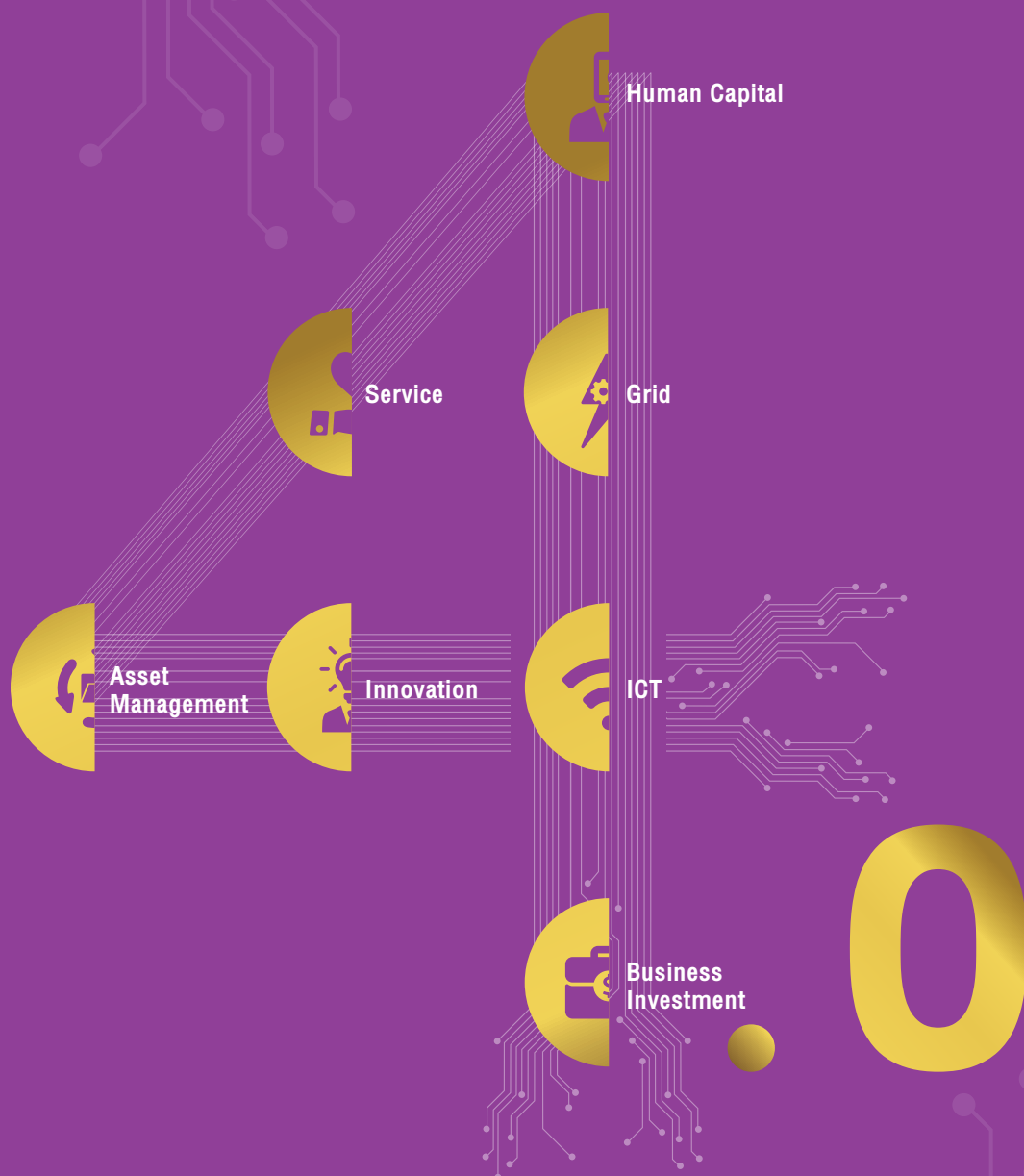


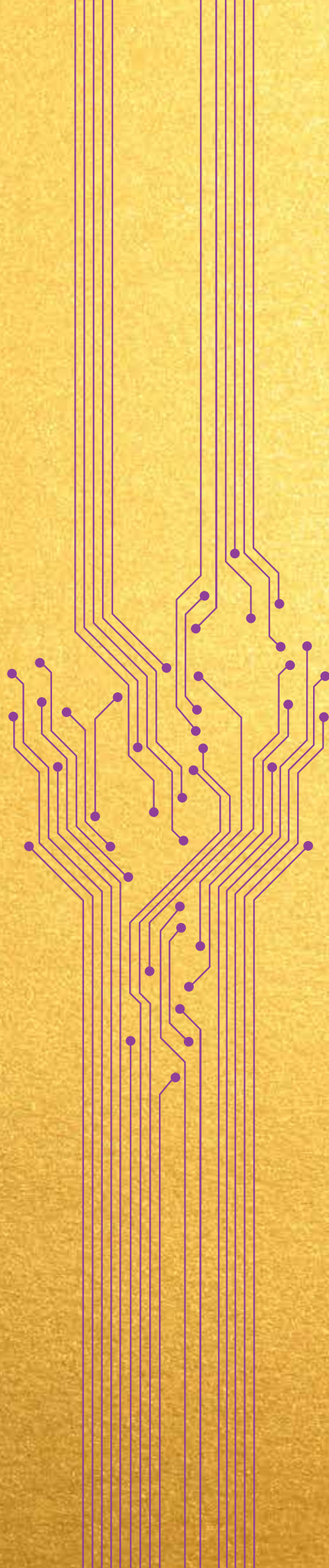


PEA



**Develop People with Innovations
Develop Work with Technology**

**Annual Report 2017
Provincial Electricity Authority**



Under Policy

PEA 4.0

“Develop People with Innovations and Develop Work with Technology”

Provincial Electricity Authority focuses on development in seven key areas.



Human Capital

Develop personnel with readiness to become human capital in the digital age.



Service

Excellence in service, exceeding customer expectations.



Grid

Develop the power grid into a smart system.



Asset Management

Manage assets to generate maximum benefit.



Innovation

Use innovation to expand commercial results.



ICT

Manage the organization and data with information technology.



Business Investment

Build a business that adapts to disruptive changes.

Provincial Electricity Authority aims to achieve excellence in every area
to light the bright future for Thai society.



History

Provincial Electricity Authority was founded as an individual organization under the Royal Decree issued on 6 March 1954 and announced in the Royal Thai Government Gazette on 16 March 1954. The Board of Directors was appointed to control and manage under the Department of Public and Municipal Works, Ministry of Interior, and the government with the Minister of Interior holding general governing authority. Provincial Electricity Organization has legal capital of 5 million Baht with 117 electricity authorities under its purview. Subsequently, Provincial Electricity Authority was established under Provincial Electricity Authority Act of B.E. 2503 (1960) on 28 September 1960 and inherited ongoing missions from the Provincial Electricity Organization.

Mission

PEA is responsible for the provision of standardized electricity services and related business to attain the customer's satisfaction on products and services through PEA's continual corporate development plans with the recognition of social and environmental responsibility.

Vision

Provincial Electricity Authority (PEA) is a leading organization in region, which focused on providing efficient, reliable electricity services, related business for developing quality of life, sustainability of economics and society.

Core Value

• Modernization • Excellent Service • Good Governance

Objectives

1 To produce, procure, deliver and distribute electricity.

2 To operate in businesses involving electricity and other businesses related to or capable of benefiting the Provincial Electricity Authority.

Awards of Excellence



State - Owned Enterprise Award 2017 (SOE Award) for “Outstanding Disclosure of Information and Transparency” from the State Enterprise Policy Office (SEPO)



State - Owned Enterprise Award 2017 for “Outstanding Corporate Social Responsibility” from the State Enterprise Policy Office (SEPO)



Global Reporting Initiative (GRI) Award of 2017 from the Office of the Securities and Exchange Commission (SEC), the Thai Listed Companies Association, and Thaipat Institute



Honorary Outstanding Government Information Center Award for 46 Provincial Electricity Authority Information Act Centers Passing Advanced Assessment Criteria from the Official Information Commission, Office of the Permanent Secretary, the Prime Minister's Office



Award for Outstanding State Enterprises with Development to Excellence in the Areas of Pushing for Plans to Improve Ethics and Operational Transparency of 2017

- Transparency from Work Plans to Improve Anti-corruption Efficiency and Promote Sustainable Ethics and Transparency of Provincial Electricity Authority.



- Corruption-Free from Action Plans in the Area of Good Governance and Corruption Suppression by Provincial Electricity Authority.



Green Office Award, Gold Level, of 2017 for 29 offices from the Department of Environmental Quality Promotion.



The Zero Accident Campaign Award, Gold Level, of 2017 from the Ministry of Labor.



The Honorable Mentions NACC Integrity Awards from the Office of the National Anti-Corruption Commission.



Green Building Accreditation under Leadership in Energy & Environmental Design Existing Buildings: Operations and Maintenance (LEED EBOM) from the U.S. Green Building Council (USGBC) consisting of:

- PEA Pathumthani received the LEED 2009 Existing Buildings: Operation and Maintenance Award, Gold Level.
- PEA Nong Ya Sai, Suphanburi received the LEED 2009 Existing Buildings: Operation and Maintenance Award, Certified Level.



Government Easy Contact Center (GECC) Award of 2017 for 125 centers from the Office of the Public Sector Development Commission (OPDC)



2nd Place Award and the People's Choice Award from the Smart Energy Hackathon Southeast Asia



Excellent Assessment Scores from the Integrity and Transparency Assessment (ITA) of Government Agencies in 2017 (94.39 Points)



One Invention Award Each at the Silver and Bronze Levels and the Special Award from the Seoul International Invention Fair (SIIF 2017)



Special Achievement in GIS Award (SAG Award) of 2017 at the ESRI User Conference 2017 in the United States



Bronze Invention Award and Special Award from the 13th Taipei International Innovation Show & Technomart (INST 2017)



The Thailand HR Innovation Award 2017 Award, Silver Level, from the Thailand Productivity Institute in Cooperation with the Personnel Management Association of Thailand (PMAT) and the National Institute of Development Administration (NIDA)



Two Gold Awards from the International Quality & Productivity Convention 2017 at Padang, Indonesia



IPv6 Excellence Awards 2017 honoring agencies providing basic internet services and IPv6 supporting services for three consecutive years from the Ministry of Digital Economy and Society



Outstanding Model Person Award in the Area of Reducing and Abstaining from Use of Foam Food Containers for Good Health Among Thais of 2017 (Mr. Sermsakool Klaikaew, Governor of Provincial Electricity Authority) from the Health Department, Ministry of Public Health



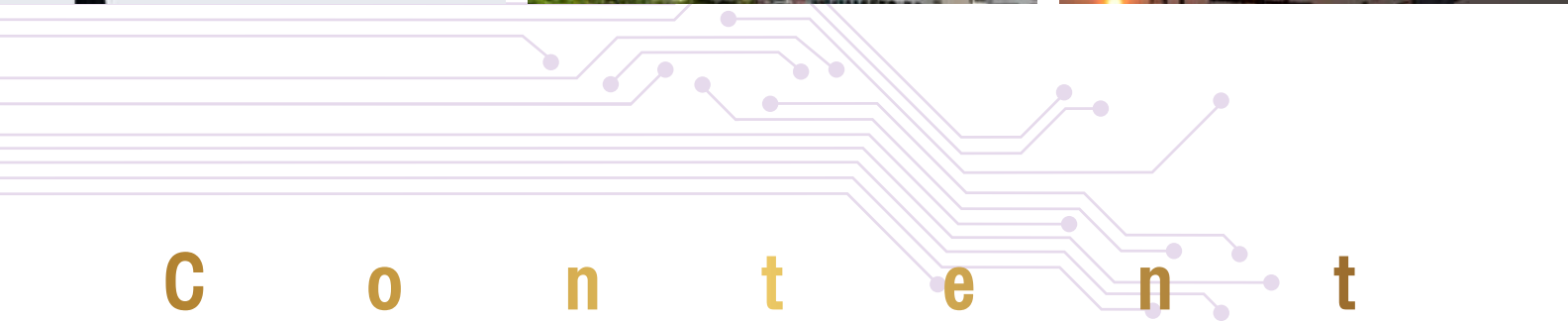
Model Person Award for Participation in Good Governance and Anti-Corruption Promotion in Organizations of 2017 (Mr. Surasak Trithan, Deputy Governor of Human Resources) from the Office of the National Anti-Corruption Commission



Outstanding Organization Award in Electricity for Society from the Provincial Press Association of Thailand



Honest Behavior Award of 2017 (Mr. Surasak Trithan, Deputy Governor of Human Resources) from the Office of the National Anti-Corruption Commission



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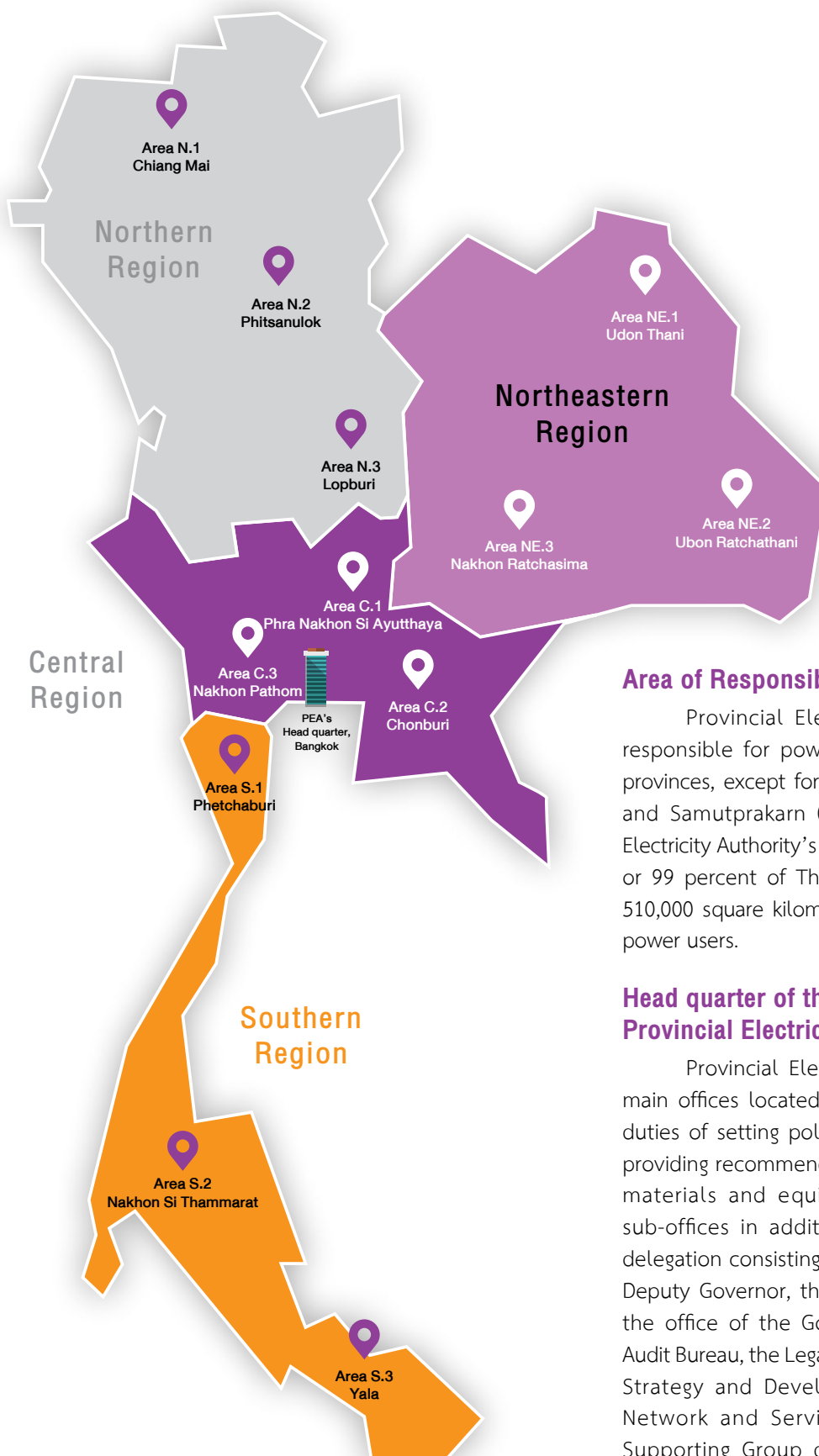
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Areas of Responsibility of Provincial Electricity Authority



Area of Responsibility

Provincial Electricity Authority is responsible for power distribution to 74 provinces, except for Bangkok, Nonthaburi, and Samutprakarn (in the Metropolitan Electricity Authority's area of responsibility), or 99 percent of Thailand, or an area of 510,000 square kilometers with 19,360,799 power users.

Head quarter of the Provincial Electricity Authority

Provincial Electricity Authority has main offices located in Bangkok with the duties of setting policies and work plans, providing recommendations and procuring materials and equipment for regional sub-offices in addition to management delegation consisting of the Governor, the Deputy Governor, the Assistant Governor, the office of the Governor, the Internal Audit Bureau, the Legal office, the Corporate Strategy and Development Group, the Network and Service Group, and the Supporting Group divided further, into departments and divisions.

Offices of Provincial Electricity Authority

Head Office

Bangkok

- Provincial Electricity Authority Head quarter

200 Ngam Wong Wan Rd., Lad Yao, Chatuchak, Bangkok, 10900

N

Northern Region

- Provincial Electricity Authority Region 1 (Northern Region), Chiangmai

208 Chiangmai – Lamphun Rd., Wat Ket, Muang, Chiangmai, 50000

Supervises sub-offices under responsibility in 6 provinces consisting of Chiangmai, Mae Hong Son, Lamphun, Lampang, Chiangrai, and Phayao

- Provincial Electricity Authority Region 2 (Northern Region), Phitsanulok

350/9 Moo 7, Mittraphap Rd., Samor Khae, Muang, Phitsanulok, 65000

Supervises sub-offices under responsibility in 8 provinces consisting of Phitsanulok, Pichit, Tak, Kamphaeng Phet, Sukhothai, Phrae, Nan, and Uttaradit

- Provincial Electricity Authority Region 3 (Northern Region), Lopburi

13 Phahol Yothin Rd., Thale Chub Sorn, Muang, Lopburi, 15000

Supervises sub-offices under responsibility in 6 provinces consisting of Lopburi, Sing Buri, Phetchaboon, Nakorn Sawan, Uthaithani, and Chainat

NE

Northeastern Region

- Provincial Electricity Authority Region 1 (Northeastern Region), Udon Thani

123 Moo 5, Ban Nong Hua Mu, Na Di, Muang, Udon Thani, 41000

Supervises sub-offices under responsibility in 8 provinces consisting of Udon Thani, Nong Khai, Khon Kaen, Loei, Sakon Nakhon, Nakhon Phanom, Nong Bua Lam Phu, and Bueng Kan

- Provincial Electricity Authority Region 2 (Northeastern Region), Ubon Ratchathani

195 Moo 7, Liang Muang Rd., Jaeramair, Muang, Ubon Ratchathani, 34000

Supervises sub-offices under responsibility in 8 provinces consisting of Ubon Ratchathani, Yasothon, Roi Et, Kalasin, Mahasarakham, Srisaket, Mukdaharn, and Amnat Charoen

- Provincial Electricity Authority Region 3 (Northeastern Region), Nakhon Ratchasima

3 Moo 2, Mittraphap Rd., Ban Mai, Muang, Nakhon Ratchasima, 30000

Supervises sub-offices under responsibility in 4 provinces consisting of Nakhon Ratchasima, Chaiyaphum, Buriram, and Surin



Central Region

- **Provincial Electricity Authority Region 1 (Central Region), Phra Nakhon Si Ayudhaya**

46 Moo 6, Asia Highway, Hantra, Phra Nakhon Si Ayudhaya, Phra Nakhon Si Ayudhaya, 13000
Supervises sub-offices under responsibility in 7 provinces consisting of Phra Nakhon Si Ayudhaya, Ang Thong, Pathumthani, Saraburi, Nakhon Nayok, Prachinburi, and Sa Kaeo

- **Provincial Electricity Authority Region 2 (Central Region), Chonburi**

47/1 Moo 3, Samet, Muang, Chonburi, 20000
Supervises sub-offices under responsibility in 5 provinces consisting of Chonburi, Chacherngsao, Rayong, Chantaburi, and Trad

- **Provincial Electricity Authority Region 3 (Central Region), Nakhon Pathom**

9/1 Moo 1, Thaiyawat, Nakhon Chai Sri, Nakhon Pathom, 73120
Supervises sub-offices under responsibility in 4 provinces consisting of Nakhon Pathom, Samutsakorn, Suphanburi, and Kanchanaburi



Southern Region

- **Provincial Electricity Authority Region 1 (Southern Region), Phetchburi**

86 Moo 5, Phetchburi-Had Chao Samran, Pho Rai Wan, Muang, Phetchburi, 76000
Supervises sub-offices under responsibility in 6 provinces consisting of Phetchburi, Prachuabkirikan, Ratchaburi, Samutsongkram, Chumphon, and Ranong

- **Provincial Electricity Authority Region 2 (Southern Region), Nakhon Si Thammarat**

167, Asia Highway, Nasan, Phra Phrom, Nakhon Si Thammarat, 80000
Supervises sub-offices under responsibility in 6 provinces consisting of Nakhon Si Thammarat, Trang, Krabi, Suratthani, Phuket, and Phang-nga

- **Provincial Electricity Authority Region 3 (Southern Region), Yala**

59/27, Yala-Pattani Rd., Khao Tum, Yarang, Pattani, 94160

Supervises sub-offices under responsibility in 6 provinces consisting of Yala, Pattani, Narathiwat, Songkhla, Satun, and Phattalung



Business Overview and Companies in the Group



Provincial Electricity Authority's Business Overview

1. Provincial Electricity Authority's main business is to produce, procure, deliver, distribute and provide electricity services for the public, businesses, and industries in order to meet customer needs and create satisfaction in quality and services. This is achieved by continually developing the organization with corporate social responsibility. Provincial Electricity Authority is responsible for power distribution in 74 provinces of Thailand, except for Bangkok, Nonthaburi and Samutprakarn, and area of 99 percent of Thailand or approximately 510,000 square kilometers with 19.36 million power users.

2. Related businesses are carried out in the form of providing additional services related to the main business consisting of electricity system construction work, electricity system repair and maintenance work, system inspection, testing and analysis work, personnel training and development work, electricity system consultation and design work, rental work, and other work.

PEA ENCOM International Co., Ltd.

The resolution of the Council of Ministers on 3 June 2009 established PEA ENCOM International Co., Ltd. to operate in the business of investment in electricity and providing electricity system training for the government sector and the private sector domestically and abroad.

PEA ENCOM International Co., Ltd. was registered as a juristic person on 14 October 2009 with business operation facilities located at 200, LED Building, 4th Floor, Ngam Wong Wan Rd., Lad Yao, Chatuchak, Bangkok, with Provincial Electricity Authority as the sole shareholder. PEA ENCOM International Co., Ltd. has 782.28 million baht in registered capital.



Vision

Be the leader in the power energy and energy conservation of ASEAN region in 2020.

Mission

1. To invest and develop domestic energy business and energy conservation.
2. To be the mechanism for government sector on investment support and market reference on renewable energy and energy conservation.
3. To expand the investment on energy and related business within the region.

Performance

Recently, PEA ENCOM International Co., Ltd. invested in renewable energy in the country such as the solar energy production work plan in cooperation with Solar Power Co., Ltd. in four projects in Surin, Loei and Khon Kaen. PEA ENCOM International Co., Ltd. was assigned by the Ministry of Interior and Provincial Electricity Authority to invest in the construction of power plants for producing energy from waste disposal in Phra Nakhon Si Ayudhaya. Furthermore, the Company is requesting approval from the Council of Ministers to establish/create a joint venture with three companies in the group to carry out civil-state power plant projects for three southern border provinces in the work plan for community biomass power production. With regard to work overseas, PEA ENCOM International Co., Ltd. is currently in negotiations to participate in the solar power production project and the power distribution project for the Myawaddy and Tachilek Economic Zones in Myanmar, etc.

In 2017, PEA ENCOM International Co., Ltd. prepared a plan to invest in solar rooftop energy production for a period of five years with an investment goal of 200 MW by signing contracts with seven customers with production capacity of 4 MW. PEA ENCOM International Co., Ltd. is considering customers for another 40 MW.

PEA ENCOM International Co., Ltd. provides consultation services in the area of efficient engineering and electricity management with a focus on electricity quality analysis and problem-solving, substation protective system inspection and analysis, one-stop power system maintenance in the area of safety engineering for entrepreneurs with past performance including solar farm installation services for Khon Kaen University. Furthermore, PEA ENCOM International provides efficient energy management services in industrial homes, business buildings, and residential homes. During the past year, PEA ENCOM International Co., Ltd. distributed an LED light bulb product under the name of ENCOM LED in 330 department store, home product and construction material distribution center branches in addition to providing services in the project to improve energy consumption efficiency for agencies under the Royal Thai Police, etc.

In terms of offering engineering training services domestically and abroad to increase theoretical and practical knowledge of electricity and energy systems for organizations such as the tool application course to maintain industrial factory power systems, the solar energy generation system maintenance course, the Electricity/Power Utility Safety Management System course and the tool application course to maintain industrial factory power systems, etc., PEA ENCOM International Co., Ltd. provided services for domestic and foreign customers



over the past year, including the government sector and the private sector such as the Improving Management Capacity in Power Distribution EVNNPC for Vietnamese electricity authorities, etc.

Connected Transactions

In 2017, Provincial Electricity Authority made the two following contracts to hire PEA ENCOM International Co., Ltd., the only company in Provincial Electricity Authority's group:

1. Employment Contract No. TSD-6/2017 dated 24 July 2017 was a sub-contracting agreement to procure and install a 1-megawatt solar farm for Khon Kaen University. The contract has a term of six months.

2. Employment Contract No. จ.267/2560 dated 4 January 2018 was a contract to hire, procure and install the renewable energy development project to conserve energy in Dhammaraksa Foundation Medical Facilities in Lopburi. The contract has a term of 120 days.

Disclosure of connected transactions is consistent with regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand including accounting standards on disclosure of information concerning connected persons or businesses outlined by the National Accounting Council.

Validity of Connected Transactions

Provincial Electricity Authority and PEA ENCOM International Co., Ltd. prepared a memorandum of understanding on cooperation in service businesses related to solar energy production and power grid construction on 25 November 2016. In operations under the memorandum, if Provincial Electricity Authority was hired by customers to provide services related to solar energy production, Provincial Electricity Authority will allow PEA ENCOM International Co., Ltd. to operate for the benefit of both customer parties who will receive quality and fast services meeting reliability standards. Provincial Electricity Authority has procurement criteria and steps meeting the Government Procurement and Supplies Management Act B.E. 2560 (2017) and the Ministry of Finance Regulations on Government Procurement and Supplies Management B.E. 2560 (2017) including other associated laws and regulations with no influence on trade price negotiation power.

Policy on Future Transactions

For future connected transactions, Provincial Electricity Authority and the companies in the group will conduct business with one another normally with no special transactions and transfer of interest with one another. Provincial Electricity Authority has a policy to strictly comply with the Government Procurement and Supplies Management Act B.E. 2560 (2017) and the Ministry of Finance Regulations on Government Procurement and Supplies Management B.E. 2560 (2017) including other associated laws and regulations.



Summary of Key Financial Information

Financial Information

Unit: Million Baht

Items	2017	2016	2015
Total Income	463,747	456,737	465,807
Total Expenses	436,295	430,849	444,735
Net Profit	27,452	25,888	21,072
Total Assets	398,305	378,149	366,977
Total Liabilities	234,170	227,400	227,541
Equity	164,135	150,749	139,436

Financial Ratios

Items		2017	2016	2015
Current Ratio	(Times)	1.73	1.77	1.60
Liquidity Ratio	(Times)	1.66	1.73	1.56
Debt-to-Equity Ratio	(Times)	0.48	0.54	0.61
Return on Equity Ratio	(Percent)	7.02	6.53	5.85
Leverage Ratio	(Times)	4.00	3.15	2.57



Industry Conditions and Future Trends

Industry Conditions

Currently, Thailand's electricity industry structure is based on an Enhanced Single Buyer (ESB) model, endorsed by the cabinet on December 9, 2003. Electricity Generating Authority of Thailand is the producer, deliverer and purchaser of electricity from private power plans and the single buyer of power from overseas. In addition, Electricity Generating Authority of Thailand distributes power via a transmission system to Metropolitan Electricity Authority and Provincial Electricity Authority in order to distribute power to power users. Furthermore, Electricity Generating Authority of Thailand also distributes some power directly to major power users licensed to distribute under related laws and to neighboring countries. Metropolitan Electricity Authority is responsible for distributing power to

power users in Bangkok, Nonthaburi and Samutprakarn while Provincial Electricity Authority distributes power to power users in other provinces outside the service area of Metropolitan Electricity Authority. In addition, some private power producers are able to distribute electricity directly to customers. Concerning electricity distribution to users, Metropolitan Electricity Authority and Provincial Electricity Authority own substations, transmission cable systems, distribution systems, distribution transformers, low voltage systems, and electricity meters with uniform tariffs for the same type of power users nationwide and different types of power users. The Energy Regulatory Commission (ERC) regulates the country's overall electricity cost structure.



* Examples of major entrepreneurs in the market.

Future Trends

Based on consideration of the environment, current internal factors, and external factors influencing future operations of Provincial Electricity Authority, Provincial Electricity Authority has set guidelines and directions of Provincial Electricity Authority's operations in 2018-2023 in preparing strategic plans with five strategic objectives under the eleven following strategies:

Strategic Objectives (SO)

Strategic Objectives	Goals
1. To operate the businesses in compliance with good governance principles for sustainable growth.	<ol style="list-style-type: none"> 1. Stakeholders and communities have confidence and accept operations based on the organization's principles of good governance. 2. Improvement of operations under SDGs and good practice guidelines within the DJSI framework. 3. Improvement of safety, occupational health and organization working condition standards (TIS 18001).
2. To become an organization of excellence in electricity distribution by enhancing efficiency of every work system.	<ol style="list-style-type: none"> 1. Increased security in the distribution system, reduced loss and operations according to the smart grid development plan. 2. Appropriate and flexible organization structure for operations or strengthened business operation procedures. 3. Improved efficiency and income generation capabilities of assets. 4. Long-term financial security.
3. To focus on meeting the needs of every customer group.	<ol style="list-style-type: none"> 1. Improved satisfaction and attachment of every customer group. 2. Improved service standards equal to comparisons and compliance with SLA in every process.
4. To manage related businesses for sustainability.	<ol style="list-style-type: none"> 1. Clear structure and work plans of the company in the group in one-stop connected business operations. 2. Market expansion to every country in the region.
5. To modernize the organization with digital technology and innovations.	<ol style="list-style-type: none"> 1. Improve management and develop personnel capacity to meet the organization's direction. 2. Digital technology development to have standards, security, and safety in support of business growth. 3. Improved innovation roles leading to work process development and expansion of commercial results.

Strategies are as follows:

Strategy 1 : Promote sustainable organization growth according to SDGs guidelines and good practice guidelines within the DJSI framework with a focus on analysis and designation of driving factors toward sustainability within the organization, including communications and the use of the aforementioned driving factors to specify work plans leading to sustainability in the organization. Major goals include goal achievement in three dimensions. Economic dimension goals are aimed at responding to government policies, focus on energy strategies to support the country's growth while maintaining the ability to generate economic wealth. Social dimension goals are aimed at creating good stakeholder relations with every party, good quality of life and social well-being. Environmental dimension goals pay attention to and accept responsibility for environmental wellness. Furthermore, this strategy focuses on developing Provincial Electricity Authority into an organization with sustainable development by applying good guidelines from international standards as practice guidelines for operations including ISO 26001, UN SDGs and DJSI in order to promote participation in corporate social responsibility activities for society, communities and the environment.

Strategy 2 : Place importance on stakeholders and respond to stakeholders by emphasizing building good relations with every stakeholder party to create a foundation of sustainable growth for the organization. This is done by focusing on meeting the needs of stakeholders inside and outside the organization in order to improve satisfaction and attachment for every stakeholder group.

Strategy 3 : Leading regional electricity distribution quality with emphasis on improving effective electricity distribution capacity limits and coverage. Provincial Electricity Authority will develop the electricity system and construct substations to adequately distribute electricity with security, reliability, ability to support increasing electricity needs, reduce operating and maintenance problems, minimize losses in the distribution system, improve and link electricity distribution systems in business areas, industries, industrial estates and vital areas in addition to expanding the country's economic and strategic areas for electricity infrastructure with coverage, sufficiency, and reliable quality.

Strategy 4 : Manage assets, allocate assets and create financial security by becoming an organization with fully effective asset management and allocation. This strategy will focus on developing an asset management system to boost the efficiency of asset use and the organization's operations in addition to reducing operating costs, maintenance costs and increasing the organization's financial returns.

Strategy 5 : Modify work processes to meet business needs and the organization's direction by placing importance on streamlining the organization's work process with digital technology to make operations more flexible, faster and better able to meet customer needs and expectations. This is to be achieved by analyzing the organization's business operation model in addition to business structure analysis to design and develop the organization's work systems/work processes to be flexible and consistent with the organization's vision, strategy and goals.

Strategy 6 : Build customer attachment by focusing on studying the factors, levels of needs and expectations of customer groups influencing customer satisfaction. This involves



analyzing information from surveys to learn about customers and markets, then summarizing recommendations to improve the organization's operations. The aforementioned information will be used to plan products and services, markets, modify work systems and processes, develop associated business opportunities and create appropriate relationships with each customer group.

Strategy 7 : Seek investment opportunities in connected business with focus on investment promotion/joint ventures and business development to adapt in support of changes in the electricity business due to current changes in electricity system technology and industry models in addition to placing importance on increasing revenue from the organization's additional businesses to increase the ratio of income from supporting businesses on the organization's overall income. Provincial Electricity Authority will focus on operating electricity businesses and connected businesses (highest market shares) at the national level with emphasis on building the PEA brand and electricity system standards in order to gain regional acceptance.

Strategy 8 : Improve human capital management and capacity with a strategy focused on more strategic human resource management. Provincial Electricity Authority will develop effective human resource management to achieve goals by emphasizing the development of competency systems as a key instrument for linking the organization's vision, obligations and strategies to human resource management in order to analyze necessary characteristics for employees in each work position in addition to preparing personnel to support the organization's main business, including connected businesses in the future. This is to enable employees in each position to function effectively in line with operating directions.

Strategy 9 : Promote and develop capacity with digital technology for digital transformation. This strategy focuses on developing digital technology capacity to transform the organization into a digital utility as Provincial Electricity Authority's strategic position in 2022 with modifications in three major issues consisting of the following:

- Digital Service – Develop digital technology to improve customer service efficiency.
- Digital Operational Excellence – Modernization of electricity system with a smart grid.
- Digital Business – Use of digital technology to boost the effectiveness of current products and service provision.

Strategy 10 : Promote the security, safety and stability of sustainable and secured digital technology by focusing on creating operational security, safety and confidence with digital technology for stakeholders from every sector. This is a basic factor aimed at driving the organization to become a digital utility with coverage of standards, privacy and personal data protection and cyber security, which will focus on creating information and communication system security and safety to create confidence in online communications and transactions.

Strategy 11: Promote and create cooperation in research and development of innovations in developing the main business and related businesses. Focus on research and innovation development by improving effectiveness in the entire process and innovation output. Innovation will focus on reinforcing electricity systems to be secure, effective and modern while improving customer service efficiency and modifying major processes of the organization to be consistent and up-to-date with technological changes and changing electricity industry models.



Distribution Situation Analysis of Provincial Electricity Authority



Electricity Provision

In 2017, Provincial Electricity Authority purchased and generated 139,548.01 million units of electricity from various sources, a growth of 1.80 percent from the previous year with 130,252.19 million units purchased from Electricity Generating Authority of Thailand, 112.46 million units purchased from the Department of Alternative Energy Development and Efficiency, 8,980.72 million units purchased from very small power producers (VSPPs), 98.11 million units purchased from solar PV rooftop generators and 104.53 million units were generated by Provincial Electricity Authority (dams and islands).

Electricity Distribution

Provincial Electricity Authority distributed a total of 132,400.86 million units of electricity in 2017, a growth of 2.10 percent from the previous year. This growth is below the target of 2.58 percent (predictions from 7 October 2017). Residential homes grew by 1.29 percent from the early start of the rainy season in mid-May 2017 and from colder weather conditions than the previous year, resulting in less

electricity consumption for cooling. Commercial electricity use grew by 1.85 percent due to an increase in the number of tourists and government sector economic stimulus policies. However, commercial use of electricity did not grow much due to the mourning period for the cremation of His Late Majesty, King Bhumibol Adulyadej. Industrial electricity use grew by 2.47 percent, an increase caused by growth in exports and improved GDP trends, including government sector investment in several major projects such as high-speed rail projects, dual-track rail projects, three new motorway projects and the Eastern Economic Corridor (EEC), etc. This caused industrial electricity use to grow. Other groups (non-profit organization, agricultural water pumping, temporary electricity and free electricity) grew by 4.66 percent.

Electricity Distribution by Area

Northern Region – With a proportion of 14.43 percent of total electricity distribution, electricity distribution in the northern region grew by 2.12

percent from the previous year with the highest growth at 3.24 percent in Provincial Electricity Authority Region 1 (Northern Region), Chiangmai.

Northeastern Region – With a proportion of 15.92 percent of total electricity distribution, electricity distribution in the northern region grew by 2.46 percent from the previous year with the highest growth at 3.11 percent in Provincial Electricity Authority Region 3 (Northeastern Region), Nakhon Ratchasima.

Central Region – With a proportion of 52.75 percent of total electricity distribution, electricity distribution in the central region grew by 1.92 percent from the previous year with the highest growth at 3.05 percent in Provincial Electricity Authority Region 2 (Central Region), Chonburi.

Southern Region – With a proportion of 16.90 percent of total electricity distribution, electricity distribution in the southern region grew by 2.33 percent from the previous year with the highest growth at 3.98 percent in Provincial Electricity Authority Region 1 (Southern Region), Phetchaburi.

Electricity Distribution by Voltage

- **Electricity at 230 kV** has only one power user consisting of G Steel Public Company Limited, a company operating in the steel production business in Provincial Electricity Authority Region 2 (Central Region), Chonburi, at 0.18 percent of total electricity distribution, a growth of 3.97 percent from the previous year.

- **Electricity at 115 kV** is at 18.85 percent of total electricity distribution, a growth of 2.72 percent from the previous year.

- **Electricity at 69 kV** has only one power user consisting of Good Year (Thailand) Public Company Limited in Provincial Electricity Authority Region 1 (Central Region), Phra Nakhon Si Ayudhaya, at 0.03 percent of total electricity distribution, a reduction by 4.88 percent from the previous year.

- **Electricity at 22-33 kV** is at 50.04 percent of total electricity distribution, a growth by 7.77 percent from the previous year.

- **Electricity at less than 22-23 kV** is at 30.90 percent of total electricity distribution, a reduction by 3.21 percent from the previous year.

Electricity Distribution by Electricity Cost Type

Electricity distribution categorized by electricity cost type in 2017 was as follows: Residential homes grew by 1.29 percent. Small businesses grew by 2.67 percent. Medium businesses grew by 1.22 percent. Large businesses grew by 3.06 percent. Specific businesses grew by 0.26 percent. Non-profit organizations dropped by 12.89 percent. Agricultural pumping grew by 11.57 percent. Temporary electricity contracted by 0.89 percent. Secondary electricity dropped by 42.26 percent. Interruptible rates dropped by 3.80 percent, and free electricity grew by 6.68 percent.

Electricity Distribution by Customer Group

- **Residential Homes** – Residential homes make up 23.67 percent of total electricity distribution, a growth by 1.29 percent due to fluctuating weather conditions. The Thai Meteorological Department announced the rainy season since mid-May 2017. Normally, Thailand enters the rainy season in June of every year. In addition, the winter was colder and longer than the previous year. The weather in 2017 was hotter in 2017 with a mean temperature of 27.7 degrees Celsius, lower than the mean temperature of 28.2 degrees Celsius in the previous year, especially in March-May when the mean temperature was 1.5 degrees Celsius lower than the previous year, resulting in significantly lower electricity use for cooling. This is similar to household electricity users who used more than 150 units of electricity per month with a growth of only 2.00 percent when compared to the previous year.

- **Commercial Use** – Commercial use make up 24.25 percent of total electricity distribution, a growth by 1.85 percent from public spending stimulation according to government sector policies and growth in the number of tourists.

However, when compared to the mean of 6.12 percent in 2014 – 2016, growth was found to be minor because the country was in mourning after the cremation of His Late Majesty, King Bhumibol Adulyadej. Thus, domestic spending did not increase significantly.

- **Industrial Use** – Industrial use make up 49.09 percent of total electricity distribution, a growth by 2.47 percent from steel, automobiles, electronics, and plastics in line with growth in export volume, GDP, and government sector investment in several megaprojects, giving investors more confidence reflected by the new high point of the Securities Exchange of Thailand (SET).

- **Other Groups** (Non-Profit Organizations, Irrigation Pumping, Temporary Electricity, and Free Electricity) – This group make up 2.99 percent of total electricity distribution, a growth by 4.66 percent from electricity consumption to facilitate traffic when people travel to attend the cremation ceremony for His Late Majesty, King Bhumibol Adulyadej. Provincial Electricity Authority permitted local administrative organizations to request electricity for this royal ceremony as a special case.

Electricity Distribution by Type of Economic Activity

Provincial Electricity Authority categorized major electricity user groups by the Thailand Standard Industrial Classification (TSIC) into ten main sections. In 2017, the production section used electricity the most at 66.17 percent, followed by the sales and hotels section (14.32%), the social services section (6.96%) and the agricultural section (4.66%). Total electricity use in all ten sections grew from the previous year by 2.47 percent from electricity needs in the following sections with high electricity consumption ratios:

- **Production Section** – This section grew from the previous year by 3.54 percent with the following electricity use by the top five industries:

- **Steel** grew by 10.96 percent, an increase from infrastructure construction such as dual-track railway projects, high speed railway projects and the Bang Sue Central Station, etc. This created more need for long and flat steel at 6.21 percent and 11.72 percent, respectively, and increased overall steel needs by 10.30 percent.

- **Automobiles** grew by 2.82 percent from private and commercial automobile manufacturing to meet domestic demand and from commercial automobile manufacturing to meet market demands abroad such as in Vietnam and Middle-Eastern countries, etc.

- **Electronics** grew by 2.83 percent, corresponding with growing global electronics demand, especially Bitcoin mining and cryptocurrency, use of blockchain technology, big data development and standard/open APIs (Application Programing Interfaces), etc.

- **Cement** contracted by 4.60 percent, a continuous reduction after significant production for export to neighboring countries in 2015. Cement production factories were established in the aforementioned countries, causing less demand for cement imports from Thailand.

- **Plastics** grew by 2.75 percent from continually increasing demand for products throughout the year. Production increased in November-early December 2017 to support the holidays in the country and abroad.

- **Sales and Hotels Section** – This section grew by 2.92 percent as a result of the government sector's economic stimulation policy supporting increased domestic spending and tourism including a rise in tourist numbers of almost every nationality, particularly tourists from China. However, when compared to the mean score in 2014 – 2016 at 7.29 percent, growth was found to be less than expected because the country was in mourning after the cremation of His Late Majesty, King Bhumibol Adulyadej.

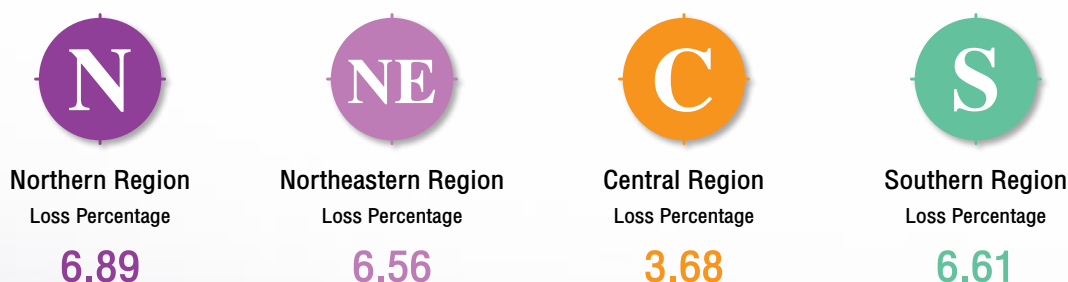


Social Services Section – This section grew by 0.62 because the rainy season arrived earlier than normal and cold weather conditions persisted longer than the previous year, reducing electricity consumption in office buildings of various agencies.

Agricultural Section – This section grew by 3.77 percent from the early rainy season enabling farmers to harvest quickly and at larger amounts. In addition, Chinese tourists have a significant preference for durians and boxed coconut milk.

Loss

In 2017, Provincial Electricity Authority lost 7,147.15 million units in the distribution system or 5.12 percent, a reduction from the loss of 7,404.12 million units or 5.40 percent in 2016 from enacting strict measures for reducing loss in the power grid. Loss in each area is as follows:



Number of Power Users

In 2017, Provincial Electricity Authority had a total of 19.36 million power users, an increase from the previous year by 0.47 million power users or 2.47 percent. Growth was highest in the central region at 3.12 percent, followed by the northeastern region at 2.54 percent, the northern and southern regions at 2.13 percent and 2.01 percent, respectively. Power users categorized by customer group are as follows:

- Residential homes grew by 2.16 percent, or 88.33 percent of all power users.
- Commercial power users grew by 4.50 percent, or 8.61 percent of power users.
- Industrial power users grew by 2.59 percent, or 0.18 percent of all power users.

- Other groups (non-profit organizations, irrigation pumping, temporary electricity and free electricity) grew by 6.05 percent, or 2.87 of all power users.

Estimated Units Distributed in 2018

Provincial Electricity Authority represented by work group prepared electricity needs predictions with assessments that the number of units distributed will increase by 3.24 percent due to all of the following factors:

Positive Factors

Gross domestic product (GDP) is expected to grow by 3.6-4.6 percent from main supporting factors consisting of government spending in large projects and exports, a major cog driving Thai economic growth to meet goals.

Government Spending, Investment and Policies

Because the government sector has always had consistent and clear spending and investment policies, more current capital is entering the economy with the following ongoing projects:

- The Eastern Economic Corridor (EEC) development.
- Special economic zone projects.
- The high speed monorail project connecting Don Muang, Suvarnabhumi and Utapao Airports to support the EEC.
- The High Speed Nakhon Ratchasima - Bangkok Rail Project, Phase One.

- Five dual-track rail projects in the first phase consisting of the Nakhon Pathom - HuaHin line, the HuaHin-Prachuabkirikan line, the Prachuabkirikan - Chumphon line, the Map KaBao - Jira line and the Lopburi - Pak Nam Pho line.

- Five motorway projects consisting of the Bang Pa-In – Saraburi – Nakhon Ratchasima motorway, the Bang Yai – Ban Pong – Kanchanaburi motorway, the Chonburi – Pattaya – Map Ta Phut motorway, the Nakhon Pathom – Samutsongkram – Cha-am motorway, and the Bang Pa-In – Nakhon Sawan motorway.

- **Global Economic and Export Conditions**

Thailand's trading partners have improving economic directions due to global economic recovery, particularly the United States, while other countries such as the European Union, Japan, China, and ASEAN have shown slight growth. Nevertheless, the government sector has set measures in place to support exports with a focus on e-commerce. Furthermore, the government sector has set market expansion strategies with emphasis on service businesses, cluster businesses, entrepreneur development, and business operations overseas in over 300 activities.

- **Industrial Sector**

Industrial capacity and opportunities increase in the Eastern Economic Corridor (EEC) and special economic zone projects. The EEC focuses on gaining acceptance from investors worldwide with original industry groups with capacity and readiness for development in the area, readiness in the area of public utilities, agricultural structure, good service industry and tourism. The population is familiar with industrial activity and there is cooperation between communities and industries on the environment. Special economic zones emphasize development of border areas and linking trade with neighboring countries, promoting quality of life and spreading sustainable prosperity by constructing infrastructure to support economic growth in the aforementioned areas.

- **Tourism**

The government sector supports 2018 as the “National Year of Tourism” with the Tourism Council of Thailand announcing the “Amazing Thailand Tourism Year 2018” campaign with a period from 1 November 2017 to 1 January 2019. The campaign aims for Thailand to become a quality tourism site with growth based on Thainess, income distribution to communities, promotion of cultural identity and local traditions with income goals set at 3 trillion baht.

Negative Factors

- **Measures and Policies of the Thai and Foreign Government Sectors**

From 1 January 2018, taxes on goods under the ASEAN – China FTA will be reduced. Thus, less expensive products from China will be sold in Thailand and CLMV countries. This may result in a loss of market shares domestically and abroad. Furthermore, from 1 April 2018 onward, the minimum wage will be raised, making production costs higher while large industrial sectors are in operation with potential difficulty for entrepreneurs to adapt and manage.

- **Household Sector**

The household sector continues to have high debt. In 2018, household debt to GDP is expected to be 77 – 78 percent, most of which will be automobile loans, credit cards, private loans and multi-purpose loans. Although the minimum wage has been adjusted, particularly for food costs, households will have less purchasing power and spending, including possible reductions in repayment capabilities.

- **Baht Currency Value**

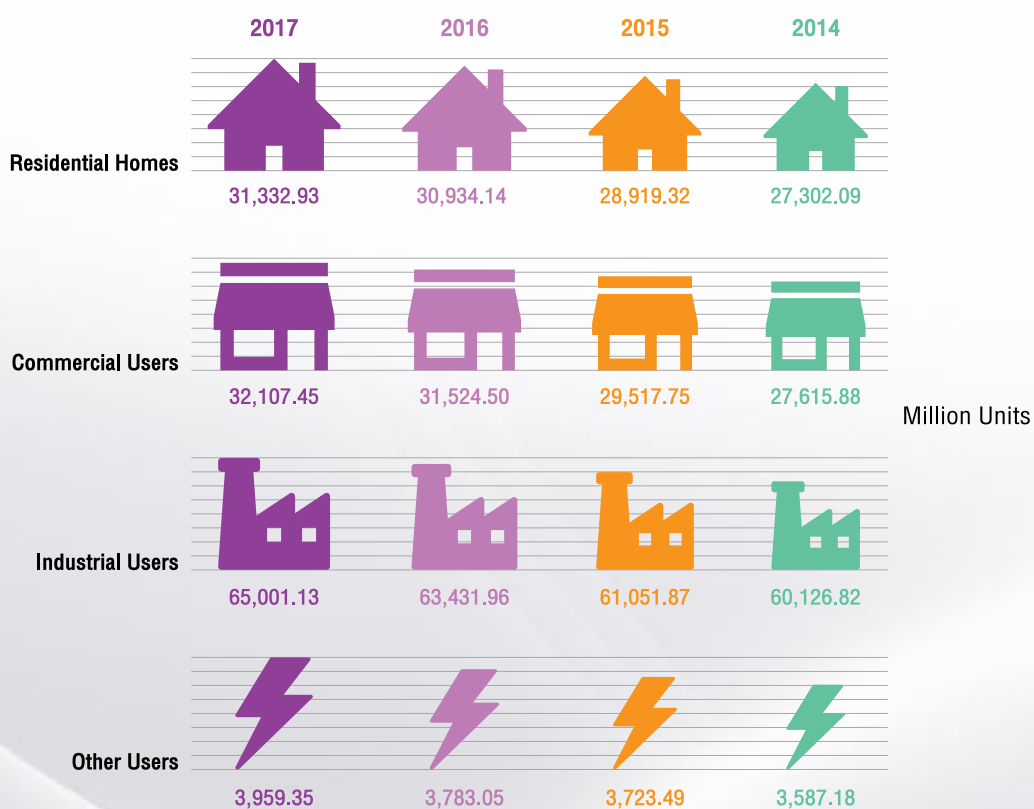
The baht currency has strengthening trends with effects on imports because trading partners may delay imports due to more expensive prices. This may influence industrial income primarily based on production for export. In the meantime, Thailand may have more imports with effects on trade balance, which must be regulated to maintain trade balance at an appropriate



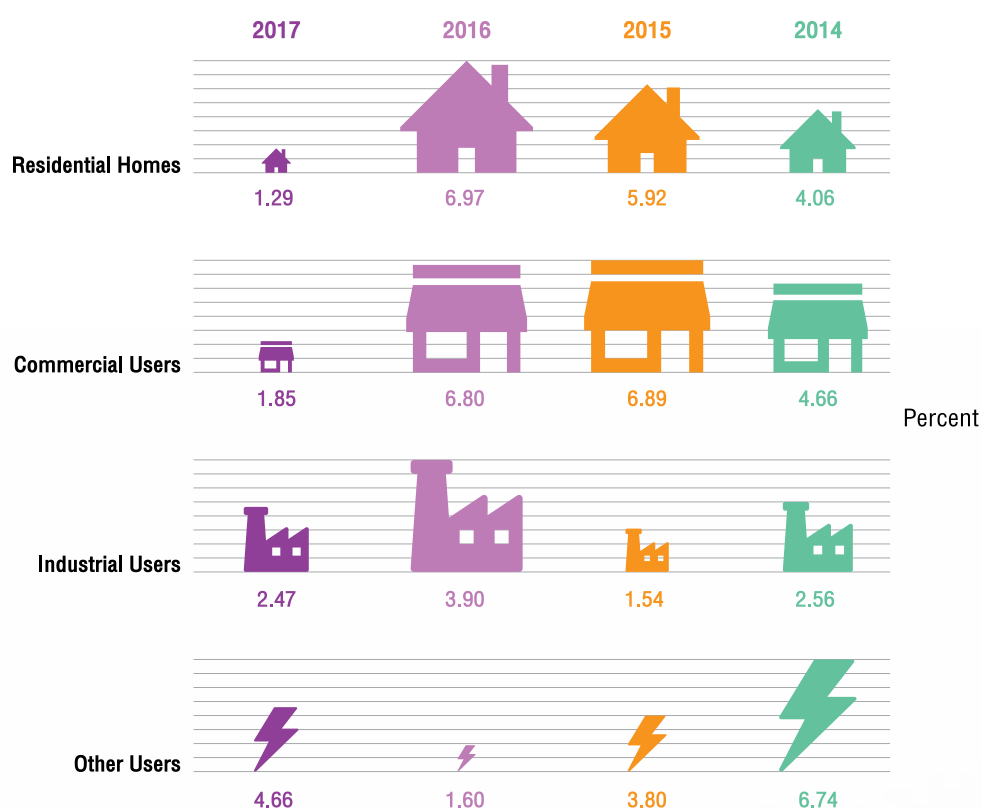
Comparison of Electricity Units Distributed in 2014 – 2017 : Customer Groups

Customer Group	Electricity Units Distributed (Million Units)				Increase - Reduction Rates (Percent)			
	2017	2016	2015	2014	2017	2016	2015	2014
Residential Homes	31,332.93	30,934.14	28,919.32	27,302.09	1.29	6.97	5.92	4.06
Commercial Users	32,107.45	31,524.50	29,517.75	27,615.88	1.85	6.80	6.89	4.66
Industrial Users	65,001.13	63,431.96	61,051.87	60,126.82	2.47	3.90	1.54	2.56
Other Users	3,959.35	3,783.05	3,723.49	3,587.18	4.66	1.60	3.80	6.74
Total	132,400.86	129,673.65	123,212.43	118,631.97	2.10	5.24	3.86	3.51

Comparison of Electricity Units Distributed in 2014 – 2017: Customer Groups



Increases (Reductions) in Electricity Units Distributed in 2014 - 2017 : Customer Groups

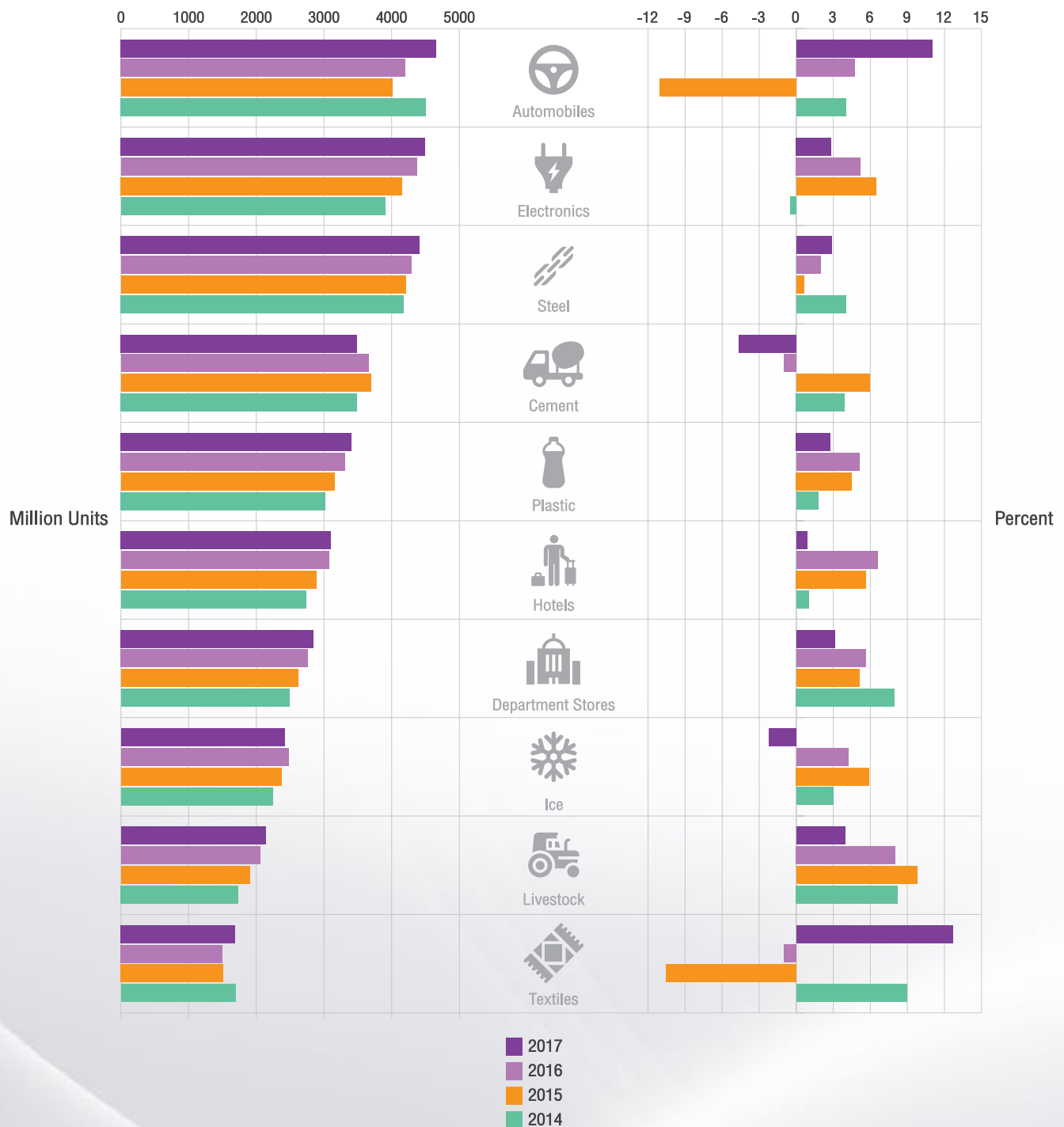


Comparison of Electricity Units Distributed in 2014 – 2017 : Top Ten Activities

Business Type	Electricity Units Distributed (Million Units)				Increase-Reduction Rates (Percent)			
	2017	2016	2015	2014	2017	2016	2015	2014
Automobiles	4,634.17	4,176.61	3,988.74	4,480.64	10.96	4.71	(10.98)	4.00
Electronics	4,467.68	4,345.32	4,131.22	3,882.12	2.82	5.18	6.42	(0.46)
Steel	4,386.19	4,265.42	4,182.87	4,158.44	2.83	1.97	0.59	4.01
Cement	3,471.33	3,638.61	3,675.98	3,471.10	(4.60)	(1.02)	5.90	3.90
Plastic	3,387.31	3,296.56	3,136.61	3,002.26	2.75	5.10	4.47	1.77
Hotels	3,083.55	3,057.01	2,870.00	2,717.41	0.87	6.52	5.62	1.02
Department Stores	2,832.03	2,747.19	2,602.28	2,476.24	3.09	5.57	5.09	7.92
Ice	2,405.70	2,460.60	2,361.45	2,230.22	(2.23)	4.20	5.88	2.95
Livestock	2,125.43	2,044.86	1,893.82	1,725.71	3.94	7.98	9.74	8.17
Textiles	1,678.66	1,491.03	1,506.27	1,682.75	12.58	(1.01)	(10.49)	8.89

Comparison of Electricity Units
Distributed in 2014 – 2017 :
Top Ten Activities

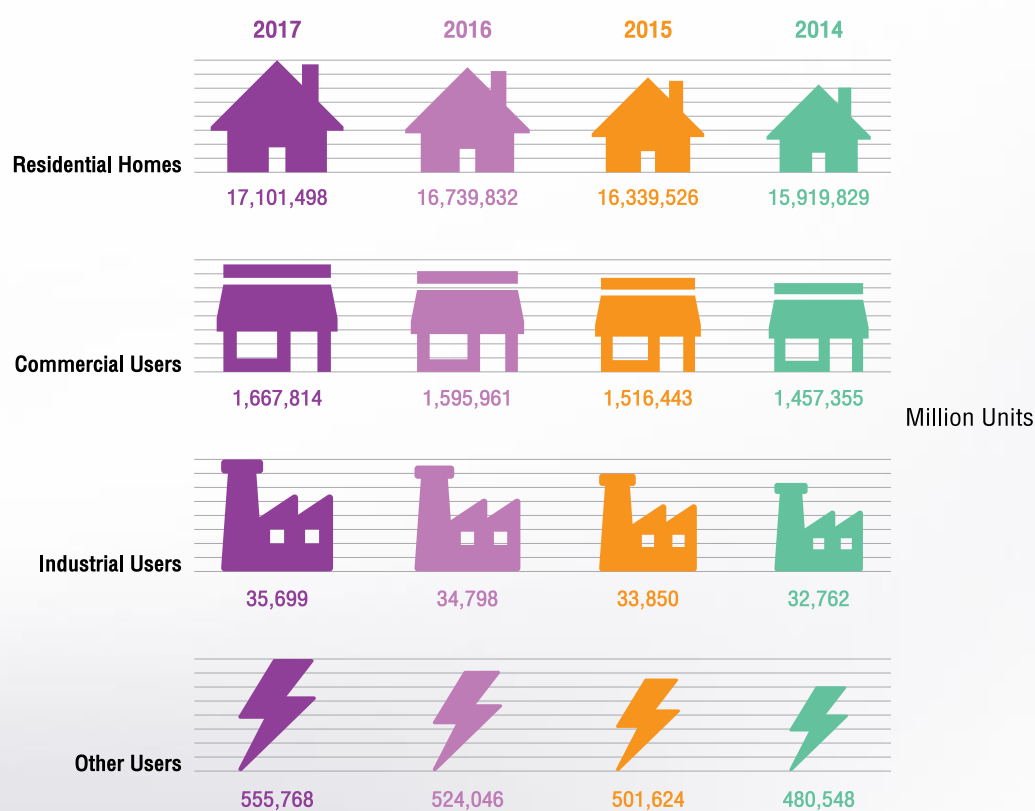
Increases (Reductions) in Electricity
Units Distributed in 2014 – 2017 :
Top Ten Activities



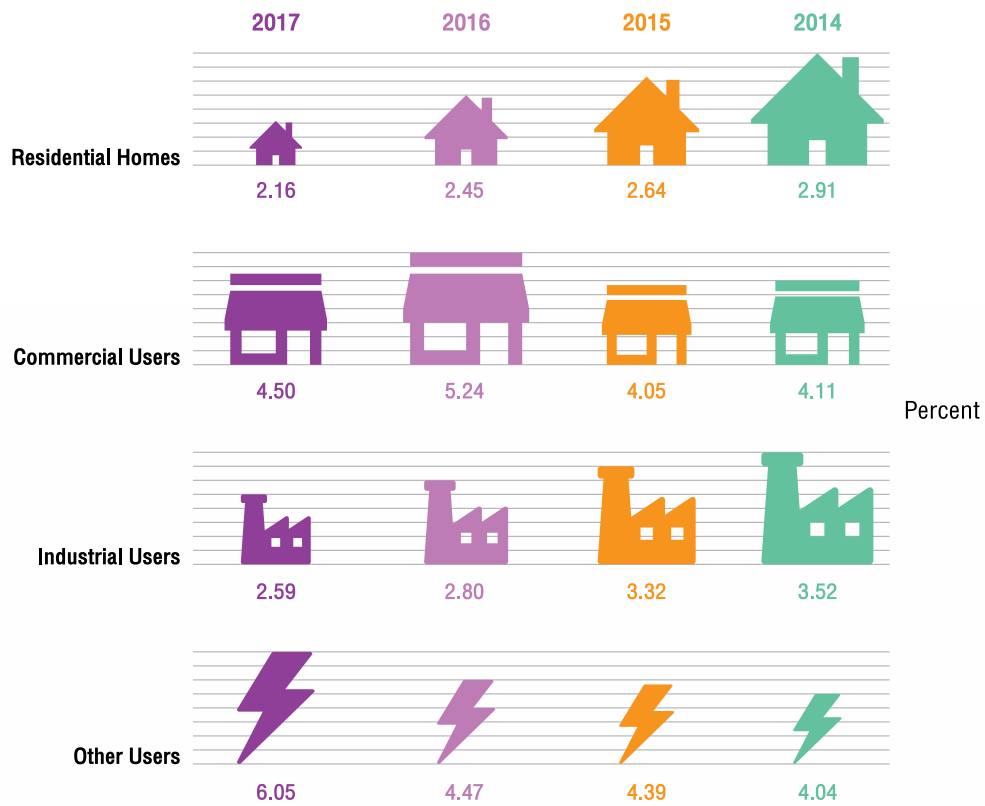
Comparison of Power Users in 2014 – 2017 : Customer Groups

Customer Group	Electricity Units Distributed (Million Units)				Increase - Reduction Rates (Percent)			
	2017	2016	2015	2014	2017	2016	2015	2014
Residential Homes	17,101,498	16,739,832	16,339,526	15,919,829	2.16	2.45	2.64	2.91
Commercial Users	1,667,814	1,595,961	1,516,443	1,457,355	4.50	5.24	4.05	4.11
Industrial Users	35,699	34,798	33,850	32,762	2.59	2.80	3.32	3.52
Other Users	555,768	524,046	501,624	480,548	6.05	4.47	4.39	4.04
Total	19,360,779	18,894,637	18,391,443	17,890,494	2.47	2.74	2.80	3.04

Comparison of Power Users in 2014 – 2017 : Customer Groups



Increases (Reductions) of Power Users in 2014 – 2017 : Customer Groups



Performance Report according to the Balanced Scorecard (BSC)

In 2017, the Provincial Electricity Authority implementation was conducted on the basis of the Balanced Scorecard (BSC) in five areas comprising Finance, Customers, Internal Process, Learning & Growth, and Society & Environment. Details of which can be summarized as follows:

Finance

The Provincial Electricity Authority has total assets equaling 398,305 million baht, an increase of 20,156 million baht or 5.33 percent with net income from electricity costs and other income from operations at a total of 463,748 million baht, an increase from 2016 by 7,011 million baht or 1.54 percent. The Provincial Electricity Authority has expenses from operations at 436,295 million baht, an increase from 2016 by 5,446 million baht or 1.26 percent, and net profit accounts for 27,452 million baht, an increase from 2016 by 1,564 million baht or 6.04 percent.

In 2017, the Provincial Electricity Authority made domestic loans to invest in work plans and projects in order to meet the higher electricity needs and increase efficiency and security of electricity systems. The Provincial Electricity Authority made loans from domestic sources in baht currency by issuing bonds, bringing the amount of domestic and foreign loans as of 31st December 2017 up to 75,670 million baht and 480 million baht, respectively, or 99.37 percent and 0.63 percent of all loans.

As a result of the management and control on the use of operating expenses, the Provincial Electricity Authority significantly improved financial indicators according to the performance assessment agreements with the Ministry of Finance in the area of operating expenses (CPI-X). Investment plan management is considered on the basis of the following two views:

1. Percentage of Overall Disbursements with the Goal of 22,016.44 million baht. The Provincial Electricity Authority was able to disburse 22,748.44 million baht or 103.32 percent of disbursement goals for the entire year. Thus, the Provincial Electricity Authority met criteria for significant improvement.
2. Percentage of Disbursement Ability according to Plans. Mean disbursement for investment budgets in all four quarters was at 97.32 percent, meeting criteria for improvement-significant improvement.

Customers

The Provincial Electricity Authority meets customer needs by providing rapid, quality and modern services covering all customers in PEA's service area. According to performance in line with work plans and electricity system development projects, the Provincial Electricity Authority performed as follows:

1. The Provincial Electricity Authority has 19,360,779 power users, an increase from 2016 by 2.47 percent, and distributed 132,401 million units of electricity, an increase from 2016 by 2.10 percent.
2. The Provincial Electricity Authority distributes electricity to rural households at a total number of 74,304 villages or 99.99 percent of villages nationwide and 21.46 million households at the household level or 99.77 percent of all households nationwide. Furthermore, the Provincial

Electricity Authority has expanded service provision by establishing PEA Shops in 82 department stores nationwide in addition to organizing PEA Mobile Shops to provide services for customers in major communities. Moreover, the Provincial Electricity Authority has developed PEA Call Center 1129 to provide automatic news and information services by telephone and providing services for customers via mobile phone application called “PEA Mobile”, which can be used on iOS and Android systems.

Internal Process

The Provincial Electricity Authority continually developed and improved electricity distribution systems to support the rising demand for electricity consumption in order to create security and reliability in electricity supplying systems. This resulted in upgrading the better values of System Availability Interruption Frequency Index (SAIFI) and System Availability Interruption Duration Index (SAIDI) in 2017 to be better than those of 2016. SAIFI in 2017 equaled to 4.50 times/person/year, a reduction from 2016 by 0.67 times/person/year, while SAIDI in 2017 equaled to 118.70 minutes/person/year, which is a reduction from 2016 by 34.43 minutes/person/year.

Furthermore, the Provincial Electricity Authority uses modern technology to enhance operational efficiency by searching for places which petitioned to use electricity with the PEA Map system and improved work to solve electricity problems by modifying the OMS system, the GIS system, weather predictions and SCADA, thereby allowing the Provincial Electricity Authority to monitor progress in solving electricity errors much more rapidly.

Learning & Growth

The Provincial Electricity Authority has developed and created a culture of learning in the organization by specifying guidelines for promoting learning and exchanging knowledge in order to develop processes and create innovation via knowledge management processes. Knowledge is compiled, categorized and transferred via processes, including the organization’s knowledge management information system. Furthermore, the Provincial Electricity Authority carried out the PEA Think Tank project to create space for exchanging knowledge on key issues of interest to the organization.

Moreover, the Provincial Electricity Authority supports employee learning through quality activity competitions, innovation competitions, work skill competitions, outstanding electricity authority competitions and promoted learning between the Provincial Electricity Authority, external agencies and the general public through Provincial Electricity Authority learning centers, power user visits, cooperation among ASEAN power utilities, the organization of PEACON & Innovation conferences and academic cooperation projects. All of these have contributed to the Provincial Electricity Authority a knowledge base for development into sustainable innovations.

Society & Environment

The Provincial Electricity Authority is determined to work according to primary missions with corporate social responsibility. In 2017, the Provincial Electricity Authority extended performance in responsibility to society to cover the entire organization in order to push all internal offices to be aware of the importance of working in compliance with ISO 26000 corporate social responsibility

standards in every process. The Provincial Electricity Authority requires every office to participate in preparing the Provincial Electricity Authority Corporate Social Responsibility Roadmap of 2017 - 2021 and the ISO 26000 in Processes Self-Assessment Manual (ISPA).

Furthermore, the Provincial Electricity Authority conducts other corporate social responsibility projects such as the PEA Safe Community Electricity Use Project, the PEA Project to Support Renewable Energy Use by Community Enterprises, the PEA LED Project for Thai Cultural Tourism Sites, the PEA Weir Construction Water Conservation Project, the PEA Mobile Medical Units Project and the Green Office Project.

In 2017, the Provincial Electricity Authority set up the PEA 4.0 policy to support the government's policy with a focus on "Develop People with Innovations and Develop Work with Technology" by developing in seven areas and pushing the following seven main processes:

1. Human Capital: Push for personnel development into human capital with preparedness in the digital era.

2. Service: Service Excellence: Beyond Customer Expectation.

3. Grid: Increase grid security to become a strong grid and grid modernization to support Smart Grid.

4. Asset Management: Focus on Enterprise Asset Management (EAM) to cover the cycle of assets beginning from procurement, acquisition, maintenance and expiration when assets are removed from the system.

5. Innovation: Promote knowledge and innovation to create PEA brand commercial tools or equipment to be widely used throughout the organization and replace or reduce external procurement, improve equipment standards and useful life, reduce maintenance and increase leverage in procurement from manufacturers or sales representatives.

6. ICT: Information and communication technology to support development of Smart Grid, the Internet of Things (IoT), a Cloud System, Big Data management and Blockchain technology.

7. Business Investment: Readiness and capacity to invest in order to become project owners or partners with PEA ENCOM International Co., Ltd. with the aim to create new businesses to support disruptive changes in technology such as Electric Vehicles (EV), Solar Rooftops, Smart Meters and Smart Homes, etc.

In 2018, the Provincial Electricity Authority will manage in line with work plans and projects with the determination to become a modern leading regional organization in providing effective electricity services to improve quality of life, the economy and society with sustainability.



(Mr. Chayabol Thitisak)

Chairman of the Board of Directors
Provincial Electricity Authority



Organization Performance



Management Discussion and Analysis (MD&A)

Provincial Electricity Authority is determined to become a customer centric organization by emphasizing building and managing relationships with customers to meet needs and build satisfaction along with increasing capacity to deliver services through innovative creations and appropriate application of modern technology with the following management and improvements in operations:

1. Electricity System

According to current and future plans for continual investment, Provincial Electricity Authority prepared work plans to be consistent with predictions on electricity needs. Due to energy and environmental crises, electricity needs will become increasingly severe while national development needs energy as an important basic factor. Therefore, in

addition to providing quality and efficient electricity services, Provincial Electricity Authority focuses on energy management with smart grid technology by using information and communication technology to measure and control the electricity grid and making the system more automatic. Provincial Electricity Authority develops modern technologies and electricity quality, improves electricity grid reliability and efficiency in urban communities, remote areas, agricultural areas, and islands to increase electricity distribution service efficiency, increase customer satisfaction and improve quality of life for people in the country with directional frameworks of electricity system development plans according to the 12th National Economic and Social Development Plan. Nevertheless, in 2017, Provincial Electricity Authority continually carried out projects related to current and future electricity grid development according to investment plans as follows:



1.1 Transmission System and Substation Development Project, Phase 9

This project had the objective to develop electricity systems and increase distribution stations to sufficiently distribute electricity with security, reliability and ability to support increased electricity needs. The TCSSDP 9 Project is divided into four smaller projects by region with an overall progress of 35.79 percent. The project was slightly later than specified goals because of inability to procure land for substation construction on schedule due to high land prices, inconsistent qualifications with notifications and a lack of offers, etc.

1.2 Major Cities Power System Development Project, Phase 1

This project was aimed at creating electricity grid security and reliability while reducing maintenance and safety problems and barriers. In 2017, the project's construction progress was not significant because the project received approval from the Council of Ministers in February. Most operations in 2017 were in the survey and design phase.

1.3 Agriculture Electrification Project, Phase 2

This project was conducted with the objective of expanding electricity services to agricultural areas, plantations-combined planting areas, and agricultural orchards in order to support farmers' occupations and improve economic strength at the foundation. The project aims for small farmers to participate in the project. Thus, farmers wishing to participate in the project are required to be registered as farmers. However, some farmers did not have qualifications meeting the criteria in the project's initial stage (unregistered farmers), causing the farmers to not be included in the project. The project is currently advertising the project to help interested farmers to access more information while rallying for farmers to be registered, causing the project's performance trends to improve gradually.

1.4 New rural household electrification project

This project had the objective to

expand electricity areas to every household without electricity in compliance with the government's policy and the project was able to achieve specified goals.

1.5 Remote rural household electrification project

The project was aimed at expanding electricity coverage to households in remote areas according to the government's policy and the project was able to achieve specified goals.

1.6 Transmission and Distribution System Development Project, Phase 1

This project was aimed at developing the electricity grid to sufficiently support increased electricity needs, increase effectiveness, security and reliability of electricity systems while reducing operational and maintenance problems, loss in the distribution system and increase electricity grid security. Because the project received approval from the Council of Ministers in November 2016, the project's construction progress was minor and most operations in 2017 were in the survey and design phase.

1.7 Distribution System Dispatching Center Improvement Project

This project was aimed at developing, increasing efficiency and managing the main communication system of Provincial Electricity Authority in addition to integrating with systems such as the Outage Management System, the Geographic Information System, automatic meter readings and support distributed generation. Work for the distribution center was contracting and procurement work including hardware and software installation throughout the country. Provincial Electricity Authority contracted four smaller work groups divided by region. In 2017, the first public hearing on specifications was completed and the project is currently complying with the Government Procurement and Supplies Management Act B.E. 2560 (2017). Communication systems work was able to be performed according to specified work plans.



1.8 Smart Grid Development Project

This project was conducted in Pattaya, Chonburi, with the objective to study technologies, designs, use and benefits from each system in the Smart Grid in various areas for expansion to other areas. The project divided work into two work groups. Work Group 1: consisted of smart meter installation work, smart electricity disruption correction systems, and IT integration systems. Drafts of price bidding documents contained complicated technical specifications and interested companies had many opinions toward drafts of bidding documents from the first public hearing. A two-stage e-auction bid was conducted when considering technical specifications and prospective bidders were required to prepare live demonstrations to test system functions with significant time required to consider live demonstration test results. Work Group 2: performed substation automation installation work. Bidders were not prepared and lacked understanding on proper technical specification proposals according to Provincial Electricity Authority's specifications, causing the bidding to be canceled and more time was needed to hold another bidding, resulting in delays in contracting a company to carry out the project.

2. Information and Communication Technology (ICT) Management

2.1 ICT Infrastructure

Provincial Electricity Authority modified communication systems to support current and future Provincial Electricity Authority strategies. In 2017, Provincial Electricity Authority expanded the fiber optic network to cover every electricity authority and substation office, expanded IP Core Network installation in Phase 2 to be completed in 2018 and installed the IP Access Network (MPLS) to cover the entire country and be completed in 2019. The aforementioned operations will provide Provincial Electricity Authority with an effective IP Base network to support future work such as SCADA Smart Grid, finished computer software systems for the main business, the Internet, and other systems. Furthermore, Provincial Electricity Authority installed full HD video conference systems at every electricity authority work center, which will significantly cut costs. High frequency radio systems were installed as secondary communications for cases where primary communication systems are not functioning. Both tasks will be completed in 2018. Provincial Electricity Authority encountered the following problems and causes:

No.	Problems and Obstacles	Causes
1	Later procurement than planned.	1) Responses to complicated public hearing topics. 2) Bidding cancellation and need to hold a new bidding.
2	Procurement and work delivery inconsistent with plans.	Contract partners were unable install and deliver work as planned.

2.2 Organization Capacity Development

Provincial Electricity Authority installed automatic meter reading (AMR) via the General Packet Radio Service (GPRS) for large power users who use electricity at more than 30 kilowatts or installed 100 kVA transformers including customers in the three southern border provinces in order to help power users have confidence in accurate and fast unit readings in addition to using electricity conduction data via the Internet to manage electricity consumption with maximum efficiency, resulting in good satisfaction and service image for Provincial Electricity Authority. In addition, Provincial Electricity Authority was able to reduce meter reading expenses and loss. Installation was divided into two stages consisting of 35,940 meters in Phase 1 and 59,310 meters in Phase 2. From the beginning of the project to the present day, Provincial Electricity Authority has been able to install 95,250 AMR meters for power users.



effective provision of services for power users such as inquiries regarding electricity fees/outstanding payments, electricity costs/complaints/recommendations and praise including warning services before cutting electricity meters/electricity fee notification/power outage warnings/SMS news and information, etc.

The 1129 PEA Call Center emphasizes customer centric service provision for stakeholders and customer while creating maximum satisfaction.

The 1129 PEA Call Center's main service objective is to be a center for contact and information services every day, 24 hours per day. Services include inquiries for information and fast and accurate services to promote good image and relationships between Provincial Electricity Authority, power users and the general public. Currently, the 1129 PEA Call Center is operating in Phase 3 and uses technology to develop service systems to be more effective and modern. The number of lines was



2.3 Support for Provincial Electricity Authority Goods and Service Delivery

Provincial Electricity Authority's main business is to distribute electricity. Therefore, Provincial Electricity Authority has many power users and service recipients because Provincial Electricity Authority's service area covers the entire country. Thus, Provincial Electricity Authority has a concept to build relationships between the organization and customers by using the 1129 PEA Call Center to create service standards and develop communication channels with customers, a key to

increased to 90 lines with voice and non-voice service channels for telephones, facsimile, IVR Self Service, Web Chat, E-mail, and service provision via social media (Facebook and Twitter). This enables Provincial Electricity Authority to support continually rising needs effectively. Furthermore, the 1129 PEA Call Center supports service provision in Burmese, Cambodian and Malayan in addition to services in Thai and English for the ASEAN Economic Community and is currently piloting services in Burmese and Malayan.

Performance of the 1129 PEA Call Center in 2017 showed service user statistics to exceed

2016 by 289,714 lines with 2,074,152 incoming calls at a mean of 172,846 incoming calls. The highest number of incoming calls was recorded in May (264,537 incoming calls). A survey of 1129 PEA Call Center service users in 2017 found satisfaction to be good at 94.66 percent.

In 2017, improvements in efficiency and service for customers were made with the following information:

- Increased outbound service in notifying electricity correction results to customers via outbound SMS messages or outbound calls back to customers. Service provision began on 1 March 2017.
- Supported call transfers from electricity correction shift rooms to the 1129 PEA Call Center in cases where the staff was working and not ready to receive calls.
- Systematic improvement and review of OMS processes in cooperation with regional PEAs and onsite electricity authorities in order to effectively integrate work.
- Provincial Electricity Authority is ready to participate in testing disaster recovery processes (DRP) of finished computer software systems for the main business in order to create confidence in Provincial Electricity Authority Call Center's capacity sufficiency for continual service provision.
- Lectures to exchange knowledge on the 1129 PEA Call Center for executive groups consisting of:
 - Executives from Electricite du Laos (EDL) on 8 March 2017.

- Executives from Provincial Waterworks Authority on 25 May 2017.

- Executives and officials from 12 regional electricity authorities and onsite electricity authorities.

Furthermore, to facilitate continual improvements to the 1129 PEA Call Center, Provincial Electricity Authority received approval for the framework to study guidelines in preparing the PEA Call Center, Phase 4, and prepared the Terms of Reference (TOR) for the First Report: Summary of the Findings and Analysis of Organization Overview, Work Systems and Other Related Areas and the Second Report: Summary of the Findings, Analysis, and Assessment of Current PEA Call Center Performance and Future Work Developments.

Power petition services were improved by integrating data from the Geographic Information System (GIS), the PEA Corp Business Software Package and linking identification card data with civil registration databases of the Department of Provincial Administration, Ministry of Interior. This increased data accuracy and reduced the number of documents required for contacting Provincial Electricity Authority, enabling one touch service provision.

3. Human Resource Management and Development

3.1 Manpower Management

Provincial Electricity Authority emphasizes customer centric practices. Thus, Provincial Electricity Authority modified manpower rates in electricity authority office electricity operation work and



modified work methods to be more effective in order to reduce System Average Interruption Duration Index (SAIDI), increase electricity grid reliability and build satisfaction among customers.

3.2 Organization Restructuring

Provincial Electricity Authority places importance on restructuring the organization in order to be able to support current and future missions. Thus, Provincial Electricity Authority conducted reviews to modify workloads of every agency, transfer agencies, workloads and upgrade agency status to be more suitable and flexible. The new structure was announced to be in use on 22 April 2015.

3.3 Performance Management

Provincial Electricity Authority managed performance by outlining a system for assessing employee performance by specifying standard methods and indicators to create fairness and attachment among employees. Performance assessments were used in paying wages, considering appointments, selecting high capacity personnel and sending personnel to receive improvement.

3.4 Personnel Satisfaction and Attachment Improvement

To help personnel in the organization live together happily and be able to continually produce quality results for the organization without creating conditions or making demands from the organization, Provincial Electricity Authority surveyed organization personnel satisfaction and attachment on an annual basis to use survey results to make improvements and plan strategies to improve satisfaction and attachment among Provincial Electricity Authority's personnel, which will have positive effects on Provincial Electricity Authority's operations and customers.

3.5 Personnel Improvement and Development

Provincial Electricity Authority considers personnel as a valuable and vital factor for the organization's sustainable growth. Provincial Electricity Authority has policies to improve personnel at every level and position including in technical

knowledge, which is the organization's primary knowledge and specific ability, knowledge, and capabilities based on job characteristics, management and improvements in quality of life, ethics, and morals.

In 2017, Provincial Electricity Authority has policies related to personnel with a focus on capability building to build the organization into a highly capable organization driven by quality personnel who work happily with determination. Enhancing human capital promotes human capital development for sustainable organization development and emphasis on personnel development to enter the PEA 4.0 era. This was achieved by specifying the "Improving business and workforce development through Technology and Innovation" policy with personnel as the main factor driving the organization. Provincial Electricity Authority promoted personnel development by various methods, focused on continual learning and promoted personnel participation and responsibility in self-improvement by preparing Individual Development Plans (IDP) covering executives and employees at every level. A 70:20:10 development model was included in IDP preparations. In the meantime, Provincial Electricity Authority is also focused on developing experts in specific fields of engineering such as electricity quality, power grid reliability, power grid protection, and loss reduction hotlines, etc. This will be an important force in preparing personnel to be ready with knowledge, capabilities and skills to support future operations while promoting and creating a forum for exchanging knowledge and experience, employees' research and innovation capabilities. Provincial Electricity Authority hosted academic conferences, competitions and seminars such as PEACON & Innovation 2017, innovation and invention competitions, quality activity competitions, work skill competitions, outstanding electricity authority selections, PEA Standard Performance Day and development of PEA Think Tank. Furthermore, Provincial Electricity Authority supports personnel in lifelong learning by providing scholarships for master's

degrees and doctorate degrees domestically and overseas, supporting personnel training opportunities domestically and overseas and promoting personnel capacity to present academic articles at international venues in order to prepare personnel to have sufficient capacity to support future business changes and growth.

3.6 Creating a Culture of Learning

Provincial Electricity Authority recognizes the importance of creating a mechanism for using employee capabilities to create maximum benefit for the organization by using employees' knowledge and experience or the organization's intellectual capital to develop processes, improve productivity and create new innovations in the organization. Provincial Electricity Authority places importance on promoting learning at the individual level and at the organization level.

Currently, Provincial Electricity Authority determines guidelines for promoting learning and knowledge exchanges in order to develop processes and create innovations through key processes such as knowledge management and innovation management. This begins from specifying the organization's vital knowledge by considering the major factors involved such as customer opinions, strategic challenges and advantages, policies of high-ranking executives, important work plans, and the organization's special capabilities, etc., along with compiling the aforementioned information in the form of electronic documents and ordinary documents. Provincial Electricity Authority disseminated and transferred the aforementioned knowledge through teaching processes, training, seminars and the organization's knowledge management information system. Provincial Electricity Authority performed knowledge management assessments to measure and use data to review processes to be more effective. Furthermore, Provincial Electricity Authority established PEA Think Tank to create a space for exchanging, learning, and discussing knowledge

on key issues of interest to the organization in order to integrate knowledge of experts inside and outside the organization. This is to create performance efficiency enhancement guidelines capable of leading to sustainable practice. According to results from operations in 2017, Provincial Electricity Authority was able to collect knowledge from agencies in the organization with a total of 7,102 articles and 6,071 employees attended activities in the knowledge management process. Furthermore, Provincial Electricity Authority promoted employees' learning in the organization in various forms by organizing activities such as PEACON & Innovation 2017 with displays of innovations, quality activities, and knowledge events, work skill competitions and outstanding electricity authority selection. Moreover, Provincial Electricity Authority promoted learning between Provincial Electricity Authority, outside organization and the general public through the creation of Provincial Electricity Authority learning centers, power user visits, power user seminars, the 1129 PEA Call Center, education for communities, academic conferences and seminars with various agencies, cooperation between ASEAN electricity authorities and regular knowledge handbooks and academic cooperation projects. Thus, Provincial Electricity Authority has a base of knowledge with readiness to build into sustainable innovations.

4. Supplies Management

4.1 Supplies Management

Provincial Electricity Authority procures and management supplies in compliance with the Government Procurement and Supplies Management Act B.E. 2560 (2017) and the Ministry of Finance Regulations on Government Procurement and Supplies Management B.E. 2560 (2017). This was achieved by preparing operational guidelines, criteria and methods in line with the Act and Ministry of Finance Regulations to facilitate effective, transparent and accountable procurement and supplies management.

4.2 Logistics and Supply Chain Development

Provincial Electricity Authority develops supplies delivery systems and warehouses to support supply chain operations by developing supply chain management such as modern warehouse development using radio frequency identification (RFID) and barcode technology with warehouse management. In addition, Provincial Electricity Authority developed the 3-Year Warehouse Security System Management Plan (2017 – 2019) with a focus on procurement of electric forklifts and roof structure construction to cover supply yards in order to improve supplies management.

In January – December, the value of incoming supplies is 12,412 million baht with a mean supply value of 7,509 million baht or a supply turnover rate of 1.65 times.

5. Services

5.1 Electricity Services

Provincial Electricity Authority's primary duty is to deliver, distribute and provide electricity services for customers by dividing service areas into four regions consisting of the northern, northeastern, central, and southern regions. Each region was composed of three sub-offices, a total of 12 sub-offices with 946 branch-offices, under Provincial Electricity Authority's jurisdiction covering 74 provinces nationwide except for Bangkok, Nonthaburi and Samutprakarn, which are in the area of responsibility of Metropolitan Electricity Authority.

Provincial Electricity Authority expanded service provision by establishing PEA shops at 90 department stores nationwide and organizing 52 PEA Mobile Shops to provide services for customers in communities. Furthermore, Provincial Electricity Authority developed the 1129 PEA Call Center to provide automatic news and information services by telephone, facsimile, and SMS messages to ensure that every problem and complaint from customers will be resolved effectively.

Provincial Electricity Authority emphasizes fast and effective customer service meeting service quality standard while improving service quality continually. For example, the One Touch Service system's work processes were improved by using modern technology to improve efficiency in searching for places which petitioned for electricity with the PEA Map system. Moreover, electricity correction work was improved by modifying the OMS system, the GIS map system, and weather prediction data with SCADA. This enabled faster monitoring of electricity correction progress. Furthermore, billing improvements and barcode system development supports payments via ATMs to increase payment channels for the public. In addition, when information is filled in petitions, the system is linked with civil registration databases from information systems of the Department of Provincial Administration by using smart card readers. This reduces the procedures, costs, expenses, and waiting time, enabling fast and more satisfactory response to customer needs.

Regarding services provided via the PEA Mobile Application, Provincial Electricity Authority provides services via a mobile phone application called "PEA Mobile". Customers can download the application for iOS and Android systems. This mobile application is capable of providing services, checking electricity values, searching for Provincial Electricity Authority service points, Provincial Electricity Authority offices and PEA Shops, reporting power outages, malfunctions, recommendations and complaints. In 2017, the PEA Mobile Application was modified to allow electricity payments by deducting VISA and Master Card credit cards via 2C2P or counter service. In addition, Provincial Electricity authority carried out a project to develop a one-stop Internet customer service system called "PEA Smart Plus".

In the area of online service provision, Provincial Electricity Authority has www.pea.co.th



as another channel used by Provincial Electricity Authority to report customer information. Furthermore, PEA e-Service including PEA e-Pay and PEA e-Invoice facilitate customers' payment for services and service fee checking. In addition, customers can follow Provincial Electricity Authority's news and information via social media consisting of the following:

Facebook : www.facebook.com/Provincial.Electricity.Authority

Twitter : twitter.com/pea_thailand

5.2 Power Grid Construction and Maintenance Services

Provincial Electricity Authority provides services related to construction and maintenance of substations, power grids, transformers and electrical equipment for power users in order to help provide one-stop service. These services are considered necessary for electricity distribution processes and are processes directly contributing to building satisfaction in customers. Services are divided into the following five areas: construction services, maintenance services, electrical equipment installation services, equipment testing services, and consultant services.

5.3 Electrical Engineering Services

Provincial Electricity Authority uses modern knowledge, technology, tools, instruments and equipment including personnel with experience and experience in the fields of engineering and

project management to provide services for outside customers including government agencies and private agencies nationwide with quality assurance and speed. In addition, Provincial Electricity Authority provides services at fair prices to meet needs and build customer satisfaction. Types of services include power grid consultation and design work, power grid and substation construction work, power grid testing and analysis work, power grid maintenance work, and electrical equipment testing work.

5.4 Information and Communication Services

Information and communication services are provided by allowing the lease of dark fiber and bandwidth fiber optic cables with three main customer groups consisting of operators who need cables to expand communication networks, small power producers who need cables to control and monitor distribution security and security groups such as the Office of the Permanent Secretary, Ministry of Defense. Overall, use of Provincial Electricity Authority's network shares resources and reduces redundant investment by the country.

5.5 Renewable Energy Services

Provincial Electricity Authority founded PEA ENCOM International Co., Ltd. to operate and invest in renewable energy businesses domestically and overseas by investing or jointly investing with various organizations in order to study and develop renewable energy in addition to acting as a consultant on energy conservation for interested organizations.



Financial Status Analysis Report



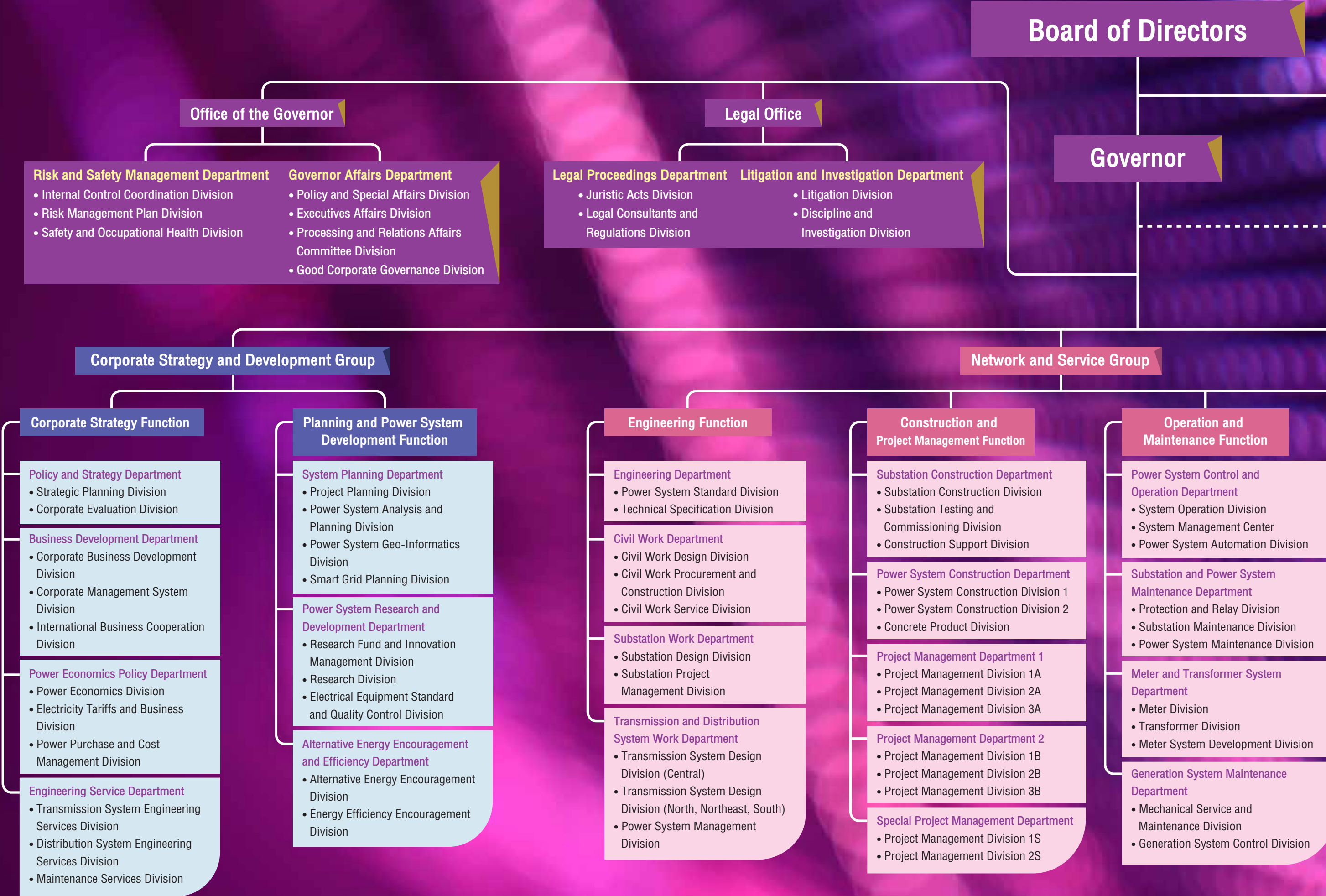
Performance in 2017 shows Provincial Electricity Authority to have a total income of 463,747 million baht, most of which is from electricity distribution income at 448,270 million baht. In addition, Provincial Electricity Authority has expenses at a total of 436,295 million baht, most of which was 375,777 million baht in electricity purchases. Provincial Electricity Authority has a net profit of 27,452 million baht, an increase by 1,564 million baht from 2016 and 2,705 million baht of profit increased from electricity distribution. This is a result from the country's economic growth trend in 2017 continuing from 2016 by 3.9 percent due to improvements in exports and tourism corresponding with growth in trading partners' economies. Furthermore, consistent economic stimulation measures from the government and Provincial Electricity Authority's specification of measures for controlling operating expenses enabled effective management of operating expenses.

Provincial Electricity Authority has a total of 398,305 million baht in assets, an increase from 2016 by 20,156 million baht or 5.3 percent. Assets consisted of 110,691 million baht in current assets and 287,614 million baht in non-current assets. Most of the increase is from land, buildings and equipment at 10,799 million baht or 4.5 percent. Provincial Electricity Authority has a total of 234,170 million baht in liabilities, an increase from 2016 by 6,770 million baht or 3.0 percent. Liabilities are composed of 63,970 million baht in current liabilities and 170,200 million baht in non-current liabilities. Equity is 164,135 million baht, an increase from 2016 by 13,386 million baht or 8.9 percent.

Provincial Electricity Authority took out domestic loans to invest in plans/projects to support higher electricity needs, improve power grid efficiency and security and reduce loss along with maintaining the environment and scenery according to the government's policy. Loan procurement guidelines specified for Provincial Electricity Authority to take loans from domestic sources in baht currency primarily by issuing bonds, making Provincial Electricity Authority's foreign loans and domestic loans 480 million baht and 75,671 million baht as of 31 December 2017, respectively, or 0.6 percent and 99.4 percent of domestic loans.



Management Structure of Provincial Electricity Authority





Manpower Structure and Personnel-related Expenses

Manpower Structure

Number of Employees and Hired Workers by Function/Office in 2017

Unit: Employee

No.	Branch/Office	Employees	Hired Workers	Total
1	Governor	8	-	8
2	Office of the Governor	164	15	179
3	Legal Office	112	1	113
4	Internal Audit Bureau	160	-	160
5	Human Resource	480	6	486
6	Accounting & Finance	331	24	355
7	Operation and Maintenance	485	42	527
8	Corporate Strategy	290	4	294
9	Planning and Power System Development	252	4	256
10	Corporate Social Responsibility	126	5	131
11	General Services	340	40	380
12	Construction and Project Management	500	82	582
13	ICT	308	4	312
14	Electricity Authority Region 1	6,086	1,174	7,260
15	Electricity Authority Region 2	6,972	1,442	8,414
16	Electricity Authority Region 3	7,253	1,707	8,960
17	Electricity Authority Region 4	5,661	1,269	6,930
18	Engineering	307	7	314
Total		29,835	5,826	35,661

Remarks: Provincial Electricity Authority currently has 102 disabled employees and 16 hired workers.

Personnel-related Expenses

Unit: Million Baht

Items	2017	2016	2015
Employee Expenses	27,155	26,529	24,709
Hired Worker Expenses	1,371	1,277	1,075
Total	28,526	27,806	25,784



PEA Board of Directors 2017

Provincial Electricity Authority has prepared a report disclosing asset information and connected transactions for Provincial Electricity's Board of Directors to report to the public.

Chairman of the Board of Directors

(8 August 2017 – Present)



Chayabol Thitisak

Position Length: 8 August 2017 – Present
Date of Birth: 28 April 1960
Position: Director - General, Department of Disaster Prevention and Mitigation

Notable Work Experience

1. Deputy Permanent Secretary, Ministry of Interior
2. Governor of Nakhon Sawan Province

Qualification

1. Master's Degree – M.D.A. Western Michigan University
2. Bachelor's Degree – Bachelor of Political Science, Chulalongkorn University

Member of a Committee in Other Departments/Organizations:

1. Chairman, The Market Organization.
2. Director, Tourism Authority of Thailand

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Chairman of the Board of Directors

(21 July 2015 – 20 July 2017)



Tawin Pleansri

Director's Pool 2014

Position Length: 21 July 2015 – 20 July 2017

Date of Birth: 5 December 1953

Position: Retired Government Official

Notable Work Experience

1. Secretary-General, National Security Council
2. Advisor to the Deputy Prime Minister (General Prawit Wongsuwan)

Qualification

1. Master's Degree – Master of Political Science, Chulalongkorn University
2. Bachelor's Degree – Bachelor of Law, Thammasat University
3. Bachelor's Degree – Bachelor of Economics, Chulalongkorn University

Member of a Committee in Other Departments/Organizations:

None

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Directors



Yodphot Wongrukmit

Director's Pool 2014

Position Length: 21 July 2015 – 20 July 2017 and
8 August 2017 – Present

Date of Birth: 7 December 1959

Position: Senior Executive Vice President,
Corporate Management and
Sustainability Development,
Bangchak Corporation Public
Company Limited

Notable Work Experience

1. Senior Executive Vice President, Corporate Administration and Information Technology, Bangchak Petroleum Public Company Limited
2. Senior Executive Vice President, Marketing Business, Bangchak Petroleum Public Company Limited
3. Acting Senior Executive Vice President, Marketing Business, Bangchak Petroleum Public Company Limited

Qualification

1. Master's Degree – MBA Middle Tennessee State University, USA
2. Bachelor's Degree – Bachelor of Economics, University of the Thai Chamber of Commerce (2nd Class Honors)

Member of a Committee in Other Departments/Organizations:
Director, Bangchak Greenet Co., Ltd.

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Danucha Pichayanan

Director's Pool 2014

Position Length: 21 July 2015 – 20 July 2017 and
8 August 2017 – Present

Date of Birth: 5 August 1970

Position: Deputy Secretary-General,
National Economic & Social
Development Board

Notable Work Experience

1. Policy & Plan Advisor, Office of the National Economic & Social Development Board
2. Director, Infrastructure Project Office
3. Senior Professional Policy & Plan Analyst

Qualification

1. Master's Degree – M.S. Engineering Management, George Washington University, USA
2. Bachelor's Degree – Bachelor of Engineering, Chulalongkorn University

Member of a Committee in Other Departments/Organizations:
None

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)





Nopparat Maythaveekulchai, Ph.D.

Director's Pool 2016

Position Length: 8 August 2017 – Present

Date of Birth: 8 April 1960

Position: Former Director, Thailand Convention & Exhibition Bureau (Public Organization)

Notable Work Experience

1. Acting Managing Director, ACT Mobile Co., Ltd.
2. Acting Manager, Thai Mobile Joint Venture

Qualification

1. Doctorate Degree – Diplome de Docteur Opto – Electronics, Universited'Aix-Marseille, France
2. Master's Degree – Diplome d'Etude Approfondie (DEA) in Opto – Microwave – Electronics, Institute National Polytechnique de Grenoble (INPG), France
3. Master's Degree – MBA in International Management, Asian Institute of Technology (AIT), Thailand
4. Bachelor's Degree – Bachelor of Engineering, Electrical Engineering (Force and Communication), King Mongkut's University of Technology Thonburi

Member of a Committee in Other Departments/Organizations:

Executive Director, Foreign Tourist Assistance Fund, Ministry of Tourism and Sport

Shareholding in Companies Related to the Energy Business

Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Yongyutdh Khomase

Position Length: 11 October 2016 – 20 July 2017 and 8 August 2017 – Present

Date of Birth: 16 November 1955

Position: Retired Government Official

Notable Work Experience

1. Director, Bureau of the Budget Area 6, Bureau of the Budget
2. Director, Evaluations Division 2, Bureau of the Budget

Qualification

1. Master's Degree – Master of Public Administration, National Institute of Development Administration.
2. Bachelor's Degree – Bachelor of Economics (Finance), Ramkhamhaeng University

Member of a Committee in Other Departments/Organizations:

None

Shareholding in Companies Related to the Energy Business

Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Directors



Sak Segkhoonthod, Ph.D.

Position Length: 8 August 2017 – Present
Date of Birth: 3 May 1966
Position: President and CEO,
 Digital Government Development
 Agency (Public Organization) (DGA)

Notable Work Experience

1. Senior Executive Vice President, Office of Government Information Technology Management, National Science and Technology Development Agency
2. Executive Vice President, Office of Government Information Technology Management, National Science and Technology Development Agency

Qualification

1. Doctorate Degree – Electronic Systems Engineering, Essex University, United Kingdom
2. Master's Degree – Computer Studies, Essex University, United Kingdom
3. Bachelor's Degree – Bachelor of Industrial Technology in Electronics, King Mongkut's Institute of Technology Ladkrabang

Member of a Committee in Other Departments/Organizations:

1. Senior Expert Committee in the Electronic Transactions Commission.
2. Executive Committee of the National Electronics and Computer Technology Center
3. Senior Expert Director in the Official Information Commission

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Pannipa Apichatabutra

Director's Pool 2012

Position Length: 8 August 2017 - Present
Date of Birth: 25 December 1955
Position: Retired

Notable Work Experience

1. Deputy Managing Director, Internal Audit, Krung Thai Bank PCL
2. Assistant Managing Director, Capital and Capital Market Administration Group, Krung Thai Bank PCL

Qualification

1. Master's Degree – MBA, Ohio University, U.S.A.
2. Bachelor's Degree – Bachelor of Accounting, Chulalongkorn University

Member of a Committee in Other Departments/Organizations:

1. Management Audit Director, Mahidol University
2. Administrative Director, Tobacco Factory

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)





Flg. off. Kamolnai Chaixanien

Position Length: 8 August 2017 – Present
Date of Birth: 17 March 1958
Position: Senior Vice President, Thai Beverage Public Company Limited

Notable Work Experience

1. Deputy Managing Director – Asset Management, TCC Assets (Thailand) Co., Ltd.
2. Deputy Managing Director – Asset Management, Overseas Hotels Group, TCC Assets (Thailand) Co., Ltd.

Qualification

1. Master's Degree – MBA , Cornell University, Johnson Graduate School of Management, New York, USA
2. Master's Degree – Engineering in OR & IE, Cornell University, School of Industrial Engineering & Operations Research, New York, USA
3. Bachelor's Degree – Chemical Engineering, University of New Hampshire, New Hampshire, USA

Member of a Committee in Other Departments/Organizations:

1. Director, Amarin Printing & Publishing Public Company Limited
2. Director, Varopakorn Public Company Limited
3. Director, NCC Management & Development Co., Ltd.

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Nikorn Susiriwattananont

Position Length: 8 August 2017 – Present
Date of Birth: 30 June 1956
Position: Vice Chairman, The Federation of Thai Industries

Notable Work Experience

1. Chairman, Thai Iron & Steel Industry Club, Federation of Thai Industries
2. Director, Iron & Steel Institute of Thailand

Qualification

1. Master's Degree – Master of Commerce, Thammasat University
2. Bachelor's Degree – Social Sciences – Bachelor of Anthropology, Thammasat University

Member of a Committee in Other Departments/Organizations:

None

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Directors



Panit Dhirapharbwongse, Ph.D. (Ministry of Finance Representative)

Position Length: 8 August 2017 – Present
Date of Birth: 10 November 1967
Position: Legal Advisor, Office of the Permanent Secretary, Ministry of Finance

Notable Work Experience

1. Legal Group Director, Office of the Permanent Secretary, Ministry of Finance
2. Head of the Legal Work Group, Legal Bureau, Revenue Department

Qualification

1. Doctorate Degree – Ph.D. (Law), Thai Government Scholarship by the Need of the Revenue Department, Queen Mary's College, University of London, UK
2. Master's Degree – LL.M in International Economic Law, University of Warwick, UK
3. Bachelor's Degree – Bachelor of Law, Thammasat University

Member of a Committee in Other Departments/Organizations:

1. Director, Islamic Bank Asset Management Ltd.
2. Director, Krung Thai Law Firm Co., Ltd.

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



General Chatudom Titthasiri

Director's Pool 2014

Position Length: 21 July 2014 – 20 July 2017
Date of Birth: 31 October 1956
Position: Deputy Permanent Secretary, Ministry of Defense

Notable Work Experience

1. Deputy Chief of Staff, Royal Thai Army
2. Comptroller of The Army

Qualification

1. Master's Degree – Master of Arts (Military Science), Command and General Staff College
2. Bachelor's Degree – Bachelor of Science, Chulachomklao Royal Military Academy

Member of a Committee in Other Departments/Organizations:

Director, Airports of Thailand Public Co., Ltd.

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Prasit Suebchana (Ministry of Finance Representative)

Director's Pool 2012

Position Length: 21 July 2014 – 20 July 2017

Date of Birth: 6 April 1957

Position: Inspector General, Ministry of Finance

Notable Work Experience

Deputy Permanent Secretary, Ministry of Finance

Qualification

1. Master's Degree – Master of Public Administration (Public Administration Science), National Institute of Development Administration
2. Bachelor's Degree – Bachelor of Law, Ramkhamhaeng University

Member of a Committee in Other Departments/Organizations:

1. Director, Aeronautical Radio of Thailand Co., Ltd. (Term Expires on 30 September 2017)
2. Director, The Transport Co., Ltd. (Term Expires on 30 September 2017)

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Rerngsak Mahavinitchaimontri

Position Length: 25 November 2014 –
24 November 2017

Date of Birth: 14 April 1953

Position: Retired Government Official

Notable Work Experience

1. Governor of Chachoengsao Province
2. Governor of Nakhon Phanom Province
3. Governor of Kanchanaburi Province

Qualification

1. Master's Degree – Master of Public Administration (Public Administration Science), National Institute of Development Administration
2. Bachelor's Degree – Bachelor of Political Science (Government), Chulalongkorn University

Member of a Committee in Other Departments/Organizations:

1. Director, Working Committee, The Princess Mother Park Foundation
2. Public Sector Audit and Evaluation Committee, Ministry of Interior

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Directors



Patdikom Wongsuwan

Director's Pool 2016

Position Length: 23 February 2016 –
24 November 2017

Date of Birth: 23 March 1956

Position: Retired Government Official

Notable Work Experience

1. Director-General, Department of Corrections
2. Deputy Director-General, Department of Corrections
3. Prison Warden, Khlong Prem Central Prison

Qualification

1. Master's Degree – Master of Political Science, Thammasat University
2. Bachelor's Degree – Bachelor of Law, Thammasat University

Member of a Committee in Other Departments/Organizations:
None

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Major General Prachya Chalermwat, Ph.D.

Position Length: 21 July 2014 – 20 July 2017

Date of Birth: 17 October 1961

Position: Specialist, Office of the
Permanent Secretary, Ministry of
Defense

Notable Work Experience

1. Deputy Director, Computer Security Center, Defense Information and Space Technology.
2. Director, Protocol Division, Office of External Relations, Office of Policy and Planning, Office of Permanent Secretary for Defence
3. Deputy Director, Mathematic and Computer Department, Chulachomklao Royal Military Academy

Qualification

1. Doctorate Degree – Ph.D. Computational Science, George Mason University, USA (NASA Research Funded)
2. Master's Degree – M.S. Computer Science, George Washington University, USA (Stipend Award)
3. Bachelor's Degree – B.S. (E.E.), Chulachomklao Royal Military Academy (Dean's List)

Member of a Committee in Other Departments/Organizations:
Board of Directors of ITSA (Thailand) Information System Association

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

CTA Energy & Mining Co., Ltd.

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Assistant Professor Boonchai Sowanwanichakul

Director's Pool 2012

Position Length: 21 July 2014 – 20 July 2017

Date of Birth: 28 May 1958

Position: Assistant Professor, Chulalongkorn University

Notable Work Experience

Vice President Dean, Chulalongkorn University

Qualification

Bachelor's Degree – Bachelor of Engineering (Computer), Chulalongkorn University

Member of a Committee in Other Departments/Organizations:

1. Director, Krung Thai Computer Services Public Company Limited
2. Independent Director, Forth Smart Service Public Company Limited

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Surong Bulakul

Position Length: 25 November 2014 – 24 November 2017

Date of Birth: 15 November 1955

Position:

1. Advisor, Thai Listed Companies Association
2. Advisor, Federation of Thai Capital Market Organizations
3. Advisor, The Securities and Exchange Commission, Thailand (SEC)
4. Advisor, PTT Public Company Limited

Notable Work Experience

1. Chief Financial Officer, PTT Public Company Limited
2. Chief Operating Officer, Infrastructure, PTT Public Company Limited.

Qualification

1. Master's Degree – Business Administration, Cornell University, New York, USA
2. Master's Degree – Engineering in Operations Research, Cornell University, New York, USA
3. Bachelor's Degree – Bachelor of Science in Industrial Engineering and Operations Research, Syracuse University, New York, USA

Member of a Committee in Other Departments/Organizations:

1. Chairman of the Board, Port Authority of Thailand
2. Director, Bangkok Industrial Gas Co., Ltd.
3. Vice Chairman, The Thai Chamber of Commerce
4. Chairman of the Board, Sakari Resources Company Limited, Singapore
5. Director, 24m Technologies, Inc., USA
6. Chairman of the Board, Tiger Energy Trading Pte. Ltd.
7. Chairman of the Board, Global Power Synergy Public Company Limited (GPSC)

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Directors



Phaiboon Siripanoosatie

Director's Pool 2012

Position Length: 25 November 2014 – 20 July 2017

Date of Birth: 5 February 1963

Position: Vice Chairman, Chief Executive Officer, Risk Executive Director, Recruitment & Remuneration Director, Amanah Leasing Public Company Limited

Notable Work Experience

1. Director, Government Savings Bank
2. Executive Director, Office of Small and Medium Enterprise Promotion (OSMEP)

Qualification

1. Master's Degree – Master of Political Science, (Politics and Government), Sukhothai Thammathirat Open University
2. Bachelor's Degree – Bachelor of Engineering, Chulalongkorn University

Member of a Committee in Other Departments/Organizations:

1. Senior Expert Director, Geo-Informatics & Space Technology Development Agency (Public Organization)
2. Director and Audit Director, Finansia Syrus Securities Public Company Limited

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Associate Professor Wisuit Sunthonkanokpong, Ph.D.

Position Length: 25 November 2014 –

24 November 2017

Date of Birth: 8 August 1966

Position: Associate Professor, King Mongkut's University of Technology Ladkrabang

Notable Work Experience

1. Director, Academic Council, King Mongkut's University of Technology Ladkrabang
2. Council Director, King Mongkut's University of Technology Ladkrabang

Qualification

1. Doctorate Degree – Doctor of Philosophy in Learning Innovation and Technology, King Mongkut's University of Technology Thonburi
2. Master's Degree – Master of Engineering in Electrical Engineering, King Mongkut's University of Technology Ladkrabang
3. Bachelor's Degree – Bachelor of Education in Telecommunications Engineering, King Mongkut's University of Technology Ladkrabang

Member of a Committee in Other Departments/Organizations:

None

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)





Assistant Professor Prechaporn Suwatnodom, Ph.D.

Position Length: 21 July 2014 – 20 July 2017
Date of Birth: 8 February 1977
Position: Engineer, Professional Level, Bureau of Planning, Department of Highways, Ministry of Transport

Notable Work Experience

1. Honorary Advisor Committee of Transportation, National Legislative Assembly of Thailand
2. Director of Air Park Industry and Aircraft Industry, Ministry of Transport
3. Advisor to the Permanent Secretary, Ministry of Transport
4. Assistant to the Thailand Trade Representative, Office of the Thailand Trade Representative, Secretariat of the Cabinet
5. Director, Sufficiency Family Foundation

Qualification

1. Doctorate Degree – Doctor of Philosophy in Civil Engineering; University of California, Los Angeles, USA
2. Master's Degree – Master of Engineering (Honors); University of California, Los Angeles, USA
3. Master's Degree – Master of Science (honors); University of California, Los Angeles, USA
4. Bachelor's Degree – Bachelors of Science in Civil Engineering (honors), Specialization: Structure Engineering; University of California, Irvine, USA
5. Bachelor's Degree – Bachelors of Science in Civil Engineering (honors), Specialization: Transportation Engineering; University of California, Irvine, USA

Member of a Committee in Other Departments/Organizations:

Director, KrungthepThanakom Co., Ltd.

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)



Sermsakool Klaikaew

Director's in 2016

Position Length: 3 June 2015 – Present
Date of Birth: 10 November 1958
Position: Governor of Provincial Electricity Authority (Commencing on 3 June 2015 – Present)

Notable Work Experience

1. Deputy Governor (Human Resources)
2. Director, Provincial Electricity Authority Area 1 (Central) Phra Nakhon Si Ayutthaya Province

Qualification

1. Master's Degree – Master of Public & Private Management, National Institute of Development Administration
2. Bachelor's Degree – Bachelor of Engineering, Electrical Engineering, Kasetsart University

Member of a Committee in Other Departments/Organizations:

None

Shareholding in Companies Related to the Energy Business Exceeding 10 Percent of All Shares in the Company:

*None

Procurement/Employment Transactions with PEA in a Balance of 100 Million Baht and Up:

*None

(Including work on behalf of companies where this director is an executive or shareholder)

Remarks*

The auditing process consists of the following:

1. Inquiring with directors for information.
2. Examining procurements of the Provincial Electricity Authority with balance exceeding 100 million baht on the database.
3. Examining reports on conflicts of interest. Directors must report conflicts of interest upon (1) accepting a position, (2) creation of a conflict of interest and (3) the end of every year.

In cases where directors hold shares in companies involved in the energy business at more than 10 percent of the company's shares with voting rights, the Provincial Electricity Authority will report to the Ministry of Interior.





PEA Executives



Mr. Sermsakool Klaikaew

Position: Governor

Age: 59 Years

Education Facility/Qualification/Fields

- National Institute of Development Administration/
Master of Development Administration/Public and
Private Management Program
- Kasetsart University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 3 June 2015 - Governor, Provincial Electricity Authority
- 18 February 2015 - Deputy Governor, Human Resource
- 19 March 2014 - Director, Area 1 Electricity Authority (Phra Nakorn Si
Ayutthaya Province), Region 3
- 1 October 2013 - Assistant Governor, Human Resources Development





Mr. Dusadee Limtong

Position: Deputy Governor, Office of the Governor

Age: 59 Years

Education Facility/Qualification/Fields

- Srinakharinwirot University/
Bachelor of Arts/Thai Language and Literature

Positions Held

1 October 2016 - Deputy Governor, Office of the Governor
18 February 2015 - Director, Office of the Governor
1 January 2015 - Acting Director, Office of the Governor Affairs Department



Mr. Somluck Kingmala

Position: Deputy Governor, Office of the Governor

Age: 57 Years

Education Facility/Qualification/Fields

- Ramkhamhaeng University/
Master of Business Administration
- Khon Kaen University/
Bachelor of Engineering/Electrical Engineering

Positions Held

1 October 2017 - Deputy Governor, Office of the Governor
18 February 2015 - Director, Area 1 Electricity Authority, (Phra Nakorn Si Aythaya Province) Region 3
1 January 2015 - Acting Director, Engineering and Service Department, Area 2 (Ubon Ratchathani Province), Region 2



Mr. Khemmarat Sartpreecha

Position: Deputy Governor, Office of the Governor

Age: 55 Years

Education Facility/Qualification/Fields

- National Institute of Development Administration/Master of Public Administration/Management for Executives
- Khon Kaen University/Bachelor of Engineering/Electrical Engineering

Positions Held

1 October 2017 - Deputy Governor, Office of the Governor, Acting Managing Director, PEA ENCOM International Co., Ltd.
1 October 2016 - Director, Area 2 Electricity Authority (Chon Buri Province), Region 3
15 June 2015 - Director, Area 3 Electricity Authority (Lop Buri Province), Region 1



PEA Executives



Mr. Sompong Preeprem

Position: Deputy Governor, Planning and Power System Development

Age: 56 Years

Education Facility/Qualification/Fields

- Kasetsart University/Master of Business Administration
- Khon Kaen University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 1 October 2017 - Deputy Governor, Planning and Power System Development
- 1 October 2016 - Assistant Governor, Planning and Power System Development
- 1 October 2015 - Assistant Governor, Office of the Governor



Mr. Poonsiri Dharmasaroj

Position: Deputy Governor, Corporate Strategy

Age: 58 Years

Education Facility/Qualification/Fields

- Chiang Mai University/Master of Business Administration
- Chiang Mai University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 1 October 2015 - Deputy Governor, Corporate Strategy
- 18 February 2015 - Assistant Governor, Corporate Strategy
- 1 January 2015 - Acting Assistant Governor, ICT



Mr. Ekachai Saktusana

Position: Deputy Governor, Electricity Authority Region 1

Age: 60 Years

Education Facility/Qualification/Fields

- Khon Kaen University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 1 October 2015 - Deputy Governor, Electricity Authority Region 1
- 18 February 2015 - Director, Area 2 Electricity Authority (Phitsanulok Province), Region 1
- 1 January 2015 - Acting Director, Engineering and Service Department, Area 2 (Phitsanulok Province), Region 1



Mr. Kittu Jariyamana

Position: Deputy Governor, Electricity Authority Region 2

Age: 60 Years

Education Facility/Qualification/Fields

- National Institute of Development Administration/Master of Public Administration/Management for Executives
- Khon Kaen University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 1 October 2016 - Deputy Governor, Electricity Authority Region 2
- 1 October 2015 - Director, Area 3 Electricity Authority (Nakhon Ratchasima Province), Region 2
- 18 March 2015 - Assistant Governor, Operations and Maintenance





Mr. Prakan Wongput

Position: Deputy Governor, Electricity Authority Region 3
Age: 59 Years

Education Facility/Qualification/Fields

- National Institute of Development Administration/Master of Development Administration
- Chiang Mai University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 1 October 2015 - Deputy Governor, Electricity Authority Region 3
- 1 October 2013 - Director, Area 3 Electricity Authority (Nakhon Ratchasima Province), Region 2
- 19 December 2012 - Director, Area 3 Electricity Authority (Yala Province), Region 4



Mr. Manoon Chantaraksa

Position: Deputy Governor, Electricity Authority Region 4
Age: 59 Years

Education Facility/Qualification/Fields

- Ramkhamhaeng University/Master of Business Administration
- Khon Kaen University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 1 October 2016 - Deputy Governor, Electricity Authority Region 4
- 1 September 2015 - Acting Deputy Governor, Corporate Social Responsibility
- 18 March 2015 - Deputy Governor, Office of the Governor



Mr. Pichet Srisawat

Position: Deputy Governor, Engineering
Age: 60 Years

Education Facility/Qualification/Fields

- Kasetsart University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 1 October 2016 - Deputy Governor, Engineering
- 1 October 2015 - Assistant Governor, Engineering
- 18 March 2015 - Director, Engineering Department



Mr. Suwat Chiochanchai

Position: Deputy Governor, ICT
Age: 58 Years

Education Facility/Qualification/Fields

- Kasetsart University, Master of Business Administration
- Kasetsart University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 18 February 2015 - Deputy Governor, ICT
- 1 October 2014 - Acting Deputy Governor, Engineering Business
- 1 October 2013 - Deputy Governor, Planning and Power System Development



PEA Executives



Mr. Piyaopoj Ruthirago

Position: Deputy Governor,
Construction and Project
Management

Age: 57 Years

Education Facility/Qualification/Fields

- Prince of Songkla University/Bachelor
of Engineering/Electrical Engineering

Positions Held

1 October 2016 - Deputy Governor,
Construction and
Project Management

15 June 2015 - Director, Area 2
Electricity Authority
(Chon Buri Province),
Region 3

18 February 2015 - Director, Area 3
Electricity Authority
(Lop Buri Province),
Region 1



Mr. Wallop Kittiwiwat

Position: Deputy Governor, Operations
and Maintenance

Age: 56 Years

Education Facility/Qualification/Fields

- Kasetsart University/Master of Business
Administration

- King Mongkut's Institute of Technology
Ladkrabang/Bachelor of Engineering/
Electrical Engineering

Positions Held

1 October 2017 - Deputy Governor,
Operations and
Maintenance

1 October 2015 - Assistant Governor,
Operations and
Maintenance

18 March 2015 - Director, Operations
and Maintenance
Department, Area 3
(Nakhon Pathom
Province), Region 3



Mr. Amnuaychai Suwansontorn

Position: Deputy Governor, Corporate
Services

Age: 59 Years

Education Facility/Qualification/Fields

- Ramkhamhaeng University/Master of
Arts/Political Science

- Chulalongkorn University/Bachelor of
Commerce/General Marketing

Positions Held

18 February 2015 - Deputy Governor,
Corporate Services

1 January 2015 - Acting Deputy
Governor, Corporate
Services

1 October 2013 - Assistant Governor,
Corporate Services





Mrs. Chinsanee Unchitti

Position: Deputy Governor, Accounting and Finance

Age: 58 Years

Education Facility/Qualification/Fields

- Kasetsart University/Master of Business Administration
- Ramkhamhaeng University/Bachelor of Business Administration/Finance and Banking

Positions Held

- 1 October 2017 - Deputy Governor Accounting and Finance
- 1 October 2016 - Assistant Governor Accounting and Finance
- 18 March 2015 - Director, Finance Department



Mr. Surasak Trithan

Position: Deputy Governor, Human Resource

Age: 59 Years

Education Facility/Qualification/Fields

- Kasetsart University/Master of Business Administration
- Kasetsart University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 15 June 2015 - Deputy Governor, Human Resource
- 18 February 2015 - Director, Area 2 Electricity Authority (Chon Buri Province), Region 3
- 19 March 2014 - Level 13 Expert, Office of the Deputy Governor of Regulated Retail Business (Region 3)



Mr. Somphob Thengthabthim

Position: Deputy Governor, Corporate Social Responsibility

Age: 59 Years

Education Facility/Qualification/Fields

- Kasetsart University/Bachelor of Engineering/Electrical Engineering

Positions Held

- 1 October 2015 - Deputy Governor, Corporate Social Responsibility
- 18 February 2015 - Assistant Governor, Corporate Social Responsibility
- 23 January 2013 - Director, Business Planning Department (Region 1)



Significant Current and Future Investments

Provincial Electricity Authority prepares work plans and projects to be consistent with future electricity needs in addition to specifying investment plan frameworks for power grid development plans to be consistent with the National Economic and Social Development Plan. This effort is aimed at achieving the main goal of developing Provincial Electricity Authority's power grid to be sufficient with coverage and security while meeting service quality standards in order to prepare and lay down a foundation for improving Thailand into a developed, secure, prosperous and sustainable country by developing in line the Sufficiency Economy Philosophy. Furthermore, Provincial Electricity Authority is determined to develop PEA Smart Grid by using information and communication technology to measure and control the power grid, making the system more automated. New power grid infrastructure models will be developed to support renewable energy and more effective energy consumption management technologies in the future. This is consistent with the government's national development policies and strategies including other agencies. Projects are planned according to investment plans in line with the projections for electricity needs prepared by the work committee on the preparation of electricity need predictions. The current committee was approved on 18 September 2017 and predictions are to be used as a base for preparing budgets and investment plans because energy and environmental crises will increase in severity while national development increases the need for basic energy factors

According to projects for electricity needs from 18 September 2017, the base case at the end of the 12th National Economic and Social Development Plan (2011) will consume 133,570 million units of electricity with a maximum electricity need of 23,786 megawatts and 20.78 million power users, a mean annual increase of 3.44, 2.29, and 2.16 percent, respectively.

Work Plans and Project

Government Work Plans and Policies Related to Electricity Service Provision

Provincial Electricity Authority's power grid development plans in the National Economic and Social Development Plan considered the following energy policies of the government:

1. Promote and push for the energy industry to generate income for the country. The energy industry is a strategic industry. Therefore, investment in energy infrastructure and the region's energy business hub development will be increased by using geostrategic advantages.
2. Create energy security by seeking and developing energy sources and power grids domestically and abroad along with diversifying types of energy sources appropriately and sustainably.
3. Promote generation, consumption, research and development of renewable energy and alternative energy by setting a goal to replace at least 25 percent of fossil fuels within 10 years. This requires comprehensive industrial development.

4. Promote and push for full energy conservation by reducing energy consumption to production levels by 25 percent within 10 years through comprehensive development, promotion of highly efficient equipment and facilities along with clean energy development to reduce greenhouse gas emissions and solve global warming in addition to building awareness among consumers to use energy conservatively and effectively in an earnest and consistent system in the production, transportation and household sectors.

Power Grid Development Plan Preparation Objectives

1. To improve operating performance and organization capabilities to excellence in order to become a leader in the electricity distribution business.
2. To focus on meeting the needs of all stakeholder groups.
3. To emphasize innovation, technology and business expansion in support of connected business operations domestically and overseas.
4. To promote and improve effective use and capacity of information systems.

Investment Planning

Provincial Electricity Authority specifies investment plans in line with the framework of the National Economic and Social Development Plan to be consistent with the country's development strategies and consider continual support for future electricity needs including Provincial Electricity Authority's financial status. Main investment projects consist of 16 ongoing projects, 2 ongoing work plans, 6 future projects (investment expected over the next three years) and 3 future work plans as follows:

Significant Current and Future Investment Projects

Unit: Million Baht

Projects	Investment Balance			Status
	Domestic Loans	PEA Income	Total Balance	
Current Ongoing Projects				
Transmission system and substation development project, 9 th stage, phase 1	5,295	1,765	7,060	Project Progress: 43.92%
Transmission system and substation development project, 9 th stage, phase 2	3,405	1,135	4,540	Project Progress: 28.41%
Transmission system and substation development project, 9 th stage, phase 3	11,314	3,771	15,085	Project Progress: 36.79%
Transmission system and substation development project, 9 th stage, phase 4	3,360	1,125	4,485	Project Progress: 46.90%
The power distribution system reinforcement project, 7 th stage	12,950	4,320	17,270	Project Progress: 96.87%



Projects	Investment Balance			Status
	Domestic Loans	PEA Income	Total Balance	
Distribution system reliability improvement project, 3 rd stage	11,365	3,790	15,155	Project Progress: 65.00%
Submarine cable extension to electrified island project (Ko Pha-ngan, Suratthani province)	820	274	1,094	Complete; distribution began on 18 May 2017
New rural household electrification project	2,761	926	3,687	Completed for 130,054 households; 98.80%
Remote rural household electrification project	910	305	1,215	Completed for 9,186 households; 79.19%
Distribution system dispatching center improvement project	3,395	1,135	4,530	Project Progress: 12.27%
Smart grid development plan (Pattaya in Chonburi province)	800	269	1,069	Ongoing Contract Bidding Project Progress: 2.50%
Transmission and distribution development project 1 st stage	47,009	15,670	62,679	Project Progress: 2.40%
Power system development for special economic zone project 1 st stage (Tak, Sakaeo, Trat, Mukdahan, Songkhla and Nong khai province)	2,355	785	3,140	Project Progress: 9.80%
Agriculture electrification project, 2 nd stage	1,520	510	2,030	Project Progress: 20.68%
Major Cities Power System Development Project, 1 st stage	8,750	2,920	11,670	Project Progress: 1.07%
Micro grid development project at Mae Sariang district, Mae Hong Son province	185	80	265	TOR Approval Pending
Geographic information system development plan, 3 rd stage	1,560	530	2,090	Deputy Governor (Engineering) approved the TOR and the Cost Estimate for procurement and installation of power grid geo-informatics software including application program development. The aforementioned draft has been presented to Provincial Electricity Authority's Computer System Management and Procurement Committee.

Projects	Investment Balance			Status
	Domestic Loans	PEA Income	Total Balance	
Development plan for power interruption analysis and solution center (plan 2)	529	176	705	Phase 1 with 12 centers is complete. Phase 2 with 23 centers has 5 centers completed and 18 centers with ongoing progress. Phase 3 with 150 centers with ongoing progress.
Total Ongoing Projects	118,283	39,486	157,769	

Projects with Expected Investment over the Next 3 Years

PEA small hydropower development at dame of royal irrigation department project (10 Areas consist in Lampang, Chiang Mai, Sakon Nakhon, Phetchabun, Songkhla province, Rayong province (2 areas) and Trat province (3 areas)	-	808	808	Consultants are being hired to study, design and supervise in five areas (Lampang, Rayong, Phetchaboon, Chiangmai and Sakon Nakhon). Consideration is being given to the remainder for funds from Provincial Electricity Authority's research fund.
Renewable energy generation development project on Kut island and Mak island, Trat province	241	81	322	Associated agencies are providing opinions to accompany approval from COM.
System voltage conversion from 33 kV to 22 kV project in southern region, 1 st stage	799	266	1,065	Project feasibility study completed. Currently considering project adjustment into long-term plans to be carried out in Ranong first.
The 115 kV submarine cable extension to Samui island, Suratthani province	1,597	533	2,130	Opinions from the Suratthani Marine and Coastal Resources Commission are being gathered for presentation to the Natural Resources & Environment Policy & Planning Office to be presented further to the Office of the National Environment Board for approval.
Power generation development from wind farm in the southern region project	900	300	1,200	Currently adjusting the complete feasibility study report according to opinions of the report acceptance committee.
Micro hydro power plant for community project	225	75	300	Project Feasibility Study Ongoing

Projects	Investment Balance			Status
	Domestic Loans	PEA Income	Total Balance	
Power system development for special economic zone project, 2 nd stage (Chiang Rai, Narathiwat, Nakhon Phanom and Kanchanaburi province)	3,000	1,000	4,000	Ongoing
Power system Development on islands project	4,973	1,657	6,630	Project Feasibility Study Ongoing
Transmission and distribution development project 2 nd stage	58,215	19,405	77,620	Compiling and Summarizing Workload from PEA Districts
Major Cities Power System Development Project, 2 nd stage	5,925	1,975	7,900	Project Feasibility Study Ongoing
Submarine Cable Capacity Improvement to Electrified Islands Project	1,623	542	2,165	Environmental Impact Analysis Ongoing
Underground Cable System Development Plan in Municipal area	3,749	1,251	5,000	Presentation to the Provincial Electricity Authority Board of Directors Ongoing
The Geographic Information System Efficiency Improvement Plan	1,005	335	1,340	Current systems are being assessed and new technology trends are being studied.
New rural household electrification project 2 nd stage	4,923	1,642	6,565	Approval for the project being petitioned from the Council of Ministers
Smart Grid Development Project 1 st stage	4,970	1,660	6,630	Project Feasibility Study Ongoing
Advanced Metering Infrastructure for C&I Customer Project	1,606	536	2,142	Opinions from associated agencies are being gathered for presentation to petition the Council of Ministers for project approval.
Micro Grid Development Plan 1 st stage	825	275	1,100	Project Feasibility Study Ongoing
Electricity Asset management Development Plan	716	240	956	Project Feasibility Study Ongoing
Total expected to be invested in the next three years	95,292	32,581	127,873	
Total	213,575	72,067	285,642	

Investments

Capital sources consist of domestic loan institutes or fundraising and investments of Provincial Electricity Authority with the following investment ratios:

Capital Sources	Balance (Million Baht)	Ratio (Percent)
1. Domestic Loans/Fundraising	213,575	75
2. Provincial Electricity Authority Income	72,067	25
Total	285,642	100

Expected Benefits

After Provincial Electricity Authority complies with continual power grid development plans, plans in the 12th National Economic & Social Development Plan and estimates in the 13th National Economic & Social Development Plan, Provincial Electricity Authority expects the following benefits:

1. Electricity Service Expansion

Provincial Electricity Authority will be able to expand electricity services sufficiently for increased needs in support of growth in the business, industrial and tourism sectors including the future PEA Smart Grid while linking distribution systems to expand service boundaries and provide services for households with coverage.

2. Distribution Security Quality Improvement

Provincial Electricity Authority will be able to provide effective modern electricity services meeting international standards while enhancing power grid management efficiency to support easier links between equipment via networks. This will allow planning and management to reduce power grid operation and maintenance problems, leading to consistent power distribution security, fewer power outages and lower loss in addition to enabling connections with renewable energy sources and very small power producers, thereby increasing reliability to meet the needs of more power users.

3. Economic and Social Aspects

- 3.1 Efficient energy management.
- 3.2 Increase power grid capacity and service quality for power users.
- 3.3 Increased clean renewable energy consumption ratios and reduced greenhouse gas emissions.
- 3.4 Delays in large power plant construction and reduced foreign currency expenditures to import energy.
- 3.5 Secure power grid with reduced number of power outages and outage durations.
- 3.6 Power users will be able to manage electricity consumption in households, offices or buildings cost-effectively by the desired model to save on electricity bills.
- 3.7 Support for economic capacity development and improvements in quality of life by distributing infrastructure services to people with coverage of regional and rural areas.
- 3.8 Supports regional urban development by managing the power grid to improve scenery.
- 3.9 Supports rural job creation from household industry, rural industry and community industry development to help people have more work in local areas, higher income and reduce migration to cities.
- 3.10 Energy development with consideration given to effects on natural resources and environment to help people have good living conditions, quality of life and health.

Significant Information Report

Description	2017	2016	Increase (Decrease) in 2017 – 2016	
			Amount	Percent
Sales of Electricity Energy (Million Baht)	448,270	441,458	6,812	1.54
Other Operating Revenues (Million Baht)	13,348	13,136	212	1.61
Operating Expenses (Million Baht)	432,889	427,584	5,305	1.24
Income from Operations (Million Baht)	28,729	27,010	1,719	6.36
Capital Expenditures (Million Baht)	29,517	37,457	(7,940)	(21.20)
Loans (Million Baht)	76,151	78,075	(1,924)	(2.46)
Total Assets (Million Baht)	398,305	378,149	20,156	5.33
Number of Electricity Users (Cases)	19,360,779	18,894,637	466,142	2.47
Units Sales (Million Units)	132,401	129,674	2,727	2.10
Mean Units Sales (Unit/User)	6,839	6,863	(24)	(0.36)
Mean Electricity Fee (Baht/Unit)	3.47	3.48	(0.01)	(0.29)
Total Maximum Demand (MW)	19,721	20,854	(1,133)	(5.43)
Electricity (Million Units)	139,548	137,078	2,470	1.80
- Purchased (Million Units)	139,443	136,974	2,469	1.80
- Generated (Million Units)	105	104	1	0.96
Transmission Lines (Circuits-Km)	12,258	11,776	482	4.09
High-Voltage Distribution Lines (Circuits-Km)	308,958	304,432	4,526	1.49
Low-Voltage Distribution Lines (Circuits - Km)	462,786	453,836	8,950	1.97
Number of PEA Offices (Offices)	946	946	0	0.00
Number of PEA Employees (People)	29,835	30,114	(279)	(0.93)
Total Villages	74,304	74,304	0	0.00
Number of Villages with Electricity	74,297	74,297	0	0.00
Percentage of Villages with Electricity	99.99	99.99	0	0.00

Unit : Cases

The Customers	2017	2016	2015	2014	2013
Residential Homes (<150 kWh)	9,977,244	9,994,895	10,028,627	10,051,293	10,003,237
Residential Homes (>150 kWh)	7,124,254	6,744,937	6,310,899	5,868,536	5,465,774
Small Businesses	1,610,024	1,539,248	1,463,744	1,408,156	1,353,585
Medium Businesses	74,267	72,459	68,761	65,360	62,283
Large Businesses	6,625	6,396	6,112	5,836	5,533
Special Businesses	12,530	12,598	11,622	10,714	9,969
Non-Profit Organizations	1,305	1,261	1,237	1,385	1,416
Agricultural Pumping	5,046	4,935	4,415	4,641	4,809
Temporary Electricity	312,699	292,382	275,882	262,631	250,843
Secondary Electricity	64	55	51	48	41
Interruptible Power Supply	3	3	3	3	3
Free Electricity	236,718	225,468	220,090	211,891	204,826
Total	19,360,779	18,894,637	18,391,443	17,890,494	17,362,319
Increases (%)	2.47	2.74	2.80	3.04	3.36
Index (2013 = 100%)	111.51	108.83	105.93	103.04	100.00



Energy sales

Energy sales By Electricity Rate

Unit : Million Units

The Customers	2017	2016	2015	2014	2013
Residential Homes (<150 kWh)	8,141	8,198	8,270	8,291	8,159
Residential Homes (>150 kWh)	23,192	22,736	20,649	19,012	18,078
Small Businesses	13,035	12,696	12,032	11,373	10,987
Medium Businesses	21,157	20,902	19,988	19,214	18,580
Large Businesses	56,729	55,047	52,556	51,617	50,167
Special Businesses	4,183	4,172	3,876	3,636	3,585
Non-Profit Organizations	66	76	70	56	54
Agricultural Pumping	298	267	387	414	354
Temporary Electricity	977	985	989	982	950
Secondary Electricity	80	138	172	141	52
Interruptible Power Supply	1,925	2,001	1,945	1,761	1,641
Free Electricity	2,618	2,456	2,278	2,135	2,002
Total	132,401	129,674	123,212	118,632	114,609
Increases (%)	2.10	5.24	3.86	3.51	2.58
Index (2013 = 100%)	115.52	113.14	107.51	103.51	100.00

Electric energy Generate

Energy Generated, Purchased

Unit : Million Units

Source	2017	2016	2015	2014	2013
Generated by PEA	105	104	91	104	100
Purchased from EGAT	130,252	129,328	124,376	120,194	116,795
Purchased from DAEDE	112	85	70	101	99
Purchased from VSPPs	8,981	7,472	5,796	5,077	3,801
Purchased from Solar Rooftops	98	89	57	9	-
Total	139,548	137,078	130,390	125,484	120,796

Lighting, Business and Industrial Electricity

Electricity By Category (Not Including Free Electricity)

Unit : Million Units

Category	2017	2016	2015	2014	2013
Lighting	32,674	32,262	30,365	28,755	27,595
Business and Industrial	97,109	94,956	90,569	87,742	85,012
Total	129,783	127,218	120,934	116,497	112,607
Increases (%)	2.02	5.20	3.81	3.45	2.47
Index (2013 = 100%)	115.25	112.98	107.39	103.45	100.00

Fiscal Year	Lighting		Business and Industrial		Total	
	Million Units	%	Million Units	%	Million Units	%
2013	27,595	24.51	85,012	75.49	112,607	100.00
2014	28,755	24.68	87,742	75.32	116,497	100.00
2015	30,365	25.11	90,569	74.89	120,934	100.00
2016	32,262	25.36	94,956	74.64	127,218	100.00
2017	32,674	25.18	97,109	74.82	129,783	100.00

Employees

Employees by Qualification

Unit : Cases

Qualification	2017	2016	2015	2014	2013
Degree	8,949	8,897	8,167	8,020	8,016
Diploma-Higher Vocational Certificate	15,409	15,193	14,296	13,177	12,608
Vocational Certificate - Grade 12	4,484	4,856	5,237	5,372	5,501
Other	993	1,168	1,393	1,540	1,667
Total	29,835	30,114	29,093	28,109	27,792
Increase (Decrease) %	3.50	3.50	3.50	1.14	(0.96)
Index (2013 = 100%)	108.35	108.35	104.68	101.14	100.03



Corporate Social Responsibility



Provincial Electricity Authority is determined to create strength by working according to primary missions along with corporate social responsibility and implement international standards, government policies, policies of the Board of Directors and executives including organization strategies as a framework for improving operations in order to tangibly improve demonstrations of responsibility to society, the environment and stakeholders.

Provincial Electricity Authority always works with corporate social responsibility inside and outside the organization with policies to expand distribution areas to people in remote areas, push for every agency to recognize the importance of compliance with corporate social responsibility standards (ISO 26000) in every process with coverage of the entire

organization. Every branch is required to prepare Provincial Electricity Authority Corporate Social Responsibility Roadmap 2017 – 2021 along with organizing training on use of the ISO 26000 in Processes Self - Assessment Manual (ISPA) for Provincial Electricity Authority executives and employees in all 12 sub-offices and the Head Office.

Moreover, Provincial Electricity Authority organizes annual action seminars to analyze and identify strengths, weaknesses, opportunities and threats to corporate social responsibility in addition to prioritizing stakeholders with consideration given to effects, anxiety and expectations in order to prepare work plans consistent with strategies of the Corporate Social Responsibility Roadmap and seven main topics of ISO 26000 standards as follows:



1. Organizational Governance

Provincial Electricity Authority has improved corporate social responsibility performance by preparing Provincial Electricity Authority Strategic Plan and Corporate Social Responsibility Roadmap with a focus on working to cover every in-and after-process step by considering stakeholders, delivering products and services with efficiency, security and safety along with ensuring personnel work with corporate social responsibility meeting corporate social responsibility standards (ISO 26000). This is consistent with Provincial Electricity Authority Governor's "Towards Sustainable CSR" policy. Sustainable growth with communities, society, environment and the economy emphasizes CSR in process, creating shared values (CSV) and using the Sufficiency Economy Philosophy, the royal science leading to sustainable practices, as operating principles while promoting integration and participation by using civil-state mechanisms and adhering to sustainable development practice guidelines according to international standards. Moreover, Provincial Electricity Authority focuses on developing innovations for sustainable environments in business processes by promoting research and development of technologies to create innovations to connect with communities, promote renewable energy use for tourism and safety and promote clean energy use by community enterprises, etc.

2. Human Rights

Provincial Electricity Authority adheres to the principle of equitable treatment of stakeholders inside and outside the organization by considering respect for human rights. In 2017, Provincial Electricity Authority continually carried out projects to promote and improve quality of life for disadvantaged persons such as the project to accept 20 disabled persons to work with Provincial Electricity Authority and the project to organize goods or service distribution facilities for disabled persons or caregivers of disabled persons at the Head Office

and 16 sub-offices. In 2018, Provincial Electricity Authority has a goal to expand the aforementioned goods and service distribution facilities to 91 branch offices nationwide in order to support equal and fair treatment of disadvantaged persons.

Regarding human rights in the organization, Provincial Electricity Authority manages to retain personnel in the organization with benefits such as scholarships, loan benefits, etc., including transparent and fair management by using the same methods of practice in the entire organization. Employees and hired workers have routes for progress in career paths through training to improve knowledge, capabilities, skills and capacity in working from when employees first entered work to when employees hold higher positions

3. Labor Practices

Provincial Electricity Authority plans to treat personnel with knowledge, capabilities and expertise to be able to growth effectively in duties along with maintaining work hygienic and safe work environments, supporting personnel, providing benefits and welfare rights, creating channels for personnel to communicate and express needs and opinions in order to attract personnel, create satisfaction and increase attachment to the organization. In addition, Provincial Electricity Authority conducts surveys of employees' needs and expectations, which are different depending on job characteristics and duties, in order to improve benefit and welfare policies to meet personnel needs and expectations.

Furthermore, the most important issue in Provincial Electricity Authority's operations is personnel security, safety and occupational health. Thus, Provincial Electricity Authority emphasizes modifying workplaces to be safe, hygienic and have good benefits by creating 208 Occupational Safety, Health and Work Environment Committees covering every work area. Each committee is composed of employee representatives

(50%) and employer representatives (50%). In addition, Provincial Electricity Authority has safety agencies responsible for work and compliance with occupational health, hygiene and work environment policies to respond to the afore-mentioned policies. Provincial Electricity Authority uses proactive occupational health processes by organizing personnel health risk assessments, controlling danger at operating facilities and regularly checking and monitoring the work environment.

4. The Environment

Provincial Electricity Authority considers responsibility to the environment in every work process because electricity is the country's basic public utility. In addition, power plant, transmission and distribution system construction projects are large projects requiring a significant budget. Therefore, before commencing the aforementioned projects, Provincial Electricity Authority prepares environmental impact analysis reports (EIA) and strictly complies with associated laws such as the Promotion and Conservation of National Environment Quality Act B.E. 2535 (1992). In addition, Provincial Electricity Authority needs permission from related government agencies and approval from the Council of Ministers.

In substation, transmission and distribution system construction, Provincial Electricity Authority has standards meeting engineering and safety principles. Moreover, Provincial Electricity Authority refers to national and international standards in designing substations, transmission and distribution systems such as standards of the International Electro technical Commission (IEC), the Institute of Electrical and Electronics Engineers (IEEE) and the Engineering Institute of Thailand (EIT).

Furthermore, Provincial Electricity Authority has organized the Green Office Project and announced Provincial Electricity Authority's Green Office Policy on 24 April 2017 to express

determination to achieve practical success in the entire organization. This is to support every agency in Provincial Electricity Authority to use resources cost-effectively with environmental friendliness while reducing greenhouse gas emissions in preparation to become an international environmentally friendly office. In addition, Provincial Electricity Authority adjusts employee behaviors to be aware of environmental impacts with sustainability by reducing electricity, fuel and water use, recycling and reusing to reduce waste, reduce and discontinue use of hazardous products or chemicals in offices in order to reduce pollution in the environment and reduce greenhouse gas emissions. Thus, Provincial Electricity Authority received the Excellent (G-Gold) Award for four consecutive years (2014 – 2017) for being an agency meeting green office criteria. This award was created by the Department of Environment Quality Promotion, Ministry of Natural Resources and Environment. In 2014, Provincial Electricity Authority received four awards. In 2015, Provincial Electricity Authority received 12 awards. In 2016, Provincial Electricity Authority received 24 awards. And in 2017, Provincial Electricity Authority received another 29 awards for a total of 69 awards. In the future, Provincial Electricity Authority is determined to expand results of the Green Office Project to cover Provincial Electricity Authority offices in every province.

5. Fair Operating Practices

Provincial Electricity Authority places importance on corruption prevention and suppression by designating four main strategies in Provincial Electricity Authority Anti-Corruption Roadmap (2017 – 2021) consisting of: (1) Upgrade the Board of Director's intentions on good governance and anti-corruption; (2) Promote anti-corruption society and culture throughout the organization; (3) Develop aggressive good governance standards and anti-corruption systems; and (4) Develop suppression mechanisms and processes; monitor, examine and

penalize effectively to gain international acceptance. In 2017, Provincial Electricity Authority carried out major work plans such as the plan to integrate the corporate governance eSystem (CG – eSystem), the plan to monitor and explain internal control to agencies with corruption, the plan to develop procurement processes with be consistent with the Government Procurement and Supplies Management Act B.E. 2560 (2017) and the Ministry of Finance Regulations on Government Procurement and Supplies Management B.E. 2560 (2017), the plan to develop and enhance complaint management processes in the areas of services and corruption of PEA's Anti-Corruption Operation Center and the plan to develop information technology good governance standards and E-Investigate systems. In addition, Provincial Electricity Authority places importance on communication and training on policies and organizational corruption procedures for the Board of Directors and employees from every level.

Provincial Electricity Authority cooperates and supports the Board of Directors, executives and employees to attend anti-corruption activities organized by other agencies continually such as the “Honesty in the Footsteps of Our Father, PEA Does Good for the Land” declaration to express honesty and transparency in management to stakeholders inside and outside the organization, the International Anti-Corruption Day event (Thailand) hosted by the government in cooperation with the National Anti-Corruption Commission (NACC), the Office of the Public Sector Anti-Corruption Commission (PACC), the Anti-Corruption Organization of Thailand, government sector networks, state enterprises, the private sector, and the civil society sector, etc.

6. Consumer Issues

Provincial Electricity Authority is aware that stakeholders or customers are major stakeholders. Therefore, Provincial Electricity Authority prepared

project management plans and system development and modification plans with a focus on building and managing customer relations to become a customer-centric organization that places importance on hearing the voice of customers (VOC) including past customers, current customers, competitors' customers and future customers in order to analyze customer needs and expectations to develop activities/plans/projects to meet the needs of each customer group. In 2017, Provincial Electricity Authority developed a one-stop online customer service system called “PEA Smart Plus” by developing a mobile application on Smart Phones to facilitate services such as electricity bill notifications, electricity cost calculations, electricity payments via credit cards and online banking, electricity petitions, inability to reset meters when electricity costs are not paid, electricity malfunction notifications, recommendations/complaints, service location searches, and news and information notification, etc.

In addition, Provincial Electricity Authority uses online social media and Internet technology to hear and monitor public opinions on quality of goods and services such as the 1129 PEA Call Center, monitoring feedback data from customers by telephone, queue management systems, the Smile Box, for evaluating the customer satisfaction and key account management (KAM).

7. Community Involvement and Development

Provincial Electricity Authority builds relationships with communities to create an understanding, inquire regarding problems or effects from project operations along with educating communities on safety in using electricity. In 2017, Provincial Electricity Authority organized community relations activities in 15 communities nationwide to learn about problems and impacts on people such as anxiety regarding danger from transformers installed in communities, installation of high-voltage

cables over residences, danger from electricity leaks in flooded areas, errors from unit notations and the creation of knowledge on electricity safety through the following projects:

- **The Communities Using PEA's Electricity Safety Project**

Provincial Electricity Authority first organized the Communities Using PEA's Electricity Safety Project in 2013 and continued the project into the fourth year with a goal to disseminate beneficial knowledge on conservative and safe power consumption while reducing risk of loss of life and property from misuse of electricity to government and private agencies, education institutes, community leaders and educate electrical power students at the high vocational certificate (HVC) and vocational certificate (VC) levels in testing and modifying community electricity safety in the area of the Provincial Electricity Authority's responsibility

nationwide. In 2017, Provincial Electricity Authority allocated an education budget of 1,920,000 baht with 600 students under the Office of the Vocational Education Commission participating in the project and Provincial Electricity Authority was able to test power systems for 17,935 households.

- **One Tambon, One Electrician Project**

Provincial Electricity Authority organized the One Tambon, One Electrician Project to train labor skills in the electrician's profession for people in communities within Provincial Electricity Authority's service area nationwide, creating job opportunities for people in communities while promoting involvement in communities among Provincial Electricity Authority employees. In 2017, Provincial Electricity Authority allocated 6,660,000 baht with 2,000 communities who participated in the project. Satisfaction surveys found 90.35 percent of the participants to be satisfied in the benefits.



Audit Committee Report 2017

The Provincial Electricity Authority's Audit Committee was appointed by the Board of Directors. The Committee is composed of three qualified experts equipped with knowledge, capabilities and experience in internal audit, business administration, finance and law. In 2017, the Provincial Electricity Authority had the following Audit Directors in office according to terms:

Audit Directors in 1 January 2017 - 20 July 2017:

1. Mr. Prasit Suebchana, Audit Committee Chairman
2. Mr. Danucha Pichayanan, Audit Director
3. Mr. Yodphot Wongrukmit, Audit Director

A new Audit Committee has been in office from 25 August 2017 to the present

1. Miss Pannipa Apichatabutra, Audit Committee Chairman
2. Mr. Nikorn Susiriwattananon, Audit Director
3. Mr. Panit Dhirapharbwongse, Audit Director

The Director, Internal Audit Office, acts as the Secretary of the Audit Committee.

The Audit Committee has always acted within the scope of responsibilities prescribed by the Provincial Electricity Authority Regulations on the Audit Committee of the Provincial Electricity Authority B.E. 2556 (2013), revisions (2nd Edition) of B.E. 2559 (2016) and revisions (3rd Edition) B.E. 2560 (2017). Furthermore, the Audit Committee follows the practice guidelines specified in the State Enterprise Audit Committee Operating Manual, Revised Edition, B.E. 2555 (2012), State Enterprise Policy Office (SEPO), Ministry of Finance.

In 2017, the Audit Committee convened 12 meetings with executives, internal auditors and certified public accountants (Office of the Auditor General of Thailand) to discuss related agendas. The Audit Committee, also made three visits to inspect work and employees at several PEA branches and obtained important information, problems and barriers in operations. At these meetings and visits, the Audit Committee expressed opinions and recommendations for independent actions allowing executives and employees to work effectively and accurately while reporting key performance results to The Board of Directors. The Audit Committee works within its scope of responsibility by considering the Provincial Electricity Authority's performance as follows:

1. Financial Report Reviews - Review of significant data on monthly, quarterly and annual financial statements of the Provincial Electricity Authority and subsidiaries, including performance with executives, internal auditors and certified public accountants (Office of the Auditor General of Thailand). The Audit Committee considered key issues and offered useful opinions to ensure that financial reports were prepared with accuracy, reliability and sufficient disclosure of information as prescribed by the law, financial reporting standards and benefits for financial statement users.

2. Risk Management Reviews - Consideration of corporate risk management policies, plans and guidelines to ensure coverage of major internal and external risk factors in addition to effective risk management plans and guidelines.

3. Internal Control Review and Monitoring in the Provincial Electricity Authority and Subsidiaries - Consideration of auditing plans based on risk assessment and internal control, auditing methods, auditing reports and detected issues in addition to providing the recommendations, observations and opinions of the Internal Audit Bureau. In addition, the Audit committee supports PEA's risk management policies, guidelines and internal control systems to meet the standards prescribed by the State Audit Commission and ability to control risks at acceptable levels.

4. Good Governance Review - Consideration and promotion of PEA compliance with laws, rules, regulations methods, Council of Ministers' Resolutions, other notifications or related directives. The Provincial Electricity Authority must have morals, transparency and accountability without conflicts between personal and collective interests or corruption. The Audit Committee emphasizes work under ethical principles and good practice guidelines to foster conscientiousness among employees at every level while promoting corporate social responsibility in the organization.

5. Discussions with Certified Public Accountants (Office of the Auditor General of Thailand) - Discussions are held without the management to consider the scope and guidelines of audits and certified public accountants' performance to facilitate coordination and reduce redundancy. In 2017, the PEA paid an auditing fee of 2,000,000 Baht

6. Maintaining Audit Committee Quality - The Audit Committee was supported in training to enhance knowledge and understanding on the operations of the Audit Committee and PEA. To increase Audit Committee efficiency, overall performance was assessed with self-assessments following the good practice guidelines of the State Enterprise Policy Office, Ministry of Finance. Furthermore, the Audit Committee reviewed and modified PEA Regulations to be consistent with current rules and regulations.

7. Governance of Internal Audit Operations - In 2017, the Audit Committee reviewed and approved the Internal Audit Bureau Charter, the 5-Year Auditing Plan, Annual Auditing Plan, reviewed operations and auditing results of the Internal Audit Bureau under the Annual Auditing Plan, reports of conflicts between personal and collective interests, suitability and sufficiency of human resources and other resources of the Audit Committee in addition to recommending aggressive auditing and support of anti-corruption policies in addition to supporting self-improvement among auditors to earn professional internal auditing certificates.

The Audit Committee believes that the Provincial Electricity Authority and subsidiaries prepared accurate financial reports pursuant to financial reporting standards and worked within good governance systems with sufficient risk management and internal control systems, independent auditing meeting auditing standards and compliance with significant laws, rules, regulations and policies. No significant errors were encountered. The Audit Committee expresses opinions independently and advises the management and meeting attendants in a straightforward manner with focus on the interests of the Provincial Electricity Authority.



(Miss Pannipa Apichatabutra)
Audit Committee Chairman

Risk Management & Internal Control Committee Report

The Provincial Electricity Authority implements risk management principles by applying COSO ERM risk management standards and outlining internal control systems pursuant to the State Audit Commission Regulations (SAC) on Specification of Internal Control Standards B.E. 2544 (2001) in addition to using policies for developing internal control systems according to the COSO - 2013 conceptual framework in the entire organization. The Provincial Electricity Authority organizes a risk management structure and internal control system divided into the organizational and branch levels with systematic channels for reporting and monitoring assessments of risk management and internal control to ensure risk management and internal control covering the Provincial Electricity Authority's entire organization and support uncertainty of environmental changes which may have effects on interim operations in order to create positive results from current and future Provincial Electricity Authority missions.

In 2017, the Provincial Electricity Authority assessed risks by considering internal and external factors with potential effects on operations along with preparing plans to create confidence in achieving goals according to the organization's strategy with approval from the Provincial Electricity Authority's Risk Management & Internal Control Committee. The six following risk factors were managed by the Provincial Electricity Authority:

1. The Provincial Electricity Authority's inability to provide services and distribute consistent electricity.
2. Personnel readiness for future operations.
3. Asset management to achieve maximum efficiency.
4. Information technology security.
5. High overall loss.
6. Business model preparation.

In the area of internal control, the Provincial Electricity Authority monitors, assesses, develops and modifies internal control systems to ensure that current internal control systems are modern, sufficient, suitable, effective and capable of preventing or reducing risks to acceptable levels, as well as prepares certificates for internal control assessments of the Provincial Electricity Authority in 2017 to be sent to the State Audit Commission, the Provincial Electricity Authority's Board of Directors and the Audit Committee within 90 days after the end of the year in addition to sending copies of certificates to the Ministry of Interior.

The Committee has met with Provincial Electricity Authority executives to set risk management measures to achieve goals by monitoring risk management and internal control system assessments, including situational trends with potentially significant effects on the organization for six times. In addition, the Committee visited regional electricity authority offices for policy issued as well as operational site visit once.

The Risk Management & Internal Control Committee of the Provincial Electricity Authority is determined to perform main risk management duties and govern internal control systems with efficiency and appropriateness to help the Provincial Electricity Authority's operations achieve every objective. The Committee is highly confident that support and involvement from every employee in working under risk management measures and internal control systems set in place by the Provincial Electricity Authority will increase the likelihood of success, reduce problems, overcome barriers and alleviate potential uncertainty in the collective operations of the Provincial Electricity Authority to help the Provincial Electricity Authority become a leading organization capable of becoming "The Electric Utility of the Future".



(Mr. Danucha Pichayanan)

Chairman, Risk Management & Internal Control Committee, PEA



AUDITOR'S REPORT

To: The Board of Directors of the Provincial Electricity Authority

Opinion

The Office of the Auditor General of Thailand has audited the accompanying consolidated financial statements of the Provincial Electricity Authority and its subsidiary (the Group), and separate financial statements of the Provincial Electricity Authority (the Company), which comprise the consolidated and separate statements of financial position as at December 31, 2017, and the consolidated and separate statements of comprehensive income, the consolidated and separate statements of changes in equity and the consolidated and separate statements of cash flows for the year then ended, and notes to the consolidated and separate financial statements, including a summary of significant accounting policies.

In the Office of The Auditor General of Thailand's opinion, the consolidated and separate financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Provincial Electricity Authority and its subsidiary, and separate financial position of the Provincial Electricity Authority, respectively, as at December 31, 2017, and its consolidated and separate financial performance and its cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

Basis for Opinion

The Office of the Auditor General of Thailand conducted the audit in accordance with Thai Standards on Auditing (TSAs). The Office of the Auditor General of Thailand's responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of the Office of the Auditor General of Thailand's report. The Office of the Auditor General of Thailand is independent of the Group and the Company in accordance with the State Audit Standards issued by the State Audit Commission and the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that are relevant to the Office of the Auditor General of Thailand's audit of the consolidated and separate financial statements, and has fulfilled other ethical responsibilities in accordance with these requirements. The Office of the Auditor General of Thailand believes that the audit evidence obtained is sufficient and appropriate to provide a basis for the Office of the Auditor General of Thailand's opinion.

Other Information

The management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and separate financial statements and the auditor's report thereon. The annual report is expected to be made available to the Office of the Auditor General of Thailand after the date of this auditor's report.

The Office of the Auditor General of Thailand's opinion on the consolidated and separate financial statements does not cover the other information and the Office of the Auditor General of Thailand will not express any form of assurance conclusion thereon.

In connection with the audit of the consolidated and separate financial statements, the Office of the Auditor General of Thailand's responsibility is to read the other information identified above when it becomes

available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or the Office of the Auditor General of Thailand's knowledge obtained in the audit, or otherwise appears to be materially misstated.

When the Office of the Auditor General of Thailand reads the annual report, if the Office of the Auditor General of Thailand concludes that there is a material misstatement therein, the Office of the Auditor General of Thailand is required to communicate the matter to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Consolidated and Separate Financial Statements

The management is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, the management is responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, and using the going concern basis of accounting unless management either intends to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.


Those charged with governance are responsible for overseeing the Group's and the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

The Office of the Auditor General of Thailand's objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes the Office of the Auditor General of Thailand's opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with TSAs, the Office of the Auditor General of Thailand exercises professional judgment and maintain professional skepticism throughout the audit, including:

- Identifies and assesses the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence that is sufficient and appropriate to provide a basis for the Office of the Auditor General of Thailand's opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.



- Concludes on the appropriateness of the management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Company's ability to continue as a going concern. If the Office of the Auditor General of Thailand concludes that a material uncertainty exists, the Office of the Auditor General of Thailand is required to draw attention in the Office of the Auditor General of Thailand auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify the Office of the Auditor General of Thailand's opinion. The Office of the Auditor General of Thailand's conclusions are based on the audit evidence obtained up to the date of the Office of the Auditor General of Thailand auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.

- Evaluates the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The Office of the Auditor General of Thailand is responsible for the direction, supervision and performance of the group audit. The Office of the Auditor General of Thailand remains solely responsible for the Office of the Auditor General of Thailand's audit opinion.

The Office of the Auditor General of Thailand communicates with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that the Office of the Auditor General of Thailand identifies during the Office of the Auditor General of Thailand's audit.

April 2, 2018

English translation of the Auditor's Report has not been reviewed
by the Office of the Auditor General of Thailand.



THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF FINANCIAL POSITION

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

Consolidated financial statements				
	Notes	Dec. 31, 2017	Dec. 31, 2016	Jan. 1, 2016
			(Restated)	(Brought forward) (Restated)
Assets				
Current Assets				
Cash and cash equivalents	3.1, 5.1	3,468,958,206	2,114,251,315	4,437,899,027
Short-term investments	5.2	23,048,469,659	21,610,990,901	11,047,000,000
Trade accounts receivable	3.2, 5.3	34,458,968,845	32,006,421,118	33,637,524,486
Other accounts receivables	5.4	648,452,756	392,434,436	429,206,192
Accrued revenues	5.5	4,273,364,139	5,784,083,731	8,842,446,113
Materials and supplies	3.3, 5.6	4,787,529,358	2,407,640,602	2,479,507,884
Special-purpose deposits at financial institutions	3.4, 5.7	36,507,258,445	33,172,224,163	34,854,819,163
Undue input VAT		2,153,924,038	2,081,321,471	2,219,514,039
Advance payments to suppliers		1,966,920,110	1,404,359,783	1,580,705,656
Other current assets		130,870,391	109,534,193	150,955,972
Total Current Assets		111,444,715,947	101,083,261,713	99,679,578,532
Non-current Assets				
Investments in associates	3.5, 5.8	304,541,728	272,046,070	241,706,467
Investments in joint venture	3.5, 5.9	5,434,289	-	-
Investment property	3.7, 5.11	586,023,502	705,798,177	715,013,852
Property, plant and equipment	3.8, 5.12	253,297,161,830	242,498,008,933	232,667,595,872
Constructions in progress	3.9, 5.13	31,016,809,025	30,983,959,223	32,593,887,673
Intangible assets	3.10, 5.14	1,770,503,688	2,590,321,928	1,036,758,458
Other non-current assets	5.15	177,606,694	175,911,340	108,896,963
Total Non-current Assets		287,158,080,756	277,226,045,671	267,363,859,285
Total Assets		398,602,796,703	378,309,307,384	367,043,437,817

The notes to financial statements are an integral part of these financial statements.



THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF FINANCIAL POSITION

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

Consolidated financial statements				
	Notes	Dec. 31, 2017	Dec. 31, 2016	Jan. 1, 2016
			(Restated)	(Brought forward) (Restated)
Liabilities and Equity				
Current Liabilities				
Trade accounts payable		37,236,135,661	34,170,463,341	36,837,059,279
Other payables	5.16	2,377,032,197	2,287,885,689	2,537,617,815
Accrued expenses		4,266,445,279	3,861,762,911	3,492,177,031
Current portion of long-term loans	3.11, 3.12, 5.17, 7.2, 7.3	7,538,410,551	5,234,599,704	7,911,662,071
Current portion of finance lease liabilities	5.18	1,020,374,225	884,896,194	981,968,304
Accrued interest payable on loans		697,038,417	730,134,011	828,321,920
Accrued remittance to the Ministry of Finance	5.19	8,164,500,000	7,094,500,000	6,672,000,000
Advance received per contract		1,654,312,436	1,544,352,230	1,416,104,473
Deposits payable	5.20	680,523,212	699,433,832	701,196,409
Other current liabilities	5.21	436,707,317	472,780,039	600,635,935
Total Current Liabilities		64,071,479,295	56,980,807,951	61,978,743,237
Non-current Liabilities				
Long-term loans	3.11, 3.12, 5.17, 7.2, 7.3	68,612,498,966	72,840,392,754	76,370,942,832
Long-term provisions	3.13, 5.22	208,007,755	197,639,799	192,209,799
Construction obligations	5.23	9,272,147,076	9,758,704,314	9,445,293,362
Finance lease liabilities	5.18	1,626,262,403	2,043,544,704	427,048,106
Deferred revenues	3.14, 5.24	48,890,424,439	46,175,035,148	43,595,839,529
Electricity usage guarantee	3.15, 5.25	27,353,866,171	25,544,476,466	23,654,542,773
Sales and service guarantee		869,960,139	827,592,680	764,763,125
Employee gratuity fund	3.16, 5.26	8,637,850	7,876,330	7,082,282
Employee benefit obligations	3.17, 5.27	13,083,695,706	12,832,850,408	11,030,895,417
Other non-current liabilities		275,613,631	235,777,188	93,097,870
Total Non-current Liabilities		170,201,114,136	170,463,889,791	165,581,715,095
Total Liabilities		234,272,593,431	227,444,697,742	227,560,458,332
Equity				
Initial capital		87,003,887	87,003,887	87,003,887
Contributions from the government		4,802,500,915	4,802,500,915	4,802,500,915
Retained Earnings				
Appropriated		4,273,341	-	-
Unappropriated		159,436,425,129	145,975,104,840	134,593,474,683
Total Equity		164,330,203,272	150,864,609,642	139,482,979,485
Total Liabilities and Equity		398,602,796,703	378,309,307,384	367,043,437,817

The notes to financial statements are an integral part of these financial statements.

THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF FINANCIAL POSITION

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

Separate financial statements				
	Notes	Dec. 31, 2017	Dec. 31, 2016	Jan. 1, 2016
			(Restated)	(Brought forward) (Restated)
Assets				
Current Assets				
Cash and cash equivalents	3.1, 5.1	2,997,425,587	1,815,000,305	4,063,721,026
Short-term investments	5.2	22,935,888,058	21,500,000,000	11,047,000,000
Trade accounts receivable	3.2, 5.3	34,440,165,794	31,983,699,504	33,636,753,788
Other receivables	5.4	644,655,014	391,796,684	512,793,080
Accrued revenues	5.5	4,179,630,107	5,778,825,350	8,842,201,419
Materials and supplies	3.3, 5.6	4,781,185,724	2,404,645,308	2,475,909,039
Special-purpose deposits at financial institutions	3.4, 5.7	36,457,258,445	33,172,224,163	34,854,819,163
Undue input VAT		2,153,787,603	2,081,312,682	2,219,497,193
Advance payments to suppliers		1,970,997,587	1,404,359,783	1,580,705,656
Other current assets		129,963,241	109,500,994	150,955,972
Total Current Assets		110,690,957,160	100,641,364,773	99,384,356,336
Non-current Assets				
Investments in subsidiary	3.6, 5.10	782,283,750	557,283,750	473,283,750
Investment property	3.7, 5.11	586,023,502	705,798,177	715,013,852
Property, plant and equipment	3.8, 5.12	253,294,965,419	242,495,514,744	232,665,233,118
Constructions in progress	3.9, 5.13	31,016,809,025	30,983,959,223	32,593,887,673
Intangible assets	3.10, 5.14	1,770,364,082	2,590,190,312	1,036,699,249
Other non-current assets	5.15	163,611,148	174,597,662	108,208,185
Total Non-current Assets		287,614,056,926	277,507,343,868	267,592,325,827
Total Assets		398,305,014,086	378,148,708,641	366,976,682,163

The notes to financial statements are an integral part of these financial statements.



THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF FINANCIAL POSITION

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

	Notes	Separate financial statements		
		Dec. 31, 2017	Dec. 31, 2016	Jan. 1, 2016
			(Restated)	(Brought forward) (Restated)
Liabilities and Equity				
Current Liabilities				
Trade accounts payable		37,236,135,661	34,170,463,341	36,837,059,279
Other payables	5.16	2,350,018,354	2,249,368,103	2,521,511,418
Accrued expenses		4,190,255,703	3,858,358,447	3,491,747,938
Current portion of long-term loans	3.11, 3.12, 5.17, 7.2, 7.3	7,538,410,551	5,234,599,704	7,911,662,071
Current portion of financial lease liabilities	5.18	1,019,613,245	884,185,050	981,303,446
Accrued interest payable on loans		697,038,417	730,134,011	828,321,920
Accrued remittance to the Ministry of Finance	5.19	8,164,500,000	7,094,500,000	6,672,000,000
Advance received per contract		1,658,201,068	1,544,352,230	1,416,104,473
Deposits payable	5.20	680,523,212	699,433,832	701,196,409
Other current liabilities	5.21	435,617,624	472,167,220	600,613,898
Total Current Liabilities		63,970,313,835	56,937,561,938	61,961,520,852
Non-current Liabilities				
Long-term loans	3.11, 3.12, 5.17, 7.2, 7.3	68,612,498,966	72,840,392,754	76,370,942,832
Long-term provisions	3.13, 5.22	208,007,755	197,639,799	192,209,799
Construction obligations	5.23	9,272,147,076	9,758,704,314	9,445,293,362
Finance lease liabilities	5.18	1,626,174,914	2,042,757,455	425,610,933
Deferred revenues	3.14, 5.24	48,890,424,439	46,175,035,148	43,595,839,529
Electricity usage guarantee	3.15, 5.25	27,353,866,171	25,544,476,466	23,654,542,773
Sales and service guarantee		869,960,139	827,563,280	764,403,350
Employee gratuity fund	3.16, 5.26	8,637,850	7,876,330	7,082,282
Employee benefit obligations	3.17, 5.27	13,082,835,784	12,831,935,361	11,030,227,987
Other non-current liabilities		275,613,631	235,777,188	93,042,182
Total Non-current Liabilities		170,200,166,725	170,462,158,095	165,579,195,029
Total Liabilities		234,170,480,560	227,399,720,033	227,540,715,881
Equity				
Initial capital		87,003,887	87,003,887	87,003,887
Contributions from the government		4,802,500,915	4,802,500,915	4,802,500,915
Unappropriated retained earnings		159,245,028,724	145,859,483,806	134,546,461,480
Total Equity		164,134,533,526	150,748,988,608	139,435,966,282
Total Liabilities and Equity		398,305,014,086	378,148,708,641	366,976,682,163

The notes to financial statements are an integral part of these financial statements.

THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

Consolidated financial statements			
	Notes	2017	2016
Revenues			
Sales and service revenues		461,766,460,690	454,647,093,950
Other revenues		2,139,793,423	2,148,163,125
Total Revenues	3.19, 5.29	463,906,254,113	456,795,257,075
Expenses			
Cost of electricity		375,777,159,404	371,670,586,818
Employee compensations		23,474,950,724	23,159,685,094
Employee benefit expenses		1,073,787,472	1,082,621,302
Executive remuneration	3.20, 5.28	131,215,864	129,249,470
Preventive, repair and maintenance, and construction expenses		4,724,978,825	4,931,190,556
Depreciation and amortization expenses		19,703,082,174	19,007,278,084
Other operating expenses		8,154,582,594	7,663,439,555
Other expenses		349,521,226	176,681,685
Financial costs	3.21, 5.29	3,056,539,682	3,087,743,532
Total Expenses	5.29	436,445,817,965	430,908,476,096
Share of profit of associates	5.29	71,479,316	69,609,603
Profit for the year	5.29	27,531,915,464	25,956,390,582
Other comprehensive income (loss):			
Items that will not be reclassified to profit or loss			
Actuarial loss on post-employment benefit plan		(208,710,201)	(1,543,760,425)
Total comprehensive income for the year	3.17, 5.27	27,323,205,263	24,412,630,157

The notes to financial statements are an integral part of these financial statements.



THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

	Notes	Separate financial statements	
		2017	2016
Revenues			
Sales and service revenues		461,617,736,101	454,593,991,738
Other revenues		2,129,681,061	2,142,563,393
Total Revenues	3.19, 5.29	463,747,417,162	456,736,555,131
Expenses			
Cost of electricity		375,777,159,404	371,670,586,818
Employee compensations		23,459,208,440	23,151,769,338
Employee benefit expenses		1,073,490,065	1,082,332,913
Executive remuneration	3.20, 5.28	130,191,209	127,517,299
Preventive, repair and maintenance, and construction expenses		4,714,055,241	4,915,980,271
Depreciation and amortization expenses		19,702,087,464	19,006,481,314
Other operating expenses		8,033,029,893	7,629,769,443
Other expenses		349,521,198	176,681,685
Financial costs	3.21, 5.29	3,056,454,964	3,087,612,527
Total Expenses	5.29	436,295,197,878	430,848,731,608
Profit for the year	5.29	27,452,219,284	25,887,823,523
Other comprehensive income (loss):			
Items that will not be reclassified to profit or loss			
Actuarial loss on post-employment benefit plan		(209,062,733)	(1,543,801,197)
Total comprehensive income for the year	3.17, 5.27	27,243,156,551	24,344,022,326

The notes to financial statements are an integral part of these financial statements.

THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF CHANGES IN EQUITY

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

	Notes	Consolidated financial statements			
		Initial Capital and Contributions from the Government	Retained Earnings		Total Equity
			Appropriated	Unappropriated	
Balance as at January 1, 2016		4,889,504,802	-	134,593,474,683	139,482,979,485
Accumulated amount from					
Adjustment for remittance to the Ministry of Finance for the year 2015	5.19	-	-	8,000,000	8,000,000
Balance after adjustment		4,889,504,802	-	134,601,474,683	139,490,979,485
Interim remittance to the Ministry of Finance from net profit for the year 2016	5.19	-	-	(5,944,500,000)	(5,944,500,000)
Reserve for remittance to the Ministry of Finance from net profit for the year 2016	5.19	-	-	(7,094,500,000)	(7,094,500,000)
Total comprehensive income for the year 2016		-	-	24,412,630,157	24,412,630,157
Balance as at January 1, 2017		4,889,504,802	-	145,975,104,840	150,864,609,642
Accumulated amount from					
Adjustment for remittance to the Ministry of Finance for the year 2016 (addition)	5.19	-	-	(611,633)	(611,633)
Balance after adjustment		4,889,504,802	-	145,974,493,207	150,863,998,009
Legal reserve		-	4,273,341	(4,273,341)	-
Interim remittance to the Ministry of Finance from net profit for the year 2017	5.19	-	-	(5,692,500,000)	(5,692,500,000)
Reserve for remittance to the Ministry of Finance from net profit for the year 2017	5.19	-	-	(8,164,500,000)	(8,164,500,000)
Total comprehensive income for the year 2017		-	-	27,323,205,263	27,323,205,263
Balance as at December 31, 2017		4,889,504,802	4,273,341	159,436,425,129	164,330,203,272

The notes to financial statements are an integral part of these financial statements.

THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF CHANGES IN EQUITY

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

	Notes	Separate financial statements		
		Initial Capital and Contributions from the Government	Unappropriated Retained Earnings	Total Equity
Balance as at January 1, 2016		4,889,504,802	134,546,461,480	139,435,966,282
Accumulated amount from				
Adjustment for remittance to the Ministry of Finance for the year 2015	5.19	-	8,000,000	8,000,000
Balance after adjustment		4,889,504,802	134,554,461,480	139,443,966,282
Interim remittance to the Ministry of Finance from net profit for the year 2016	5.19	-	(5,944,500,000)	(5,944,500,000)
Reserve for remittance to the Ministry of Finance from net profit for the year 2016	5.19	-	(7,094,500,000)	(7,094,500,000)
Total comprehensive income for the year 2016		-	24,344,022,326	24,344,022,326
Balance as at January 1, 2017		4,889,504,802	145,859,483,806	150,748,988,608
Accumulated amount from				
Adjustment for remittance to the Ministry of Finance for the year 2016 (addition)	5.19	-	(611,633)	(611,633)
Balance after adjustment		4,889,504,802	145,858,872,173	150,748,376,975
Interim remittance to the Ministry of Finance from net profit for the year 2017	5.19	-	(5,692,500,000)	(5,692,500,000)
Reserve for remittance to the Ministry of Finance from net profit for the year 2017	5.19	-	(8,164,500,000)	(8,164,500,000)
Total comprehensive income for the year 2017		-	27,243,156,551	27,243,156,551
Balance as at December 31, 2017		4,889,504,802	159,245,028,724	164,134,533,526

The notes to financial statements are an integral part of these financial statements.

THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

	Consolidated financial statements	
	Notes	
	2017	2016
Cash Flows from Operating Activities:		
Profit for the year	27,531,915,464	25,956,390,582
Adjustments of net profit to net cash provided by (used in) operating activities:		
Depreciation and amortization	19,874,618,267	19,170,427,246
Bad debts and doubtful accounts	13,014,796	12,151,225
Provision for obsolete materials and supplies	(3,675,456)	29,133,316
Amortization of deferred revenues	(3,930,159,376)	(3,748,185,276)
Employee benefit obligations	42,135,097	258,194,567
Long-term provisions	9,884,956	3,447,930
Loss on disposal of assets	147,990,449	33,809,730
Gain on disposal of materials and supplies	(6,378,674)	(12,970,585)
Loss (gain) on foreign exchange	10,555,759	(20,950,374)
Other non-operating revenues	-	(105,550)
Share of profit of associates	(71,479,316)	(69,609,603)
Interest income	(1,154,028,011)	(1,209,899,672)
Interest expense	3,054,550,099	3,085,665,151
Profit from operating activities before changes in operating assets and liabilities	45,518,944,054	43,487,498,687
Changes in operating assets (increase) decrease		
Trade accounts receivable	(2,458,900,055)	1,611,528,581
Other receivables	(262,680,787)	43,814,758
Accrued revenues	(145,396,205)	2,761,408,621
Interest received	1,154,532,175	1,506,853,434
Materials and supplies	(3,578,925,503)	327,660,273
Special-purpose deposits at financial institutions	(3,335,034,281)	1,682,594,999
Undue input VAT	(72,602,567)	138,192,568
Advance payments to suppliers	(562,560,328)	176,345,873
Other current assets	(21,336,197)	41,421,778
Other non-current assets	(1,695,354)	(66,633,817)
Changes in operating liabilities increase (decrease)		
Trade accounts payable	3,065,672,321	(2,666,595,938)
Other payables	20,327,991	37,734,514
Advance received per contract	109,960,206	128,247,757
Deposits payable	(18,910,620)	(1,762,576)

The notes to financial statements are an integral part of these financial statements.



THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

	Notes	Consolidated financial statements	
		2017	2016
Accrued expenses		404,682,369	369,585,879
Other current liabilities		(35,589,723)	(125,873,827)
Construction obligations		(486,557,239)	313,410,952
Deferred revenues		6,645,548,667	6,327,380,895
Electricity usage guarantee		1,809,389,705	1,889,933,693
Sales and service guarantee		42,367,459	62,829,555
Employee gratuity fund		761,520	794,048
Other non-current liabilities		39,836,443	142,679,319
Net cash provided by operating activities		47,831,834,051	58,189,050,026
Cash Flows from Investing Activities:			
Payment of short-term investments		(1,437,478,758)	(10,563,990,901)
Payment of investment in associates and joint venture		(5,473,130)	-
Dividend received from associates		39,022,500	39,270,000
Payment of property, plant and equipment		(4,653,567,996)	(5,045,693,086)
Payment of constructions in progress		(22,884,181,044)	(21,196,428,493)
Interest expense capitalized to constructions in progress		(293,320,470)	(447,373,746)
Payment of intangible assets		(25,609,232)	(314,884,816)
Payment of investment property		(425,374)	(260,280)
Net cash used in investing activities		(29,261,033,504)	(37,529,361,322)
Cash Flows from Financing Activities:			
Interest paid		(2,897,866,249)	(3,091,453,370)
Payment of long-term loans		(5,234,638,702)	(10,186,662,071)
Proceeds from long-term loans		3,300,000,000	4,000,000,000
Payment of financial lease liabilities		(1,251,588,705)	(1,096,720,975)
Remittance to the Ministry of Finance		(11,132,000,000)	(12,608,500,000)
Net cash used in financing activities		(17,216,093,656)	(22,983,336,416)
Net increase (decrease) in cash and cash equivalents		1,354,706,891	(2,323,647,712)
Cash and cash equivalents at the beginning of the period		2,114,251,315	4,437,899,027
Cash and cash equivalents at the end of the period	3.1, 5.1	3,468,958,206	2,114,251,315

The notes to financial statements are an integral part of these financial statements.

THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

	Notes	Separate financial statements	
		2017	2016
Cash Flows from Operating Activities:			
Profit for the year		27,452,219,284	25,887,823,523
Adjustments of net profit to net cash provided by (used in) operating activities:			
Depreciation and amortization		19,873,623,557	19,169,630,476
Bad debts and doubtful accounts		13,014,796	12,151,225
Provision for obsolete materials and supplies		(3,675,456)	29,133,316
Amortization of deferred revenues		(3,930,159,376)	(3,748,185,276)
Employee benefit obligations		41,837,690	257,906,177
Long-term provisions		9,884,956	3,447,930
Loss on disposal of assets		147,990,449	33,809,730
Gain on disposal of materials and supplies		(6,378,674)	(12,970,585)
Loss (gain) on foreign exchange		10,555,759	(20,950,374)
Other non-operating revenues		-	(105,550)
Interest income		(1,148,905,787)	(1,205,569,760)
Interest expense		<u>3,054,465,381</u>	<u>3,085,534,146</u>
Profit from operating activities before changes in operating assets and liabilities		45,514,472,579	43,491,654,978
Changes in operating assets (increase) decrease			
Trade accounts receivable		(2,462,818,619)	1,633,479,498
Other receivables		(259,520,796)	44,039,398
Accrued revenues		(56,833,748)	2,765,608,621
Interest received		1,149,323,145	1,503,337,209
Materials and supplies		(3,575,577,163)	327,056,722
Special-purpose deposits at financial institutions		(3,285,034,281)	1,682,594,999
Undue input VAT		(72,474,921)	138,184,511
Advance payments to suppliers		(566,637,805)	176,345,873
Other current assets		(20,462,247)	41,454,978
Other non-current assets		10,986,515	(66,008,918)
Changes in operating liabilities increase (decrease)			
Trade accounts payable		3,065,672,321	(2,666,595,938)
Other payables		31,831,735	15,323,325
Advance received per contract		113,848,838	128,247,757
Deposits payable		(18,910,620)	(1,762,576)

The notes to financial statements are an integral part of these financial statements.

THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

STATEMENTS OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2017

Unit: Baht

	Notes	Separate financial statements	
		2017	2016
Accrued expenses		331,897,256	366,610,509
Other current liabilities		(36,066,597)	(126,464,608)
Construction obligations		(486,557,239)	313,410,952
Deferred revenues		6,645,548,667	6,327,380,895
Electricity usage guarantee		1,809,389,705	1,889,933,693
Sales and service guarantee		42,396,859	63,159,930
Employee gratuity fund		761,520	794,048
Other non-current liabilities		39,836,443	142,735,006
Net cash provided by operating activities		47,915,071,547	58,190,520,862
Cash Flows from Investing Activities:			
Payment of short-term investments		(1,435,888,058)	(10,453,000,000)
Payment of investment in subsidiary		(225,000,000)	-
Payment of property, plant and equipment		(4,652,909,616)	(5,044,782,473)
Payment of constructions in progress		(22,884,181,044)	(21,196,428,493)
Interest expense capitalized to constructions in progress		(293,320,470)	(447,373,746)
Payment of intangible assets		(25,562,689)	(314,794,817)
Payment of investment property		(425,374)	(260,280)
Net cash used in investing activities		(29,517,287,251)	(37,456,639,809)
Cash Flows from Financing Activities:			
Interest paid		(2,897,866,249)	(3,091,453,370)
Payment of long-term loans		(5,234,638,702)	(10,186,662,071)
Proceeds from long-term loans		3,300,000,000	4,000,000,000
Payment of financial lease liabilities		(1,250,854,063)	(1,095,986,333)
Remittance to the Ministry of Finance		(11,132,000,000)	(12,608,500,000)
Net cash used in financing activities		(17,215,359,014)	(22,982,601,774)
Net increase (decrease) in cash and cash equivalents		1,182,425,282	(2,248,720,721)
Cash and cash equivalents at the beginning of the period		1,815,000,305	4,063,721,026
Cash and cash equivalents at the end of the period	3.1, 5.1	2,997,425,587	1,815,000,305

The notes to financial statements are an integral part of these financial statements.

THE PROVINCIAL ELECTRICITY AUTHORITY AND ITS SUBSIDIARY

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2017

1. General Information

The Provincial Electricity Authority was established as a state enterprise for public utility under the Provincial Electricity Authority Act, B.E. 2503 (1960) and is located at 200 Ngamwongwan Road, Ladyao, Chatuchak, Bangkok 10900. The main objective of Provincial Electricity Authority is to generate, obtain, distribute and sell electricity energy to people, businesses and industrial sectors in 74 provinces throughout Thailand, with the exception of Bangkok, Nonthaburi, and Samut Prakan provinces.

The Provincial Electricity Authority has extensive transactions and relationships with the Electricity Generating Authority of Thailand (EGAT). Most of electricity energy sold to customers by Provincial Electricity Authority was purchased from EGAT. Accordingly, the financial statements may not necessarily be indicative of the conditions that would have existed or the results of operations that would have occurred if Provincial Electricity Authority has operated without such affiliations.

2. Basis of Financial Statement Presentation

2.1 Basis of consolidated and separate financial statements preparation

The consolidated and the separate financial statements have been prepared in accordance with Thai Financial Reporting Standards and generally accepted accounting principles under Accounting Act, B.E. 2543 (2000), which include accounting standards under the Accounting Profession Act B.E. 2547 (2004), including interpretations and guidelines promulgated by the Federation of Accounting Professions (FAP), and the notification of Department of Business Development “Definition of the abbreviated components required in the Financial Statements (2nd Edition) B.E. 2559 (2016)”, dated October 11, B.E. 2559 (2016).

The consolidated and the separate financial statements have been prepared under the historical cost convention with the exception as disclosed in Note 3 Summary of Significant Accounting Policies.

Consolidated financial statements include financial statements of Provincial Electricity Authority and financial statements of its subsidiary, PEA Encom International Company Limited after elimination of related company’s significant transactions and balances. PEA Encom International Co., Ltd. was established in Thailand in which Provincial Electricity Authority has controlled and held over 50% of paid-up share capital.

Shareholding proportion and amount of investments in associates, investments in joint venture and investments in subsidiary are presented in Notes 5.8, 5.9 and 5.10, respectively.

Investment in associates and joint venture are recorded in the consolidated financial statements under the equity method.

Separate financial statements include financial statements of Provincial Electricity Authority, which include transactions of PEA Employee Gratuity Fund and investments in subsidiary and associates are recorded under the cost method.

English translation of the financial statements has been prepared from the statutory financial statements that were issued in Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.



2.2 Thai Accounting Standards, Thai Financial Reporting Standards, Thai Standing Interpretations and Thai Financial Reporting Interpretations are announced in Government Gazette as follows:

2.2.1 Effective for the current accounting period

Provincial Electricity Authority has applied Thai accounting standards, Thai financial reporting standards, Thai standing interpretations and Thai financial reporting interpretations, which are newly issued and revised by FAP which are effective for accounting periods beginning on or after January 1, 2017 onward. The management of Provincial Electricity Authority determined that the applications will not have significant impacts on accounting policies and the financial statements of Provincial Electricity Authority and its subsidiary.

2.2.2 Effective for accounting periods beginning on or after January 1, 2018 are as follows:

Thai Accounting Standards	Title
No.1 (revised 2017)	Presentation of Financial Statements
No.2 (revised 2017)	Inventories
No.7 (revised 2017)	Statement of Cash Flows
No.8 (revised 2017)	Accounting Policies, Changes in Accounting Estimates and Errors
No.10 (revised 2017)	Events after the Reporting Period
No.11 (revised 2017)	Construction Contracts
No.12 (revised 2017)	Income Taxes
No.16 (revised 2017)	Property, Plant and Equipment
No.17 (revised 2017)	Leases
No.18 (revised 2017)	Revenue
No.19 (revised 2017)	Employee Benefits
No.20 (revised 2017)	Accounting for Government Grants and Disclosure of Government Assistance
No.21 (revised 2017)	The Effects of Changes in Foreign Exchange Rates
No.23 (revised 2017)	Borrowing Cost
No.24 (revised 2017)	Related Party Disclosures
No.26 (revised 2017)	Accounting and Reporting by Retirement Benefit Plans
No.27 (revised 2017)	Separate Financial Statements
No.28 (revised 2017)	Investment in Associates and Joint Venture
No.29 (revised 2017)	Financial Reporting in Hyperinflationary Economic
No.33 (revised 2017)	Earnings per Share
No.34 (revised 2017)	Interim Financial Reporting
No.36 (revised 2017)	Impairment of Assets
No.37 (revised 2017)	Provisions, Contingent Liabilities and Contingent Assets
No.38 (revised 2017)	Intangible Assets
No.40 (revised 2017)	Investment Property
No.41 (revised 2017)	Agriculture

Thai Financial Reporting Standards	Title
No.2 (revised 2017)	Share-based Payment
No.3 (revised 2017)	Business Combinations
No.4 (revised 2017)	Insurance Contracts
No.5 (revised 2017)	Non-current Assets Held for Sale and Discontinued Operations
No.6 (revised 2017)	Exploration for and Evaluation of Mineral Resources
No.8 (revised 2017)	Operating Segments
No.10 (revised 2017)	Consolidated Financial Statements
No.11 (revised 2017)	Joint Arrangements
No.12 (revised 2017)	Disclosure of Interests in Other Entities
No.13 (revised 2017)	Fair Value Measurement

Thai Standing Interpretations	Title
No.10 (revised 2017)	Government Assistance - No Specific Relation to Operating Activities
No.15 (revised 2017)	Operating Leases - Incentives
No.25 (revised 2017)	Income Taxes - Changes in the Tax Status of an Entity or its Shareholders
No.27 (revised 2017)	Evaluating the Substance of Transactions Involving the Legal Form of a Lease
No.29 (revised 2017)	Service Concession Arrangements: Disclosures
No.31 (revised 2017)	Revenue - Barter Transactions Involving Advertising Services
No.32 (revised 2017)	Intangible Assets - Web Site Costs

Thai Financial Reporting Interpretations	Title
No.1 (revised 2017)	Changes in Existing Decommissioning, Restoration and Similar Liabilities
No.4 (revised 2017)	Determining whether an Arrangement contains a Lease
No.5 (revised 2017)	Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds
No.7 (revised 2017)	Applying the Restatement Approach Under TAS29 (revised 2017) Financial Reporting in Hyperinflationary Economies
No.10 (revised 2017)	Interim Financial Reporting and Impairment
No.12 (revised 2017)	Service Concession Arrangements
No.13 (revised 2017)	Customer Loyalty Programmes
No.14 (revised 2017)	TAS 19 (revised 2017) – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction
No.15 (revised 2017)	Agreements for the Construction of Real Estate



Thai Financial Reporting Interpretations Title
(Continued)

No.17 (revised 2017)	Distributions of Non-cash Assets to Owners
No.18 (revised 2017)	Transfers of Assets from Customers
No.20 (revised 2017)	Stripping Costs in the Production Phase of a Surface Mine
No.21 (revised 2017)	Levies

The management of Provincial Electricity Authority and its subsidiary has assessed that the adoption of these new and revised Thai accounting standards, Thai financial reporting standards, Thai standing interpretations, and Thai financial reporting interpretations as mentioned above, will not have significant impacts on the financial statements for the period when they are initially applied.

3. Summary of Significant Accounting Policies

3.1 Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits at banks and financial institutions with original maturities of 3 months or less, excluding deposits at banks used as collateral.

3.2 Trade accounts receivable

Trade accounts receivable are stated at net realizable value. Allowance for doubtful accounts are based on contingent loss from uncollectible receivables which are estimated from historical collection experiences and a review of the current status of the non-governmental or state enterprise receivables outstanding at the statements of financial position date, after deducting electricity usage guarantee in accordance with the regulation of the Ministry of Finance regarding “Accounting and Finance of Government Enterprise, B.E. 2548 (2005)” and a resolution of PEA’s Audit Committee Meeting No. 3/2549 dated on March 10, 2006 as follows:

Overdue period	Percentage of allowance for doubtful accounts
Over 6 months - 1 year	50
Over 1 year	100

Increases and decreases in allowance for doubtful accounts are recognized as expenses or income for the period when incurred.

3.3 Materials and supplies

Materials and supplies are stated at the lower of the cost or net realizable value. The cost is determined using the weighted average cost method. Allowance is made in full for obsolete materials and supplies and for materials and supplies pending for improvement.

3.4 Special-purpose deposits at financial institutions

Special-purpose deposits at financial institutions consist of:

3.4.1 Special-purpose deposits at financial institutions, which are presented as current assets in statements of financial position, are deposits to be used within one accounting period and with the specific purposes and conditions. Special-purpose deposits comprises of electricity usage guarantee fund, sinking fund for repayment of bonds, and restricted cash. All of which can be used in Provincial Electricity Authority's activities in case of Provincial Electricity Authority having the deficits in working capital. Interest from electricity usage guarantee fund is used for benefits of electricity users and KFW special fund is used for scholarships, training, analysis and research.

3.4.2 Special-purpose deposits at financial institutions, which are presented as non-current assets in the statements of financial position, are deposits to be used longer than one accounting period and cannot be used for operating activities are PEA Employee Gratuity Fund.

3.5 Investments in associates and joint venture

Investments in associates and joint venture are presented in the consolidated financial statements under the equity method.

3.6 Investments in subsidiary

Investments in subsidiary are presented in the separate financial statements under the cost method.

In case an impairment of investment has occurred, the impairment loss of investment will be recognized in the statements of comprehensive income.

3.7 Investment property

Investment property comprises of property and plant acquired for used in the operation but has not been utilized and/or property and plant owned to earn rentals. Provincial Electricity Authority has adopted to measure using the cost method. Subsequently investment property is presented at cost after deducting accumulated depreciation (if any).

3.8 Property, plant and equipment

Provincial Electricity Authority's policies for property, plant and equipment, and depreciation are summarized as follows:

Property, plant and equipment are initially recognized at cost which is calculated from purchase prices plus any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operation in the manner intended. Self-constructed assets are recorded as construction costs, consisting of material costs, direct labor and construction-related expenses.

Property is stated at cost. Plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses of assets (if any).

Property comprises of land used in the operation and land acquired for operating objective with certain plan of usage within one year.

Depreciation of plant and equipment is calculated using the straight-line method over the estimated useful lives of the assets as follows:



	Percentage per annum
Buildings and constructions	3 and 6.25
Electricity generating systems	3 - 20
Electricity distributing systems	4 - 20
Furniture, tools, equipment and vehicles	4 - 20

When property, plant and equipment are impaired, the impairment losses will be recognized in the statements of comprehensive income.

In case of disposal, Provincial Electricity Authority writes off cost of assets and its accumulated depreciation from the accounts, and recognizes gain or loss on disposal of assets as other incomes or other expenses in the statements of comprehensive income.

3.9 Constructions in progress

Constructions in progress include construction costs, borrowing costs incurred on direct costs associated with the borrowing of funds used for the construction, and other costs which are directly related to construction or preparation of the property for its intended use. Constructions in progress do not include calculation of depreciation.

3.10 Intangible assets

Intangible assets comprise of computer software licenses and computer software systems for core business that are stated at cost less accumulated amortization and allowance for impairment of assets (if any).

Amortization of computer software licenses and computer software systems for core business is calculated using the straight-line method over the lease period and recognized as expenses in the statements of comprehensive income.

Impairment loss of intangible assets will be recognized as operating expenses in the statements of comprehensive income when incurred.

3.11 Foreign currency transactions

Foreign currency transactions are translated into Thai Baht by using the exchange rates prevailing at the transaction date. Monetary assets and liabilities at the statements of financial position date which are denominated in foreign currencies are translated into Baht at the reference exchange rates announced by the Bank of Thailand at such date. Gains or losses on exchange arising on settlements and translations are recognized as revenues or expenses for the period when incurred.

3.12 Financial instruments

Financial assets, presented at the statement of financial position date of Provincial Electricity Authority, comprise of cash and cash equivalents, and trade accounts receivable. Financial liabilities are obligations under contracts comprising trade accounts payable, other payables, other current liabilities, short-term loans, and long-term loans.

3.13 Long-term provisions

Provincial Electricity Authority records the provisions in the statements of financial position if Provincial Electricity Authority has contingent liabilities arising from legal claims or result of a past events which is probable that an outflow of resources embodying economic benefits will be required to settle the obligations, and it can be estimated with sufficient reliability. The actual results may differ from those estimates.

Provincial Electricity Authority recognizes the provisions with the best estimate of the expenditure required to settle the present obligation at the statement of financial position date by considering risks and uncertainties that inevitably surround obligations. The provisions are measured based on expected cash flows associated with the present obligation as present value of the expected cash flows associated with that present obligation.

Provisions due within one year are classified as short-term provisions and provisions due more than one year are classified as long-term provisions.

3.14 Deferred revenues

3.14.1 Contributions for constructing electricity distributing systems represent cash collected from people who request to use the electricity in order to reduce the burden of Provincial Electricity Authority for construction of the electricity distributing systems. Ownership of the systems including responsibility for maintenance and repair belong to Provincial Electricity Authority. Such contributions are presented as deferred revenues in the statements of financial position and recognized as revenues at the rate of 5% per annum when the construction is completed (the rate is equal to the depreciation rate of Provincial Electricity Authority's electricity distributing system assets).

3.14.2 Contribution revenues represent assets received from donation which are used in operations. Most of such assets are electricity distribution systems that the electricity users donate to Provincial Electricity Authority, which Provincial Electricity Authority is responsible for maintenance. Such assets are presented as deferred revenues from acquisition of donated assets in the statements of financial position and recognized as revenues at the rate in accordance with depreciation rates of such assets over their useful lives.

Assets received from donation which are not used in operations are recognized as other non-operating revenues in the statements of comprehensive income in the period of acquisition.

3.14.3 Contribution revenues from foreign financial institutions represent contributions from foreign financial institutions in form of interest discount to be used for various purposes of Provincial Electricity Authority. Such revenues are presented as deferred revenues in the statements of financial position and recognized as revenues based on the actual amount of expenses incurred.

3.14.4 Deferred revenues from rental represent rental income which Provincial Electricity Authority has received in advance from third parties whom rent the raw lands of Provincial Electricity Authority. And, deferred revenues will be recognized as rental income from investment property over the lease period.

3.15 Electricity usage guarantee

Electricity usage guarantee is the money that electricity users deposit to Provincial Electricity Authority for guarantee of electricity usage. Provincial Electricity Authority deposits into the bank account



named “Electricity Usage Guarantee Fund” to reserve fund for refunding of electricity usage guarantee to electricity users. Any interest income earned is separately deposited in the bank account named “Interest from Electricity Usage Guarantee Fund.” Provincial Electricity Authority will use interest of the fund to repaid as interest on deposit for electricity usage guarantee to the electricity users according to the requirement of the Energy Regulatory Commission and will use in activities for public interests and/or beneficial activities for electricity users.

Provincial Electricity Authority has set the Regulation on Supervision of Electricity Usage Guarantee Fund, B.E.2557 (2014) and appointed the committee which is responsible for supervising and controlling an operation of Electricity Usage Guarantee Fund and interest from Electricity Usage Guarantee Fund. Provincial Electricity Authority has to made fund transfer at the amount equal to the net increase in electricity usage guarantee for each month to the “Electricity Usage Guarantee Fund” account. In case of working capital deficiency or liquidity difficulty, Provincial Electricity Authority can use the electricity usage guarantee fund as a working capital under consideration and approval of the Board of Directors of Provincial Electricity Authority. Then, Provincial Electricity Authority will be required to repay to electricity usage guarantee fund for not less than Baht 100 million on each month by depositing into the “Electricity Usage Guarantee Fund” account until the amount is fully covered. Also, Provincial Electricity Authority is required to make a payment of interest at the interest rate of savings account for state enterprises specified by Krung Thai Bank Public Company Limited by depositing into the “Interest from Electricity Usage Guarantee Fund”. In case of working capital deficiency or liquidity difficulty, the repayment can be postponed under the approval of the Governor and should be reported to the Board of Directors.

3.16 Employee Gratuity Fund

Provincial Electricity Authority has established Employee Gratuity Fund for the purpose of giving aid to employees in case of termination without guilt in accordance with the Regulations of the Provincial Electricity Authority on Employee Gratuity Fund and Benefit for PEA Employees, B.E. 2522 (1979). Provincial Electricity Authority pays monthly contribution at the rate of 10% of employee salaries and recognizes as an expense in the statements of comprehensive income of Provincial Electricity Authority. In this regard, transactions of employee gratuity fund are included in the financial statements of Provincial Electricity Authority and also eliminate the related party transactions.

3.17 Employee benefits obligation

3.17.1 Short-term employee benefits

Short-term employee benefits comprise salaries, overtimes, bonuses, compensated absences and other short-term benefits in accordance with the contract of employment. Short-term employee benefits will be recognized as employee expenses in the statements of comprehensive income on accrual basis.

3.17.2 Post-employment benefits

3.17.2.1 Defined contribution plan

Provincial Electricity Authority has established the provident fund in accordance with the Provident Fund Act, B.E. 2530 (1987) which employees have option to pay into the fund accumulated at the rate of 3 – 15% of the salary of each and Provincial Electricity Authority will pay into the fund at the rate of 9 – 11% of salary of members of the fund to defined contribution plans.

Provincial Electricity Authority’s contributions are recognized as employee expenses in the statements of comprehensive income. Provincial Electricity Authority has also established employee gratuity fund according to Note 5.26.

3.17.2.2 Defined benefit plan

Provincial Electricity Authority's defined benefit plan comprises remuneration under the State Enterprise Labor Relations Act, B.E. 2543 (2000), compensation under Labor Law, compensated absences of employees who are dismissed without committing an offense under the law, unused portion of personal leaves of employees, souvenir for retired employees and other post-employment benefits in accordance with the contract of employment.

Since January 1, 2011, the estimation of employee benefits are calculated by the actuarial technique using the Projected Unit Credit Method. This method estimate the present value of expected future payments which are calculated on the basis of employee salaries, turnover rate, mortality, length of service and other factors.

Provincial Electricity Authority recognizes provisions for defined benefit plan in the statements of financial position at net present value of employee benefit obligations based on unrecognized past service cost and fair value of project assets (if any). Provincial Electricity Authority also recognizes defined benefit plan expenses as expenses related to employment in the statements of comprehensive income.

Actuarial gains (losses) occurred are recognized in the statements of comprehensive income.

3.17.3 Other long-term employee benefits

Provincial Electricity Authority has given a welfare for employees who work for the complete agreed period as other long-term employee benefits. Provincial Electricity Authority recorded these employee benefits by using projected unit credit method which are calculated by the actuary.

3.18 Technology research and development fund

Provincial Electricity Authority has established technology research and development fund, according to the policy of the Office of the National Economic and Social Development Board, to continuously promote and support existing and new technology research and development in highly efficient manner. The fund aims to reduce the dependence and importation of technology from abroad. Consequently, Provincial Electricity Authority is able to apply the results of research and development to its operations in the highest efficiency. Provincial Electricity Authority has contributed from its budget as a fund granted to domestic educational institutions, domestic research and development institutions and business units within Provincial Electricity Authority.

The contributions of technology research and development are recognized as an expense when incurred.

3.19 Revenue recognition

Sales of electricity energy are recognized on a monthly basis in accordance with a cyclical recording of electricity usage units of the customers from electric meters.

Sales of electricity equipment are recognized when goods are delivered, and the ownership is transferred to customers.

Income from constructions for electricity users is recognized based on proportion to actual costs incurred.

Deferred contributions for construction are recognized as income at the rate of 5% per annum (equal to depreciation rate of Provincial Electricity Authority's electricity distributing system assets).

Interest income is recognized as it accrues on a time proportion basis taking into account the principal amount outstanding and the effective interest rate.



3.20 Executive remuneration

Executive remuneration represents the compensation paid to directors and management who have the power to decide which includes both of monetary and remunerations benefit.

3.21 Financial costs

Financial costs represent costs incurred from seeking operational funds which include interest expense and fee paid.

Interest expense and other expenses, directly attributable to constructions of buildings and electricity generating and distributing systems, are incurred from loans made specifically for purpose of acquiring fixed assets are capitalized as costs of assets.

Interest and other expenses incurred subsequent to the completion of construction are recognized as expenses for the period in the statements of comprehensive income.

3.22 Related party transactions

Related parties are individuals or enterprises that control or are controlled, directly or indirectly by Provincial Electricity Authority, or are under common control with Provincial Electricity Authority. Moreover, related parties also include associates and individuals who have direct or indirect voting rights that result in significant influence on Provincial Electricity Authority, executives, directors or employees and close member of that person's family is related to Provincial Electricity Authority's executives who have control over Provincial Electricity Authority.

3.23 Use of judgments and significant accounting estimates

To prepare of financial statements in conformity with generally accepted accounting principles, management has to make estimates and several assumptions that affect amount of revenues, expenses, assets and liabilities and disclosure of contingent assets and liabilities. Actual results may differ from the estimates such as allowance for doubtful accounts, allowance for obsolete materials and supplies and allowance for loss or misstated or lost materials.

3.24 Operating Segments

Provincial Electricity Authority presents operating segments by geographical areas in which Provincial Electricity Authority's management, administration and financial reporting structure are criteria for determination segmentation.

Provincial Electricity Authority has 5 geographical segments which include northern, northeastern, central, southern areas and headquarter. Each area is responsible for distributing electricity in its own area. The headquarter is responsible for setting policies and plans as well as providing all necessary materials to the regional areas.

According to PEA accounting policies for operating segments, each of the operating segments recognize revenues based on the amount of electricity sold in its own areas. Provincial Electricity Authority also allocates its cost of sales from headquarter to each of the operating segments based on actual cost occurred.

Operating income of each segment derives from total revenues deducted cost and operating expenses.

Assets of each regional area are those assets used in operating activities by each of the operating segment or related activities.

Liabilities of each regional area are those liabilities incurred from operating activities by each of the operating segment and related activities, except trade accounts payable, long-term loans, accrued remittance to the Ministry of Finance and liabilities under financial leases which the headquarter does not allocate those items to each of the operating segments.

4. Reclassification

Some items presented in statements of financial position as at December 31, 2016 and January 1, 2016 are reclassified in accordance with the presentation of statements of financial position as at December 31, 2017, which are summarized as follows:

Unit: Million Baht

Consolidated financial statements				
Items	Previously shown items	Reclassified as	Dec. 31, 2016	Jan. 1, 2016
Accounts payable - domestic	Trade account payable	Other payables	733.58	780.10
Suspense payable - unbilled	Trade account payable	Other payables	902.95	1,039.24

Unit: Million Baht

Separate financial statements				
Items	Previously shown items	Reclassified as	Dec. 31, 2016	Jan. 1, 2016
Accounts payable - domestic	Trade account payable	Other payables	694.98	763.99
Suspense payable - unbilled	Trade account payable	Other payables	902.95	1,039.24

Some items presented in statements of comprehensive income for the year ended December 31, 2016 are reclassified in accordance with the presentation on statements of comprehensive income for the year ended December 31, 2017.

Unit: Million Baht

Consolidated financial statements			
Items	Previously shown items	Reclassified as	Dec. 31, 2016
Service fee paid on lump sum basis	Other operating expenses	Preventive, repair, maintenance and construction expenses	226.30

Unit: Million Baht

Separate financial statements			
Items	Previously shown items	Reclassified as	Dec. 31, 2016
Service fee paid on lump sum basis	Other operating expenses	Preventive, repair, maintenance and construction expenses	210.15



5. Supplementary information

5.1 Cash and cash equivalents consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Cash	41.26	38.58	41.25	38.01
Cash at banks: - Current accounts	1.27	1.26	1.27	1.25
- Savings accounts	3,190.54	1,841.19	2,954.91	1,775.74
- Fixed deposits	235.89	233.22	-	-
Total	3,468.96	2,114.25	2,997.43	1,815.00

5.2 Short-term investments

Short-term investments presented in the consolidated and separate financial statements are fixed deposits at the financial institutions with maturity of 6 months.

As at December 31, 2017 and 2016, Provincial Electricity Authority and its subsidiary have short-term investments in the consolidated financial statement amounting Baht 23,048.47 million and Baht 21,610.99 million, respectively.

As at December 31, 2017 and 2016, Provincial Electricity Authority has short-term investments in the separate financial statement amounting Baht 22,935.89 million and Baht 21,500.00 million, respectively.

5.3 Trade accounts receivable consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Accounts receivable from sales of electricity	32,912.02	30,498.37	32,912.02	30,498.37
Account receivable from sales of equipment and rendering services	1,546.95	1,508.05	1,528.14	1,485.33
Total	34,458.97	32,006.42	34,440.16	31,983.70

5.3.1 Accounts receivable from sales of electricity are as follows:

Unit: Million Baht

Consolidated and separate financial statements				
	Dec. 31, 2017			Dec. 31, 2016
Outstanding period	Public Sector	Private Sector	Total	Total
1 month - 6 months	3,931.53	31,005.48	34,937.01	32,292.41
Over 6 months - 1 year	62.43	38.79	101.22	139.02
Over 1 year	83.84	1,395.39	1,479.23	1,484.57
	4,077.80	32,439.66	36,517.46	33,916.00
Less Undue output VAT	(265.08)	(2,102.57)	(2,367.65)	(2,195.91)
	3,812.72	30,337.09	34,149.81	31,720.09
Less Allowance for doubtful accounts	-	(1,237.79)	(1,237.79)	(1,221.72)
Total	3,812.72	29,099.30	32,912.02	30,498.37

5.3.2 Accounts receivable from sales of equipment and rendering of services are as follows:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Receivables from sales and rendering services	335.24	429.35	316.43	406.07
Receivables from construction obligations	1,135.24	997.31	1,135.24	997.31
Other receivables	247.86	267.16	247.86	267.16
	1,718.34	1,693.82	1,699.53	1,670.54
Less Undue output VAT	(109.32)	(107.85)	(109.32)	(107.30)
	1,609.02	1,585.97	1,590.21	1,563.24
Less Allowance for doubtful accounts	(62.07)	(77.92)	(62.07)	(77.92)
Total	1,546.95	1,508.05	1,528.14	1,485.32

5.4 Other accounts receivables consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Other accounts receivables	615.81	361.57	615.81	360.95
Prepaid expenses	32.64	30.87	28.84	30.85
Total	648.45	392.44	644.65	391.80



5.5 Accrued revenues consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Accrued interest	427.92	428.42	426.95	427.37
Accrued revenues from the Power Development Fund	3,549.47	5,153.51	3,549.47	5,153.51
Other accrued revenues	295.97	202.15	203.21	197.95
Total	4,273.36	5,784.08	4,179.63	5,778.83

As at December 31, 2016, accrued revenues from the Power Development Fund partly includes refundable VAT from the Power Development Fund amounting to Baht 1,655.61 million.

5.6 Materials and supplies consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Materials and supplies				
Operating materials and supplies	1,216.97	499.61	1,216.97	499.61
Materials and supplies for construction and maintenance	2,161.95	572.68	2,155.61	569.69
Materials and supplies for repair	1,119.00	1,100.89	1,119.00	1,100.89
Demolish materials and supplies, and obsolete materials and supplies	302.90	245.30	302.90	245.30
Materials and supplies pending for adjustments	61.36	70.02	61.36	70.02
	4,862.18	2,488.50	4,855.84	2,485.51
Materials and supplies in transit	10.36	7.82	10.36	7.82
	4,872.54	2,496.32	4,866.20	2,493.33
<u>Less</u> Allowance for obsolete materials and supplies	(23.65)	(18.66)	(23.65)	(18.66)
Allowance for loss or misstated or lost materials and supplies under investigation	(61.36)	(70.02)	(61.36)	(70.02)
Total	4,787.53	2,407.64	4,781.19	2,404.65

For the years ended December 31, 2017 and 2016, allowance for obsolete materials and supplies and allowance for material losses or materials and supplies under investigation are recognized as decrease in expense and expense amounting to Baht (3.67) million and Baht 29.13 million, respectively.

5.7 Special-purpose deposits at financial institutions consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Electricity usage guarantee fund (Note 5.25)				
Current accounts	0.001	0.001	0.001	0.001
Savings accounts	0.012	0.012	0.012	0.012
Fixed deposits	27,207.37	25,380.96	27,207.37	25,380.96
	27,207.38	25,380.97	27,207.38	25,380.97
Sinking fund for repayment of bonds				
Current accounts	0.001	0.001	0.001	0.001
Savings accounts	779.40	6.44	779.40	6.44
Fixed deposits	2,030.49	2,205.00	2,030.49	2,205.00
	2,809.89	2,211.44	2,809.89	2,211.44
Interest from electricity usage guarantee fund				
Current accounts	0.001	0.001	0.001	0.001
Savings accounts	10.27	29.10	10.27	29.10
Fixed deposits	4,563.37	4,149.72	4,563.37	4,149.72
	4,573.64	4,178.82	4,573.64	4,178.82
KFW special fund				
Current accounts	0.001	0.001	0.001	0.001
Savings accounts	16.44	33.27	16.44	33.27
Fixed deposits	169.21	139.21	169.21	139.21
	185.65	172.48	185.65	172.48
Restricted cash				
Current accounts	0.004	0.004	0.004	0.004
Savings accounts	1,680.70	1,228.50	1,680.70	1,228.50
Fixed deposits	50.00	-	-	-
	1,730.70	1,228.50	1,680.70	1,228.50
Total	36,507.26	33,172.22	36,457.26	33,172.22



Electricity usage guarantee fund, restricted cash for guarantee of employees' loans and sinking fund for repayment of bonds are deposits at financial institutions that can be used in Provincial Electricity Authority's activities in case of Provincial Electricity Authority having deficits in working capital. Interest from electricity usage guarantee fund and KFW special fund are deposits at financial institutions which are restricted for specific purposes as determined by Provincial Electricity Authority.

Sinking fund for repayment of bonds is used as PEA guarantee for repayment of bonds at the maturity date. Provincial Electricity Authority will periodically deposit to the account for repayment of bonds with maturity period within 3 years.

5.8 Investments in associates

Investments in associates in the consolidated financial statements represent the investments of PEA Encom International Company Limited, the subsidiary of Provincial Electricity Authority, which has invested in 4 solar power plants projects to generate and sell electricity energy to Provincial Electricity Authority since May 12, 2014, and has acquired 25% shareholding for each of the companies. Investments in associates are accounted using the equity method.

As at December 31, 2017 and 2016, investments in associates consist of:

Unit: Million Baht

Associates	Dec. 31, 2017		Dec. 31, 2016	
	Cost Method	Equity Method	Cost Method	Equity Method
1. Solar Power (Surin 1) Co., Ltd.	41.25	77.99	41.25	70.04
2. Solar Power (Surin 2) Co., Ltd.	41.25	74.36	41.25	66.04
3. Solar Power (KhonKaen 10) Co., Ltd	41.25	75.24	41.25	67.11
4. Solar Power (Loei 2) Co., Ltd	41.25	76.95	41.25	68.86
	165.00	304.54	165.00	272.05

5.9 Investment in joint venture

Investment in joint venture in the consolidated financial statements is the investment of PEA Encom International Company Limited, the subsidiary of Provincial Electricity Authority, which has entered into a joint venture agreement in the name of PEA Encom Fah Chai joint venture to install and provide service on solar cell electricity generating system on March 8, 2017. The investments account for 25% of registered capital amounting to Baht 5.47 million and are accounted using the equity method.

As at December 31, 2017 and 2016, investment in joint venture consists of:

Unit: Million Baht

Joint venture	Dec. 31, 2017		Dec. 31, 2016	
	Cost Method	Equity Method	Cost Method	Equity Method
PEA Joint Venture Encom Fah Chai	5.47	5.43	-	-
Total	5.47	5.43	-	-

5.10 Investments in subsidiary

Investments in subsidiary in the separate financial statements represent the investments in PEA Encom International Company Limited. The Company is registered in Thailand with a purpose of investing in electricity-related businesses and conducting training services concerning electricity systems and other private organizations both domestically and internationally. Provincial Electricity Authority has acquired 100% shareholding of its ordinary shares. The investments in subsidiary are recorded under the cost method.

As at December 31, 2017 and 2016, Provincial Electricity Authority has investments in subsidiary presented in the separate financial statements of Baht 782.28 million and Baht 557.28 million, respectively.

5.11 Investment property consist of:

Unit: Million Baht

Consolidated and separate financial statements			
	Land and land improvements	Vacant building	Total
Cost			
As at January 1, 2017	289.43	474.99	764.42
- Additions	0.24	2.16	2.40
- Decrease	(104.33)	-	(104.33)
As at December 31, 2017	185.34	477.15	662.49
Accumulated depreciation			
As at January 1, 2017	-	58.62	58.62
- Additions	-	17.85	17.85
As at December 31, 2017	-	76.47	76.47
Net book value			
As at December 31, 2016	289.43	416.37	705.80
As at December 31, 2017	185.34	400.68	586.02

As at December 31, 2017 and 2016, according to the appraisal value announced by the Treasury department, land has total fair value of Baht 444.16 million and Baht 482.57 million, respectively, and buildings have fair value of Baht 194.81 million and Baht 193.30 million, respectively.

Provincial Electricity Authority has rental income on investment property for the years ended December 31, 2017 and 2016, amounting to Baht 25.21 million and Baht 25.08 million, respectively. The acquisition cost of land used for rentals as at December 31, 2017 and 2016, are Baht 137.46 million and Baht 137.69 million, respectively.



5.12 Property, plant and equipment consist of:

Unit: Million Baht

	Consolidated financial statements						
	Land and land improvements	Buildings and constructions	Electricity generating systems	Electricity distributing systems	Furniture, tools and equipment	Vehicles	Vehicles under Finance leases
Cost							Total
As at January 1, 2017	12,008.36	14,725.92	2,294.48	416,730.14	20,487.95	9,136.59	476,493.08
- Additions	1,215.36	623.54	41.67	26,219.48	1,454.75	780.00	30,916.37
- Decreases	(324.43)	(38.64)	(14.55)	(2,376.84)	(275.37)	(34.16)	(3,074.56)
As at December 31, 2017	12,899.29	15,310.82	2,321.60	440,572.78	21,669.33	9,882.43	504,334.89
Accumulated depreciation							
As at January 1, 2017	1,337.60	5,569.44	1,068.22	206,548.94	11,816.89	7,250.11	233,995.07
- Additions	130.73	472.06	82.34	16,711.85	1,430.18	334.36	19,428.64
- Decreases	(7.71)	(36.66)	(5.72)	(2,038.42)	(252.23)	(34.68)	(2,385.98)
As at December 31, 2017	1,460.62	6,004.84	1,144.84	221,222.37	12,994.84	7,549.79	251,037.73
Net book value							
As at December 31, 2016	10,670.76	9,156.48	1,226.26	210,181.20	8,673.06	1,886.48	242,498.01
As at December 31, 2017	11,438.67	9,305.98	1,176.76	219,350.41	8,674.49	2,332.64	253,297.16

Unit: Million Baht

Separate financial statements									
	Land and land improvements	Buildings and constructions	Electricity generating systems	Electricity distributing systems	Furniture, tools and equipment	Vehicles	Vehicles under Finance leases	Total	
Cost									
As at January 1, 2017	12,008.36	14,725.92	2,294.48	416,730.14	20,487.98	9,136.59	1,104.57	476,488.04	
- Additions	1,215.36	623.54	41.67	26,219.48	1,454.09	780.00	581.57	30,915.71	
- Decreases	(324.43)	(38.64)	(14.55)	(2,376.84)	(275.37)	(34.16)	(10.57)	(3,074.56)	
As at December 31, 2017	12,899.29	15,310.82	2,321.60	440,572.78	21,666.70	9,882.43	1,675.57	504,329.19	
Accumulated depreciation									
As at January 1, 2017	1,337.60	5,569.44	1,068.22	206,548.94	11,816.12	7,250.11	402.10	233,992.53	
- Additions	130.73	472.06	82.34	16,711.85	1,429.83	334.36	266.51	19,427.68	
- Decreases	(7.71)	(36.66)	(5.72)	(2,038.42)	(252.23)	(34.68)	(10.56)	(2,385.98)	
As at December 31, 2017	1,460.62	6,004.84	1,144.84	221,222.37	12,993.72	7,549.79	658.05	251,034.23	
Net book value									
As at December 31, 2016	10,670.76	9,156.48	1,226.26	210,181.20	8,671.86	1,886.48	702.47	242,495.51	
As at December 31, 2017	11,438.67	9,305.98	1,176.76	219,350.41	8,672.98	2,332.64	1,017.52	253,294.96	

Plant and equipment that are fully depreciated but are continuing use for Provincial Electricity Authority and its subsidiary as at December 31, 2017 and 2016, are amounting to Baht 0.88 million and Baht 0.75 million, respectively.

5.13 Constructions in progress consist of:

Unit: Million Baht

Consolidated and separate financial statements				
Constructions in progress				
	PEA capital budget	Partially funded by electricity users	Funded by interest from electricity usage guarantee	Total
As at January 1, 2017	25,860.89	5,122.99	0.08	30,983.96
- Additions	18,494.93	6,343.73	0.02	24,838.68
- Decreases	(18,328.41)	(6,477.32)	(0.10)	(24,805.83)
As at December 31, 2017	26,027.41	4,989.40	-	31,016.81

Unit: Million Baht

Consolidated and separate financial statements				
Constructions in progress				
	PEA capital budget	Partially funded by electricity users	Funded by interest from electricity usage guarantee	Total
As at January 1, 2016	27,874.73	4,718.61	0.55	32,593.89
- Additions	15,053.91	6,515.28	-	21,569.19
- Decreases	(17,067.75)	(6,110.90)	(0.47)	(23,179.12)
As at December 31, 2016	25,860.89	5,122.99	0.08	30,983.96



5.14 Intangible assets consist of:

Unit: Million Baht

Consolidated financial statements			
	Computer software licenses	Finance lease assets	Total
Cost			
As at January 1, 2017	3,473.35	2,201.31	5,674.66
- Additions	25.68	-	25.68
- Decreases	(99.10)	-	(99.10)
As at December 31, 2017	3,399.93	2,201.31	5,601.24
Accumulated amortization			
As at January 1, 2017	3,012.18	72.16	3,084.34
- Additions	185.11	660.34	845.45
- Decreases	(99.05)	-	(99.05)
As at December 31, 2017	3,098.24	732.50	3,830.74
Net book value			
As at December 31, 2016	461.17	2,129.15	2,590.32
As at December 31, 2017	301.69	1,468.81	1,770.50

Unit: Million Baht

Separate financial statements			
	Computer software licenses	Finance lease assets	Total
Cost			
As at January 1, 2017	3,473.17	2,201.32	5,674.49
- Additions	25.63	-	25.63
- Decreases	(99.10)	-	(99.10)
As at December 31, 2017	3,399.70	2,201.32	5,601.02
Accumulated amortization			
As at January 1, 2017	3,012.14	72.16	3,084.30
- Additions	185.07	660.34	845.41
- Decreases	(99.05)	-	(99.05)
As at December 31, 2017	3,098.16	732.50	3,830.66
Net book value			
As at December 31, 2016	461.03	2,129.16	2,590.19
As at December 31, 2017	301.54	1,468.82	1,770.36

Intangible assets that are fully amortized but are continuing use for Provincial Electricity Authority and its subsidiary as at December 31, 2017 and 2016, are amounting to Baht 0.005 million.



5.15 Other non-current assets consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Employee receivables	72.21	66.53	72.21	66.53
Long-term receivables	66.37	91.94	66.37	91.94
Deferred expenses	21.85	13.44	21.85	13.44
Retentions and deposits	15.01	2.64	2.84	2.64
Withholding taxes	1.83	1.31	-	-
PEA Employee Gratuity Fund				
Cash	0.004	0.004	0.004	0.004
Current accounts	0.011	0.011	0.011	0.011
Savings accounts	0.32	0.03	0.32	0.03
Total	177.61	175.91	163.61	174.60

5.16 Other payables consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Payable for goods or services - domestic	929.75	733.58	902.84	694.98
Suspense payable - unbilled	843.42	902.95	843.42	902.95
Other payables	282.18	314.67	282.08	314.75
Unearned revenues	321.68	336.69	321.68	336.69
Total	2,377.03	2,287.89	2,350.02	2,249.37

Consolidated and separate financial statements as at December 31, 2017 and 2016, suspense payable-unbilled amounting to Baht 843.42 million and Baht 902.95 million, respectively, represent payable for goods or services received but Provincial Electricity Authority has not received invoices from payables.

5.17 Long-term loans are as follows:

Unit: Million Baht

Consolidated and separate financial statements					
Type of loans	Repayment terms	Currency	Fixed interest rate per contract (%)	Dec. 31, 2017	Dec. 31, 2016
Domestic loans					
- Ministry of Finance	1988 – 2031	Canadian Dollar	Interest free	210.91	233.79
- Bonds	2005 – 2040	Baht	2.40 – 6.84	75,460.00	77,250.00
Total domestic loans				75,670.91	77,483.79
Foreign loans					
- Financial institutions	2000 - 2020	Euro	2.00	248.83	330.11
	2007 - 2023	Euro	8.00*	231.17	261.09
Total foreign loans				480.00	591.20
Total long - term loans				76,150.91	78,074.99
Less Current portion				7,538.41	5,234.60
Total				68,612.50	72,840.39

* Borrowing interest rate of 8% per annum under the loan contract includes interest expense that Provincial Electricity Authority paid to KFW special fund at the rate of 6% per annum, and that are recorded as interest expense at the rate of 2% per annum.

Provincial Electricity Authority has obtained loans to construct buildings, electricity generating and distributing system. The borrowing costs that directly attributable to the construction of qualifying assets and incurred from loans made for specific purposes are capitalized as cost of assets at interest rates of 2.40 - 6.84% per annum.

Interest expenses on loans for the years ended December 31, 2017 and 2016, amounting to Baht 3,158.09 million and Baht 3,440.64 million, respectively, are capitalized as cost of construction in progress amounting to Baht 293.32 million and Baht 447.37 million and are recognized as expenses in the statements of comprehensive income for Baht 2,864.77 million and Baht 2,993.27 million, respectively.



5.18 Finance lease liabilities consist of:

Unit: Million Baht

Consolidated financial statements						
	Within 1 year		After 1 year but within 5 years		Total	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Present value of finance lease liabilities						
- Computer software systems	709.76	666.22	876.68	1,525.24	1,586.44	2,191.46
- Vehicles	310.61	218.68	749.58	518.31	1,060.19	736.99
Total	1,020.37	884.90	1,626.26	2,043.55	2,646.63	2,928.45

Unit: Million Baht

Separate financial statements						
	Within 1 year		After 1 year but within 5 years		Total	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Present value of finance lease liabilities						
- Computer software systems	709.76	666.22	876.68	1,525.24	1,586.44	2,191.46
- Vehicles	309.86	217.97	749.49	517.52	1,059.35	735.49
Total	1,019.62	884.19	1,626.17	2,042.76	2,645.79	2,926.95

5.18.1 Finance lease liabilities – computer software systems

Unit: Million Baht

Consolidated and separate financial statements						
	Within 1 year		After 1 year but within 5 years		Total	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Finance lease liabilities	795.60	795.60	918.00	1,652.40	1,713.60	2,448.00
Less Future financial charge	(85.84)	(129.38)	(41.32)	(127.16)	(127.16)	(256.54)
Present value of finance lease liabilities	709.76	666.22	876.68	1,525.24	1,586.44	2,191.46

5.18.2 Finance lease liabilities – vehicles

Unit: Million Baht

Consolidated financial statements						
	Within 1 year		After 1 year but within 5 years		Total	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Finance lease liabilities	376.09	264.69	832.94	571.63	1,209.03	836.32
<u>Less</u> Future financial charge	(65.48)	(46.01)	(83.36)	(53.32)	(148.84)	(99.33)
Present value of finance lease liabilities	310.61	218.68	749.58	518.31	1,060.19	736.99

Unit: Million Baht

Separate financial statements						
	Within 1 year		After 1 year but within 5 years		Total	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Finance lease liabilities	375.30	263.89	832.85	570.81	1,208.15	834.70
<u>Less</u> Future financial charge	(65.44)	(45.92)	(83.36)	(53.29)	(148.80)	(99.21)
Present value of finance lease liabilities	309.86	217.97	749.49	517.52	1,059.35	735.49

5.19 Accrued remittance to the Ministry of Finance consist of:

Unit: Million Baht

Consolidated and separate financial statements		
	Dec. 31, 2017	Dec. 31, 2016
Beginning balance	7,094.50	6,672.00
Adjustment for remittance to the Ministry of Finance	(1,655.00)	(8.00)
Reserve for remittance to public revenues 45% of net profit	13,857.00	13,039.00
Remit to public revenues during the year	(11,132.00)	(12,608.50)
Total	8,164.50	7,094.50

Adjustment for remittance to the Ministry of Finance in the year 2017 amounting to Baht 1,655.00 million is an item that the State Enterprise Policy Office has conceded to use a VAT obligation in connection with a free electricity subsidy for the underprivileged users policy amounting to Baht 1,655.61 million as a deduction from remittance to Ministry of Finance in the year 2016. Meanwhile, Provincial Electricity Authority sets the additional provision on accrued remittance to the Ministry of Finance in the year 2016 amounting to Baht 0.61 million.

Adjustment for remittance to the Ministry of Finance in 2016 amounting to Baht 8.00 million is an adjustment made for which Provincial Electricity Authority has estimated remittance for excess than the amount which Ministry of Finance has specified.



5.20 Deposits payable consist of:

Unit: Million Baht

	Consolidated and separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016
Accrued remittance to the Power Development Fund	356.67	350.75
Pending repayment electricity usage guarantee	224.29	238.00
Other deposits payable	99.56	110.68
Total	680.52	699.43

5.21 Other current liabilities consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Retentions and deposits	328.71	351.80	328.13	351.21
Withholding tax payable	0.51	0.03	-	-
Suspense accounts	105.82	118.80	105.82	118.80
Provisions	1.67	2.15	1.67	2.15
Total	436.71	472.78	435.62	472.16

5.22 Long-term provisions

Consolidated and separate financial statements as at December 31, 2017 and 2016, amounting to Baht 208.01 million and Baht 197.64 million, respectively, represent the provisions that Provincial Electricity Authority was filed in litigation as a defendant, which Provincial Electricity Authority assesses the status of the lawsuits and estimates that Provincial Electricity Authority will be obliged to the liabilities for 39 lawsuits and for 32 lawsuits, respectively.

5.23 Construction obligations

Consolidated and separate financial statements as at December 31, 2017 and 2016, amounting to Baht 9,272.15 million and Baht 9,758.70 million, respectively, represent the obligations of Provincial Electricity Authority to expand the electricity distributing areas for electricity users which the electricity users have fully or partially funded the construction costs. The ownership of the assets belong to Provincial Electricity Authority.

5.24 Deferred revenues consist of:

Unit: Million Baht

	Consolidated and separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016
Contributions for construction	46,920.98	44,161.03
Deferred revenues	1,588.98	1,618.92
Deferred rental revenue	380.46	395.09
Total	48,890.42	46,175.04

5.25 Electricity usage guarantee represents cash received from electricity users to guarantee for their electricity usage, which are deposited at financial institutions and used as working capital, is as follows:

Unit: Million Baht

	Consolidated and separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016
Electricity usage guarantee fund (Note 5.7)	27,207.38	25,380.97
Electricity usage guarantee - additional deposits by Provincial Electricity Authority	146.49	163.51
Total	27,353.87	25,544.48

5.26 Employee Gratuity Fund

As at December 31, 2017 and 2016, Employee Gratuity Fund is as follows:

Unit: Million Baht

	Consolidated and separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016
Beginning balance	7.88	7.08
<u>Add</u> Contributions during the year	0.33	1.12
Deficit in the plan	0.43	-
Deficit of revenues over expenses for the year	(0.03)	(0.02)
	8.61	8.18
<u>Less</u> Surplus in the plan	-	0.32
Refunds for shortage in the gratuity fund over obligations	(0.03)	(0.02)
Ending balance of fund equal to obligations to be paid to resigned employees	8.64	7.88



5.27 Employee benefit obligations

Employee benefits of Provincial Electricity Authority and its subsidiary consist of post-employment benefits including defined contribution plans (provident fund), defined benefit plans and other long-term employee benefits according to the State Enterprise Labor Relations Act, B.E. 2543 (2000).

As at December 31, 2017 and 2016, employee benefit obligations are as follows:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Post-employment benefits under defined benefit plans				
Retirement pension	11,247.53	11,037.75	11,246.67	11,036.84
Retirement souvenir gift	326.43	318.91	326.43	318.91
Accumulate vacation leave remains at retirement	1,128.51	1,104.82	1,128.51	1,104.82
Total post-employment benefits under defined benefit plans	12,702.47	12,461.48	12,701.61	12,460.57
Other long-term employee benefits				
Souvenir gifts for completing agreed period	381.23	371.37	381.23	371.37
Total other long-term employee benefits	381.23	371.37	381.23	371.37
Total	13,083.70	12,832.85	13,082.84	12,831.94

Post-employment benefits under defined benefit plans and other long-term employee benefits presented in the statements of comprehensive income as at December 31, 2017 and 2016, are as follows:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Current service costs	674.45	647.42	674.18	647.16
Interest cost	400.33	441.23	400.30	441.23
Actual cost	(1,032.64)	(830.46)	(1,032.64)	(830.46)
Actuarial losses	208.71	1,543.76	209.06	1,543.80
Total	250.85	1,801.95	250.90	1,801.71

Movement in the present value of the provisions for benefit plans for the years ended December 31, 2017 and 2016, are as follows:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Beginning balance of the defined benefit obligations	12,832.85	11,030.90	12,831.94	11,030.23
Current service costs	674.45	647.42	674.18	647.16
Interest cost	400.33	441.23	400.30	441.21
Actual cost	(1,032.64)	(830.46)	(1,032.64)	(830.46)
Actuarial losses on post - employment benefit plans	208.71	1,543.76	209.06	1,543.80
Ending balance of the defined benefit obligations	13,083.70	12,832.85	13,082.84	12,831.94

Actuarial assumptions used to the calculation of provisions under post-employment benefits plan as at December 31, 2017 and 2016, are as follows:

	Dec. 31, 2017 (percentage)	Dec. 31, 2016 (percentage)
Discount rate	3.13	3.13
Inflation rate	2.50	2.50
Future salary incremental rate	7.00 – 9.00	7.00 – 9.00
Employee turnover rate	0.00 – 7.00	0.00 – 7.00
Mortality rate	Thai mortality table for the year 2017	Thai mortality table for the year 2008, adjusted for estimation of death rate at 3.00 per year



The sensitivity analysis for main assumptions used for the estimation based on actuarial science, which is used to determine the present value of obligation under the defined benefit plans as at December 31, 2017, are as followed:

Unit: Million Baht

Change in present value of defined benefit obligation			
	Percent	Increase in rate	Decrease in rate
Discount rate	1	(1,116.37)	1,332.08
Inflation rate	1	38.73	(33.20)
Salary growth rate	1	1,486.21	(1,270.47)
Employee turnover rate	20	(91.94)	93.90
Mortality rate	1	78.35	(89.37)

Employee benefits expected to be paid	
Year	Unit: Million Baht
2018	1,148.64
2019	1,382.12
2020	1,374.76
2021	1,305.02
2022	1,200.61
2023	1,140.85
2024	1,103.86
2025	991.27
2026	1,003.40
2027 onward	35,125.08

For the post-employment benefits under defined contribution plans, Provincial Electricity Authority has established the provident fund. The Fund is monthly contributed by salary of employee and by Provincial Electricity Authority. Provincial Electricity Authority registered provident fund in accordance with the Provident Fund Act, B.E. 2530 (1987).

For the years ended December 31, 2017 and 2016, Provincial Electricity Authority contributes to the provident fund amounting to Baht 1,549.03 million and Baht 1,532.75 million, respectively.

5.28 Executives' remunerations consist of:

Unit: Million Baht

	Consolidated financial statements		Separate financial statements	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Directors' remunerations	15.71	17.41	14.68	15.68
Management's remunerations	115.51	111.84	115.51	111.84
Total	131.22	129.25	130.19	127.52

5.29 Operational results

Operating results for the years ended December 31, 2017 and 2016 are as follows:

Unit: Million Baht

Consolidated financial statements				
	Dec. 31, 2017	Dec. 31, 2016	Increase (Decrease)	Percentage
Operating revenues	461,766.46	454,647.09	7,119.37	1.57
Operating expenses	<u>433,039.76</u>	<u>427,644.05</u>	<u>5,395.71</u>	1.26
Operating income	28,726.70	27,003.04	1,723.66	6.38
Other revenues	2,139.79	2,148.16	(8.37)	(0.39)
Other expenses	349.52	176.68	172.84	97.83
Financial costs	3,056.54	3,087.74	(31.20)	(1.01)
Share of profits of associates	71.48	69.61	1.87	2.69
Profit for the year	27,531.91	25,956.39	1,575.52	6.07

For the year ended December 31, 2017, Provincial Electricity Authority and its subsidiary have profit of Baht 27,531.91 million which increases from the same period of prior year by Baht 1,575.52 million and by 6.07% from the year 2016. The increase is attributable to increase in operating income by Baht 1,723.66 million, decrease in other revenues by Baht 8.37 million, increase in other expenses by Baht 172.84 million and decrease in financial costs by Baht 31.20 million, and increase in share of profits of associates by Baht 1.87 million.

Unit: Million Baht

Separate financial statements				
	Dec. 31, 2017	Dec. 31, 2016	Increase (Decrease)	Percentage
Operating revenues	461,617.73	454,593.99	7,023.74	1.55
Operating expenses	<u>432,889.22</u>	<u>427,584.44</u>	<u>5,304.78</u>	1.24
Operating income	28,728.51	27,009.55	1,718.96	6.36
Other revenues	2,129.68	2,142.56	(12.88)	(0.60)
Other expenses	349.52	176.68	172.84	97.83
Financial costs	3,056.45	3,087.61	(31.16)	(1.01)
Profit for the year	27,452.22	25,887.82	1,564.40	6.04



For the year ended December 31, 2017, Provincial Electricity Authority has profit of Baht 27,452.22 million which increases from the same period of prior year by Baht 1,564.40 million and by 6.04% from the year 2016. The increase is attributable to increase in operating income by Baht 1,718.96 million, decrease in other revenues by Baht 12.88 million, increase in other expenses by Baht 172.84 million and decrease in financial costs by Baht 31.16 million.

The National Telecommunications Commission allowed Provincial Electricity Authority to operate the third type of telecommunication business (fiber optic) since March 1, 2007. In the year 2017, Provincial Electricity Authority has revenues from telecommunication business amounting to Baht 157.96 million which are recognized as other operating revenues.

Provincial Electricity Authority has received license to operate broadcasting and television business No. B1-F22051-0004-56 in providing assistance on broadcasting and television. The service includes a rental of electric pole for putting up cable line by National Broadcasting and Telecommunications Commission beginning from December 16, 2013 to December 15, 2028. In the year 2017 and 2016, Provincial Electricity Authority has revenues on rental of electric pole for putting up cable line from Cable TVs business amounting to Baht 20.08 million and Baht 19.06 million, respectively.

According to the resolution of Energy Regulatory Commission No. ERC 5502/3289.2 dated on July 31, 2012, the committee has agreed on refunding interest from electricity usage guarantee fund in the form of interest payment on an annual basis from Provincial Electricity Authority to the electricity user of medium general services, of large general services and of specific business services who has paid the deposit in cash. The amount of refund is based on annual average interest rate of Krung Thai Bank Public Company Limited's savings account for the state enterprises. In the case of power meter has been cut out of power supply and customers who discontinued using the electricity services during the year, this benefit would not be given. In the year 2017, Provincial Electricity Authority has refunded the benefit to the customers amounting to Baht 23.45 million and recorded as other expenses.

According to the resolution of Energy Regulatory Commission No. ERC 5502/๓5088 dated on June 19, 2014 and No. ERC 5502/๓8907 dated on October 14, 2014, the committee has agreed on refunding interest from electricity usage guarantee fund to user of residential general service and of small general service, according to the concept of refunding interest to user of medium general service, of large general service, and of specific business services. In case that the users' power meter has been cut out of power supply but the electricity supply service agreement has not been terminated, the users are still entitled to receive the refunding interest. The refunding will be made on every 5 years basis. The amount of refunding interest is calculated from the period beginning from January 2015 to December 2019 and the interest will be paid within the first quarter of the year 2020. In the year 2017, Provincial Electricity Authority is obliged to refund interest to the customers amounted to Baht 66.31 million and recorded as other expenses.



5.30 Financial Information of Operating Segments

5.30.1 Statement of Financial position of operating segments are as follows:

Unit: Million Baht

	North			Northeast			Central			South			Headquarter			Consolidated financial Statements		
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2016
Information from statements of financial position																		
Trade accounts receivable	4,690.40	4,413.78	5,142.96	4,761.70	17,792.25	16,716.47	6,216.97	5,574.76	616.39	539.71	34,458.97	32,006.42						
Other current assets	876.14	923.80	1,026.30	1,445.50	1,030.56	981.30	901.63	858.45	73,151.12	64,867.79	76,985.75	69,076.84						
Property, plant and equipment	54,595.14	52,577.96	54,772.80	52,698.09	80,437.87	76,325.72	60,422.46	57,705.58	3,068.89	3,190.66	253,297.16	242,498.01						
Other non-current assets	4,859.56	4,898.40	5,884.16	5,674.57	11,120.12	11,414.85	7,035.88	8,243.68	4,961.20	4,496.54	33,860.92	34,728.04						
Total Assets	65,021.24	62,813.94	66,826.22	64,579.86	110,380.80	105,438.34	74,576.94	72,382.47	81,797.60	73,094.70	398,602.80	378,309.31						
Current Liabilities	40,781.92	40,092.19	46,858.25	46,587.97	(201,485.87)	(172,075.10)	17,731.47	18,723.54	160,185.71	123,652.21	64,071.48	56,980.81						
Long-term loans	-	-	-	-	-	-	-	-	68,612.50	72,840.39	68,612.50	72,840.39						
Other non-current liabilities	18,993.57	18,258.61	23,517.57	22,086.07	35,793.30	33,857.53	19,869.89	19,351.60	3,414.29	4,069.69	101,588.62	97,623.50						
Total Liabilities	59,775.49	58,350.80	70,375.82	68,674.04	(165,692.57)	(138,217.57)	37,601.36	38,075.14	232,212.50	200,562.29	234,272.60	227,444.70						
Equity	5,245.75	4,463.14	(3,549.60)	(4,094.18)	276,073.37	243,655.91	36,975.58	34,307.33	(150,414.90)	(127,467.59)	164,330.20	150,864.61						
Total Liabilities and Equity	65,021.24	62,813.94	66,826.22	64,579.86	110,380.80	105,438.34	74,576.94	72,382.47	81,797.60	73,094.70	398,602.80	378,309.31						



5.30.2 Operational results of operating segments are as follows:

Unit: Million Baht

	North			Northeast			Central			South			Headquarter			Consolidated financial Statements		
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2016
Information from statements of comprehensive income																		
Sales of electricity energy	68,286.34	67,138.90	74,791.87	73,399.89	238,667.88	235,303.57	79,546.45	78,333.83	473.92	470.91	461,766.46	454,647.10						
Other revenues	111.51	73.64	153.64	81.75	385.72	503.32	180.96	129.39	1,307.96	1,360.06	2,139.79	2,148.16						
Total revenues	68,397.85	67,212.54	74,945.51	73,481.64	239,053.60	235,806.89	79,727.41	78,463.22	1,781.88	1,830.97	463,906.25	456,795.26						
Cost of electricity	56,335.66	55,864.14	61,970.60	61,232.63	192,104.18	190,208.27	65,366.72	64,365.55	-	-	375,777.16	371,670.59						
Employee compensations	4,771.30	4,756.99	5,238.45	5,244.10	5,303.64	5,067.79	4,247.83	4,203.02	3,913.73	3,887.79	23,474.95	23,159.69						
Employee benefit expenses	217.63	229.54	235.27	249.87	259.92	252.06	200.93	202.08	160.04	149.07	1,073.79	1,082.62						
Executive remuneration	7.34	6.42	7.34	7.17	7.03	6.55	6.62	6.49	102.88	102.62	131.21	129.25						
Preventive, repair and maintenance, and construction expenses	844.64	779.52	829.87	686.22	1,369.68	1,512.53	867.56	917.89	813.23	808.73	4,724.98	4,704.89						
Depreciation and amortization expenses	4,041.22	3,881.71	4,263.94	4,068.33	5,667.18	5,414.38	4,508.07	4,322.85	1,222.67	1,320.01	19,703.08	19,007.28						
Other operating expenses	1,341.37	1,343.43	1,770.09	1,716.72	1,775.57	1,680.36	1,700.11	1,651.40	1,567.44	1,497.83	8,154.58	7,889.74						
Other expenses	7.10	41.54	29.38	(21.34)	91.56	76.18	113.81	64.60	107.67	15.70	349.52	176.68						
Financial costs	5.87	8.65	4.91	7.28	8.67	9.48	9.94	9.29	3,027.15	3,053.04	3,056.54	3,087.74						
Total expenses	67,572.13	66,911.94	74,349.85	73,190.98	206,587.43	204,227.60	77,021.59	75,743.17	10,914.81	10,834.79	436,445.81	430,908.48						
Share of profit of associates	-	-	-	-	-	-	-	-	71.48	69.61	71.48	69.61						
Income (loss) for the year	825.72	300.60	595.66	290.66	32,466.17	31,579.29	2,705.82	2,720.05	(9,061.45)	(8,934.21)	27,531.92	25,956.39						
Other comprehensive loss	(43.11)	(300.84)	(51.08)	(358.40)	(48.70)	(368.64)	(37.57)	(274.16)	(28.25)	(241.72)	(208.71)	(1,543.76)						
Total comprehensive income (loss) for the year	782.61	(0.24)	544.58	(67.74)	32,417.47	31,210.65	2,668.25	2,445.89	(9,089.70)	(9,175.93)	27,323.21	24,412.63						

6. Related party transactions

Significant related party transactions are as follows:

6.1 Assets and liabilities, as at December 31, 2017 and 2016, significant related party transactions are as follows:

Unit: Million Baht

Item/Company's name	Relationship	Consolidated financial statements		Separate financial statements	
		Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Investments in associates					
Solar Power (SR1) Co., Ltd.	Subsidiary's associate	77.99	70.04	-	-
Solar Power (SR2) Co., Ltd.	Subsidiary's associate	74.36	66.03	-	-
Solar Power (KK10) Co., Ltd.	Subsidiary's associate	75.24	67.11	-	-
Solar Power (LO2) Co., Ltd.	Subsidiary's associate	76.95	68.86	-	-
Investments in joint venture					
PEA Encom Fah chai	Subsidiary's joint venture	5.43	-	-	-
Investments in subsidiary					
PEA Encom International Co., Ltd.	Subsidiary	-	-	782.28	557.28
Advance payments to suppliers					
PEA Encom International Co., Ltd.	Subsidiary	-	-	4.68	-
Undue input VAT					
PEA Encom International Co., Ltd.	Subsidiary	-	-	0.55	-
Trade accounts payable					
EGAT	Related party	28,199.66	26,780.07	28,199.66	26,780.07
Other payables					
PEA Encom International Co., Ltd.	Subsidiary	-	-	0.01	0.09
Accrued expenses					
PEA Encom International Co., Ltd.	Subsidiary	-	-	8.46	-



6.2 Revenues and expenses, related party transaction for the years ended December 31, 2017 and 2016, are as follows:

Unit: Million Baht

Item/Company's name	Relationship	Consolidated financial statements		Separate financial statements	
		Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Other operating revenues					
PEA Encom International Co., Ltd.	Subsidiary	-	-	0.73	0.73
Cost of electricity					
EGAT	Related Party	341,649.63	345,347.64	341,649.63	345,347.64
Solar Power (SR1) Co., Ltd.	Subsidiary's associate	129.93	128.05	-	-
Solar Power (SR2) Co., Ltd.	Subsidiary's associate	128.27	128.93	-	-
Solar Power (KK10) Co., Ltd.	Subsidiary's associate	119.47	122.19	-	-
Solar Power (LO2) Co., Ltd.	Subsidiary's associate	113.75	118.23	-	-
Employee expenses					
PEA Encom International Co., Ltd.	Subsidiary	-	-	-	0.18
Maintenance cost					
PEA Encom International Co., Ltd.	Subsidiary	-	-	0.96	0.96
Construction expenses					
PEA Encom International Co., Ltd.	Subsidiary	-	-	31.11	-

7. Disclosure of financial instruments

7.1 Credit risk

Credit risk arises when accounts receivable do not comply with the terms and conditions of credit agreements, causing losses to Provincial Electricity Authority. Also, a concentration exposure in credit portfolios is regarded as an important aspect of credit risk. Most of Provincial Electricity Authority accounts receivable are juristic person and natural person, however, there has been no significant losses that affects PEA financial statements in the past. Therefore, it is assumed that Provincial Electricity Authority has no credit risk.

In case of financial assets recognition in the statements of financial position, book values of the assets presented in the statements of financial position represent the maximum amount of exposure to the credit risk of breach of contract by Provincial Electricity Authority.

7.2 Interest rate risk

Interest rate risk arises when interest rate changes and may have a negative effect on operations of Provincial Electricity Authority, however, most of Provincial Electricity Authority's loans have fixed interest rates and Provincial Electricity Authority's loans are not significant amount except as mentioned in Note 5.17.

7.3 Foreign exchange rate risk

Foreign exchange rate risk arises when there is a change in foreign exchange rates and may effect on Provincial Electricity Authority and its subsidiary's financial position in current and following years. However, most of Provincial Electricity Authority's transactions are incurred in Thai Baht, therefore, changes in foreign exchange rate do not have significant impact on Provincial Electricity Authority and its subsidiary's assets and liabilities.

7.4 Fair value of financial Instruments

Provincial Electricity Authority and its subsidiary estimate fair value of financial Instruments by using following assumptions:

Cash and cash equivalents, short-term investments, trade accounts receivable and trade accounts payable have book values approximate of their fair value due to their short-term period of settlement.

8. Contingent liabilities

As at December 31, 2017 and 2016, Provincial Electricity Authority was sued at 2,382 cases and at 1,751 cases, respectively, with total amount in dispute of Baht 35,422.69 million and Baht 4,566.32 million, respectively.

Provincial Electricity Authority was filed in lawsuits including a lawsuit on lease computer software packages for using in its core business. Portalnet co., Ltd., is authorized by its joint venture partner SPIES, sues Provincial Electricity Authority to the Central Administrative Court on November 22, 2010 on cost of using computer software prior to the commencement period of computer software leasing of Baht 1,868.71 million plus an accrued interest at the rate of 7.5 percent per annum from the date of filing the petition onwards. The Central Administrative Court has dismissed the case. Currently, the case is on the proceedings of the Supreme Administrative Court. And, PEA legal department predicts that Provincial Electricity Authority will win the case.

9. Approval of financial statements

These financial statements were approved for issuance by PEA Governor on April 2, 2018

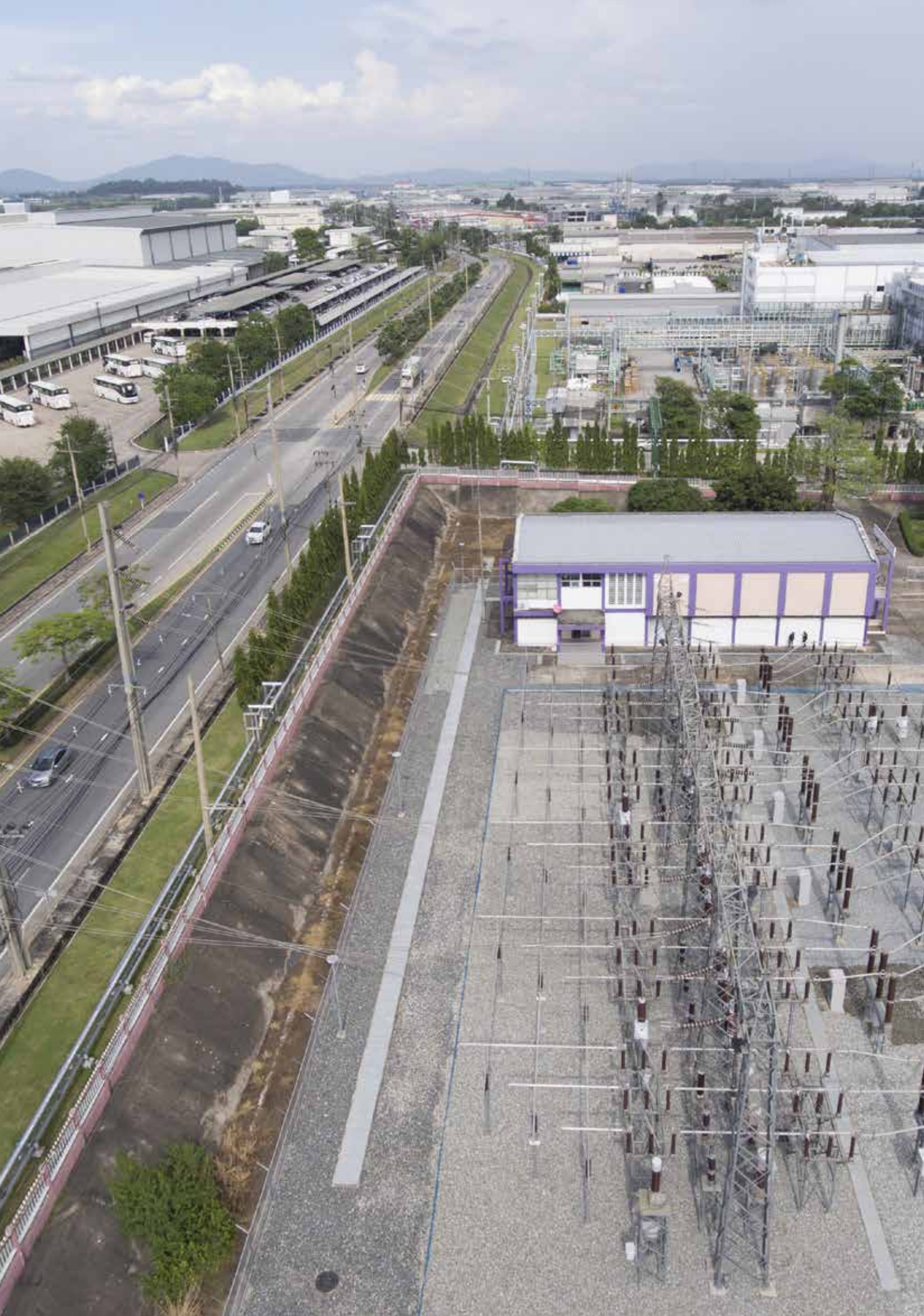


10-Year Summary

Description	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Net Electric Revenue (Million Baht)	448,270	441,458	451,476	450,634	418,888	375,188	313,702	313,634	280,882	257,243
Other Revenue (Million Baht)	15,477	15,279	14,331	14,378	15,182	12,975	11,048	10,077	9,417	9,334
Operating Expenses (Million Baht)	432,889	427,584	441,140	441,152	409,450	369,954	308,525	306,012	273,492	252,248
Other Expenses (Million Baht)	3,406	3,264	3,595	3,463	3,542	3,234	3,764	2,936	2,807	4,160
Net Profit (Million Baht)	27,452	25,888	21,072	20,397	21,078	14,975	12,461	14,763	14,000	10,169
Investments in Assets (Million Baht)	29,517	37,457	37,230	27,154	26,240	25,395	21,607	24,091	21,520	22,081
Loans (Million Baht)	76,151	78,075	84,283	82,254	79,385	74,515	95,217	85,747	74,123	71,416
Net Assets (Million Baht)	398,305	378,149	366,977	348,426	328,084	309,269	303,817	283,997	262,037	247,323
Number of Power Users (Cases)	19,360,779	18,894,637	18,391,443	17,890,494	17,362,319	16,798,675	16,191,866	15,731,241	15,226,156	14,759,334
Total Sales of Electricity (Million kWh)	132,401	129,674	123,212	118,632	114,609	111,726	102,947	102,464	91,711	91,148
Average Number Sales of Electricity (Unit/Case)	6,839	6,863	6,699	6,631	6,601	6,651	6,358	6,513	6,023	6,176

Description	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Average Price of Electricity (Baht/Unit)	3.47	3.48	3.75	3.89	3.73	3.46	3.14	3.11	3.11	2.87
Total Maximum Demand (Megawatts)	19,721	20,439	18,597	17,724	17,294	16,682	15,996	16,099	14,603	14,090
Total Electric Energy (Million kWh)	139,548	137,078	130,390	125,484	120,796	118,738	108,355	107,762	96,536	95,607
- Purchased Power (Million kWh)	139,443	136,974	130,298	125,380	120,696	118,644	108,243	107,659	96,452	95,541
- PEA Generation (Million kWh)	105	104	91	104	100	94	112	103	84	66
Transmission Lines (Circuit/Kilometer)	12,258	11,564	11,547	11,414	10,992	10,341	9,697	9,214	9,031	8,701
High Voltage Distribution Lines (Circuit/Kilometer)	308,988	304,432	299,865	296,809	299,069	298,984	296,215	291,594	299,008	289,328
Low Voltage Distribution Lines (Circuit/Kilometer)	462,786	453,836	460,721	442,348	444,741	457,118	456,667	457,595	456,754	450,424
Number of PEA offices	946	946	946	947	928	928	862	913	914	914
Number of Employees	29,835	30,114	29,093	28,109	27,792	28,060	27,784	27,818	27,847	27,521







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