

# Samoa Electricity Sector

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# PRESENTATION OUTLINE



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3. Framework
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<https://www.facebook.com/633643980161542/videos/658123181046955/>

# BACKGROUND



- ▶ The Electricity Power Corporation (EPC) was established under Electricity Act 1972, a corporation wholly owned by government, and solely responsible for managing Samoa's power sector
- ▶ Provides power to 98% of population of Samoa, approximately 34,214 customers – domestic and non-domestic
- ▶ Average total production 114,351,019 kWh per annum. Hydro 34%, Diesel 65%, 1% RE sources
- ▶ Generation fuel consumption averages 22 million litres diesel / year, approximately SAT\$59 million, represents 60% of total costs

# REFORMS

## Electricity Act 2010



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REGULATOR**

- ▶ Regulatory authority to OOTR
  - ❖ Licensing
  - ❖ Tariff Setting
- ▶ Independent Power Producers –IPP

# TARIFF SETTING



## Tariff Setting

PART IV, Sections 19–23

### Legal requirement on factors to consider when setting tariffs:

- (1) Likelihood of tariff to recover costs and earn reasonable returns for EPC
- (2) Ability of low income households to pay for electricity
- (3) Easy to understand and apply
- (4) Conduct public consultations prior to making decision

# MYT Regulatory Framework Design



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## Conventional

### Cost Plus Regulation

- Prudent costs established by Regulator
- Assured return allowed on cost estimates
- Cost variations eligible for true-up

## Multi Year Tariff (MYT)

### Performance Based Regulation

- Regulates by outcome and not by cost behavior
- Utility at liberty to manage costs and enhance profits
- Price cap approach

**Choice of framework will depend on implementation capabilities of the sector entities**

# EPC Performance Indicators



Key Indicator	Definition	Pacific Power Association	International best practice	EPC Current status 13/14	KPIs (Desired Outcome)
<b>GENERATION PERFORMANCE INDICATORS</b>					
<b>1. Specific diesel fuel oil consumption</b>	<u>Total Units Produced(kwh Fuel Used(Litres)</u>	3.79KWhr/litre	4.2kWh/litre	4.2kWh/litre	3.8–5.0kWh/lit
<b>2.Lube Oil Consumption</b>	<u>Total Lubricating oil used(litres)</u> Total Gross production	1,000–1,300kWh/litre	No standard	1,258kWh/litre	1,000–1,300kWh/lit
<b>3. Capacity Factor</b>	<u>Total Gross Production</u> Installed Plant Capacity* Period hours(8,760)	34%	40%	36%	<40%
<b>4.Renewable Energy Contribution</b>	<u>Total Renewable Production kWh*100</u> Total Gross Electricity production, KWH	22%	100%	30%	80–100%
<b>DISTRIBUTION AND UTILISATION PERFORMANCE INDICATORS</b>					
<b>5. System Losses</b>	<u>Total Gross Production – Total Electricity Sales *</u> 100 Total Gross Production	18%	10%	13%	15%
<b>6. SAIFI (System Average Interruption Frequency Index)</b>	<u>Total number of Consumer Interruption</u> Average total number of consumers	19	0.9	25	20
<b>7.SAIDI (System Average Interruption Duration Index)</b>	<u>Total consumer hours interruption*60</u> Average total number of consumers	15,404 minutes	47 minutes	1,515 minutes	2,000 minutes
<b>CORPORATE SERVICES AND FINANCE</b>					
<b>8. Operating Ratio</b>	<u>Total Operating expenses +Depreciation*100</u> Total Operating Revenue	186%	0%+	87.56	0%+
<b>9.Debt to Equity Ratio</b>	<u>Long Term Debts</u> Equity +Long Term Debts	26.07%	<50%	50.4%	<50%
<b>10. Debtor–days</b>	<u>Debtors at year end*365</u> Total Revenue	79days	30days	41 days	<60days

# Conclusion



- 1) Adoption of the Performance Based Regulation (PBR) using the Price Cap formula to calculate the Multi Year Tariff
- 2) Approved the 10 Key Performance Indicators proposed by EPC
- 3) EPC to file Quarterly Reports for Regulatory Monitoring&Evaluation
- 4) Quarterly Review of energy charge
- 5) Performance Audit



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