4 Study on impacts of TOU rates introduced in 2013

| Goal 8: | | Benefits to stakeholders |
|--|---|---|
| <p>The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)</p> | <p>8.4 Study on impacts of TOU rates introduced in 2013</p> | <p>8.4.1 Identification of possible areas for improvement</p> <p>8.4.2 Incentives for energy conservation</p> <p>8.4.3 Improvements in TOU structure</p> <p>8.4.4 Promotion of energy efficiency and conservation</p> |

8.5 Benchmarking study on network operation cost, asset management costs, network technology and expansion planning method

| Goal 8: | | Benefits to stakeholders |
|--|--|---|
| <p>The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)</p> | <p>8.5 Benchmarking study on network operation cost, asset management costs, network technology and expansion planning methods</p> | <p>8.5.1 Identification of drivers of benchmark costs among licensees</p> <p>8.5.2 Ability to compare international cost drivers</p> <p>8.5.3 Lower network losses</p> <p>8.5.4 Lower distribution losses can curb generation demand increase and costs</p> |

8.6

Implementing Guidelines on Regulatory Accounting

In its role as the licensing authority for the electricity sector, the PUCSL is required to ensure fair tariffs and service charges and disseminate information related to such to stakeholders. To ensure compliance to standards, monitoring performance and determining revenue streams, the Commission will develop and implement a set of guidelines which will enable uniformity of accounting standards among the generation, transmission and distribution licensees.

Goal 8:

The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)

8.6 Benchmarking study on network operation cost, asset management costs, network technology and expansion planning methods

Benefits to stakeholders

- 8.6.1 Support for licensees on preparing regulatory accounts.
- 8.6.2 Enabling of Commission to source information for regulatory activities
- 8.6.3 Reduction of costs in supply of electricity
- 8.6.4 Fairness in tariffs and charges
- 8.6.5 Lower consumer tariffs in the long run by accurate determination of allowable revenues to DLs
- 8.6.6 Increased efficiency of transmission and distribution licensees by effective monitoring of their activities
- 8.6.7 Reliability in regulatory decisions for all stakeholders
- 8.6.8 Access to accurate information on licensees' financial position in a given year

8.7

Regulations on electricity trading arrangements between licensees

This would allow and secure appropriate electricity trading arrangements between licensees dealing with Power Purchase Agreements (PPA) and Power Sales Agreements (PSA).

| | | Benefits to stakeholders |
|---|---|---|
| Goal 8: The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms) | 8.7 Regulations on electricity trading arrangements between licensees | 8.7.1 Transparency and uniformity in criteria help licensees to adhere to requirements 8.7.2 Type and content of PPAs and PSAs specified 8.7.3 Introduction of competition 8.7.3 Reduced costs in the purchase and sale of electricity 8.7.4 Uniformity of criteria helps PUCSL to monitor performance 8.7.5 Facilitation of formulation of regulations for improvement and policy changes |

8.8 Policy advice on tariff setting

| | | Benefits to stakeholders |
|---|-------------------------------------|---|
| Goal 8: The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms) | 8.8 Policy advice on tariff setting | 8.8.1 Benefits for all stakeholders through cost-reflective tariffs 8.8.2 Smart subsidies for specific industries and vulnerable consumer groups 8.8.3 Improved well-being and productivity among all stakeholders 8.8.4 Better advice for Government on impact of tariff levels and need to rationalise end-user tariffs 8.8.5 Most economical and efficient service possible for consumers 8.8.6 Reduced costs in supply of electricity 8.8.7 Fairness in tariffs and charges |

8.9 Regulations on disadvantaged groups of consumers

Goal 8:

The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)

8.9 Regulations on disadvantaged groups of consumers

Benefits to stakeholders

- 8.9.1 Identification of disadvantaged groups of consumers
- 8.9.2 Lifeline tariffs for deserving consumers
- 8.9.3 Fairness in electricity tariffs and charges

8.10

Cost (OPEX) benchmarking (Relative) of DLs for year 2013

Goal 8:

The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)

8.10 Cost (OPEX) benchmarking (Relative) of DLs for year 2013

Benefits to stakeholders

- 8.10.1 Identification of required reporting formats
- 8.10.2 Opportunity to identify relative performance of DLs
- 8.10.3 Ability to identify best and worst performers (DLs)
- 8.10.4 Ability to identify cost (OPEX) improvement

8.11

Execution of energy audits at thermal power plants in Sri Lanka as per the prepared guidelines by PUCSL

Goal 8:

The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms)

8.11 Execution of energy audits at thermal power plants in Sri Lanka as per the prepared guidelines by PUCSL

Benefits to stakeholders

- 8.11.1 Identification of areas where energy efficiency can be improved by licensees
- 8.11.2 Ability for Generation Licensees to execute energy audits at their facilities
- 8.11.3 Necessary efficiency improvements
- 8.11.4 Higher generation contribution to grid
- 8.11.5 Reduced cost of net energy fed into grid

8.12 Preparing a metering and measuring master plan

| Goal 8: | | Benefits to stakeholders |
|---|---|--|
| The total cost incurred in the supply of electricity in 2013 is reduced by 10%. (Total cost is subject to adjustment for the generation mix and fuel prices, in real terms) | 8.12 Preparing a metering and measuring master plan | <p>8.12.1 Ability to ascertain influence of geographical factors on meter accuracy</p> <p>8.12.2 More efficient and economic operation of power system</p> <p>8.12.3 Fairness in charges ensured by accurate measurements</p> <p>8.12.4 Transparency in data collection in electricity sector</p> <p>8.12.5 Conservation of energy</p> <p>8.12.6 Correct and consistent measurements</p> <p>8.12.7 Preparation of Metering Management Plan</p> |

Goal 9

Charges levied by service provider in 2013 is reduced by 10% in real terms

Ensuring fair and affordable charges for consumers is one of the main goals of the Commission and it takes many steps in this regard. One way is to provide an environment under which service providers can lower their charges.

| Perspective 2015 | Goal 9: Charges levied by service provider in 2013 is reduced by 10% in real terms | 9.1 Report on market prices of 20 most commonly used (both cost and quantity) included in allowed charges |
|------------------|---|---|
| | | 9.2 Benchmarking allowed charges related costs among licensees |
| | | 9.3 Report on international practices related to activities covered by allowed charges |
| | | 9.4 Guidelines on information required by distribution licensees to ascertain whether a person requiring a supply of electricity does not have sufficient means to defray in total the expenses incurred by the distribution licensee in providing the line, plant or supply of electricity |

9.1 Report on market prices of 20 most commonly used (both cost and quantity) included in allowed charges

Goal 9:
Charges levied by service provider in 2013 is reduced by 10% in real terms

9.1 Report on market prices of 20 most commonly used (both cost and quantity) included in allowed charges

Benefits to stakeholders

- 9.1.1 Ability to use report as reference document during annual allowed charges reviews
- 9.1.2 Reduction of unwanted costs
- 9.1.3 More accuracy in determining of Allowed Charges
- 9.1.4 Identification of most common allowed charges through discussions with Licensees
- 9.1.5 As source of information to be used in future revisions

9.2 Benchmarking allowed charges related costs among licensees

Goal 9:
Charges levied by service provider in 2013 is reduced by 10% in real terms

9.2 Benchmarking allowed charges related costs among licensees

Benefits to stakeholders

- 9.2.1 Identification of cost drivers to benchmark costs among licensees
- 9.2.2 Reduced costs from Licensees
- 9.2.3 Following of best practices, sharing ideas
- 9.2.4 Reduced consumer tariffs in the long run

9.3 Report on international practices related to activities covered by allowed charges

| | | Benefits to stakeholders |
|--|--|--|
| Goal 9: Charges levied by service provider in 2013 is reduced by 10% in real terms | 9.3 Report on international practices related to activities covered by allowed charges | 9.3.1 Identification of international best practices related to activities covered by allowed charges 9.3.2 Identification of cost drivers through discussions with Licensees 9.3.3 Reduced costs from Licensees through benchmarking 9.3.4 New ideas to improve local practices on Allowed Charges 9.3.5 Fine-tuned practices to reduce charges on consumers 9.3.6 Solutions for prevailing issues |

9.4 Guidelines on information required by DLs to ascertain whether a person requiring a supply of electricity does not have sufficient means to defray in total the expenses incurred by the DL in providing the electricity line, plant or supply of electricity

| | | Benefits to stakeholders |
|--|---|--|
| Goal 9: Charges levied by service provider in 2013 is reduced by 10% in real terms | 9.4 Guidelines on information required by DLs to ascertain whether a person requiring a supply of electricity does not have sufficient means to defray in total the expenses incurred by the DL in providing the line, plant or supply of electricity | 9.4.1 Ability for consumers to pay such expenses in easy monthly instalments 9.4.2 Access to electricity for more people 9.4.3 Assured income for DLs, ensuring sustainability of their operations |

Electricity Safety

Goal
10

Number of fatal electrical accidents is below 20 per annum

The number of electrocutions in Sri Lanka, which stood at a high of 180 in 2012 declined significantly to 76 in 2013. The myriad of electrical safety awareness campaigns conducted by the PUCSL is believed to have made a major contribution to the decreased number of electricity-related fatalities. An earlier analysis had revealed that illegal power tapping, defective equipment, power line clearance, unsafe internal wiring, not employing a competent workforce, mistakes and carelessness, working under an unfavourable environment and various side faults of service providers were the main reasons for the large number of electrocutions in Sri Lanka. Anuradhapura, Ratnapura, Kandy, Ampara and Vavuniya had been identified as high-risk areas for electrocutions through surveys carried out from 2008-2012. Drawing illegal power lines to kill wild animals and protect cultivations, getting illegal access to the electricity supply and using damaged, broken electrical appliances which are not properly insulated have been identified as the main reasons for these electrocutions. It was revealed that 28 per cent of the island-wide electrocutions had occurred in these areas, requiring urgent attention to be paid to mitigating such incidents. The Commission has set a goal of bringing down the number of electrocutions to 0 by 2020 and has intensified its plans and activities towards achieving this objective. As the independent regulator of Sri Lanka's electricity sector, the PUCSL considers ensuring the safety of the public as one of its major objectives. Some of the measures the Commission had identified to reduce the number of electrocutions are providing awareness to electricity users, standardising licensee practices through the preparation of regulations and codes and rewarding people who support the identification of illicit practices.

Perspective 2015

Goal 10:

Number of fatal electrical accidents is below 20 per annum

10.1 Developing a database for notification of safety related incidents

10.2 Preparation and implementation of safety and technical management

10.3 Comprehensive survey to check the household safety in five licensee areas (Colombo North, Galle, Jaffna, Nuwara Eliya, Anuradhapura)

10.4 Electrocution mitigation program

10.1

Developing a database for notification of safety related incidents

The Commission currently receives such information from the Police, hospitals etc. However, to improve the quality of information received and to get information in a more timely and useful manner, the Commission plans to develop a system/database to be notified of such incidents.

| Goal 10: Number of fatal electrical accidents is below 20 per annum | 10.1 Developing a database for notification of safety related incidents | Benefits to stakeholders |
|--|---|---|
| | | 10.1.1 Ability to notify all stakeholders of electricity-related accidents 10.1.2 Ability to systematically analyse accidents occurring under different circumstances 10.1.3 Ability to take necessary remedial action 10.1.4 Ensuring public safety and setting safety standards 10.1.5 Enforcement of regulations and rules 10.1.6 Ability to monitor compliance 10.1.7 Direct access to such information 10.1.8 Advice through local authorities will safeguard people and property |

10.2

Preparation and implementation of safety and technical management plan

| Goal 10: Number of fatal electrical accidents is below 20 per annums | 10.2 Preparation and implementation of safety and technical management plan | Benefits to stakeholders |
|---|---|---|
| | | 10.2.1 Ability to identify content of licensees' Safety and Technical Management Plan 10.2.2 Easy mechanism for licensees to periodically prepare and update plan 10.2.3 Streamlined safety activities of sector 10.2.4 Easy assessment of licensees' safety performance |

10.3

Comprehensive survey to check the household safety in five licensee areas (Colombo North, Galle, Jaffna, Nuwara Eliya, Anuradhapura) Preparation and implementation of safety and technical management plan

| | | Benefits to stakeholders |
|---|---|---|
| Goal 10: Number of fatal electrical accidents is below 20 per annum | 10.3 Comprehensive survey to check the household safety in five licensee areas (Colombo North, Galle, Jaffna, Nuwara Eliya, Anuradhapura) | 10.3.1 Identification of safety lapses in domestic electrical installation system 1. Material section 2. Design loopholes 3. Work competency 10.3.2 Identification of causes for electrical accidents in domestic environment 10.3.3 Mechanism to ensure domestic electrical safety 10.3.4 Preparation of guideline |

10.4

Electrocution mitigation program

This programme is being carried out with the objective of reducing the number of electrocutions across the country and minimising the damage caused by electricity to people and property. Illegal power tapping and non-compliance with safety standards have been identified as some of the main reasons for electrocutions in the island. Both domestic and industrial consumers have been affected as a result. The Commission will undertake many activities in association with the Police and many Local Government and provincial authorities throughout the year to increase awareness among the public about electricity safety.

| | | Benefits to stakeholders |
|--|---------------------------------------|---|
| Goal 10: Number of fatal electrical accidents is below 20 per annums | 10.4 Electrocution mitigation program | 10.4.1 Public awareness on safe use of electricity, identification of electrically unsafe conditions, ways and means to avoid and rectify them, safe handling of such installations, danger and illegality of illicit power tapping and related penalties under Penal Code 10.4.2 Formulation of methodology to avoid construction of buildings near electricity lines without line clearance 10.4.3 Formulation of mechanism to ensure safety of existing buildings with or without required line clearance 10.4.4 Improved awareness among students 10.4.5 Improved awareness among Local Government authorities 10.4.6 Improved awareness among members of professional bodies 10.4.7 Improved awareness among public 10.4.8 Reduced number of electrocutions |

Efficient use & conservation

Goal 12

At least 250 GWh of energy and 30 MW of capacity are saved by year 2020 through utility driven energy efficiency and conservation programs

Perspective 2015**Goal 12:**

At least 250 GWh of energy and 30 MW of capacity are saved by year 2020 through utility driven energy efficiency and conservation programs

12.1 Cost benefit study on solar net metering with storage

12.2 Preparing a metering and measurement master plan

12.3 Prepare an industrial energy efficiency guideline

12.4 Report on efficiency of energy intensive processes commonly used by small industrial consumers in Sri Lanka

12.1

Cost benefit study on solar net metering with storage

Net metering is a new concept which is used as an option for electricity cost saving by a household. By developing and analysing the possibility of expanding this concept in the island, electricity consumers will be able to connect their generators to the National Grid and save on the cost of electricity through sources such as solar energy. Identifying the advantages and disadvantages of solar net metering from consumers' perspective and implementing a proper mechanism to develop the technology would be main features of this project.

| | | Benefits to stakeholders |
|---|--|---|
| Goal 12: At least 250 GWh of energy and 30 MW of capacity are saved by year 2020 through utility driven energy efficiency and conservation programs | 12.1 Cost benefit study on solar net metering with storage | <p>12.1.1 Identification of costs and benefits of promoting solar net metering systems with storage</p> <p>12.1.2 Identification of tariff revisions required to incentivise such schemes</p> <p>12.1.3 Ability to save on energy purchased through National Grid</p> <p>12.1.4 Solar energy put to good use</p> <p>12.1.5 Promotion of solar based energy storage</p> <p>12.1.6 Connection to National Grid will curb peak demand and associated costs</p> |

12.2 Preparing a metering and measurement master plan

| Goal 12: At least 250 GWh of energy and 30 MW of capacity are saved by year 2020 through utility driven energy efficiency and conservation programs | 12.2 Preparing a metering and measurement master plan | Benefits to stakeholders |
|--|---|--|
| | | 12.2.1 Promotion of efficient and economic operation of power system in Sri Lanka by ensuring fairness in charges by accurate measurements |

12.3 Prepare an industrial energy efficiency guideline

| Goal 12: At least 250 GWh of energy and 30 MW of capacity are saved by year 2020 through utility driven energy efficiency and conservation programs | 12.3 Prepare an industrial energy efficiency guideline | Benefits to stakeholders |
|--|--|--|
| | | 12.3.1 Identification of ways and means where energy is wasted unnecessarily 12.3.2 Identification of measures already taken to improve energy efficiency 12.3.3 Identification of ways and means to further improve energy efficiency 12.3.4 Preparation of energy efficiency guidelines 12.3.5 Benefits for industries 12.3.6 Energy conservation |

12.3 Report on efficiency of energy intensive processes commonly used by small industrial consumers in Sri Lanka

| Goal 12: At least 250 GWh of energy and 30 MW of capacity are saved by year 2020 through utility driven energy efficiency and conservation programs | 12.4 Report on efficiency of energy intensive processes commonly used by small industrial consumers in Sri Lanka | Benefits to stakeholders |
|--|--|--|
| | | 12.4.1 Identification of areas where efficiency can be improved in industrial processes 12.4.2 Information sharing with small industries 12.4.3 Public better informed about energy efficiency drives 12.4.4 Ability for CEB and LECO to use report in energy efficiency and conservation programs 12.4.5 Boost for energy efficiency and conservation |

Dissemination of
InformationGoal
13

Dissemination of industry-related information is considered by the PUCSL as a vital component of its goals set for the year 2015. It is an essential requirement in order to make all stakeholders including the public aware of the role and functions of the Commission so that they can make better use of the services offered to them. It also ensures transparency in the procedures and systems on areas which are of relevance to the public. The Commission has already taken a variety of steps to ensure the clear and reliable flow of information to the public related to the generation, transmission and distribution of electricity within the regulatory safety standards and will strengthen these activities even further during the coming Year.

Perspective 2015

Goal 13:

Dissemination of
information to
stakeholders

13.1 Creation and implementation of the annual strategic communication plan

13.2 Expand and improve the website

13.3 Redesign and repackage basic information/ marketing material to create brand

13.4 Continue to develop public engagement/outreach strategies

13.5 Improve internal communication

13.1

Creation and implementation of the annual strategic communication plan

The annual strategic communication plan would create more awareness about the PUCSL and its role in energy regulation among the public and stakeholders with the dissemination of more information through many sources such as the Annual Report and Progress Report. These communication strategies would contribute to bridge the information gap which currently exists in the sector.

Goal 13:

Dissemination of
information to
stakeholders

13.1 Creation and
implementation of
the annual strategic
communication plan

Benefits to stakeholders

13.1.1 Better awareness for stakeholders on PUCSL's role and activities

13.1.2 Better awareness for the public on PUCSL's role and activities

13.1.3 Awareness for public on whom to contact to lodge a complaint related to electricity, how to contact them and what action will be taken on complaints

13.1.4 More transparency and better regulation of industry

13.2

Expand and improve the website

The reason as to why the public and stakeholders access the PUCSL website and whether they are satisfied with the information available has not been identified so far. A survey would be conducted among PUCSL employees and stakeholders to receive feedback which would lead to necessary improvements being incorporated to the current website. The redesigned website would have components for interaction, information requests, feedback forms consumer complaints, etc.

| Goal 13: Dissemination of information to stakeholders | 13.2 Expand and improve the website | Benefits to stakeholders |
|--|--|--|
| | | 13.2.1 Identification of shortcomings in current website 13.2.2 Identification of new requirements of stakeholders 13.2.3 Improved, more user-friendly website |

13.3

Redesign and repackage basic information/marketing material to create brand image

Lack of awareness about PUCSL has hampered the public from making the best use of its services. Making information available through features such as the newsletter, Perspective / Outlook reports, Simplification Report and Electricity Sector Data Booklets and leaflets and videos would help the public access such information. Making them available in the vernacular media too (Sinhala and Tami) in a user-friendly way will ensure that all communities benefit.

| Goal 13: Dissemination of information to stakeholders | 13.3 Redesign and repackage basic information/ market- ing material to create brand | Benefits to stakeholders |
|--|---|--|
| | | 13.3.1 Common platform to provide currently scattered information 13.3.2 Easy access to information for the public 13.3.3 Boost for public profile of PUCSL 13.3.4 Benefits for all communities (those in N-E too) with information provided in all 3 languages |

13.4

Continue to develop public engagement/outreach strategies

A public consultation calendar, a key communication network and improved relations with regional organisations such as SAFIR are some of the activities outlined in this area. A stakeholder satisfactory survey would be conducted to obtain feedback about the PUCSL and the services provided.

| Goal 13: Dissemination of information to stakeholders | 13.4 Continue to develop public engagement / outreach strategies | Benefits to stakeholders |
|--|---|--|
| | | 13.4.1 Identification of issues of interest to the public and stakeholders 13.4.2 Improved services from PUCSL 13.4.3 Strengthened public engagement 13.4.4 All sectors of public connected to net work 13.4.5 Information shared among all parties 13.4.6 Information gap filled |

13.5

Improve internal communication

The Commission plans to take measures to improve internal communication among staff members in order to share information among all divisions and also to empower employees. Some of the activities planned in this regard are training programmes, promoting mobile applications and an employee survey on their information needs. This will, in turn, lead to the provision of better services for consumers.

| Goal 13: Dissemination of information to stakeholders | 13.5 Improve internal communication | Benefits to stakeholders |
|--|---|---|
| | | 13.5.1 Improvement of communication skills among all employees 13.5.2 New, user-friendly applications for employees 13.5.3 Better internal communication 13.5.4 Awareness for all staff members on organisation updates 13.5.5 Better service for consumers |

Thank You



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