## Background

- Recognizing that electricity is an essential requirement for rapid economic growth and poverty alleviation, successive governments have worked towards the target of providing electricity to all households in Sri Lanka. Access to electricity for all is necessary to provide a better living standard. Sustainable economic growth of a country depends on a high level of electrification. A reliable and secure electricity supply is a pre-requisite to reach these goals. This could be achieved only if the electricity sector operates efficiently and moves forward with accelerated development.
- The National Energy Policy and Strategies of Sri Lanka, published in June 2008 in Gazette Extraordinary No.1553/10 of 10<sup>th</sup> June 2008, describe the board policies of the Government.
- 3. Recognizing effective regulation as the process that could bring about progressive changes, the Government of Sri Lanka (GOSL) enacted the Sri Lanka Electricity Act, No. 20 of 2009 which empowers the Public Utilities Commission of Sri Lanka (PUCSL) as the Regulator of the Electricity Industry. Further amendments were introduced to the electricity industry by the Sri Lanka Electricity (Amendment) Act, No. 31 of 2013.
- 4. Accordingly, the PUCSL is to exercise, perform and discharge all the powers, functions and duties as are conferred on or assigned to the Commission by or under the Sri Lanka Electricity Act, No 20 of 2009 as amended and shall perform the role of an economic, technical and safety regulator for the electricity industry in Sri Lanka ensuring transparency, fairness, and flexibility for the industry participants whilst safeguarding consumer rights to achieve GOSL policy objectives. Accordingly, PUCSL is to assure that a coordinated, efficient and economical system of electricity supply is provided for and maintained throughout Sri Lanka, at all times.
- 5 Under Section 5 of the Sri Lanka Electricity Act No. 20 of 2009, the Minister in charge of the subject of Power shall have the power to formulate general policy guidelines in respect of the electricity industry and these guidelines are to be forwarded to the Cabinet of Ministers for approval. The existing National Energy Policy and Strategies of Sri Lanka as published in the Extraordinary Gazette No. 1553/10 on 10<sup>th</sup> June 2008 gave guidance in formulating the General Policy Guidelines.
- 6. Under Section 30 of the Public Utilities Commission of Sri Lanka Act No. 35 of 2002, the Minister in charge of the subject of Policy Development and Implementation shall lay the Cabinet approved General Policy Guidelines before the Parliament for information and issue it to the PUCSL. Further, the Minister in charge of the subject of Policy Development and Implementation shall within three months of the end of each calendar year submit a report to Parliament setting out the action he or she has taken in respect of implementing the General Policy Guidelines. The General Policy Guidelines in accordance with the Sri Lanka

Electricity Act, No. 20 of 2009 has been previously approved and published on 3 March 2009 as General Policy Guidelines for the Electricity Industry.

7. Considering the recent changes to the local and global socio-economic outlook, considering the environment obligations and commitments of the country and considering the amendments brought by way of the Sri Lanka Electricity (Amendment) Act number 31 of 2013, it has been necessitated to re visit the existing General Policy Guidelines. Henceforth, the new set of General Policy Guidelines replacing the Guidelines which has been previously published on 03 March 2009 are given below:

# Fuel Diversity and Security

- 8. While a high priority is given to environmental protection, a suitable generation mix from firm energy sources must be maintained to strengthen the country's economy and energy security.<sup>1</sup>
- 9. To ensure security, availability and reliability of supply, there shall be installed firm power capacity (based on firm energy sources such as fossil fuels and storage hydro) at all time to provide at least a 2/3rd of the demand for power.<sup>2</sup>
- 10. In order maintain a practical and balanced fuel mix in the installed firm power capacity, by the year 2030, 30% of the installed firm capacity must be based on Liquified Natural Gas or indigenous Natural Gas, 30% on high efficient Coal, 25% based on large storage hydro and 15% utilizing furnace oil produced during local refinery process as a by-product and NCRE capacity based on firm energy sources.<sup>3</sup>

# **Electricity Tariff**

- 11. A uniform national tariff through a cost reflective methodology prepared by the licensee and approved by the Commission shall prevail throughout the country. There shall be an identical tariff to the same end user tariff category, irrespective of their geographical location or their distribution and supply licensee.
- 12. Electricity generation prices at bulk purchase points will be as stated in the Power Purchase Agreements and the cost of transmission, distribution and supply will be regulated ensuring fairness to both consumers and licensees. Ministry of Power & Energy shall be consulted before approving tariff revisions in order to ensure that government policies have been taken into consideration before finalizing the tariff.
- 13. Electricity Tariffs must permit licensees to recover all reasonable costs incurred in carrying out the activities authorized by its license on an efficient basis. Tariffs must be set in accordance with a cost reflective methodology approved by the PUCSL and be approved by PUCSL in accordance with policy guidelines as given hereunder.
- <sup>1</sup>03.1 Cabinet paper
- <sup>2</sup> 03.7 of Cabinet paper

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<sup>&</sup>lt;sup>3</sup> 03.8 of Cabinet Paper

- 14. A Fixed Charge shall be levied to reflect some of the cost incurred in transmission, generation and distribution billing of consumer accounts.
- 15. Average electricity price to each category of consumers will be gradually made cost reflective. A conductive environment will be created to fully utilize the Demand Side Management (DSM) opportunities arising from this change.
- 16. A transparent mechanism shall be introduced to calculate and adjust Tariff biannually, taking into account variation to cost of electricity, to bear the cost of any subsidy approved by the Government to subsidize consumers, any cross subsidy recoverable from such category of consumers. The Ministry of Power & Energy shall be consulted before setting Tariffs and publishing Charges levied by the licensees to ensure that the Government Policy has been adequately taken into consideration.
- 17. A prepaid billing/metering system shall be developed and introduced initially on optional basis. Considering any financial advantage such scheme offers to licensees, a suitable discount to the standard tariff may be offered to such customers as an encouragement. Licensees shall be given the right to mandatorily transfer customers or customer categories that have a poor bill settlement record to prepaid billing.
  - (A) Net Metering facility shall be encouraged for all the consumer categories to encourage grid connected renewable energy sources in a cost effective manner.
  - (B) Smart Metering schemes to be introduced for encouraging the electricity consumers to produce energy in house with facilities for establishing Pre-Paid, time of Use (ToU) Tariff schemes, and customer friendly billing systems.
- 18. The lifeline tariff to domestic consumers will be limited to Samurdi Beneficiaries and to a monthly household consumption of 30kWh. The related subsidy component estimated as 50% of the cost of supply will be fully financed through Government grants.
- 19. Notwithstanding above, licensees will be compensated adequately for all reasonable costs, if they are compelled to sell electricity to any category of consumers at subsidized prices, on directives by the GOSL.

### Generation

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- 20. Adequate generation should be added to fully meet the growing demand for base and peak loads in accordance with the Least Cost Long Term Generation Expansion Plan (LCLTGEP), Reliability of supply should be maintained at a level determined by the PUCSL from time to time in consultation with the with the relevant licensees.
- 21. Cost of Electricity to be kept as low as possible to lower the burden on the national economy and to achieve competitiveness of locally produced goods and services in International markets.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Cabinet Paper 03.2

- 22. In planning generation expansion, appropriate technologies may be considered to suit the differing characteristics of base and peak loads. Pead loads are characterized by high demand for short durations.
- 23. Considering the disparity in electricity consumption on District/Regional levels. corresponding demand forecasts may be made to arrive at the national level forecast. Historical growth rates on District/Regional levels fall within a wide range.

# **Transmission and Distribution Systems**

- 24. Effective and diligent planning of transmission and distribution systems is a pre-requisite for a secure and a reliable power system. Whilst GOSL is confident that local expertise is available in the sector to carry out the planning functions satisfactorily, encouragement will be given to strengthen these areas by way of technical/monetary assistance from donor agencies.
- 25. Power system will be operated in a manner ensuring optimum utilization of transmission and distributions system assets to achieve effective delivery of electricity to consumers. Special emphasis will be laid on reducing technical losses to optimum levels in transmission and distribution systems through viable investments.
- 26. GOSL is mindful that reduction of non-technical losses in the distribution systems is of utmost importance.
- 27. GOSL believes that licensees should set an example in the effort of conservation of electrical energy where consumers are also required to play a major role.

## Financing

- 26. Private sector participation will be welcome in generation projects, but major source of funds for all transmission and distribution development will be from international/bilateral donor agencies. Major hydro power generation will be under the auspices of the GOSL.
- 27. Licensees will be required to ensure sufficient internal cash generation to meet at least a part of the investment required.
- 28. Embedded generation projects will be encouraged through the private sector and GOSL will provide all assistance to obtain funds from donor agencies to local entrepreneurs.

#### Environment

29. Non-Conventional Renewable Energy (NCRE), that is inherently indigenous shall be developed to the optimum levels to diversify generation mix and to minimise dependence on imported resources. NCRE resources shall be promoted based on a priority order arrived at considering resource potential, economics, maturity of the technology and quality of supply. The first three NCRE resources in the priority order shall be mini hydro, wind and solar followed by other NCRE resources.

- 30 Non-Conventional Renewable Energy based generation shall be optimally developed to provide 1/3<sup>rd</sup> of the power demand by 2030. <sup>5</sup>
- 31. Subject to favorable weather conditions, country must progress with the vision to achieve 50% of electricity generated in 2030 from renewable sources including large-seale storage hydro and Non-Conventional Renewable energy.<sup>6</sup>
- 32. Counterbalancing interventions such as carbon sequestration plantations shall be introduced to reduce the incremental carbon foot print of electricity due to power generation.<sup>7</sup>

### **Energy Conservation**

- 33. Transmission and distribution energy losses (the sum of technical and non-technical losses) in the Electricity Sector will be gradually brought down. Every effort will be made to expedite the loss reduction program.
- 34. Present system control procedures for optimal operation of the integrated hydro-thermal power system shall be further developed. Multipurpose nature of hydropower reservoirs, wherever applicable, shall be considered in optimization procedures to take into account the national interest.
- 35. Rehabilitation / new investment decisions will be made, to improve electricity generation and transmission efficiency, guided by information gathered from continuous measurement of energy entering and leaving specific power system components.
- 36. GOSL recognizes the significant potential for energy savings and considers implementing energy conservation measures as very important. Energy saving through Demand Side Management shall be considered a priority.
- 37. Pragmatic estimates will be prepared on the potential energy savings in industrial, commercial, government and residential sectors separately in each licensee operational area and action plans will be implemented to meet the targets. Progress of these projects will be monitored with reference to action plans and all result will be published.
- 38. As an encouragement to the gradual diversification of transport energy from present oil dominance to electricity to relieve the dependence on liquid petroleum fuels as the sole transport fuel option at present, appropriate time of use tariffs shall be offered and electric vehicle charging points shall be established at strategic locations.

#### **Customer Services.**

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<sup>&</sup>lt;sup>5</sup> Capinet Paper 03.5

<sup>&</sup>lt;sup>6</sup> Cabinet Paper 03.4

<sup>&</sup>lt;sup>7</sup> Cabinet paper 03.9

- 26. PUCSL shall take necessary measures to safeguard the interests of both present and prospective consumers while ensuring a level playing field for all stakeholders in the electricity industry. Consumers are major stakeholder of the electricity industry and hence all efforts will be taken by the PUCSL to address their grievances expeditiously, educate them on their rights, responsibilities and obligations and the service quality standards that are to be maintained by the licensees.
- 27. Licensees shall handle consumer complaints efficiently and cost effectively. PUCSL will endeavor to build a relationship of trust among the consumers, regulator and the licensees on the provision of services related to the electricity supply.
- 28. Considering the high penetration of internet and mobile services across all segments of the population, maximum effort shall be taken to strategically exploit the same to the benefit of both customers and licensees. Mobile and internet-based services shall be introduced to enhance customer convenience and efficiency.
- 29. By the end of 2019, 50% of all standard services that do not mandatorily require physical presence of a customer at licensee office must be made available via internet or mobile phone as an alternate option. This includes applications for services, bill and other payments and tracking of progress. By 2020, all such services shall be offered via mobile and internet too as options.

## Secure Future Energy Infrastructure

- 30. Considering limitation to land areas having specific attributes to develop certain generating technologies and considering extensive financial losses incurred by the country in the past owing to shifting of sites to locate baseload power plants, strategic locations to establish future power generating infrastructure such as Coal, Natural Gas and Nuclear shall be earmarked following preliminary feasibility studies and secured in advance to ensure timely implementation, minimal relocation and social impacts at the time of actual development.
- 31. Similar to hydro power, potential sites to locate other largescale renewable energy infrastructure such as wind and solar farms too would be identified in advance and marked in a master plan so that they can be developed as large concentrated facilities in phases.
- 32. Corridors for backbone electricity transmission would be identified, giving priority to shared corridors with Petroleum and gas pipe transport for the benefit of national infrastructure planning. Identified routes should be published for the purpose of giving advance information to the public.
- 33. All existing and future underground electricity infrastructure shall be made available in a common mandatory GIS database to facilitate tracing and optimally locating of future underground cable routes.

**Multi Sector Development** 

- 34. In the development of new projects and in the operation of national grid the interactions with entities in the water sector, irrigation sector, transport sector, petroleum sector and road sector will be ensured to maximize socio economic benefits.
- Safety
  - 35. There are inherent dangers associated with the electricity industry and it is the duty of all responsible parties to protect public and the workforce from such dangers, by improving maintenance, equipment design, and training and by adhering to stipulated safety procedures.
  - 36. Utilities will be compelled to comply with safety standards approved by the PUCSL as well as environmental standards stipulated by the state.

#### **Exemptions from Licensing**

- 37. The PUCSL can exempt Generation, Distribution and Supply of electricity, where regulatory interventions would not result in significant improvements in efficiency, including but not limited to off-grid generation, standby generation. Such exemption may also be granted in situations of national exigency where generation capacity has to be added to maintain security of supply
- 38. Considering the inherent nature of the acquisition which cannot be done competitively, exemptions may be granted to BOT power plants that CEB acquire from power producers at the end of the term or as allowed in the power purchase agreement. Similar exceptions may also be granted to power plants whose contract period has been extended to maintain security of supply.
- 35. Exemption may also be granted for generation and distribution of electricity in identified areas in the North and East where electricity is not available. Such exemptions should be for a limited period until the national transmission grid reaches such areas.