

ELECTRICITY BOARDS AND ELECTRICITY BILL PAYMENT SYSTEMS IN SOUTH INDIA: REVIEW

R.RAJESH KANNAN

Research Scholar, School of Management Studies, Vels Institute of Science, Technology and Advanced Studies, (VISTAS), Chennai.

Dr. G.MADHUMITA, MBA, SET, Ph.D.

Associate Professor & Research Guide, School of Management Studies, Vels Institute of Science, Technology and Advanced Studies, (VISTAS), Chennai.

ABSTRACT

Electricity (Supply) Act (1948) states the power industry in South India is structured as five topographical sections for managerial purposes, administration of transmission structures (regional grids), freight dispatch tasks and for the perseverance of matching and settle down of inter-state energy trades. The five provincial grids are associated by high power AC transmission outlines thus establishing a united nationwide grid catering to the regional and inter-regional transmission of power.

Ministry of Power, Government of India (1992) defines generation of electricity power in India is done by private and government units, managed by central public sector companies, like National Thermal Power Corporation, National Hydroelectric Power Corporation and different state level organizations (State Electricity Boards - SEBs). The transmission and supply is by the State Electricity Boards (SEBs) or private corporations. The power business is experiencing revolution through standard changes in economic environment, government rules and consumer responsiveness. Distinct the previous, power generation, supply and transmission are now considered as profitable undertakings. From this altering business the environment has developed a new factor for accomplishment. The cost-effective essence is to attain greater productivity and gratification. The findings of the study helps us to understand the process of South India Electricity Boards and the different modes of payments provided to its consumers to pay the electricity bills.

KEY WORDS: *State Electricity Boards, Bill Payments, Power Transmission and Distribution.*

INTRODUCTION TO ELECTRICITY BOARDS OF SOUTH INDIAN STATES

Palash Ghosh (2016) states South India is a province consist of five Indian states namely Tamil Nadu, Karnataka, Andhra Pradesh, Telangana and Kerala. Furthermore it includes three union

terrains of Pondicherry, Andaman & Nicobar Islands and Lakshadweep, occupying India's land area of 19%.

South India is confined by Indian Ocean in the south, the Arabian Sea in the west and the Bay of Bengal in the east. The topography of the area is diverse by two peak mounts namely Eastern Ghats and the Western Ghats. Major metropolitan cities with most urban population are Bangalore, Chennai, Hyderabad, Trivandrum and Vizag.

Data compiled by Motilal Oswal Securities Ltd. (2016) shows southern India is leading electricity consumption growth in the country. Electricity usage in the region's five states and the Union territories of Puducherry and Lakshadweep grew 8.8% in April-November 2016.

Comparatively the country as a whole has seen a growth of 5.1% during the period. Consumption is high in states where rainfall is low. Tamil Nadu, which has been declared drought-hit by the state government, saw a 12% rise in electricity usage. Karnataka, which also saw scanty rains, has seen a 10% rise in power usage, points out Motilal Oswal, citing data from Central Electricity Authority.

OBJECTIVES

1. To study the functions and formations of Electricity Boards in South Indian States.
2. To study the various modes of electricity bill payments offered by State Electricity Boards to its consumers.

OVERVIEW OF ELECTRICITY BOARDS IN SOUTH INDIA

TAMIL NADU (Overview of Tamil Nadu Electricity Board)

Tamil Nadu Electricity Board - shortened as TNEB (1956) defines TNEB is owned by the Government of Tamil Nadu, India. It is responsible for power generation and distribution in the state. It was framed under (sec 13) of the state Electricity Act (2003).As on 31 December 2018 it has 223.44 lakhs of consumers and claimed as the biggest State Electricity Board in India.

According to the Electricity Supply Act of 1948, Madras State Electricity Board was renamed as TNEB on 1 July 1957 under Ministry of Power, Department of electricity, Government of Tamil Nadu. It was accountable for electricity generation, transmission and distribution, governed by State Electricity Supply Act.

In October 2008, based on duties of power transmission and power generation, TNEB was divided into 2 subsidiaries namely Tamil Nadu Transmission Corporation Limited (TANTRANSCO) & Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) with these two subsidiaries TNEB limited became the holding company.

KERALA (Overview of Kerala State Electricity Limited)

Kerala State Electricity Board Ltd - abbreviated as KSEBL (1957) states KSEB was established in 1957 as government enterprise monitored by Government of Kerala under Department of Power. It is responsible for power generation, transmission and distribution in the state.

On 31 March 1957, as directed by the newly formed Kerala Government the Kerala state Electricity board started functioning. The board was chaired by K P Sreedhara Kaymal with five members in the governing body. Aside Thiru-Kochi electricity department was merged with KSEB.

In 1958, KSEB had a fixed capacity of 109.5 megawatt with annual generation of 441.35 million unit. As demand arises in the state for electricity the board started importing power from private companies and neighboring states. The board built its own hydro power stations in the state. As of 2016 the total capacity of the state is 2657.24 megawatt with a consumer base of 91, 59,399. Under the guidelines of Central Electricity Act 2003, Kerala State Electricity Board was converted to a Limited company in 2014. The Kerala State Electricity Board, established by Government of Kerala under Electricity (Supply) Act, 1948, G O dated 07/03/1957 is endeavoring to provide un-interpreted power supply to all the people in the state at affordable price.

KARNATAKA (Overview of Karnataka Power Transmission Corporation Limited)

Karnataka Power Transmission Corporation Limited - abbreviated as KPTCL (1999) states on 28 7-1999 Government of Karnataka with a share capital of Rs 1000 crores registered KPTCL under Companies Act 1956. In October 1999 the Karnataka Electricity Board was renamed as KPTCL and was responsible for carrying out Transmission and Distribution functions in the entire state of Karnataka.

KPTCL is governed by the Chairman & Managing Director followed by four additional Directors. The Transmission and Distribution functions in the state is operated under the license of Karnataka Electricity Regulatory Commission. Karnataka Power Corporation generates power from Hydro Thermal projects in the state and trades the power to KPTCL at a fixed price. In order to provide continuous power supply in the state KPTCL purchases power from Atomic Power Station, National Thermal Power Corporation and Neyvelli Lignite Corporation.

To carry out the functions of Transmission and Distribution in the state KPTCL has 684 substations with 33KV of transmission lines for 28,000 Kms, 11Kv lines for 1, 30,000 Kms, 3, 57,000 Kms of LT lines and distribution transformers of 1, 50,000 units. To assist smooth flow of operations in the system, KPTCL has been divided into 5 zones, 15 Circles and 57 divisions each headed by Chief Engineer, Superintending Engineer and Assistant Executive Engineer to maintain day to day power functions in the state.

KPTCL monitors the operations and functions of Chamundeshwari Electricity Supply Corporation, Hubali Electricity Supply Company, Bangalore Electricity Supply Company and Gulbarga Electricity Supply Company.

ANDHRA PRADESH (Overview of Transmission Corporation of Andhra Pradesh Limited)

Andhra Pradesh State Electricity Board (1959) states Transmission Corporation is accountable for Power Generation, Transmission and Distribution of Power in the state. Under Electricity Sector Reforms agenda, Government of Andhra Pradesh promulgated Andhra Pradesh Electricity Reforms Act, 1998. The former APSEB was put into one Generating Company (APGENCO), One Transmission Company (APTRANSCO) and Four Distribution Companies (APDISCOMs) as part of the restructuring process.

APTRANSCO came into existence on 1.02.1999. From Feb 1999 to June 2005 APTRANSCO remained as Single buyer in the state-Purchasing power from various Generators and selling it to DISCOMs in accordance with the terms and conditions at Bulk Supply Tariff rates.

APTRANSCO monitors the functions of Southern Power Distribution Company of Andhra Pradesh Ltd, Eastern Power Distribution Company of Andhra Pradesh Ltd.

TELENGANA (Overview of Transmission Corporation of Telangana Limited)

Transmission Corporation of Telangana Limited (abbreviated as TSTRANSCO) 2014 states TSTRANSCO came into existence on June 2, 2014 along with the formation of the new state Telangana.

The former State Electricity Board (SEB) which came into existence in 1959 was responsible for Generation, Transmission and Distribution of Electricity. Under Electricity sector Reforms agenda, the then Government promulgated Electricity Reforms Act, 1998. The erstwhile SEB was unbundled into one Generating Company (GENCO), one Transmission Company (TRANSCO) and Four Distribution Companies (DISCOMs) as part of the reform process.

The erstwhile TRANSCO came into existence on 1.02.1999. From Feb 1999 to June 2005, TRANSCO remained as Single buyer in the State purchasing power from various Generators and selling it to DISCOMs in accordance with the terms and conditions of the individual PPAs at Bulk Supply Tariff (BST) rates.

Subsequently, in accordance with the Third Transfer Scheme notified by the then Government, TRANSCO ceased to do power trading and has retained powers of controlling system operations of Power Transmission.

With a vision to fulfill the expectations of the Government, the Telangana Southern Power Distribution Company Limited, which came into being on 2nd June 2014, with an objective of electricity to the people at an affordable price.

With its headquarters at Hyderabad, the TSSPDCL encompasses an area of 14 districts viz., Mahabubnagar, YadadriBhuvanagiri, Siddipet, Medchal, Wanaparthy, Nagarkarnool, Vikarabad,

Jogulamba Gadwal, Nalgonda, SangaReddy, Medak, Suryapet, Hyderabad, and Rangareddy Catering to the power requirements of 8.4 million consumers.

TSSPDCL encompasses an area of 14 districts viz., Mahabubnagar, Yadadri Bhuvanagiri, Suryapet, Rangareddy Medchal, Nalgonda, Wanaparthy, Hyderabad, Nagarkarnool, Jogulamba Gadwal, SangaReddy, Medak, Vikarabad and Siddipet, catering to the power requirements of 8.4 million consumers.

CONCLUSION

Different modes of electricity bill payments in South India

The Electricity Boards in South Indian states are controlled by the respective state electricity boards under Electricity (Supply) Act 1948 .The respective boards with its associates and suppliers offers different modes of electricity bill payments to its consumers to pay the monthly bills both online and offline to avoid standing in queues at the collection centers to pay their electricity bills. With effect of demonetization, increase internet penetration, use of smart phones, raise of digital payment platforms all the power suppliers had updated the systems and made ease to pay the electricity bills for its consumers. Tamil Nadu Electricity Board is monopoly in the state without any private entities offers fourteen different modes of payments to the consumers and records at first place in offering in various payment methods in South Indian State Electricity Boards. Below table gives the clear information about each state different modes of payment, services through payments are received, charges leveraged and accounts head for receiving the digital payments adopted by state electricity boards in South India.

TAMIL NADU

SL NO	Mode of Payment	Services Through	Charges	Account Head
1.	Internet - Payment Net Banking	Axis Bank Bank of Baroda Canara Bank Central Bank of India City Union Bank Federal Bank HDFC Bank ICICI Bank IDBI Bank Indian Bank Indian Overseas Bank Lakshmi Vilas Bank	NIL	Current consumption Charges, Advance Payments, Arrear Payments.

		State Bank of India TNSC Bank Union Bank of India Tamil Nadu Mercantile Bank		
2.	Internet – Payment Gateway (Any Master/VISA Card)	Axis Bank Bank of Baroda ICICI Bank IDBI Bank	1.1634% 1.2812% 2.1737% 1.1634%	Current consumption Charges, Advance Payments, Arrear Pay
3.	Internet- Payment (Debit & Credit Card)	All Major Banks	Rs. 5 to 10	Current consumption Charges, Advance Payments, Arrear Pay
4.	Payment through Mobile (Wireless Application Protocol)	City Union Bank Karur Vysya Bank	NIL	Current consumption Charges, Advance Payments, Arrear Pay
5.	Payment through Mobile (Short Message Service)	Indian Bank	NIL	Current consumption Charges, Arrear Pay
6.	India Post Counters	Selected Indian Post Counters	Rs 5 to 20	Current consumption Charges, Arrear Payment.
7.	Bank Counters	City Union Bank Indian Overseas Bank Tamil Nadu Mercantile Bank	Rs. 5 to 10	Current consumption Charges, Arrear Payment.

8.	Bank ATM	Tamil Nadu Mercantile Bank	NIL	Current consumption Charges, Arrear Payment
9.	Urban Common Services		As applicable	Current consumption Charges, Arrear Payment
10.	Tamil Nadu Arasu Cable TV corporation		As applicable	Current consumption Charges, Arrear Payment
11.	Tamil Nadu E – governance agency		As applicable	Current consumption Charges, Arrear Payment
12.	Official Online platforms	www.tnebnet.org/awp/login TANGEDCO Mobile App	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
13.	Online Payment Partners	Paytm, Phonepe, GooglePay, Bharath Bill Pay etc.	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
14.	Bill Collection Centers	Govt. Authorized and Gov. owned collection centers	NIL	Current consumption Charges, Advance Payments, Arrear Pay

KERALA

SL NO	Mode of Payment	Services Through	Charges	Account Head
1.	Tech Process [PG]	Net Banking Debit Card Credit Card	Rs 3.60 0.78% 1.01%	Current consumption Charges, Advance Payments, Arrear Payments.
2.	[Direct Bank Integration]	South Indian Bank Federal Bank Canara Bank [Direct Net Banking account holders]	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
3.	Net Banking	All Major Banks	Rs 4.49/ transaction	Current consumption Charges, Advance Payments, Arrear Payments
4.	Debit & Credit cards	All Cards	0.84 % to 1.12%	Current consumption Charges, Advance Payments, Arrear Payments
5.	Official Online platforms	https://wss.kseb.in/selfservices/quickpay	NIL	Current consumption Charges,

				Advance Payments, Arrear Payments
6.	Online Payment Partners	Paytm, Phonepe, GooglePay, Bharath Bill Pay etc...	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
7.	Bill Collection Centers	Govt. Authorized and Gov. owned collection centers	NIL	Current consumption Charges, Advance Payments, Arrear Pay

KARNATAKA

SL NO	Mode of Payment	Services Through	Charges	Account Head
1.	Net Banking	All Major Banks	As applicable	Current consumption Charges, Advance Payments, Arrear Payments.
2.	Online Payment Partners	National Payments Corporation Of India	NIL	Current consumption Charges, Advance Payments,

				Arrear Payments.
3.	Official Online platform	https://karnatakaone.gov . Bescom mobile app Karnataka Mobile one App	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
4.	Authorized Collection centers	Bangalore one BESCOM Authorized Collection Agents	Rs 5	Current Consumption Charges, Advance Payments, Arrear Payments.
5.	Online Payment Partners	Paytm, Phonepe, GooglePay, Bharath Bill Pay etc...	NIL	Current consumption Charges, Advance Payments, Arrear Payments.

ANDHRA PRADESH

SL NO	Mode of Payment	Services Through	Charges	Account Head
1.	Net Banking	All Major Banks	As applicable	Current consumption Charges, Advance Payments, Arrear Payments.
2.	Online Paymnet Partners	Paytm, Phonepe, GooglePay, Bharath Bill Pay Etc	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
3.	Official Online platform	https://payments.billdesk.com/ MercOnline/SPDCLController https://www.apeasternpower.com APSDCL Mobile App APESPDCL Mobile App	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
4.	Authorized Collection centers	APSPDCL Authorized Collection Agents APEPDCL Authorized Collection Agents Mee Seva Kendra	Rs 2- 5	Current Consumption Charges, Advance Payments, Arrear Payments.

TELANGANA

SL NO	Mode of Payment	Services Through	Charges	Account Head
1.	Net Banking	All Major Banks	As applicable	Current consumption Charges, Advance Payments, Arrear Payments.
2.	Online Payment Partners	Paytm, Phonepe, GooglePay, Bharath Bill Pay etc...	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
3.	Official Online platform	https://www.billdesk.com/pgidsk/pgmerc/tsspdclpgi/TSSPDCLPGIDetails.jsp https://www.tssouthernpower.com/ TSSPDCL Mobile App	NIL	Current consumption Charges, Advance Payments, Arrear Payments.
4.	Authorized Collection centers	TSSPDCL Authorized Collection Agents Mee Seva Kendra	Rs 2- 5	Current Consumption Charges, Advance Payments, Arrear Payments.

REFERENCES:

1. *The Electricity (Supply) Act (1948), as amended by "The Electricity Laws (Amendment) Act, 1998" Universal law publishing co.pvt.ltd.*
2. *Ministry of Power, Government of India (1992), <https://powermin.nic.in/en/content/about-ministry>*
3. *Palash Gosh (2016), "Wonders of South India" sites.google.com/site/wondersofsouthindia*
4. *Subrata Jana (2016) "South India drives power consumption growth," Motilal Oswal Securities Ltd." www.livemint.com*
5. *Tamil Nadu Electricity Board (1957), "Particulars of organization, functions & duties, Tamil Nadu Generation and Distribution Corporation (TANGEDCO) Ltd; and Tamil Nadu Transmission Corporation (TANTRANSCO) Ltd. 2010" tneb.in*
6. *Kerala State Electricity Board Ltd (1957), "Thermal /Wind / Solar Power Stations in Kerala 2015" kseb.in*
7. *Karnataka Electricity Regulatory Commission (1999), www.karnataka.gov.in/kercc/Pages/*
8. *Transmission Corporation of Andhra Pradesh Limited (1999), "Andhra Pradesh State Electricity Board (1959)," <http://www.aptransco.gov.in/>*
9. *Transmission Corporation of Telangana Limited (2014), <http://www.tstransco.in/>*
10. *www.tnebnet.org/awp/login*
11. *<http://pg.kseb.in/ui/link.qpay>*