# - TRANSLATED VERSION -

# **Opinion Report of the Independent Financial Advisor**

# Regarding

An Asset Acquisition and Connected Transaction of Gunkul Engineering Public Company Limited in a Share Acquisition of Future Electrical Control Company Limited

for

The Shareholders of

Gunkul Engineering Public Company Limited



Prepared by



I V Global Securities Public Company Limited

June 1, 2018

The English Translation of the Independent Financial Advisor's Opinion Report has been prepared solely for the convenience of foreign shareholders of Gunkul Public Company Limited and should not be relied upon as the definitive and official document.

The Thai language version of the Independent Financial Advisor's Opinion Report is the definitive and official document and shall prevail in all aspects in the event of any inconsistency with this translation.

# **Table of Content**

		Page
Preface		1
Executiv	ve Summary	3
Part 1	Characteristics & Details of the Transaction	15
1.1	Characteristics and Details of the Asset Acquisition and Connected Transaction	15
1.1.1	Objective and Background of the Transaction	15
1.1.2	Date of the Transaction	16
1.1.3	Parties Involved and Relationship with the Company	16
1.1.4	General Characteristics	17
1.1.5	Detailed of Acquired Asset	20
1.1.6	Calculation of Transaction Size	20
1.1.7	Share Purchase Agreement	23
1.1.8	Total Value of Consideration	24
1.1.9	Criterion for Purchase Price Determination	24
1.10	Sources of Funds for Transaction	25
1.11	Conditions Related to Transaction	25
1.2	Information of Gunkul Engineering Public Company Limited	25
1.3	Information of Future Electrical Company Limited	25
Part 2	Opinion of Independent Financial Advisor on Reasonableness of Asset Acquisition and Connected Transaction	27
2.1	Objective and Necessity to Entering into Transaction	27
2.2	Impact on Financial Position of the Company from Entering into Transaction	28
2.3	Advantages and Disadvantages of Entering into Transaction	30
2.3.1	Advantages of Entering into Transaction	30
2.3.2	Disadvantages of Entering into Transaction	36
2.4	Risks that may arise from Entering into Transaction	36
2.5	Comparison of Advantage and Disadvantages of Entering into the Connected Transaction and Entering into the Transactions with External Party, and the Necessity to make Transaction with Connected Persons, and Reasons that the Company did not Entering into the Transaction with External Party	40

Part 3	Opinion of Independent Financial Advisor on Appropriateness of Transaction Price and Terms of Transaction	41
3.1	Fair Value of the Purchase Price	41
3.1.1	Book Value Approach	41
3.1.2	Adjusted Book Value Approach	42
3.1.3	Market Value Approach	42
3.1.4	Market Comparable Approach	42
3.1.5	Discounted Cash Flow Approach	49
3.1.6	Summary of Opinion of the IFA on the Fair Value of FEC's Shares	58
3.2	Appropriateness of Terms of Transaction	60
Part 4	Conclusion of Opinion of Independent Financial Advisor	63
Appendi	Company Information and Operating Results of Gunkul Engineering Public Company Limited ("Company" or "GUNKUL")	
Appendi	<b>Company Information and Operating Results of</b> Future Electrical Company Limited ("FEC")	

### **GLOSSARY**

<u>Abbreviation</u> <u>Meaning</u>

SEC The Securities and Exchange Commission

**SET** The Stock Exchange of Thailand

Notification on

**Acquisition or Disposal of** 

**Assets** 

Notification of the Capital Market Supervisory Board No. TorJor 20/2551 Re: Rules on Entering into Material Transactions Deemed as Acquisition or Disposal of Assets, and the Notification of the Stock Exchange of Thailand Re: Disclosure and Guideline for Listed Company on Acquisition or Disposal of Assets B.E. 2547 and its

amendments

Notification on the Connected Transaction

The Notice of Capital Market Supervisory Board No. Thor.Jor. 21/2551 Re: Criteria on Connected Transaction, dated August 31, 2008, and amended thereof, and the Notice of the Board of Governors of the Stock Exchange of Thailand Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Connected Transactions, 2003, dated November 19, 2003, and amended thereof.

"GUNKUL" or the "Company"

Gunkul Engineering Public Company Limited

**GPD** Gunkul Power Development Company Limited,

a wholly-owned subsidiary of GUNKUL

**GKG** Gunkul Group Company Limited

FEC Future Electrical Control Company Limited

"Independent Financial Advisor" or "IFA"

I V Global Securities Public Company Limited

Legal AdvisorKudan & PartnersAccounting Tax AdvisorSP Audit Co., Ltd.

Certified Public accountants who are licensed

Public Accountant under Federation of Accounting Professions, Thailand

**DCF** Discounted Cash Flows

**EBITDA** Earnings Before Interest and Tax, Depreciation & Amortization

Enterprise Value (EV) Enterprise Value

**Equity Value** Book Value or Shareholders' Equity Value

**EV/EBITDA** Enterprise Value / Earnings Before Interest and Tax, Depreciation & Amortization

EV/S Enterprise Value / Sales
FCFF Free Cash Flow to Firm
P/BV Price to Book Value Ratio
P/E Price to Earnings Ratio
P/S Price to Sales Ratio

WACC Weighted Average Cost of Capital

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Ref: IB 44/2561

June 1, 2018

Subject: Opinion of the Independent Financial Advisor regarding the asset acquisition and Connected

Transaction of Gunkul Engineering Public Company Limited in a share acquisition of Future

**Electrical Control Company Limited** 

To Audit Committee and Shareholders of

Gunkul Engineering Public Company Limited

Appendix: 1) Company Information and operating results of Gunkul Engineering Public Company Limited

2) Company Information and operating results of Future Electrical Control Company Limited

References:1) Resolution of the meeting of Gunkul Engineering Public Company Limited's Board of Directors No. 4/2018 held on May 15, 2018;

- 2) Information Memorandum on the Asset Acquisition and Connected Transaction of Gunkul Engineering Public Company Limited dated May 15, 2018;
- 3) Annual Disclosure (Form 56-1) of Gunkul Engineering Public Company Limited for the year ended December 31, 2017;
- 4) Audited Financial Statements of Gunkul Engineering Public Company Limited for 12-month period ended December 31, 2015-2017, and the interim financial statements for the 3-month period ended March 31, 2018;
- 5) Audited Financial Statements of Future Electrical Control Company Limited for 12-month period ended December 31, 2015-2017, and the interim financial statements for the 3-month period ended March 31, 2018;
- 6) Certificate of company registration, Memorandum of Association, and other documents, as well as interviews with management and relevant personnel of Gunkul Engineering Public Company Limited;
- 7) Certificate of company registration, Memorandum of Association, and other documents, as well as interviews with management and relevant personnel of Future Electrical Control Company Limited;
- 8) "Project Panda Financial Due Diligence Report" by SP Audit, the accounting and tax advisor, dated April 30, 2018; and
- 9) Legal Due Diligence Report as prepared by Kudan & Partners, the legal advisor dated May 4, 2018.

### Disclaimers:

The result of the study by I V Global Securities Public Company Limited ("Independent Financial Advisor" or "IFA") in this report (or "IFA Report") is based on the information and assumptions provided by management of Gunkul Engineering Public Company Limited, and the information disclosed to the public through the website of the Securities and Exchange Commission of Thailand (www.sec.or.th), the Stock Exchange of Thailand (www.set.or.th), and Business Online Public Company Limited (www.bol.co.th).

The opinion of the IFA in this report is based on the assumptions that all the information and documents received are accurate and complete, and reflects the operating environment and most up-to-date information at the time of issuance of this report. However, there may be any incident having material impact on the Company's business operations and plans, as well as decision of the shareholders on the Asset Acquisition Transaction and the Connnected Transaction. The Independent Financial Advisor expresses its opinion under the current circumstance. If there is a significant change in the circumstance or any information, the result of the study may be affected.

In rendering its opinion in this report, the IFA has considered the reasonableness of conditions of the Transaction as well as other related factors thoroughly and rationally in accordance with the professional judgments.

The attachments to this report are deemed to be a part of the IFA opinion and are the information that the Audit Committee and Shareholders should consider jointly with this report.

## **Executive Summary**

The Board of Directors' Meeting of Gunkul Engineering PCL (the "Company" or "GUNKUL") No. 4/2018 held on May 15, 2018 resolved to propose to the Extraordinary General Meeting of Shareholders to consider and approve the acquisition of shares in Future Electrical Control Co., Ltd. ("FEC"), through Gunkul Power Development Co., Ltd. ("GPD"), a wholly-owned subsidiary of the Company in which the Company holds 99.99 percent of its total shares. GPD will acquire a total of 10,000,000 existing ordinary shares (representing 100 percent of FEC's total number of share issued and sold with the paid-up capital of THB 47,500,000), from FEC's existing shareholders, who are the connected persons at the consideration of not more than THB 650,000,000 (which will be referred to in this report as the" Share Purchase Transaction"). Details are as follows:

Table 1: List of the Sellers

No	List of FEC's shareholders (collectively called the "Sellers")	Relationships with the Company	No. of Shares (Shares) (Percentage of Total FEC's shares)	Paid-Up Capital (THB) ( Percentage of Total FEC's paid-up capital)	Amount (THB)
1	Gunkul Group Co., Ltd (" <b>GKG</b> ")	Major shareholder of the Company and directors and shareholders of GKG are directors of the Company and/or major shareholders of the Company and/or close relatives of directors and/or shareholders of the Company.	9,500,000 (95.000%)	42,500,000 (89.474%)	581,578,948
2	Ms. Sopacha Dhumrongpiyawut (" <b>Ms. Sopacha</b> ")	The director and management of the Company as the Chairman of the Executive Committee and the spouse of Mr. Gunkul Dhumrongpiyawat, a major shareholder and a director of the Company.	140,000 <i>(1.400%)</i>	1,400,000 (2.947%)	19,157,895
3	Mr. Gunkul Dhumrongpiyawut (" <b>Mr. Gunkul</b> ")	A major shareholder of the Company and the Chairman of the Board of Directors.	80,000 (0.800%)	800,000 (1.684%)	10,947,369
4	Mr. Chaloempon Sricharoen ("Mr. Chaloempon")	The director and management of the Company as Vice President, Sales & Marketing and brother of Ms. Sopacha, the director and management of the Company.	70,000 (0.700%)	700,000 (1.474%)	9,578,947
5	Ms. Naruechon Dhumrongpiyawut (" <b>Ms. Naruechon</b> ")	The director and management of the Company as Assistant Managing Director, Business Development and Strategic Planning and daughter of Mr. Gunkul, the director and a major shareholder of the Company.	70,000 (0.700%)	700,000 (1.474%)	9,578,947
6	Ms. Nanpapat Piyaputtinan (" <b>Ms. Nanpapat</b> ")	Sister of Mr. Gunkul, the director and a major shareholder of the Company.	70,000 (0.700%)	700,000 (1.474%)	9,578,947
7	Mr. Pawich Dhumrongpiyawut (" <b>Mr. Pawich</b> ")	Son of Mr. Gunkul, the director and a major shareholder of the Company and brother of Ms. Naruechon, the director and management of the Company.	70,000 (0.700%)	700,000 (1.474%)	9,578,947
		Total	10,000,000 <i>(100.00%)</i>	47,500,000 (100.00%)	650,000,000

Incorporated in Thailand with its propose to invest in other companies, GKG has registered capital is THB 110 million as of April 18, 2017. GKG's shareholding structure comprises of, namely: 1. Dhumrongpiyawut family holds 99.636% (including (1.1) Mr. Gunkul with 42.273% (1.2) Ms.Naruechon with 19.182% (1.3) Ms. Sopacha with 19.091% (1.4) and Mr. Arpakorn with 19.091%), 2. Mr. Chaloempon holds 0.273%, and 3. Ms. Nanprapat holds 0.091% of total shares. For more information related to shareholders of GKG, please refer to Table A-6 in Attachment 1 of this report.

Moreover, the Share Purchase Transaction constitutes an acquisition of assets pursuant to the Acquisition and Disposal Notifications with the transaction size based on net profit criteria (highest consideration criteria) equals to **50.457 percent**, according to the trailing twelve-month figures from the consolidated financial statements of the Company for the period ended March 31, 2017, ended December

31, 2017 and ended March 31, 2018 accordingly. When calculated the size of other asset acquisition transactions following the current board's resolution and the asset acquisition transactions that occurred during the 6-month period prior to the date that the Board of Directors' resolved to propose to Shareholders at the general meeting to consider and approve this Transaction, there was one other asset acquisition transaction, namely: the investment in Solar Farm, Malaysia (29.99 MW) as approved by the Company's Board of Directors Meeting No. 1/2018 dated February 21, 2018. However, this is a new investment project which has no operational results. Thus, the asset acquisition's transaction size will be 50.457 percent of the Company's 12-month net income of the Company (Please refer to Item 1.1.6 for calculation on the size of transaction). The Share Purchase Transaction is, therefore, deemed as a Class 1 Transaction under the Notification of the Capital Market Supervisory Board No. TorChor. 20/2551 Re: Rules on Entering into Material Transactions Deemed as Acquisition or Disposal of Assets and the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Acquisition and Disposition of Assets B.E. 2547 (the "Acquisition and Disposal Notifications"), in which the size of transaction is more than 50 percent but less than 100 percent. Additionally, the Share Purchase Transaction is also considered a purchase or acceptance of a transfer of business of a private entity to the Company pursuant to Section 107(2)(b) of the Public Limited Companies Act B.E. 2535 (and its amendments). Therefore, the Company must obtain an approval from the shareholders' meeting before entering into such transaction.

Furthermore, as the existing shareholders of FEC or the Sellers are the major shareholders of the Company or the directors of the Company or offspring or siblings of the directors of the Company. Consequently, the Share Purchase Transaction is considered as a "Connected Transaction" under the Notification of Capital Market Supervisory Board, Torpor 21/2551 Re: Rules on Connected Transactions dated 31 August 2008 and its amendments, as well as the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosures of Information and Other Acts of Listed Companies Concerning Connected Transactions B.E. 2546 (2003) dated 19 November 2003 and its amendments ("Connected Transaction Notification"). This Connected Transaction has a transaction size of 13.987 percent of the net tangible assets (NTA) of the Company's reviewed consolidated financial statements for the period ended March 31, 2018. When combining all Connected Transactions with the same persons (the Seller) during the past 6 months before the Company's Board of Directors resolved to propose to the shareholders for an approval for entering into this Share Purchase Transaction, the Company has entered into one Connected Transaction, which is the lease of land and building with the Connected Transaction size of 0.595 percent of the Company's total net tangible assets. The former transaction is according to the Company's financial statement ended December 31, 2017 as approved by the Company's Board of Directors Meeting No. 1/2018 dated February 21, 2018. As a result, the transaction size of this Connected Transaction is totaled at 14.582 percent.

I V Global Securities Public Company Limited ("Independent Financial Advisor", or "IFA") is appointed as an independent financial advisor to the shareholders by Gunkul Engineering Public Company Limited (the "Company"). The IFA has studied the information, related documents, as well as interviews with management of the Company, FEC and related companies. In addition, the IFA has considered the rationale of the Transaction and reasonableness of the Transaction price, benefits, consequences, risks, and pros and cons of the Transaction. The opinion of the IFA on this Transaction can be summarized as follows:

### Opinion of Independent Financial Advisor on the Reasonableness of the Transaction

The Independent Financial Advisor (IFA) has an opinion that the transaction of the acquisition of assets and Connected Transactions are <u>reasonable</u> by considering various important factors, including advantages and disadvantages, and risks of entering into the Transaction as follows:

### Objectives and Necessity for entering into the Transaction

In 2017, GUNKUL, through its joint venture "Gunkul Consortium", won a bidding for a turnkey construction of 33 kV submarine cable (distribution line) system to Ko Phra Thong in Phang Nga province of Provincial Electricity Authority ("PEA") in the amount of THB 87.28 million ("Ko Phra Thong Project"). Currently, Ko Phra Thong Project is under construction and expected to be completed by the end of 2018. The management of the Company added that the Company was interested in the submarine cabling system since approximately 5 years ago. When Ko Phra Thong Project came along, the Company began a study in late 2016 and submitted a tender in May 2017 through the joint venture due to the Company still had not received a the Provisional Acceptance Certificate ("PAC") related to the construction of submarine cabling systems, which is one of qualifications of bidders according to tender document of PEA. In addition, the Company also had an interest in providing construction services of overhead transmission or distribution line system, underground transmission or distribution line system, and

substation, which is in line with the government's emphasis on power management. According to Thailand Power Development Plan 2015-2036 (PDP2015), the government focused on stability of electrical systems, development of transmission line systems, distribution line systems to support the development of renewable energy and the entering into ASEAN Economic Community (AEC), which will be a source of increasing investment in electrical system of Thailand.

Nevertheless, Gunkul Group Co., Ltd. ("GKG") as a major shareholder of the Company, is also engaged in project bidding and being a contractual party involved in the construction of power plants through its subsidiary, Future Electrical Control Co., Ltd. ("FEC"). FEC is in the business of: (1) the construction of renewable energy power plants (solar and wind) (FEC is one of subcontractors serving the Company and other companies on the construction of the foundation system of the power plants since FEC has superior skills by implementing "Smart Pile Technology" which not only reduce costs, but also shorten the duration to construct the solar power plants); and (2) the construction of electrical systems. In 2017, FEC's main revenue came from high voltage transmission line system and distribution line system. Therefore, should the Company expand its business to be a construction contractor of electrical system in the future, there will be potential conflicts of interest with a major shareholder of the Company, since FEC and the Company will be competing in the bidding process for the construction work. Moreover, most contractual parties of electrical system constructions in the future will be the government agencies such as Electricity Generating Authority of Thailand ("EGAT"), Metropolitan Electricity Authority ("MEA"), or Provincial Electricity Authority ("PEA"). One of key qualifications of bidders is past performance of construction works of overhead transmission line, underground cable, or substation in which, currently, the Company still does not have the aforementioned works. The management of the Company provided information that should the Company intends to have works in this field, the Company must start from participating in the bidding through a joint venture with other companies having portfolio performance, which mainly start from the project with the value is not relatively high. Furthermore, it takes time to accumulate sufficient experiences and work performance. In short, it is expected to spend at least 5 years prior to the Company will be able to participate in the bidding independently. As a result, the Company is most likely to lose opportunities to generate revenue from the business of construction of electrical system, which is currently in a lucrative growth phase. There are several construction projects with a total project value of several billion baht to be open for the biddings in the near future. (For more details regarding the trend of electrical industry in Thailand (transmission and distribution line systems only), please refer to Appendix 2, Section 6.2 of this report).

In this regard, currently main business of FEC is the construction of electrical system and types of business that FEC engaging in are shown in the dotted boxes below:

High Voltage High Voltage Substation Power Plant Substation Transmission Lines Transmission 230-500 kVA 115 kV 115 kV 230-500 kV Power generation Industrial Customers Low Voltage Transmission Lines 22 kV & 33 kV Low voltage distribution Factory / Commercial / Residential

Figure 1: Transmission Line and Electricity Generating Systems

220 V & 380 V

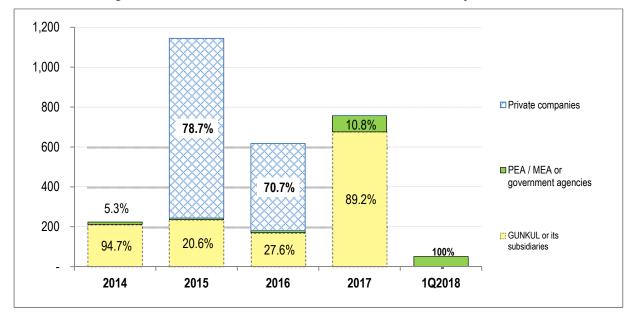


Figure 2: Revenue Structure for FEC's construction business by customers

In 2014-2016, FEC has its main revenue from the construction of renewable energy power plants as FEC is the subcontractor serving the Company and other companies on the construction of the foundation system of the power plants since FEC has superior skills by implementing "Smart Pile Technology" which not only reduce costs, but also shorten the construction duration of the solar power plants. Its main customer for 2014 is the Company, while its main customer for 2015-2016 is other private companies. However, since 2017, FEC's main income came from the construction of electrical systems, including the construction of high-voltage transmission lines and underground cables for Greenovation Power Co., Ltd. and Korat Wind Energy Co., Ltd., both of which are subsidiaries of the Company, in order to connect renewable power plants of both companies to the power system of the Provincial Electricity Authority and Electricity Generating Authority of Thailand. While for the first quarter of 2018, all revenue from FEC's construction business came from the construction of electrical systems for PEA.

Currently, FEC has the Provisional Acceptance Certificate related to the constructions of overhead electrical systems, underground cables, and substations which could be summarized as follows:

Table 2: Current Provisional Acceptance Certificate (PAC) and future Provisional Acceptance Certificate (PAC) to be obtained by FEC.

No.	Project Name	Type of Work	Name of Contractor	Name of Employer	Contract Signing Date	Date of Completion (Date on certificate)	Project value (THB Million)
1.	Construction of underground cable in the area of Karon Beach Road	Underground Cable System Voltage 33 KV with a length of	FEC & SAC Joint venture	PEA	13/10/2010	29/05/2011 (11/11/2011)	24.19
2.	Construction of underground cable in the area of Karon Beach Road (33 kV)	2.06 circuit–km	FEC & SAC Joint venture	Karon Municipality Office	30/07/2010	(,	19.25
3.	Improvement and construction of 115 kV transmission line system from a substation of Wind Energy Development Co., Ltd. ("WED"), Wayu Wind Farm, to Dan Khun Tod substation	Overhead Transmission Line System Voltage 115 KV with a length of 30.24 circuit–km	FEC	WED	9/02/2015	29/12/2016 (6/02/2017)	162.08
4.	Construction and improvement of distribution line system to underground cable in Provincial Electricity Authority ("PEA") Area 3 (South) (LOT11)	Underground Cable System Voltage 33 KV with a length of 11.88 circuit–km	FEC	PEA	21/03/2016	9/06/2017 (14 projects THB 87.14 million) (21/07/2017)	110.53

No.	Project Name	Type of Work	Name of Contractor	Name of Employer	Contract Signing Date	Date of Completion (Date on certificate)	Project value (THB Million)
5.	Construction of 115 kV substation at Lum Rang substation of Rang Ngern Solution Co., Ltd. ("RNS") and construction of 115 kV transmission line system	Overhead Transmission Line System Voltage 115 KV with a length of 2.6 circuit–km 1 Substation System Voltage 115-22 KV	FEC	RNS	8/03/2559	24/02/2017 (1/03/2017)	60.42
6.	Construction of 115 kV transmission line system of Greenovation Co., Ltd. ("GNP")	Overhead Transmission Line and Underground Cable System Voltage 115 KV with a length of 57.115 circuit–km	FEC	GNP	26/07/2559	18/01/2018 (11/4/2018)	385.36
7.	Construction of 115 kV transmission line system of Korat Wind Energy Co., Ltd. ("KWE")	Overhead Transmission Line System Voltage 115 KV with a length of 51.993 circuit–km	FEC	KWE	6/12/2559	3/05/2018 (Under Construction)	274.03
8.	Construction of 115 kV transmission line system during Mae Sai substation - Chiang Saen substation of Provincial Electricity Authority ("PEA")	Overhead Transmission Line System Voltage 115 KV with a length of 34 circuit–km	FEC	PEA	12/12/2560	Construction is expected to be completed within 630 days. The certificate is expected to be received at the end of 2019 11.	107.00
9.	Construction of four 115-22 kV substations, including Tha Li substation, Wang Saphung substation, Khon Kaen 1 substation, and Sakon Nakhon 4 substation of Provincial Electricity Authority ("PEA")	4 <u>Substations</u> System Voltage 115-22 KV	FEC	PEA	15/12/2560	Construction is expected to be completed within 630 days. The certificate is expected to be received at the end of 2019 11.	543.00

Source: The Company, FEC, and a summary conducted by the IFA.

Remarks: 1/ FEC's executives has informed that both projects are proceeding as planned and will be completed by the deadline as specified on the contracts.

Therefore, the acquisition of shares in FEC will enable the Company to expand the scope of business to the business of construction of electrical system abruptly due to FEC, currently, has extensive experiences in the construction of electrical systems such as overhead electricity transmission line system, underground transmission line system (underground cable), and substation. According to Table 2 above, Provisional Acceptance Certificates (PAC) that FEC is currently holding will support the Company, after entering into the Transaction, via FEC (which is a subsidiary of the Company), to be able to participate in the bidding of construction works as follows: 1) Construction of overhead transmission line (high voltage electricity transmission line and distribution line system) at a voltage of up to 115 kV without a limitation on distance, 2) Construction of underground cable at a voltage of up to 115 kV without a limitation on distance, and 3) Construction of substation at a voltage of up to 115 kV, which will enable the Company, via FEC, to be able to bid for various construction works from government agencies in the future.

In addition, entering into this Transaction helps to eliminate potential conflicts of interest that may occur in the construction of electrical system business between FEC and the Company. Since the Company will be running the construction of electrical business through FEC (a subsidiary of the Company after the Share Purchase Transaction has been approved at the shareholders' meeting of the Company).

In this regard, by entering to this Transaction, the Company will expand its scope of business to the construction of electrical systems.

UNKUI Produce & Distribute Produce, Procure & Produce, Procure & Operating & Construction of **Electricity from** Construction of Supply Equipment for Supply Energy Maintenance of Renewal Energy **Alternative Energy Electrical System Electrical** saving products, **Power Plant Power Plant** Resources including alternative Power Systems Domestic & energy systems International

Figure 3: Business Structure of the Company after entering into the transaction

(For additional information of FEC, please refer to Attachment 2 of this report)

### **Key Advantages of Entering into the Transaction**

 An investment that abruptly allows the Company to enter into the business of construction of overhead transmission line system, underground cable system, and substation

The acquisition of shares in FEC will enable the Company to expand the scope of business to the business of construction of electrical system abruptly due to FEC, currently, has extensive experience in the construction of electrical systems such as overhead electricity transmission line system, underground transmission line system (underground cable), and substation.

• An investment that creates opportunities for the Company's future growth in entering into the construction business of electrical system which is in a growth phase.

The acquisition of FEC's shares will support the Company to expand the scope of business to the business of construction of electrical systems in which the business is in a growth phase. According to Thailand Power Development Plan 2015-2036 (PDP2015), the government focus on stability of electrical system, development of transmission line system, distribution line system to support the development of renewable energy and the entering into ASEAN Economic Community (AEC), which will be a source of increasing investment in electrical system of Thailand.

 A diversification of investment risks that increases a variety of construction business and sources of revenue

Currently, the Company's main source of revenue comes from construction of renewable energy plants and revenue from production and distribution of electricity from renewable energy. In 2017, the Company had revenue from construction of renewable energy plants of THB 1,962.58 million, representing 41.17 percent of total revenue, and revenue from production and distribution of electricity from renewable energy of THB 1,535.56 million, or 32.21 percent of total revenue. By entering into this Share Purchase Transaction will enable the Company to have a source of additional revenue from construction business of electrical system such as the construction of high voltage transmission line, distribution line system, underground cable, and substation.

 An investment that can abruptly recognize revenue from the business of construction of electrical systems and allow the Company to have better operating result in overall

Subsequent to entering into this Transaction, FEC shall become a subsidiary of the Company. The Company shall prepare the financial statement which include the performance of FEC resulting in an increase in the Company' total revenue and operating result. Moreover, this will help enhance profitability of the Company's business group in the future since FEC has 3 current projects under implementation in which revenue shall be recognized since 2017 onwards. Estimated revenue to be realized in 2018-2019 is around THB 675.10 million.

### An investment in a company that is ready in terms of staff for the business of construction of electrical system.

Engineers, who are responsible for design and control of construction, are very important to the business operation of construction of electrical systems. Right from bidding participation with the government agencies, companies that are participating in bidding must have engineers (civil engineers and/or electrical engineers), according to Engineer Act, B.E. 2542, who are responsible for design and control of construction of subcontractors to be completed as scheduled. As of April 30, 2018, FEC has engineers and supervisors in a total amount of 34 people with 21 people classified as engineers by level based on Engineer Act, B.E. 2542. Therefore, it can be seen that FEC is a company equipped with qualified staff for business of construction of electrical systems. The management further clarifies that FEC currently has adequate man power to operate to meet the forecasted revenues that the IFA assessed in the equity value of FEC.

# • An investment with a payment term that is beneficial to the Company due to it reduces financing burdens to fully pay for the entire shares on the transaction date

The Company will acquire FEC' shares with the purchase value of not exceeding THB 650 million. According to the payment term, the payment shall be divided into 2 installments in which a payment of THB 325 million shall be made on the closing date, representing 50 percent of the total purchase value. And the second payment of THB 325 million shall be made within December 31, 2018, representing 50 percent of the total purchase value. This payment term allows the Company to reduce financing burdens to fully pay for the entire FEC's shares in one time on the transaction date.

### An investment in assets with a reasonable purchase price

The Company will acquire FEC's shares with the purchase value of THB 650 million in which the aforementioned purchase value is in the range of fair value determined by the IFA at THB 559.89 million - THB 784.75 million. Therefore, the IFA has an opinion that the purchase value is reasonable.

(For additional information related to advantages of entering into the transaction, please refer to Part 2, Section 2.3.1 of this report)

# **Key Disadvantages of Entering into the Transaction**

An investment that increases the Company's debt burdens and financing costs.

After the acquisition of shares in FEC, the Company's total liabilities shall increase by THB 190.49 million and shareholders' equity shall decrease by THB 604.41 million, resulting in an increase in a ratio of debt to shareholder's equity of the Company to 2.59 times. In addition, according to the legal due diligence report, it is found that FEC has three financial institutions to provide Letters of Guarantee (L/G) to the customers of FEC to guarantee the performance in accordance with service contract, sale contract, and electricity guarantee in a total amount of THB 209.33 million.

Therefore, by entering into this Transaction, the Company's liabilities shall increase from a combination of liabilities of FEC and interest expenses shall increase from an increase in loans, as well as, financial fees shall increase from the aforementioned provision of letters of guarantee.

(For additional information related to disadvantages of entering into the transaction, please refer to Part 2, Section 2.3.2 of this report)

### **Key Risks that may arise from Entering into the Transaction**

Risk of not receiving construction works of electrical systems as targeted.

Most of construction works in electrical power systems came from project biddings, therefore, there are risks of not receiving construction works as targeted, resulting in being unable to achieve expected revenue from the construction of electrical systems of FEC. In this regard, FEC is aware of such risks, however, the management of FEC commented that electrical system, which is a basic infrastructure, is continuously expanding to support the growth of nation's economy. Furthermore, the nation's main state agencies responsible for electricity still have long-term investment plans to



develop the country's electrical system such as 1) Thailand Power Development Plan 2015-2036 conducted by the Ministry of Energy and Electricity Generating Authority of Thailand, 2) Plan of improvement and expansion of electricity distribution system No.12 (2017–2021) of Metropolitan Electricity Authority, and 3) Projects and plans that will be implemented at present and in the future of Provincial Electricity Authority.

For the ability to secure the biddings, provisions of construction services for electrical system of FEC are mainly construction works of the Provincial Electricity Authority (PEA). During the entire period of business operation, FEC has been well recognized and trusted by customers as trustworthy and FEC has never been blacklist by its employers. As a result, FEC is able to attend the bidding and sign construction contracts with state enterprises in a continuously increased amount. In December 2017, FEC recently entered into a construction contract for 2 construction projects of high voltage transmission line system and substation of PEA with a total investment amount of approximately THB 650 million (including VAT). The estimated revenues from construction services for electrical power systems of FEC during 2018-2022 are as follows:

Table 3: Summary of projected revenue of FEC from the construction of electrical systems during 2018-2022

	2018F		2019F		2020F		2021F		2022F	
Type of Revenue	THB Million	%								
Revenue from the construction of electrical system	509.96	99.4%	1,289.23	100.0%	833.72	100.0%	546.98	100.0%	517.92	100.0%
1.1 Revenue from current projects	455.40	88.8%	163.05	12.8%	-	-	-	-	-	-
1.2 Revenue from future projects	54.56	10.6%	1,102.96	87.2%	833.72	100.0%	546.98	100.0%	517.92	100.0%
2. Other Revenue	3.02	0.6%	-	-	-		-		-	
Total	512.98	100.0%	1,289.23	100.0%	833.72	100.0%	546.98	100.0%	517.92	100.0%

Source: The Company and estimation by the IFA

Remark: Revenue excluding VAT

Table 4: Estimated size of construction market of electrical power systems industry during 2018-2022

<b>Item</b> Unit: THB Million	2018F	2019F	2020F	2021F	2022F
Total investment value according to plans of Provincial Electricity Authority ("PEA")	79,414.00 <sup>1/</sup>	18,104.00 <sup>2/</sup>	18,104.00 <sup>2/</sup>	18,104.00 <sup>2/</sup>	18,104.00 <sup>2/</sup>
(For illustration of overview of the electrical systems construction industry)					
Total project value that FEC expects to participate in the biddings <sup>3/</sup>	6,262.86	9,509.76	6,240.99	6,240.00	6,240.00
Total project value of construction contracts that FEC expected to sign	1,015.44	874.81	518.00	517.92	517.92

Source: The Company and projection conducted by the IFA.

Remark: 1/ Based on projects and plans that will be implemented at present and in the future of PEA, with a total value of current projects of THB 79,414 million.

- 2/ Based on projects and plans that will be implemented at present and in the future of PEA in which the construction period is in the range of 2019-2023, with a total investment value of THB 90,520 million. Therefore, the average investment value in 5 years will be at approximately THB 18,104 million per year. (For additional information, please refer to Appendix 2, Section 6.2, Table B-10 of this report).
- 3/ Estimates obtained from FEC's executive and the Company's management, Strategic Planning and Investment Division which are not connected persons in this Transaction

From Table 3 above, it can be seen that in 2018, FEC's main revenue will come from its backlog which is under operation and will be gradually recognized as revenue. However, from 2019 onward, FEC's main income will come from future projects which FEC will participate in the bidding process in 2018 onwards. In this regard, from Table 4 above, it can be summarized that total project value of construction contracts that FEC expected to sign in 2018, 2019 and 2020-2022 will be 16.21 percent, 9.20 percent and 8.30 percent of total project value that FEC expects to participate in the biddings, accordingly. In 2018 and 2019, the near term projection, the management of the Company and FEC has a lot of information to support this business plan, especially in 2018. For 2018, the management of the Company and FEC had a thorough study related to the future bidding work and commented that there is project that FEC expects to secure with relatively high probability. While in 2019-2022, the proportion of the project value of construction contracts that FEC expected to sign is close to such portion from the bidding in 2017 at 8.57 percent. Moreover, when considering the market value of the



electrical systems construction industry (Total investment value according to plans of PEA), it can be summarized that the project value of construction contracts that FEC expected to sign in 2018, 2019 and 2020-2022 is 1.28 percent, 4.83 percent and 2.86 percent of the market value, which is relatively small compared to total market value. In summary, total project value of construction contracts that FEC expected to sign, as well as future revenue, is based on reasonable and feasible assumptions.

### Risk of increasing costs resulting from penalty of not being able to deliver engineering services to meet customer deadline.

The business of construction of electrical power systems by FEC has a provision of construction services based on a construction contract in which complete works are clearly scheduled to deliver to employers. Most contract periods are in the range of 12 months to 18 months in which the contracts shall be determined penalty resulting from the delay of delivery as stated in construction contracts. Therefore, in the event that there is a delay in the operation of FEC, FEC may be penalized, resulting in an increase in burdens or cost of operation. Additionally, FEC may be at risk of being suspended or terminated construction contracts by employers.

In this regard, the management of FEC explained that, in the past, FEC had delivered two completed projects behind schedule as stated in construction contracts and has been penalized. The first project was signed in 2010 and FEC was penalized in an amount of THB 3 million, while the second project was signed in 2011 and FEC was penalized in an amount of THB 0.20 million – THB 0.30 million. The delays in these two projects occurred in a period that FEC had just begun entering into the business of construction of electrical system and also had less experience. In 2016, 2017, and for the first 3 months of 2018, FEC has not delivered any completed works behind contracted schedule which can cause any penalty.

### Risk of reliance on engineering staff

FEC operates a business of construction of electrical power system by providing services ranging from design, procurement, and construction of transmission line, distribution line system, and substation. Therefore, it is necessary to rely on staff with knowledge, ability, and experience in particular field, especially engineer team, who are responsible for reproduction the design for the biddings participation, design, project cost estimate, design endorsement, and operation control of each project to be completed as scheduled and according to customers' requirements efficiently.

In this regard, the management of FEC explained that FEC has recognized the importance of staff which is a key success factor of FEC's operation. Moreover, FEC has set a policy to reduce a risk of reliance on engineering staff by determining an appropriate salary and other remuneration system that fit specific jobs and providing benefits and incentives to create ties to the organization in the long run, as well as, diversifying management authority to reduce reliance on individual staff.

### Risk of reliance on major customers which are government agencies and state enterprises.

FEC's main revenue came from the construction contracts in which the business of construction can be divided into two categories: construction of solar and wind power plant, and construction of electrical systems. In the past five years (2013-2017), FEC had revenue from construction under the construction contract of more than 90 percent of total revenue. In 2013-2016, FEC's main revenue came from construction of renewable energy power plants. Since 2017 onwards, FEC's main revenue came from construction of electricity power system. In the first 3 months of 2018, FEC has a major customer, Provincial Electricity Authority ("PEA"), which resulted in revenue in a proportion of 94.4 percent of total revenue. As a result, FEC has a risk of reliance on major customers.

The management of FEC commented that according to plans, PEA shall be opening the biddings for the construction of electrical systems for many projects with the investment amount of several billion baht. This is a great opportunity for FEC to participate in the biddings. However, FEC has a policy to reduce a risk of reliance on a major customer by expanding customer base to MEA, private companies, and other government agencies in the future.

### Risk of increasing costs due to changes in material price and low-quality subcontractors

The business of construction of electrical power system, which is the core business of FEC, requires participation in the bidding process in a format of turnkey project proposal which includes cost of material, equipment, wages, taxes, as well as, profits. As a result, the rising cost of material will result in rising operating cost of FEC for each project and then lowering profits. The management of FEC clarified that during the preparation for the auction FEC will verify material prices used for determining bidding price suitably. In addition, FEC shall compare prices of several vendors prior to



ordering material. Furthermore, FEC shall build relationships with many material suppliers in order to build negotiation power.

In addition, another factor that will impact the cost of project is the operation of low-quality or lack of attention subcontractors, resulting in poor quality works or delays in project operation. The management of FEC acknowledged that such problems are known and action plans are determined to minimize the aforesaid risk

### Risk of Performance Warranty

Currently, FEC is under performance warranty of seven completed projects as shown in Table 2-10 in which warranty shall be in a 2-year period from completion of construction. Therefore, if there is a problem within 2 years, FEC is required to solve the problem which will increase operating cost and negatively impact on financial statements of the Company. By entering into the Transaction, FEC will become a subsidiary of the Company. Thus, the costs of FEC shall be costs of the Company in the consolidated financial statements.

However, the management of FEC explained that since FEC started providing performance warranty for construction of electrical system, there is only one occasion that FEC used to repair work during performance warranty period. The problem at that time was a technical problem caused by the environment of project's location and expenses incurred was approximately THB 1 million. In addition, due to construction works are mainly carried out by subcontractors and performance warranties for subcontractors, the same as performance warranty of the Company, are specified in subcontractor contracts.

### Risk of being liable for the unpaid portion of the registered capital

By entering into the Transaction, GPD (a subsidiary of the Company) will acquire 10,000,000 ordinary shares of FEC with a par value of THB 10 per share, representing 100 percent of FEC's total shares. FEC's ordinary shares have not been paid in a full amount in which the paid-up capital is equal to THB 47,500,000. According to the Civil and Commercial Code, the responsibility of shareholders is limited, that is only a specific amount of unpaid share capital. If a force majeure happens and causes FEC to be liable for any damages which may impact GPD, a shareholder of FEC, to be responsible by making a payment for share capital that still has not been paid in an amount of THB 52,500,000.

In this regard, the management of the Company said that subsequent to the entering into the Transaction, GPD has no plan of paying for share capital in full, unless FEC must act in accordance with the law or for benefits to FEC's operation in the future.

(For additional information related to Risks that may arise from entering into the transaction, please refer to Part 2, Section 2.4 of this report)

Comparison of Advantages and Disadvantages between Transaction Made with Connected Person and Transaction Made with External Party, Necessity to make Transaction with Connected Persons, and Reasons that the Company does not Make Transaction with External Party

- Benefits and advantages of entering into the transaction with the connected person, compared with non-connected person
- The acquisition of shares in FEC shall help the Company to have the Provisional Acceptance Certificate (PAC) under the name of FEC and enter into a business of construction of electrical system abruptly.
- Acquisition of shares in FEC from related parties instead of acquisition of other companies that operate the same business as FEC will help eliminate the risk of conflict of interest in business operation in the future. If the Company were to acquire other companies in order to participate in the bidding and sign construction contracts of electrical system with state agencies, this shall be considered as operating a business that directly competes with FEC (which has the same major shareholder as the Company).
- The Company also receives a good payment term from related parties in which the Company is not required to make a full payment for the purchase of shares in one time on the transaction date. This allows the Company to reduce financing burdens to pay for the entire amount of shares.



- Disadvantages of entering into the transaction with the connected person, compared with the nonconnected person
- Entering into the Connected Transaction in which the transaction size is more than 3 percent of the net tangible assets of the Company, the Company must comply with the Connected Transaction Notification which causes additional costs related to an appointment of the Independent Financial Advisor (IFA) to provide an opinion to the shareholders of the Company and the arrangement of the shareholders' meeting.
- As the Company and FEC have the same major shareholder Dhumrongpiyawut family, holding voting rights of more than 50 percent of the total voting rights of each company, the acquisition of shares in FEC by the Company is considered a business combination under common control, and resulting in deficit from business combination under common control of THB 592.50 million, according to the Company's projection. This Transaction will result in a decrease in shareholders' equity, which shall cause an increase in a ratio of debt to shareholders' equity

(For additional information related to advantages and disadvantages of entering into the transaction with the connected person, compared with non-connected person, please refer to Part 2, Section 2.5 of this report)

## **Appropriateness of Transaction Value**

Summary of FEC's share valuation based on five different valuation approaches is as follow:

Table 5: Summary of a range of FEC's fair price

Valuation Approach	FEC's Fair Valuation		Higher (Lower) than FEC's Purchase Value			Appropriateness of Valuation Approach	
	(THB	Millio.	n)	(THB Million)			Арргоасп
1) Book value approach	89	.91		(560.09)			Inappropriate
2) Adjusted book value approach	89	.91		(	560.0	9)	Inappropriate
3) Market value approach		-			-		N/A
4) Market comparable approach							
4.1) Price to book value ratio (P/BV)	105.19	-	124.97	(544.81)	-	(525.03)	Inappropriate
4.2) Price to earnings ratio (P/E)	4,732.9	-	11,819.5	4,082.9	-	11,169.50	Inappropriate
4.3) Price to Sales Ratio (P/S)	554.71	-	787.33	(95.29)	-	137.33	Inappropriate
4.4) EV/EBITDA 1/	4,646.1	-	10,775.7	3,996.10	-	10,125.70	Inappropriate
4.5) EV/Sales	829.21	-	1,142.4	179.21	-	492.35	Inappropriate
5) Discounted cash flow approach (DCF) Base case	658	3.58			8.58		Appropriate
Sensitivity Analysis	559.89	-	784.75	(90.11)	-	134.75	Appropriate

Source: Projected and summarized by the IFA.

Remarks: N/A - Cannot be calculated.

Value of shares purchase and connected transaction is THB 650 million.

The IFA has an opinion that <u>discounted cash flow approach is the most appropriate approach for fair valuation of FEC's due to this approach is able to reflect FEC's operating results and profitability in the future.</u> In summary, the IFA has calculated FEC's shareholders' equity which is in the range of THB 559.89 million - THB 784.75 million and FEC's shares purchase price of not exceeding THB 650 million. Therefore, the IFA has an opinion that **shares purchase price of not exceeding THB 650 million is appropriate.** 

 $<sup>1/\,\,\</sup>text{EV/EBITDA} \text{ is a ratio of Enterprise Value to Earnings before Interest, Taxes, Depreciation and Amortization.}$ 

Share Purchase Value under Share Purchase Agreement of not exceeding THB 650 million Approach 1. Book Value Approach 89.91 Approach 4.1 P/BV 124.86 ratio 1.17 - 1.39 times 105.19 1/ Approach 4.2 P/E 28.03 - 70.00 times Approach 4.3 P/S 0.62 - 0.88 times 554.71 787.33 Approach 4.4 EV/EBITDA 21.82 - 49.37 times 2/ **Approach 4.5 EV/S** 1.16 – 1.51 times 1,142.35 829.21 Approach 5. DCF Discount rate 8.53% 559.89 784.75 Terminal Growth rate 0-2% 0 200 400 600 800 1,000 1,200 Fair Valution (in THB million)

Figure 4: Summary of Valuation of FEC's Fair Price

Source: Projected and summarized by the IFA.

Remarks: 1/ Shareholders' equity calculated by P/E ratio is in the range of THB 4,732.90 million - THB 11,819.50 million 2/ Shareholders' equity calculated by EV/EBITDA ratio is in the range of THB 4,646.10 million - THB 10,775.70 million

(For more information on the appropriateness of transaction value, please refer to Part 3, Section 3.1 of this report).

### **Appropriateness of Terms of Transaction**

The IFA is of the opinion that terms to entering into the transaction are **appropriate**, as no term and condition is out of the ordinary course business and the terms of the transaction are for the benefits of both the Company and the shareholders.

(For more information on appropriateness of terms of the Transaction, please refer to Part 3, Section 3.2 of this report)

The opinion of IFA in this report is based on the assumptions that all the information and documents received are accurate and complete, and reflects the operating environment and most up-to-date information at the time of issuance of this report. In conclusion, the Independent Financial Advisor is of the opinion that the entry into this Transaction is appropriate and recommends that the shareholders should **approve** this asset acquisition and connected transaction.

In deciding whether to grant approval for the Company to enter into the transaction, the shareholders can consider the information, reasons and opinion in various aspects provided by the IFA in this report. However, the decision whether to approve the Transaction depends primarily on the shareholders' individual judgment.

The details of the opinion of the Independent Financial Advisor can be found in the following parts of this IFA Report, as follow:

### Part 1: Characteristics & Details of the Transaction

# 1.1 Characteristics and Details of the Asset Acquisition and Connected Transaction

### 1.1.1 Objective and Background of the Transaction

The Board of Directors' Meeting of Gunkul Engineering PCL (the "Company" or "GUNKUL") No. 4/2018 held on May 15, 2018 resolved to propose to the Extraordinary General Meeting of Shareholders to consider and approve the acquisition of shares in Future Electrical Control Co., Ltd ("FEC"), through Gunkul Power Development Co., Ltd. ("GPD"), a wholly-owned subsidiary of the Company in which the Company holds 99.99 percent of its total shares. GPD will acquire a total of 10,000,000 existing ordinary shares (representing 100 percent of FEC's total number of share issued and sold), from FEC's existing shareholders, who are the connected persons, namely: (1) 9,500,000 shares from Gunkul Group Co., Ltd. ("GKG"), (2) 140,000 shares from Ms. Sopacha (3) 80,000 shares from Mr. Gunkul (4) 70,000 shares from Mr. Chaloempon (5) 70,000 shares from Naruechon (6) 70,000 shares from Ms. Nanpapat and (8) 70,000 shares from Mr. Pawich (collectively called the "Sellers") at the consideration of not more than THB 650,000,000 (which will be referred to in this report as the "Share Purchase Transaction", or "Transaction").

In this regard, the Share Purchase Transaction constitutes an acquisition of assets pursuant to the Acquisition and Disposal Notifications with the transaction size based on net profit criteria (highest consideration criteria) equals to 50.457 percent, according to the trailing twelve-month figures from the consolidated financial statements of the Company for the period ended March 31, 2017, ended December 31, 2017 and ended March 31, 2018 accordingly. When calculated the size of other asset acquisition transactions following the current board's resolution and the asset acquisition transactions that occurred during the 6-month period prior to the date that the Board of Directors' resolved to propose to Shareholders at the general meeting to consider and approve this Transaction, there was one other asset acquisition transaction, namely: the investment in Solar Farm, Malaysia (29.99 MW) as approved by the Company's Board of Directors Meeting No. 1/2018 dated February 21, 2018. However, this is a new investment project which has no operational results. Thus, the asset acquisition's transaction size will be 50.457 percent of the Company's 12-month net income of the Company (Please refer to Item 1.1.6 for calculation on the size of transaction). The Share Purchase Transaction is, therefore, deemed as a Class 1 Transaction under the Notification of the Capital Market Supervisory Board No. TorChor. 20/2551 Re: Rules on Entering into Material Transactions Deemed as Acquisition or Disposal of Assets and the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Acquisition and Disposition of Assets B.E. 2547 (the "Acquisition and Disposal Notifications"), in which the size of transaction is more than 50 percent but less than 100 percent. Moreover, the Share Purchase Transaction is also considered a purchase or acceptance of a transfer of business of a private entity to the Company pursuant to Section 107(2)(b) of the Public Limited Companies Act B.E. 2535 (and its amendments). Therefore, the Company must obtain an approval from the shareholders' meeting before entering into such transaction.

Additionally, as the existing shareholders of FEC or the Sellers are the major shareholders of the Company or the directors of the Company or offspring or siblings of the directors of the Company. Consequently, the Share Purchase Transaction is considered as a Connected Transaction under the Notification of Capital Market Supervisory Board, Torpor 21/2551 Re: Rules on Connected Transactions dated 31 August 2008 and its amendments, as well as the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosures of Information and Other Acts of Listed Companies Concerning Connected Transactions B.E. 2546 (2003) dated 19 November 2003 and its amendments ("Connected Transaction Notification"). This Connected Transaction has a transaction size of 13.987 percent of the net tangible assets (NTA) of the Company's reviewed consolidated financial statements for the period ended March 31, 2018. When combining all Connected Transactions with the same persons (the Seller) during the past 6 months before the Company's Board of Directors resolved to propose to the shareholders for an approval for entering into this Share Purchase Transaction, the Company has entered into one Connected Transaction, which is the lease of land and building with the Connected Transaction size of 0.595 percent of the Company's total net tangible assets. The former transaction is according to the Company's financial statement ended December 31, 2017 as approved by the Company's Board of Directors Meeting No. 1/2018 dated February 21, 2018. As a result, the transaction size of this Connected Transaction is totaled at 14.582 percent.

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The Company is, therefore, required to appoint an independent financial advisor to provide an opinion on this transaction, promptly prepare a report, disclose the asset acquisition transaction to the SET, presenting therein the information as required by the SET, and hold a shareholders' meeting to approve the entry into such transaction with a required affirmative vote of not less than three-fourths of the total number of votes of the shareholders or their proxies attending the meeting and having the rights to vote, excluding shareholders with vested interest. In this regard, the Company has appointed I V Global Securities Public Company Limited as the independent financial advisor (the "Independent Financial Advisor" or "IFA") to provide opinion on this Asset Acquisition and Connected Transaction to shareholders.

### 1.1.2 Date of the Transaction

After obtaining approval from the Extraordinary General Meeting of Shareholders No.1/2018 of the Company, which will be held on June 28, 2018, and the conditions precedent provided under the Share Purchase Agreement (as detailed in 1.1.11 of this report) are fulfilled. In this regard, the Company expects the Share Purchase Transaction to take place within the third quarter of 2018.

### 1.1.3 Parties Involved and Relationship with the Company

The Buyer . Gunkul Power Development Co., Ltd. ("GPD"), a wholly-owned subsidiary of

the Company

The Sellers Current shareholders of Future Electrical Control Co., Ltd. ("FEC"), consisting of:

	No. of selling shares	<u>%</u>
1) Gunkul Group Co., Ltd (" <b>GKG</b> ") <sup>1/</sup>	9,500,000	95.00
2) Ms. Sopacha Dhumrongpiyawut	140,000	1.40
3) Mr. Gunkul Dhumrongpiyawut	80,000	0.80
4) Mr. Chaloempon Sricharoen	70,000	0.70
5) Ms. Naruechon Dhumrongpiyawut	70,000	0.70
6) Ms. Nanpapat Piyaputtinan	70,000	0.70
7) Mr. Pawich Dhumrongpiyawut	<u>70,000</u>	<u>0.70</u>
Total	<u>10,000,000</u>	<u>100.00</u>

Remark: 1/ GKG is incorporated in Thailand with its propose to invest in other companies. As of April 18, 2017, its registered capital is THB 110 million. GKG's shareholding structure consists of 1. Dhumrongpiyawut family holds 99.636% (including (1.1) Mr. Gunkul with 42.273% (1.2) Ms.Naruechon with 19.182% (1.3) Ms. Sopacha with 19.091% (1.4) and Mr. Arpakorn with 19.091%), 2. Mr. Chaloempon holds 0.273%, and 3. Ms. Nanprapat holds 0.091% of total shares.

For more information related to GKG' shareholders, please refer to Table A-6 in Attachment 1 of this report.

Relationship

The Company, FEC and the Sellers, as well as directors, shareholders and management of the Company FEC and GKG are related, which shall cause the Transaction to be considered as the Connected Transaction under the Notification of the Capital Market Supervisory Board No. TorChor. 21/2008 Re: Rules on Connected Transactions and the Notification of the Board of Governor of the SET Re: Disclosure of Information and Other Acts of Listed Companies concerning Connected Transactions B.E. 2546(the "Notification on Connected Transaction").



Table 1-1: Relationship between people or entity involved in this Transaction

	Relationship / Holding Position in						
List of the Sellers	"The Company" or "GUNKUL" 1/	FEC <sup>2/</sup>	GKG 3/				
Gunkul Group Co., Ltd ("GKG")	■ is a juristic entity which is No.1 shareholder of the Company, holding 3,693,859,400 shares	is a juristic entity which is No.1 shareholder of FEC, holding 9,500,000 shares.	-				
	(equivalent to 49.79% of total number of shares issued and sold)	(equivalent to 95.00% of total number of shares issued and sold)					
Ms. Sopacha Dhumrongpiyawut (Spouse of Mr. Gunkul)	<ul> <li>is the Chairman of the Executive Committee and a director</li> <li>is one of the authorized directors</li> </ul>	holds 140,000 shares of FEC (equivalent to 1.40% of total number of shares issued and sold)	<ul> <li>is a director</li> <li>holds 210,000 shares of GKG         (equivalent to 19.09% of total number of shares</li> </ul>				
Mr. Gunkul Dhumrongpiyawut (Spouse of Ms. Sopacha and Father of Ms.Naruechon and Mr. Pawich)	<ul> <li>is Chairman of the Board of Directors</li> <li>is one of the authorized director</li> <li>holds 309,592,726 shares of the Company (equivalent to 4.17% of total number of shares issued and sold)</li> </ul>	holds 80,000 shares of FEC (equivalent to 0.80% of total number of shares issued and sold)	issued and sold)  is a director is the authorized director holds 465,000 shares of GKG (equivalent to 42.72% of total number of shares issued and sold)				
Mr. Chaloempon Sricharoen (Brother of Ms. Sopacha)	<ul> <li>is a director</li> <li>is one of the authorized directors</li> <li>is Vice President, Sales &amp; Marketing</li> </ul>	holds 70,000 shares of FEC (equivalent to 0.70% of total number of shares issued and sold)	holds 3,000 shares of GKG (equivalent to 0.28% of total number of shares issued and sold)				
Ms. Naruechon Dhumrongpiyawut (Daughter of Mr. Gunkul and Sister of Mr. Pawich)	<ul> <li>is a director</li> <li>is one of the authorized directors</li> <li>is Assistant Managing Director, Business Development and Strategic Planning</li> <li>holds 359,328 shares of the Company (equivalent to 0.005% of total number of shares issued and sold)</li> </ul>	■ holds 70,000 shares of FEC (equivalent to 0.70% of total number of shares issued and sold)	■ is a director  ■ holds 211,000 shares of GKG  (equivalent to 19.18% of total number of shares issued and sold)				
Ms. Nanprapat Piyaputtinan (Sister of Mr. Gunkul)	■ holds 59,243,407 shares of the Company (equivalent to 0.0799% of total number of shares issued and sold)	■ holds 70,000 shares of FEC (equivalent to 0.70% of total number of shares issued and sold)	■ holds 1,000 shares of GKG (equivalent to 0.09% of total number of shares issued and sold)				
Mr. Pawich Dhumrongpiyawut (Son of Mr. Gunkul and brother of Ms. Naruechon)	-	■ holds 70,000 shares of FEC (equivalent to 0.70% of total number of shares issued and sold)	-				

Source: 1/ The Company and SET (details of the Company's shareholders as per the book closing date on April 25, 2018 (the latest closing date))
2/ List of Shareholders (BorJor. 5) of FEC dated April 18, 2018
3/ List of Shareholders (BorJor. 5) of GKG dated April 18, 2018

#### 1.1.4 **General Characteristic of the Transaction**

The Company will purchase a total value of 10,000,000 ordinary shares, accounting for 100 percent of total number of shares issued and sold, with a par value of THB 10.00 and paid-up capital of THB 47,500,000 from FEC's existing shareholders at a total price of not more than THB 650,000,000. In this regard, each seller will be paid in the proportion to the paid-up capital owned each individual seller. Summary are as follows:

(a) Purchase of 9,500,000 ordinary shares, equivalent to approximately 95.000 percent of total shares of FEC, with the paid up capital of THB 42,500,000, equivalent to approximately



- 95.000 percent of total paid-up capital of FEC, from GKG at a total consideration of not more than THB 581,578,948.00.
- (b) Purchase of 140,000 ordinary shares, equivalent to approximately 1.400 percent of total shares of FEC, with the paid up capital of THB 1,400,000, equivalent to approximately 2.947 percent of total paid-up capital of FEC, from Ms. Sopacha at a total consideration of not more than THB 19,157,895.00.
- (c) Purchase of 80,000 ordinary shares, equivalent to approximately 0.800 percent of total shares of FEC, with the paid up capital of THB 800,000, equivalent to approximately 1.684 percent of total paid-up capital of FEC, from Mr. Gunkul at a total consideration of not more than THB 10,947,369.00.
- (d) Purchase of 70,000 ordinary shares, equivalent to approximately 0.700 percent of total shares of FEC, with the paid up capital of THB 700,000, equivalent to approximately 1.474 percent of total paid-up capital of FEC, from Mr. Chaloempon at a total consideration of not more than THB 9.578,947.00.
- (e) Purchase of 70,000 ordinary shares, equivalent to approximately 0.700 percent of total shares of FEC, with the paid up capital of THB 700,000, equivalent to approximately 1.474 percent of total paid-up capital of FEC, from Ms. Naruechon at a total consideration of not more than THB 9,578,947.00.
- (f) Purchase of 70,000 ordinary shares, equivalent to approximately 0.700 percent of total shares of FEC, with the paid up capital of THB 700,000, equivalent to approximately 1.474 percent of total paid-up capital of FEC, from Ms. Nanprapat at a total consideration of not more than THB 9,578,947.00.
- (g) Purchase of 70,000 ordinary shares, equivalent to approximately 0.700 percent of total shares of FEC, with the paid up capital of THB 700,000, equivalent to approximately 1.474 percent of total paid-up capital of FEC, from Mr. Pawich at a total consideration of not more than THB 9,578,947.00.

The Company will pay for above shares to the Sellers by cash. Half of the total consideration (THB 325 million) will be paid at the transaction date (expected to be on July 2, 2018) and the remaining half (THB 325 million) will paid in December 31, 2018.

In this regard, summary of FEC is as follow:

### 1) General Information

Table 1-2: Overview of Future Electrical Control Co., Ltd. ("FEC")

Company Name : Future Electrical Control Co.,Ltd.

Date of Establishment : July 2, 1998

Registration Number : 0105541040883

Office Address : 1177 Pearl Bangkok Building FL12A Room No. 12A01,

Phahonyothin Rd, Phayathai, Phayathai, Bangkok

Registered Capital : THB 100,000,000

divided into 10,000,000 ordinary shares with a par value of THB 10.00

Paid-up Capital : THB 47,500,000

divided into 10,000,000 ordinary shares with a par value of THB 10.00

consisting of

3,000,000 ordinary shares with a paid-up value of THB 10.00 per share 7,000,000 ordinary shares with a paid-up value of THB 2.50 per share

Business Type : Construction of renewable power plants such as solar and wind power,

etc., and construction of electrical systems, such as power stations, high voltage transmission lines, underground cable distribution system and

lighting

Auditor : Thaikit Bunchi Co.,Ltd.

Source: The Company, the affidavit of FEC as issued by Ministry of Commerce dated April 18, 2018

and FEC's reviewed financial statement ended March 31, 2018



### 2) Board of Directors

Table 1-3: List of FEC's Board of Directors Pre- and Post-Transaction

	Pre-Transaction 1/	Post-Transaction 2/
Name of	1. Mr. Chaisiri Wattanachannarong	Mr. Chaisiri Wattanachannarong
Directors	2. Mr. Kullavich Nuangam	2. Ms. Sopacha Dhumrongpiyawut
		3. Mr. Somboon Aueatchasai
Authorized Director	Two directors co-signing with the company's seal affixed	Ms. Sopacha Dhumrongpiyawat signing jointly with either Mr. Chaisiri Wattanachannarong or Mr. Somboon Aueatchasai, totaling 2 directors, with the company's seal affixed

Source: 1/ The affidavit of FEC as issued by Ministry of Commerce dated April 18, 2018

2/ The Company

### 3) Shareholders

Table 1-4: List of FEC's shareholders Pre- and Post-Transaction

Shareholders	Pre-Transaction 1/		Post-Transac	tion <sup>2/</sup>
	Amount (shares) 3/	%	Amount (shares) 3/	%
1. Gunkul Group Co., Ltd	9,500,000	95.00	1	-
2. Ms. Sopacha Dhumrongpiyawut	140,000	1.40	-	-
3. Mr. Gunkul Dhumrongpiyawut	80,000	0.80	-	-
4. Mr. Chaloempon Sricharoen	70,000	0.70	-	-
5. Ms. Naruechon Dhumrongpiyawut	70,000	0.70	-	-
6. Ms. Nanprapat Piyaputtinan	70,000	0.70	-	-
7. Mr. Pawich Dhumrongpiyawut	70,000	0.70	-	-
Gunkul Power Development Co., Ltd.     (A subsidiary of the Company ) ("GPD")	-	-	9,999,998	99.99998
Representative of the Company     (To be determined later)	-	-	1	0.00001
10. Representative of the Company (To be determined later)	-	-	1	0.00001
Total	10,000,000	100.00	10,000,000	100.00

Source: 1/ List of Shareholders (BorJor. 5) of FEC issued on April 18, 2018

2/ The Company

Remarks: 3/ Ordinary Shares with a par value of THB 10.00

# 4) Pending Litigation

### ■ None

According to the legal due diligence by Kudan and Partners Limited dated May 4, 2018. In this regard, the IFA has considered that there were no significant issues that could impact or interfere with this Transaction.



### 5) Financial Information of FEC

Table 1-5: Financial information of FEC of past three years

Statement of Financial Position (Unit: THB Million)	1Q / 2018 Reviewed	31 DEC 17 Audited	31 DEC 16 Audited	31 DEC 15 Audited	
Total Asset	352.18	947.54	661.47	779.36	
Total Liabilities	262.27	331.41	216.97	483.83	
Total Equity	89.91	616.13	444.50	295.53	
Income Statement (Unit: THB Million)	1Q / 2018	FY2017	FY2016	FY2015	
Total Revenue	53.94	859.86	632.48	1,165.86	
Total Expense	(50.17)	(688.23)	(483.10)	(927.85)	
Net Profit	3.77	171.63	149.38	238.01	

Source: The Company and FEC

In this regard, FEC's Auditor is Thaikit Bunchi Co., Ltd.

(For additional details of FEC, please refer to Appendix 2 of this report)

### 1.1.5 Details of Acquired Assets

10,000,000 ordinary shares of FEC, which is account for 100 percent of FEC's total shares, with a par value of THB 10.00. In this regard, the capital of shares is not fully paid. The paid-up capital is THB 47,500,000. After this Transaction, FEC will become a subsidiary of the Company. Moreover, the acquisition of FEC shares will lead the Company to earn all contract rights in FEC, all FEC's assets that used in the project and rights in the relevant and needed license to run all FEC projects.

The details of FEC are shown in Attachment 2 of this report.

### 1.1.6 Calculation of Transaction Size

### 1.1.6.1 Acquisition of assets

The Share Purchase Transaction is deemed as Acquisition of Assets, in accordance with the Notification of the Capital Market Supervisory Board TorPor. 20/2551 Re: Rules on Entering into Material Transactions Deemed as Acquisition or Disposal of Assets dated 31 August 2008 and Notification of the Capital Market Supervisory Board Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Acquisition and Disposition of Assets B.E. 2547 (2004) dated as 29 October 2004, and its amendments ("Acquisition or Disposition Notification"). The maximum transaction size, using the net profit criteria, is 50.457 percent of trailing 12-month net income of the Company, based on the consolidated financial statements of the Company ended March 31, 2018, ended December 31, 2017 and ended March 31, 2017. The calculation details are as follow:

Table 1-6: Details of such calculation for this Transaction according to various criteria

Criteria	Formula	Transaction Size
1. Net Tangible Asset	NTA of Target * Percentage of Acquisition * 100	1.935%
(NTA) Criteria	NTA of the Company = { 89.91 <sup>1/</sup> * 100% / 4,647.01 <sup>2/</sup> } x 100	
Net Profit Criteria		50.457%
	Net Profit of the Company = { 171.63 <sup>3/</sup> * 100% / 340.14 <sup>4/</sup> } x 100	



Criteria	Formula	Transaction Size		
3. Total Value of	Total Consideration Paid	1.947%		
Consideration Criteria	Total Asset of the Company = { 650.00 / 33,388.32 <sup>5/</sup> } x 100			
4. Value of issued	4. Value of issued   Number of issued securities as the compensation			
securities Criteria	No. of paid-up shared of the Company  Not applicable because the Company does not issue any securities to pay for FEC shares			

Remarks: 1/ NTA of FEC according to the financial statements as of March 31, 2018, reviewed by Thaikit Bunchi Co., Ltd

- 2/ NTA of the Company according to the financial statements as of March 31, 2018, reviewed by KPMG Phoomchai Audit Limited
- 3/ 12-month net income of FEC from Jan 1 Dec 31, 2017, based on the financial statement of FEC ended December 31, 2017, audited by Thaikit Bunchi Co.,Ltd. (However FEC did not prepare the reviewed financial statement ended March 31, 2017)
- 4/ Trailing 12-month net income of the Company from April 1, 2017 March 31, 2018, based on the consolidated financial statements of the Company ended March 31, 2018 and ended March 31, 2017, as reviewed by KPMG Phoomchai Audit Limited and ended December 31, 2017, as audited by KPMG Phoomchai Audit Limited
- 5/ Total Asset of the Company according to the consolidated financial statements as of March 31, 2018, as reviewed by KPMG Phoomchai Audit Limited

Moreover, when combining all asset acquisition transactions during the past 6 months before the Company's Board of Directors resolved to propose to the shareholders for an approval to entering into the Share Purchase Transaction, the Company has entered into one asset acquisition transaction which is

Table 1-7: Asset acquisition transaction that occurred during the 6-month period prior to this Transaction

Asset acquisition transactions that occurred during the 6-month
period prior to this Transaction (December 16, 2017 – May 15, 2018)

1. The investment in Solar Farm, Malaysia (29.99 MW) as approved by the Company's Board of Directors Meeting No. 1/2018 dated February 21, 2018
(This is a new investment project which has no operational results)

Aggregate amount of the asset transaction for the last 6 months

Thus, the transaction size for this investment, pursuant to total net profit basis, is 50.457 percent of the Company's trailing 12-month net income of the Company. Such transaction is, therefore, deemed as the acquisition of asset Class 1, in which the size of transaction is equivalent to more than 50 percent but less than 100 percent under the Notification of the Board of Governor of the SET re: Disclosure of Information and Practice of Listed Companies Concerning the Acquisition and Disposition of Assets (the "Acquisition or Disposition Notification").

### 1.1.6.2 Connected Transaction

As the existing shareholders of FEC or the Sellers are the major shareholders of the Company or the directors of the Company or offspring or siblings of the directors of the Company. Consequently, the Share Purchase Transaction is considered as a Connected Transaction under the Notification of Capital Market Supervisory Board, Torpor 21/2551 Re: Rules on Connected Transactions dated 31 August 2008 and its amendments, as well as the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosures of Information and Other Acts of Listed Companies Concerning Connected Transactions B.E. 2546 (2003) dated 19 November 2003 and its amendments ("Connected Transaction Notification"). When considering, the Connected Transaction, such transaction size is equivalent to 13.987 percent of the net tangible assets (NTA) of the Company's reviewed consolidated financial statements for the period ended March 31, 2018. Details are as follows:



Table 1-8: Details of the calculation of Connected Transaction size

Criteria for calculation	Formula	Transaction Size
Size of	Total Value of Consideration paid to the Sellers	13.987%
Connected Transaction	NTA of the listed company as of March 31, 2018 = $\{650.00^{1/} / 4,647.01^{2/}\} \times 100$	

Remarks: 1/ Cash to pay for FEC's shares

2/ Financial statements as of March 31, 2018, reviewed by KPMG Phoomchai Audit Limited

When combining all connected transactions with the same persons (the Seller) during the past 6 months prior to the Company's Board of Directors resolved to propose to the shareholders for an approval to entering into the Share Purchase Transaction which the Company has entered into 1 connected transaction which is

Table 1-9: Transaction size of other connected transactions that occurred during the 6-month period prior to this Transaction

The transaction size of the connected transaction that occurred during the 6-month period prior to this Transaction (December 16, 2017 – May 15, 2018)	%
1. The lease of land and building with Great Miracle Asset Co., Ltd. for using as a parking lot, storage of goods and documents. This lease agreement is for 3 years from March 18 – February 2021 as approved by the Company's Board of Directors Meeting No. 1/2018 dated February 21, 2018	0.595
Aggregate amount of the connected transaction for the last 6 months	0.595

Remarks: 1/ Dhumrongpiyawut's family is the major shareholders of Group of Great Miracle Asset Co., Ltd.

This will make the Connected Transaction size equals to 14.582 percent

Accordingly, to enter into the Share Purchase Transaction, the Company is required to undertake the following actions in line with the Acquisition and Disposal Notifications and the Connected Transactions Notifications:

- Disclose information on the Share Purchase Transaction to the SET pursuant to the Acquisition and Disposal Notifications and the Connected Transactions Notifications;
- Convene a shareholders' meeting of the Company to request for approval of such Transaction, which must be approved by a vote of not less than three-fourths of the total votes of shareholders attending the meeting and having the rights to vote excluding shareholders with vested interest; and
- Appoint an independent financial advisor to provide opinion on the Share Purchase Transaction and submit such opinion to the SEC, the SET, and the shareholders of the Company.

At the Extraordinary General Meeting of Shareholders No. 1/2018 to be held on June 28, 2018, shareholders who have conflict of interest as of May 30, 2018 or the latest closing date of the Company's share registration book for the Extraordinary General Meeting of Shareholders No. 1/2018) will not be entitled to cast vote on such transaction. In this regard, list of the Company's shareholders as of April 25, 2018 who have conflict of interest and are not entitled to cast vote are:

Table 1-10: List of Company's shareholders that have no voting rights

Name	Relationships with the parties in the transaction	Number of shar in the Compan April 25, 20	y as of	
		No. of Shares	%	
1. Gunkul Group Co., Ltd	One of the Sellers	3,693,859,400	49.792	
2. Mr. Gunkul Dhumrongpiyawut	One of the Sellers	309,592,726	4.173	
3. Ms. Nanpapat Piyaputtinan	One of the Sellers	59,243,407	0.799	
4. Mr. Prakin Sricharoen	Father of Ms. Sopacha which is one of the Sellers	57,195,151	0.771	
5. Ms. Naruechon Dhumrongpiyawut	One of the Sellers	359,328	0.005	

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Source: SET and Form 56-1 of the Company

Moreover, the Share Purchase Transaction is also considered a purchase or acceptance of a transfer of business of a private entity to the Company pursuant to Section 107(2)(b) of the Public Limited Companies Act B.E. 2535 (and its amendments). Therefore, the Company must obtain an approval from the shareholders' meeting with required affirmative votes of at least three-fourths of the total votes of the shareholders who attend the meeting and have the right to vote.

### 1.1.7 Share Purchase Agreement

In order to present an overview of the Transaction, the IFA would like to summarize key information of the agreement as follows:

# 1.1.7.1 Key conditions of the Share Purchase Agreement

Table 1-11: Key conditions of the Share Purchase Agreement

The Buyer: Gunkul Power Development Co., Ltd ("GPD"), a subsidiary of the Company  The Sellers: The person named as follows:  1) Gunkul Group Co., Ltd ("GKG")  2) Ms. Sopacha Dhumrongpiyawut  3) Mr. Gunkul Dhumrongpiyawut  4) Mr. Chaloempon Sricharoen							
<ol> <li>Gunkul Group Co., Ltd ("GKG")</li> <li>Ms. Sopacha Dhumrongpiyawut</li> <li>Mr. Gunkul Dhumrongpiyawut</li> <li>Mr. Chaloempon Sricharoen</li> </ol>							
<ul><li>2) Ms. Sopacha Dhumrongpiyawut</li><li>3) Mr. Gunkul Dhumrongpiyawut</li><li>4) Mr. Chaloempon Sricharoen</li></ul>							
3) Mr. Gunkul Dhumrongpiyawut 4) Mr. Chaloempon Sricharoen							
4) Mr. Chaloempon Sricharoen							
, · · · ·							
F) Me Negreehen Dhumrengniyawut							
5) Ms. Naruechon Dhumrongpiyawut							
6) Ms. Nanpapat Piyaputtinan							
7) Mr. Pawich Dhumrongpiyawut							
Signing Date and Transaction Date  The Company is expected to sign the agreement on July 2, 2018 after the shareholders' meeting approves to enter into the transaction.							
	10,000,000 ordinary shares of FEC, which is account for 100% of FEC's total shares, with a par value of THB 10.00. In this regard, the capital of shares is not fully paid. The paid-up capital is THB 47,500,000.						
Selling Price Not exceeding THB 650 million	Not exceeding THB 650 million						
Term of Payment The parties agree that the Buyer will pay to the Sellers in two installments as follows:	agree that the Buyer will pay to the Sellers in two installments as follows:						
1) First Payment in the amount of 50% of total selling price, which will be paid transaction date (expected to be on July 2, 2018); and	1) First Payment in the amount of 50% of total selling price, which will be paid on the transaction date (expected to be on July 2, 2018); and						
<ol> <li>Second Payment in the amount of 50% of total selling price, which will be paid December 31, 2018.</li> </ol>	<ol> <li>Second Payment in the amount of 50% of total selling price, which will be paid within December 31, 2018.</li> </ol>						
Key Condition Precedent  1) The parties' warranties as stated in the share purchase agreement are correcting.	ct and						
2) The parties have not breached any obligations under the share purchase agree	ement.						
3) The parties have been approved by the Board of Directors and / or the shareh of the legitimate buyers as required by law for entering into the transaction und share purchase agreement.							
4) The Company has been approved by the shareholders meeting of the Compensation under the share purchase agreement as required by Is							
5) The sellers proceed to ensure that Future Electrical Control Co., Ltd obtains c to the change of the shareholders structure of Future Electrical Control Co., Ltd the counterparty under any contracts which prohibit changes of shareholders.							
6) There is no any significant negative impact on Future Electrical Control Co., Ltd							
<b>Termination</b> The Parties agree that this agreement shall terminate upon the occurrence of any of following events:	of the						

Governing Law	Law of the Kingdom of Thailand
	3) When either party has exercised its rights to terminate the contract due to the breach of contract by other party, and the other party does not correct such breach within 15 days after received the written notice from the non-breaching party.
	2) If the transaction is not completed by December 31, 2018 or any other date agreed between the parties; or

Source: The Company and Draft of Share Purchase Agreement of Future Electrical Control Co., Ltd. dated May 14, 2018.

### 1.1.8 Total Value of Consideration

The Company will pay the consideration for FEC's common shares in the amount not exceeding THB 650 million, which is the total value of consideration for 10,000,000 ordinary shares of FEC with a par value of THB 10.00 and paid-up capital of THB 47,500,000 million, after the consider precedents, including other conditions, under the Share Purchase Agreement have been fulfilled (or be exempted or waived under the terms and conditions set forth in the Share Purchase Agreement). In this regard, the Company will pay for such shares by cash to the existing shareholders of FEC in the proportion to the paid-up capital owned by each individual seller.

The Company will pay for above shares to the Sellers by cash. Half of the total consideration (THB 325 million) will be paid at the transaction date (expected to be on July 2, 2018) and the remaining half (THB 325 million) will paid in December 31, 2018, details of which are as follows:

Table 1-12: Summary of the payment to the Sellers

No.	The Sellers	Amount (THB)					
		Payment at the Transaction Date	Payment within December 31, 2018				
1	Gunkul Group Co., Ltd.	290,789,474.00	290,789,474.00				
2	Ms. Sopacha Dhumrongpiyawut	9,578,947.50	9,578,947.50				
3	Mr. Gunkul Dhumrongpiyawut	5,473,684.50	5,473,684.50				
4	Mr. Chaloempon Sricharoen	4,789,473.50	4,789,473.50				
5	Ms. Naruechon Dhumrongpiyawut	4,789,473.50	4,789,473.50				
6	Ms. Nanpapat Piyaputtinan	4,789,473.50	4,789,473.50				
7	Mr. Pawich Dhumrongpiyawut	4,789,473.50	4,789,473.50				
	Total	325,000,000.00	325,000,000.00				

Source: The Company

### 1.1.9 Criterion for Purchase Price Determination

(In reference to Information Memorandum on Asset Acquisition and Connected Transaction of the Company)

The Company defines the purchase price by using the following factors:

- (1) Agreed Price by two contract parties;
- (2) The financial projection for the acquisition by the investment analysis of the company. It is expected that the rate of return from the acquisition by Discounted Cash Flow Approach method. This reflects the company's ability to make a profit in the future. In considering the purchase price, the Company does not consider the value of FEC alone but also consider the benefits that the Company will receive in the future from the expansion of the construction business of the Company; and
- (3) Information from reliable sources from external independent advisors i.e.
  - Legal due diligence report by Kudan and Partners Limited (Legal Advisor).
  - Accounting and financial due diligence report by SP Audit Co. Ltd. (Accounting and Finance Advisor).

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### 1.1.10 Source of Funds for Transaction

The Company uses working capital and cash from operating results of the Company that will be received as normal during the development of the Company's projects.

In this regards, according to additional assessment by the IFA on the Company's consolidated financial statement ended March 31, 2018, the Company had cash and cash equivalents of THB 1,399.19 million and current investments of THB 96.32 million, totaled THB 1,495.51 million, which is sufficient for entering into this acquisition transaction.

### 1.1.11 Conditions Related to Transaction

Entering into the share purchase transaction by cash payment will be succeeded only when the conditions precedent given in the share purchase agreement are met, which are consisting of:

**Table 1-13: Progress of Conditions Precedent** 

	Key Conditions Precedent	Progress
1)	The parties' warranties as stated in the share purchase agreement are correct and true.	■ In the process
2)	The parties have not breached any obligations under the share purchase agreement.	■ In the process
3)	The parties have been approved by the Board of Directors and / or the shareholders of the legitimate buyers as required by law for entering into the transaction under the share purchase agreement.	■ In the process
4)	The Company has been approved by the shareholders meeting of the Company to enter into the transaction under the share purchase agreement as required by law.	Awaiting for the shareholders' meeting of the Company. Conditions of approval include resolution of not less than three-fourths of the total number of votes of shareholders attending and eligible to vote, excluding the vote of shareholders who have interest in such transaction are excluded.
5)	The sellers proceed to ensure that Future Electrical Control Co., Ltd. obtains consent to the change of the shareholders structure of Future Electrical Control Co., Ltd. from the counterparty under any contracts which prohibit changes of shareholders.	■ In the process  (According to FEC's legal due diligence report dated May 4, 2018, the IFA concluded that the only agreements to be amended for change of the shareholders structure¹¹ of FEC is the loan agreement between FEC and one of its financial institutions.)
6)	There is no any significant negative impact on Future Electrical Control Co., Ltd.	■ In the process

Source: The Company

Remarks: Managements of the Company has inserted that there is no any clause to prohibit changes of FEC's shareholders on two on-going agreements between FEC and PEA.

### 1.2 Information of Gunkul Engineering Public Company Limited ("GUNKUL" or "Company")

Please refer to Appendix 1 of this report

# 1.3 Information of Future Electrical Control Company Limited ("FEC")

Please refer to Appendix 2 of this report



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# Part 2: Opinion of the Independent Financial Advisor on The Reasonableness of Asset Acquisition and Connected Transaction

The Independent Financial Advisor (IFA) has an opinion that entering into the assets acquisition and Connected Transaction <u>is appropriate</u> by considering from significant factors, including advantages, disadvantages, and risks of entering into the transaction as follows:

# 2.1 Objective and Necessity to Entering into Transaction

In 2017, GUNKUL, through its joint venture "Gunkul Consortium", won a bidding for a turnkey construction of 33 kV submarine cable (distribution line) system to Ko Phra Thong in Phang Nga province of Provincial Electricity Authority ("PEA") in the amount of THB 87.28 million ("Ko Phra Thong Project"). Currently, Ko Phra Thong Project is under construction and expected to be completed by the end of 2018. The management of the Company added that the Company was interested in the submarine cable system since approximately 5 years ago. When Ko Phra Thong Project came along, the Company began a study in late 2016 and submitted a tender in May 2017 through the joint venture due to the Company still had not received a the Provisional Acceptance Certificate ("PAC") related to submarine cable system construction, which is one of qualifications of bidders according to tender document of PEA. In addition, the Company also had an interest in providing construction services of overhead transmission or distribution line system, underground transmission or distribution line system, and substation, which is in line with the government's emphasis on power management. According to Thailand Power Development Plan 2015-2036 (PDP2015), the government focused on stability of electrical systems, development of transmission line systems, distribution line systems to support the development of renewable energy and the entering into ASEAN Economic Community (AEC), which will be a source of increasing investment in electrical system of Thailand.

Nevertheless, Gunkul Group Co., Ltd. ("GKG") as a major shareholder of the Company, is also engaged in project bidding and being a contractual party involved in the construction of power plants through its subsidiary, Future Electrical Control Co., Ltd. ("FEC"). FEC is engaging in the business of: (1) the construction of renewable energy power plants (solar and wind) (FEC is the subcontractor serving the Company and other companies on the construction of the foundation system of the power plants since FEC has superior skills by implementing "Smart Pile Technology" which not only reduce costs, but also shorten the duration to construct the solar power plants); and (2) the construction of electrical systems. In 2017, FEC's main revenue came from high voltage transmission line system and distribution line system. Therefore, should the Company expand its business to be a construction contractor of electrical system in the future, there will be potential conflict of interest with a major shareholder of the Company, since FEC and the Company will be competing in the bidding process for the construction work. Moreover, most contractual parties of electrical system constructions in the future will be the government agencies such as Electricity Generating Authority of Thailand ("EGAT"), Metropolitan Electricity Authority ("MEA"), or Provincial Electricity Authority ("PEA"). One of key qualifications of bidders is past performance of construction works of overhead transmission line. underground cable, or substation in which, currently, the Company still does not have the aforementioned works. The management of the Company provided information that if the Company intends to have works in this field, the Company must start from participating in the bidding through a joint venture with other companies having portfolio performance, which mainly start from the project with the value is not relatively high. Furthermore, it takes time to accumulate sufficient experiences and work performance. In short, it is expected to spend at least 5 years prior to the Company will be able to participate in the bidding independently. As a result, the Company will lose opportunities to generate revenue from the business of construction of electrical system, which is currently in a lucrative growth phase. There are several construction projects with a total project value of several billion baht to be open for the biddings in the near future. (For more details regarding the trend of electrical industry in Thailand (transmission and distribution line systems only), please refer to Appendix 2, Section 6.2 of this report).

Therefore, the Company considers that the acquisition of shares in FEC will allow the Company to enter into the business of construction of electrical system abruptly. The acquisition of shares in FEC can also increase revenue and operating results, enhance the profitability of the Company's business group, boost growth, increase capacity and capability in the pursuit of revenue of the Company's business group in the future, as well as, diversify sources of revenue of the Company.

In addition, entering into this transaction helps to eliminate future conflicts of interest that may occur in the construction of electrical system business between FEC and the Company. Since the Company will be running the construction of electrical business through FEC (a subsidiary of the Company after the Share Purchase Transaction has been approved at the shareholders' meeting of the Company). In conclusion, entering into the transaction will be an opportunity to generate returns and growth for the Company in the future and enhance benefits to the shareholders of the Company in the long term.

# 2.2 Impact on Financial Position of the Company from entering into Transaction

By entering into the Share Purchase Transaction, FEC will be a subsidiary of the Company in which the Company will consolidate financial position of FEC, resulting in changes in the financial position of the Company. In order to show the anticipated changes in the statement of financial position of the Company, the Company has prepared pro forma financial statements based on the audited consolidated financial statements of the Company for 12-month period ended December 31, 2017, and the reviewed consolidated financial statements of the Company for 3-month period ended March 31, 2018, and the audited consolidated financial statements of FEC ended December 31, 2017, and the reviewed consolidated financial statements of FEC for 3-month period ended March 31, 2018. It is based on the pro forma that the Company has acquired FEC's shares since January 1, 2017.

Key assumptions in the preparation are as follows:

- 1) In business combination between the Company and FEC, the pro forma consolidated financial statements have been prepared in accordance with accounting treatment guidance for business combination under common control since FEC and the Company are under the ultimate control by Dhumrongpiyawut family, both before and after the business combination. The Company recognized assets and liabilities of FEC based on book values as of March 31, 2018. The difference between cost of business combination under common control and the interest of the Company under book values of FEC shall be shown as an item in shareholders' equity and there is an adjustment of the elimination of inter-company transactions between the Company or subsidiaries of the Company and FEC.
- 2) Purchase price of FEC's shares is determined at THB 650 million and the difference between book values of FEC in 2017 and March 31, 2018 in an amount of THB 592.50 million shall be recorded as deficit from business combination under common control.

Table 2-1: Pro Forma Consolidated Statements of Financial Position - Assets

(Unit: THB Million)

	Prior to Entering into the Transaction <sup>1/</sup> After Entering into					the Transaction <sup>2/</sup>			
Statements of Financial Position	31 Mar	31 Mar 2018		31 Dec 2017		31 Mar 2018		31 Dec 2017	
	Value	%	Value	%	Value	%	Value	%	
Cash and cash equivalents	1,399.19	4.19	1,048.23	3.45	795.72	2.41	454.87	1.51	
Current investments	96.32	0.29	605.02	1.99	96.32	0.29	645.02	2.14	
Deposit from financial institution pledged as collateral	1,056.03	3.16	964.05	3.17	1,024.59	3.11	964.05	3.20	
Trade accounts receivable	1,758.17	5.27	1,182.39	3.89	1,848.87	5.61	1,207.13	4.01	
Unbilled revenue	543.53	1.63	759.61	2.50	573.55	1.74	759.61	2.52	
Other receivables	359.89	1.08	322.36	1.06	432.08	1.31	766.90	2.55	
Revenue Department receivable	67.14	0.20	100.73	0.33	65.23	0.20	100.74	0.33	
Short-term loans to related parties	-	-	-	-	-	-	-	-	
Inventories	427.87	1.28	403.77	1.33	432.81	1.31	408.99	1.36	
Total current assets	5,708.13	17.10	5,386.17	17.73	5,269.16	15.98	5,307.30	17.62	
Long-term deposit from financial institution pledged as collateral	323.52	0.97	40.77	0.13	323.52	0.98	40.77	0.14	
Investments in associates	383.42	1.15	381.41	1.26	383.43	1.16	381.41	1.27	
Investments in joint ventures	1,050.34	3.15	1,005.23	3.31	1,050.48	3.19	1,005.23	3.34	
Investments in subsidiaries	-	-	-	-	-		-		
Investment properties	-	-	-	-	-		-		

	Prior to Entering into the Transaction 1/				After Entering into the Transaction 2/			
Statements of Financial Position	31 Mar 2018		31 Dec 2017		31 Mar 2018		31 Dec 2017	
	Value	%	Value	%	Value	%	Value	%
Property, plant and equipment	20,392.56	61.08	18,125.00	59.67	20,407.03	61.89	17,915.44	59.48
Goodwill	163.48	0.49	163.48	0.54	163.48	0.50	163.48	0.54
Intangible assets	4,268.36	12.78	4,267.79	14.05	4,269.64	12.95	4,268.12	14.17
Deposit for purchase of assets	367.30	1.10	362.14	1.19	367.30	1.11	362.14	1.20
Advance for land lease	216.03	0.65	215.44	0.71	215.62	0.65	215.44	0.72
Deferred tax assets	77.18	0.23	21.51	0.07	74.50	0.23	21.51	0.07
Other non-current assets	438.01	1.31	408.08	1.34	450.24	1.37	437.71	1.45
Total non-current assets	27,680.19	82.90	24,990.84	82.27	27,705.24	84.02	24,811.24	82.38
Total assets	33,388.32	100.00	30,377.02	100.00	32,974.40	100.00	30,118.54	100.00

Table 2-2: Pro Forma Consolidated Statements of Financial Position – Liabilities and Equity (Unit: THB Million)

	Prior Entering into the Transaction 1/ After Entering into the Tra					the Transac	tion <sup>2/</sup>	
Statements of Financial Position	31 Ma	r 2018	31 Dec	2017	31 Mar 2	2018	31 Dec 2	2017
	Value	%	Value	%	Value	%	Value	%
Short-term loans from financial institutions	2,703.55	8.10	2,231.93	7.35	2,763.55	8.38	2,271.97	7.54
Short-term loans from related parties	-		-	-	-		-	
Trade accounts payable	677.31	2.03	712.12	2.34	754.38	2.29	722.44	2.40
Unearned revenues	103.18	0.31	196.21	0.65	176.27	0.53	196.21	0.65
Payable for purchases of assets	1,331.46	3.99	1,702.85	5.61	1,275.92	3.87	1,502.78	4.99
Revenue Department payable	8.60	0.03	10.63	0.03	11.35	0.03	22.80	0.08
Retention payables	541.89	1.62	322.15	1.06	541.85	1.64	322.15	1.07
Other payables	714.61	2.14	332.05	1.09	701.51	2.13	466.53	1.55
Current portion of long-term loans	860.55	2.58	632.32	2.08	860.55	2.61	632.32	2.10
Current portion of debentures	280.00	0.84	280.00	0.92	280.00	0.85	280.00	0.93
Current portion of finance lease liabilities	11.69	0.04	12.40	0.04	14.28	0.04	15.32	0.05
Income tax payable	114.34	0.34	33.81	0.11	135.61	0.41	55.03	0.18
Total current liabilities	7,347.17	22.01	6,466.47	21.29	7,515.25	22.79	6,487.53	21.54
Long-term loans	11,903.36	35.65	9,750.70	32.10	11,903.36	36.10	9,750.70	32.37
Debentures	3,765.50	11.28	3,765.50	12.40	3,765.50	11.42	3,765.50	12.50
Retention payables	244.44	0.73	255.59	0.84	209.83	0.64	201.64	0.67
Finance lease liabilities	17.91	0.05	20.14	0.07	26.84	0.08	28.23	0.09
Provisions for employee benefits	45.37	0.14	43.64	0.14	47.65	0.14	43.64	0.14
Deferred tax liabilities	219.72	0.66	220.37	0.73	264.47	0.80	220.37	0.73
Other non-current liabilities	59.38	0.18	51.94	0.17	60.45	0.18	76.76	0.25
Total non-current liabilities	16,255.68	48.69	14,107.89	46.44	16,278.08	49.37	14,086.84	46.77
Total liabilities	23,602.85	70.69	20,574.36	67.73	23,793.33	72.16	20,574.37	68.31
Authorized share capital	1,982.97	5.94	1,982.97	6.53	1,982.97	6.01	1,982.97	6.58
Issued and paid-up share capital	1,854.66	5.55	1,854.66	6.11	1,854.66	5.62	1,854.66	6.16
Premium on ordinary shares	5,179.47	15.51	5,179.47	17.05	5,179.47	15.71	5,179.47	17.20
Retained earnings								
Appropriated-Legal reserve	198.30	0.59	198.30	0.65	198.30	0.60	198.30	0.66
Unappropriated	2,132.02	6.39	2,241.13	7.38	2,076.84	6.30	2,016.53	6.70

	Prior Entering into the Transaction 1/				After Entering into the Transaction 21			
atements of Financial Position	31 Mar 2018		31 Dec 2017		31 Mar 2018		31 Dec 2017	
	Value	%	Value	%	Value	%	Value	%
Deficit on business combination under common control	93.62	0.28	93.62	0.31	(498.88) <sup>3/</sup>	(1.51)	(498.88) <sup>3</sup> /	(1.66)
Other components of equity	(302.05)	(0.90)	(362.63)	(1.19)	(299.68)	(0.91)	(362.65)	(1.20)
Equity attributable to owners of the Company	9,156.02	27.42	9,204.55	30.30	8,510.71	25.81	8,387.43	27.85
Non-controlling interests	629.45	1.89	598.10	1.97	670.36	2.03	1,156.73	3.84
Total shareholders' equity	9,785.48	29.31	9,802.66	32.27	9,181.07	27.84	9,544.17	31.69
Total liabilities and shareholders' equity	33,388.32	100.00	30,377.02	100.00	32,974.40	100.00	30,118.54	100.00

Remarks: 1/ Consolidated financial statements of the Company have been reviewed or audited by the Certified Public Accountant

- 2/ Pro forma consolidated financial statements have been prepared by the Company. The difference between cost of business combination under common control and the interest of the Company under book values of FEC shall be shown as an item in shareholders' equity. There is an adjustment of the elimination of inter-company transactions between the Company or subsidiaries of the Company and FEC.
- 3/ <u>Surplus</u> on business combination under common control (prior to entering into the transaction) is THB 93.62 million and deducted by deficit on business combination under common control from this Transaction of THB 592.50 million, resulting in the ending deficit on business under common control equal to THB 498.88 million.

### Impact on Financial Position of the Company

Financial position of the Company after the acquisition of shares in FEC: Total assets of the Company as of December 31, 2017 and March 31, 2018 will decrease to THB 30,118.54 million and THB 32,974.40 million, respectively, or total assets decreased by THB 258.48 million as of December 31, 2017 and decreased by THB 413.92 million as of March 31, 2018. Total assets declined primarily due to a decrease in cash used for the acquisition of shares in FEC of THB 650 million.

The Company's total liabilities will increase by THB 0.011 million as of December 31, 2017 and THB 190.48 million as of March 31, 2018. An increase in total liabilities during Q1/2018 is primarily due to the increases in trade accounts payable of THB 77.07 million, unearned revenues of THB 73.09 million, and short-term loans from financial institutions of THB 60 million.

The Company's shareholders' equity will decrease by THB 258.49 million as of December 31, 2017 and THB 604.41 million as of March 31, 2018. A decrease in shareholders' equity is mainly due to the decrease in surplus from business combination under common control of THB 592.50 million as of March 31, 2018, which is the difference between the purchased price of FEC and net asset value.

The ratio of debt to shareholders' equity as of December 31, 2017 will increase from 2.10 times to 2.16 times after the acquisition of shares in FEC. As at March 31, 2018, the ratio will increase from 2.41 times to 2.59 times after the acquisition of shares in FEC.

In this regard, the pro forma consolidated financial statement is not a mean to measure the financial position at the acquisition date of FEC's shares. The pro forma consolidated financial statements are established by using some assumptions of the event which have not yet occurred. The user, therefore, should be cautious that the pro forma consolidated financial statements may not be appropriate for other purposes except for the indication of the impact of the Transaction.

# 2.3 Advantages and Disadvantages of Entering into Transaction

### 2.3.1 Advantages of Entering into the Transaction

(1) An investment that abruptly allows the Company to enter into the business of construction of overhead transmission line system, underground cable system, and substation

Most contractual parties of electrical system constructions in the future will be the government agencies such as Electricity Generating Authority of Thailand ("EGAT"), Metropolitan Electricity Authority ("MEA"), or Provincial Electricity Authority ("PEA"). Qualifications of bidders for the construction of electrical systems could be summarized as follows;

Table 2-3: Summary of key qualifications of bidders for construction of electrical power systems.

	Type of Work		Key Qualification
1.	High voltage transmission line or distribution line system <sup>1/</sup> (overhead electricity transmission line system)		In the previous 10 years (counting till bidding date), a bidder must use to be a contractual party of turnkey construction contract of distribution line or transmission line system at a voltage of not less than 22 kV with one of agencies between PEA or MEA or EGAT.  In the previous 10 years (counting till bidding date), a bidder must use to be a contractual party with agencies/organizations of the government, state enterprises, or private agencies that are juristic persons for construction works of overhead electricity transmission line at a voltage of not less than the voltage that shall be used in the construction of the transmission line as specified in the tender document (construction works with higher voltage are applicable) with a distance of not less than a given distance, i.e., if it is a construction work with a distance of more than 10 km, a bidder must have a construction work with a distance of not less than 10 km. However, if it is a construction work with a distance of less than 10 km, a bidder must have a construction work with a distance of not less than a half of a given distance (for example, if it is a construction work of transmission line with a distance of 8 km, a bidder can submit a construction work with a distance of not less than 4 km) in which the construction contract must be executed in the area of the Department of Highways, or the Department of Rural Roads, or Local Administrative Organizations, or Special Administrative District, or Special Form of Local Government, or Royal Irrigation Department.
2.	Underground Cable	2.1	In the previous 10 years (counting till bidding date), a bidder must use to be a contractual party of turnkey construction contract of distribution line or transmission line system at a voltage of not less than 22 kV with one of agencies between PEA or MEA or EGAT.  In the previous 10 years (counting till a bidding date), a bidder must use to be a contractual party with agencies/organizations of the government, state enterprises, or private agencies that are juristic persons for construction works of underground cable conduit by horizontal directional drilling (HDD) method at a voltage of not less than the voltage that shall be used in the construction of the transmission line as specified in the tender document (construction works with higher voltage are applicable) with a distance of not less than a given distance, i.e., if it is a construction work with a distance of not less than 500 m. However, if it is a construction work with a distance of not less than 500 m. However, if it is a construction work with a distance of not less than 500 m, a bidder must have a construction work with a distance of not less than a half of a given distance (for example, if it is a construction work with a distance of not less than a half of a given distance (for example, if it is a construction work with a distance of not less than 200 m) in which the construction contract must be executed in the area of the Department of Highways, or the Department of Rural Roads, or Local Administrative Organizations, or Special Administrative District, or Special Form of Local Government, or Royal Irrigation Department.
3.	Substation	3.1	In the previous 5 years (counting till bidding date), a bidder must use to be a contractual party with agencies/organizations of the government, state enterprises, or private agencies that are juristic persons. In the same construction contract, there must be design portfolio, construction, and installation of substation, or bay addition, at a voltage of not less than the voltage that shall be used in the construction of substation as specified in the tender document, at least 1 substation, with an investment amount of not less than 25 percent of median construction cost in that tender.

Source: From an interview with the management of FEC and tender documents of construction contract via e-bidding of Provincial Electricity Authority ("PEA") and a summary conducted by the IFA.

Note: 1/ **High voltage transmission line** is a transmission line at a voltage of at least 69 kV. **Distribution line system** is a transmission line at a voltage of up to 33 kV.

Currently, FEC has the Provisional Acceptance Certificate related to the constructions of overhead electrical systems, underground cables, and substations which could be summarized as follows:

Table 2-4: Current Provisional Acceptance Certificate (PAC) and future Provisional Acceptance Certificate (PAC) which are expected to be obtained by FEC.

No	. Project Name	Type of Work	Name of Contractor	Name of Employer	Contract Signing Date	Date of Completion (Date on	Project value (THB
						certificate)	Million)
1.	Construction of underground cable in the area of Karon Beach Road	<u>Underground Cable</u> System Voltage 33 KV with a length of	FEC & SAC Joint venture	PEA	13/10/2010	29/05/2011 (11/11/2011)	24.19
2.	Construction of underground cable in the area of Karon Beach Road (33 kV)	2.06 circuit–km	FEC & SAC Joint venture	Karon Municipality Office	30/07/2010	(1111112011)	19.25
3.	Improvement and construction of 115 kV transmission line system from a substation of Wind Energy Development Co., Ltd. ("WED"), Wayu Wind Farm, to Dan Khun Tod substation	Overhead Transmission Line System Voltage 115 KV with a length of 30.24 circuit–km	FEC	WED	9/02/2015	29/12/2016 (6/02/2017)	162.08

No.	Project Name	Type of Work	Name of Contractor	Name of Employer	Contract Signing Date	Date of Completion (Date on certificate)	Project value (THB Million)
4.	Construction and improvement of distribution line system to underground cable in Provincial Electricity Authority ("PEA") Area 3 (South) (LOT11)	Underground Cable System Voltage 33 KV with a length of 11.88 circuit–km	FEC	PEA	21/03/2016	9/06/2017 (14 projects THB 87.14 million) (21/07/2017)	110.53
5.	Construction of 115 kV substation at Lum Rang substation of Rang Ngern Solution Co., Ltd. ("RNS") and construction of 115 kV transmission line system	Overhead Transmission Line System Voltage 115 KV with a length of 2.6 circuit–km 1 Substation System Voltage 115-22 KV	FEC	RNS	8/03/2559	24/02/2017	60.42
6.	Construction of 115 kV transmission line system of Greenovation Co., Ltd. ("GNP")	Overhead Transmission Line and Underground Cable System Voltage 115 KV with a length of 57.115 circuit–km	FEC	GNP	26/07/2559	18/01/2018 (11/4/2018)	385.36
7.	Construction of 115 kV transmission line system of Korat Wind Energy Co., Ltd. ("KWE")	Overhead Transmission Line System Voltage 115 KV with a length of 51.993 circuit–km	FEC	KWE	6/12/2559	3/05/2018 (Under Construction)	274.03
8.	Construction of 115 kV transmission line system during Mae Sai substation - Chiang Saen substation of Provincial Electricity Authority ("PEA")	Overhead Transmission Line System Voltage 115 KV with a length of 34 circuit–km	FEC	PEA	12/12/2560	Construction is expected to be completed within 630 days. The certificate is expected to be received at the end of 2019 11.	107.00
9.	Construction of four 115-22 kV substations, including Tha Li substation, Wang Saphung substation, Khon Kaen 1 substation, and Sakon Nakhon 4 substation of Provincial Electricity Authority ("PEA")	4 Substations System Voltage 115-22 KV	FEC	PEA	15/12/2560	Construction is expected to be completed within 630 days. The certificate is expected to be received at the end of 2019 11.	543.00

Source: The Company, FEC, and a summary conducted by the IFA.

Remark: 1/ FEC's executives has informed that both projects are proceeding as planned and will be completed by the deadline as specified on the contracts.

Currently, the Company had never entered into this business as a contractual party with any agency or company in order to operate a business of construction of overhead transmission line system, underground cable system, and substation. Moreover, the Company does not have any Provisional Acceptance Certificate ("PAC") in such industry.

Therefore, the acquisition of shares in FEC will enable the Company to expand the scope of business to the business of construction of electrical system abruptly due to FEC, currently, has extensive experience in the construction of electrical systems such as overhead electricity transmission line system, underground transmission line system (underground cable), and substation. According to Table 2-4 above, provisional acceptance certificates (PAC) that FEC is currently holding will support the Company, after entering into the Transaction, via FEC (which is a subsidiary of the Company), to be able to participate in the bidding of construction works as follows: 1) Construction of overhead transmission line (high voltage electricity transmission line and distribution line system) at a voltage of up to 115 kV without a limitation on distance, 2) Construction of underground cable at a voltage of up to 115 kV without a limitation on distance, and 3) Construction of substation at a voltage of up to 115 kV, which will enable the Company, via FEC, to be able to bid for various construction works from government agencies in the future.

## (2) An investment that creates opportunities for the Company's future growth in entering into the construction business of electrical system which is in a growth phase.

The acquisition of FEC's shares will support the Company to expand the scope of business to the business of construction of electrical system in which the business is in a growth phase. According to Thailand Power Development Plan 2015-2036 (PDP2015), the government focus on stability of electrical system, development of transmission line system, distribution line system to support the development of renewable energy and the entering into ASEAN Economic Community (AEC), which will be a source of increasing investment in electrical system of Thailand.

Moreover, MEA is under an implementation of "Plan of adjustment overhead transmission line system to underground cable system 2008-2013 (revised edition)", which the Cabinet has approved on January 31, 2017. The project to change overhead transmission line system to underground cable system of MEA is under implementation with a total distance of 175 kilometers and a total investment amount of THB 66,705 million. The main plan is to change overhead transmission line system to underground cable system for serving as a metropolis of ASEAN with a distance of 127.3 km and an investment amount of THB 48,717 million. The plan has a scope of 39 routes (Bangkok, Nonthaburi, and Samut Prakan). It is a long-term investment with an operation period during 2016-2025. Moreover, PEA has projects and plans that will be implemented at present and in the future, related to the optimization of electrical system, which is the core business of FEC. There are 4 current projects under implementation with an investment amount of approximately THB 79,414 million and 3 future plans which will be implemented during 2019-2023 with an investment amount of about THB 90,520 million. (For more information regarding the trend of electrical industry in Thailand (transmission and distribution line systems only), please refer to Appendix 2, Section 6.2 of this report).

## (3) A diversification of investment risks that increases a variety of construction business and sources of revenue

Currently, the Company's main source of revenue comes from construction of renewable energy plants and revenue from production and distribution of electricity from renewable energy. In 2017, the Company had revenue from construction of renewable energy plants of THB 1,962.58 million, representing 41.17 percent of total revenue, and revenue from production and distribution of electricity from renewable energy of THB 1,535.56 million, or 32.21 percent of total revenue. By entering into this Share Purchase Transaction will enable the Company to have a source of additional revenue from construction business of electrical system such as the construction of high voltage transmission line, distribution line system, underground cable, and substation. In addition, the Company will benefit from the diversification of risks from more variety of types of business, resulting in a reduction in risks of reliance on revenue from renewable energy business, in particular, revenue from construction of solar and wind power plants of the Company due to the government's policy to stop issuing the power purchase agreement (PPA) for renewable energy plants. As a result, there will be less demand for construction works of power plants of the Company.

Table 2-5: Company's revenue structure classified by business structure

	2015		2016		2017	
Type of Revenue	THB Million	%	THB Million	%	THB Million	%
Revenue from production, supply, and distribution of equipment for the electrical systems and renewable energy						
1.1 Supplying for distribution	3,346.59	75.03	791.97	24.68	521.74	10.94
1.2 Production for distribution	425.67	9.54	559.42	17.43	679.30	14.25
Revenue from production and distribution of electricity from renewable energy						
<ul> <li>Manufacture and sale of electricity from solar energy</li> </ul>	51.16	1.15	867.93	27.05	1,535.56	32.21
Revenue from construction of renewable energy plants	566.76	12.71	909.5	28.34	1,962.58	41.17
4. Revenue from operation and maintenance	70.12	1.57	80.07	2.50	68.09	1.43
Total Revenue	4,460.30	100.00	3,208.89	100.00	4,767.27	100.00

Source: Form 56-1 of the Company and financial statements ended as of December 31, 2017.

## (4) An investment that can abruptly recognize revenue from the business of construction of electrical systems and allow the Company to have better operating result in overall

Subsequent to the entering into the transaction, FEC shall become a subsidiary of the Company. Therefore, the Company shall prepare the financial statement which include the performance of FEC, abruptly resulting in an increase in the Company' total revenue and operating result. Moreover, this will help enhance profitability of the Company's business group in the future since FEC has 3 current projects under implementation in which revenue shall be recognized since 2017 onwards. Details could be summarized as follows:

Table 2-6: Projects under implementation of FEC

No.	Project Name	Type of Work	Employer	Contract Signing Date	Date of Completion	Project Value (including VAT) (THB Million)	Estimated revenue 2018-2019 (including VAT) (THB Million)	
1.	Construction and improvement of distribution line system to underground cable in Provincial Electricity Authority ("PEA") Area 3 (South) (LOT11)	Underground Cable System Voltage 33 KV with a length of 11.88 circuit–km	PEA	21/03/2016	14 projects on 25 June 2017 1 project on 10 April 2018	110.53	25.10	
2.	Construction of 115 kV transmission line system during Mae Sai substation - Chiang Saen substation of Provincial Electricity Authority ("PEA")	Overhead Transmission line System Voltage 115 KV with a length of 34 circuit–km	PEA	12/12/2017	Construction is expected to be completed within 630 days. The certificate is expected to be received at the end of 2019 11.	107.00	107.00	
3.	Construction of four 115-22 kV substations, including Tha Li substation, Wang Saphung substation, Khon Kaen 1 substation, and Sakon Nakhon 4 substation of Provincial Electricity Authority ("PEA")	4 Sub Stations System Voltage 115-22 KV	PEA	15/12/2017	Construction is expected to be completed within 630 days. The certificate is expected to be received at the end of 2019 11.	543.00	543.00	
	Total							

Source: The Company

Remarks: 1/ FEC's executives has informed that both projects are proceeding as planned and will be completed by the deadline as specified on the contracts.

# (5) An investment in a company that is ready in terms of staff for the business of construction of electrical system.

Engineers, who are responsible for design and control of construction, are very important to the business operation of construction of electrical systems. Start from bidding participation with the government agencies, companies that are participating in bidding must have engineers (civil engineers and/or electrical engineers), according to Engineer Act, B.E. 2542, who are responsible for design and control of construction. In addition, project engineers, who are employees of the Company, will have direct responsibility in supervision of construction and installation to be in line with determined pattern, standard requirements, including control of construction and installation of subcontractors to be completed as scheduled, preparation of operating and progress reports for project manager, coordination with customers and related agencies, as well as, taking any action to support projects to be completed as planned.

As of April 30, 2018, FEC has engineers and supervisors in a total amount of 34 people which could be divided by level and expertise as follows:

Table 2-7: Number of project engineers, project managers, and project supervisors of FEC

Position	As of April 30, 2018				
	Electrical Work	Civil Work			
	(Head count)	(Head count)			
Project engineer	7	4			
2. Project manager	5	5			
3. Project supervisor	7	6			
Total	19	15			

Source: The Company and FEC.

In addition, classifying engineers by level based on Engineer Act, B.E. 2542 can be as follows;

Table 2-8: Engineers classified by level based on Engineer Act, B.E. 2542.

Level	As of April 30, 2018				
	Electrical Engineer (Head count)	Civil Engineer (Head count)			
Associate Engineer	10	7			
Professional Engineer	1	2			
Senior Professional Engineer	1	-			
Total	12	9			

Source: The Company and FEC.

In addition, FEC also has a director, Mr. Chaisiri Wattanachannarong, who graduated from the Faculty of Engineering and currently is an associate civil engineering. He has experiences and expertise in the construction of electrical systems for more than 20 years. Therefore, it can be seen that FEC is a company equipped with qualified staff for business of construction of electrical systems. In this regards, the management further clarifies that FEC currently has adequate man power to operate to meet the forecasted revenue which the IFA assessed in the equity value of FEC.

## (6) An investment with a payment term that is beneficial to the Company due to it reduces financing burdens to fully pay for the entire shares on the transaction date

The Company will acquire FEC' shares with the purchase value of not exceeding THB 650 million. According to the payment term, the payment shall be divided into 2 installments in which a payment of THB 325 million shall be made on the closing date, representing 50 percent of the total purchase value. And a payment of THB 325 million shall be made within December 31, 2018, representing 50 percent of the total purchase value. This payment term allows the Company to reduce financing burdens to fully pay for the entire FEC's shares in one time on the transaction date.

#### (7) An investment in assets with a reasonable purchase price

The Company will acquire FEC's shares with the purchase value of THB 650.00 million in which the aforementioned purchase value is in the range of fair value determined by the IFA at THB 559.89 million - THB 784.75 million. Therefore, the IFA has an opinion that **the purchase value is reasonable.** 

(For reasonableness of purchase value of FEC's shares, please refer to Part 3, Section 3.1.6 of this report)

## 2.3.2 Disadvantages of Entering into Transaction

#### (1) An investment that increases the Company's debt burdens and financing costs.

Prior to entering into the transaction, as of March 31, 2018, the Company and its subsidiaries had total liabilities of THB 23,602.85 million and a ratio of debt to shareholders' equity of 2.41 times. Based on the reviewed financial statements of FEC, as of March 31, 2018, FEC has total liabilities of THB 262.28 million and a ratio of debt to shareholders' equity of 2.92 times. Main portions of FEC's liabilities are overdrafts and short-term loans from financial institutions of THB 60.00 million and current liabilities of THB 119.12 million, mostly are accrued expenses and unearned revenue. According to an analysis on the impact on financial position of the Company from the acquisition of shares in FEC in aforementioned Section 2.2, it can be seen that after the acquisition of shares in FEC, as of March 31, 2018, the Company's total liabilities shall increase by THB 190.49 million and shareholders' equity shall decrease by THB 604.41 million, resulting in an increase in a ratio of debt to shareholder's equity of the Company to 2.59 times.

In addition, according to the legal due diligence report, it is found that FEC has three financial institutions to provide Letters of Guarantee (L/G) to the customers of FEC to guarantee the performance in accordance with service contract, sale contract, and electricity guarantee in a total amount of THB 209.33 million in which FEC shall pay fees of letters of guarantee on a monthly basis. Moreover, if there is a claim, in the future, under the letters of guarantee, such liabilities shall become loans from financial institutions of FEC, resulting in an increase in the Company's liabilities in the future. However, the management of FEC clarified that since FEC started the construction business in 2008, FEC has never experienced such event. In this regard, those letters of guarantee are required as per the normal course of the construction business, which is a main business of FEC.

Therefore, after entering into the transaction, the Company's liabilities shall increase from a combination of liabilities of FEC and interest expenses shall increase from an increase in loans, as well as, financial fees shall increase from the aforementioned provision of letters of guarantee.

### 2.4 Risks that may arise from Entering into Transactions

#### (1) Risk of not receiving construction works of electrical systems as targeted.

In the past, FEC's main revenue came from the construction of solar and wind power plants. Since 2017, FEC's main revenue came from construction of electrical system. The operation of construction of electrical system of FEC is a provision of construction services based on a construction contract such as construction of substation, installation and improvement of high voltage transmission line and distribution line system, adjustment of electricity transmission line to underground cable, installation of lighting system, etc. The aforementioned provision of services shall rely mainly on the investment plans of state agencies or private sector. In addition, most of such construction works came from biddings, therefore, there are risks of not receiving construction works as targeted, resulting in being unable to achieve expected revenue from the construction of electrical system of FEC. In this regard, FEC is aware of such risks, however, the management of FEC commented that electrical system, which is a basic infrastructure, is continuously expanding to support the growth of nation's economy. Furthermore, the nation's main state agencies responsible for electricity still have long-term investment plans to develop the country's electrical system such as 1) Thailand Power Development Plan 2015-2036 conducted by the Ministry of Energy and Electricity Generating Authority of Thailand, 2) Plan of improvement and expansion of electricity distribution system No.12 (2017-2021) of Metropolitan Electricity Authority, and 3) Projects and plans that will be implemented at present and in the future of Provincial Electricity Authority.

For the ability to win the biddings, provisions of construction services for electrical system of FEC are mainly construction works of the Provincial Electricity Authority (PEA). During the entire period of business operation, FEC has been well recognized and trusted by customers as trustworthy and FEC has never been blacklisted by its employers. As a result, FEC is able to attend the biddings and sign construction contracts with state enterprises in a continuously increased amount. In December 2017, FEC recently entered into a construction contract for 2 construction projects of high voltage transmission line system and substation of PEA with a total investment amount of approximately THB 650 million (including VAT). The estimated revenues from construction services for electrical system of FEC during 2018-2022 are as follows:

Table 2-9: Projected revenue of FEC from construction of electrical power systems during 2018-2022

	2018F		2019F		2020F		2021F		2022F	
Type of Revenue	THB Million	%								
Revenue from the construction of electrical system	509.96	99.4%	1,289.23	100.0%	833.72	100.0%	546.98	100.0%	517.92	100.0%
1.1 Revenue from current projects	455.40	88.8%	163.05	12.8%	-	-	-	-	-	-
1.2 Revenue from future projects	54.56	10.6%	1,102.96	87.2%	833.72	100.0%	546.98	100.0%	517.92	100.0%
2. Other Revenue	3.02	0.6%	-	-	-		-		-	
Total	512.98	100.0%	1,289.23	100.0%	833.72	100.0%	546.98	100.0%	517.92	100.0%

The Company and estimation by the IFA

Remark: Revenue excluding VAT

#### **(2)** Risk of increasing costs resulting from penalty of not being able to deliver engineering services to meet customer deadline.

Business of construction of electrical system of FEC is a provision of construction services based on a construction contract in which complete works are clearly scheduled to deliver to employers. Most contract periods are in the range of 12 months to 18 months in which the contracts shall be determined penalty resulting from the delay of delivery as stated in construction contracts. Therefore, in the event that there is a delay in the operation of FEC, FEC may be penalized, resulting in an increase in burdens or cost of operation. In addition, FEC may be at risk of being suspended or terminated construction contracts by employers.

In this regard, the management of FEC explained that, in the past, FEC had delivered two completed projects behind schedule as stated in construction contracts and has been penalized. The first project was signed in 2010 and FEC was penalized in an amount of THB 3 million, while the second project was signed in 2011 and FEC was penalized in an amount of THB 0.20 million - THB 0.30 million. The delays in these two projects occurred in a period that FEC had just begun entering into the business of construction of electrical system and also had less experience. In 2016, 2017, and for the first 3 months of 2018, FEC has not delivered any completed works behind schedule as stated in construction contracts, which can cause any penalty.

Moreover, FEC has a policy to prevent a risk of being unable to deliver completed works on time by setting a meeting on a weekly basis attended by concerned parties, such as project managers and project engineers to report progress of projects, situation of supplies purchase for the projects, operation of subcontractors, obstacles or problems that occurred. The concerned parties shall discuss solutions and operation plans of projects in advance in order to ensure that FEC's staff are ready to perform their duties. These actions will enable the management and staff of FEC to aware of the problems that may arise and cause delays in delivery, as well as, to come up with solutions for the aforementioned problems immediately.

#### (3) Risk of reliance on engineering staff

FEC operates a business of construction of electrical system by providing services ranging from design, procurement, and construction of transmission line, distribution line system, and substation. Therefore, it is necessary to rely on staff with knowledge, ability, and experience in particular field, especially engineer team, who are responsible for reproduction the design for the biddings participation, design, project cost estimate, design endorsement, and operation control of each project to be completed as scheduled and according to customers' requirements efficiently. As of April 30, 2018, FEC has a team of engineers and supervisors of 34 persons which can be divided into 12 electrical engineers, 9 civil engineers and 13 supervisors of electrical and civil works. Therefore, if FEC is unable to retain a team of engineers and supervisors, it may impact the ability to operate and manage works.

In this regard, the management of FEC explained that FEC has recognized the importance of staff which is a key success factor of FEC's operation. Moreover, FEC has set a policy to reduce a risk of reliance on engineering staff by determining an appropriate salary and other remuneration system that fit specific jobs and providing benefits and incentives to create ties to the organization in the long run, as well as, diversifying management authority to reduce reliance on individual staff.

#### (4) Risk of reliance on major customers which are government agencies and state enterprises.

FEC's main revenue came from the construction contracts in which the business of construction can be divided into 2 categories, construction of solar and wind power plant, and construction of electrical systems. In the previous 5 years (2013-2017), FEC had revenue from construction under the construction contract of more than 90 percent of total revenue. In 2013-2016, FEC's main revenue came from construction of renewable energy power plants. Since 2017 onwards, FEC's main revenue came from the construction of electricity system. In the first 3 months of 2018, FEC has a major customer, Provincial Electricity Authority ("PEA"), which resulted in revenue in a proportion of 94.4 percent of total revenue. As a result, FEC has a risk of reliance on major customers.

The management of FEC commented that according to plans, PEA shall be opening the biddings for the construction of electrical systems for many projects with the investment amount of several billion bahts. This is a great opportunity for FEC to participate in the biddings. However, FEC has a policy to reduce a risk of reliance on a major customer by expanding customer base to MEA, private companies, and other government agencies in the future.

#### (5) Risk of increasing costs due to changes in material price and low-quality subcontractors

The business of construction of electrical system, which is the core business of FEC, requires participation in the bidding process in a format of turnkey project proposal which includes cost of material, equipment, wages, taxes, as well as, profits. As a result, the rising cost of material will result in rising operating cost of FEC for each project and then lowering profits. The management of FEC clarified that during the preparation for the auction FEC will verify material prices used for determining bidding price suitably. In addition, FEC shall compare prices of several vendors prior to ordering material. Furthermore, FEC shall build relationships with many material suppliers in order to build negotiation power.

In addition, another factor that will impact the cost of project is the operation of low-quality or lack of attention subcontractors, resulting in poor quality works or delays in project operation. The management of FEC acknowledged that such problems are known and action plans are determined to minimize the aforesaid risk, including: 1) Checking history and assessing the appropriateness of subcontractors before hiring; 2) Monitoring the performance of subcontractors closely and setting up a meeting to report the progress of subcontractors' operation to a team of FEC every week. If there are problems or obstacles, actions to solve the problems shall be implemented immediately; 3) Controlling the quality of project construction closely by supervisors and project engineers who are employees of FEC; and 4) Determining penalty in the subcontractor contracts in case that subcontractors fail to comply with the terms specified in the subcontractor contracts in order to minimize impact of such risk.

#### Risk of Performance Warranty

Currently, FEC is under performance warranty of 7 completed projects as shown in Table 2-10 in which warranty shall be in a 2-year period from completion of construction. Therefore, if there is a problem within 2 years, FEC is required to solve the problem which will increase operating cost and negatively impact on financial statements of the Company. By entering into the transaction, FEC will become a subsidiary of the Company. Thus, the costs of FEC shall be costs of the Company in the consolidated financial statements.

However, the management of FEC explained that since FEC started providing performance warranty for construction of electrical system, there is only one occasion that FEC used to repair work during performance warranty period. The problem at that time was a technical problem caused by the environment of project's location and expenses incurred was approximately THB 1 million. In addition. due to construction works are mainly carried out by subcontractors and performance warranties for subcontractors, the same as performance warranty of the Company, are specified in subcontractor contracts. In sum, FEC can make a claim for damages arising from subcontractors as well.

Table 2-10: Summary of performance warranty of FEC

No	Project Name	Name of Employer	Date of Completion	Performance Warranty End Date
1	7 MW Solar Power Plant	RNS	24/12/2016	24/12/2018
2	Thung Kwao Sub-District, Muang Pan District, Lampang.	RNS	29/12/2016	29/12/2018
3	8 MW Solar Power Plant	WED	29/12/2016	28/12/2018
4	Klat Luang Sub-District, Tha Yang District, Petchaburi.	PEA	11/04/2018 <sup>1/</sup>	11/04/2020 1/
5	Improvement and construction of 115 kV transmission line system from a substation of Wind Energy Development Co., Ltd. (" <b>WED</b> "), Wayu Wind Farm, to Dan Khun tod substation	RNS	24/02/2017	23/02/2019
6	Construction and improvement of distribution line system to underground cable in Provincial Electricity Authority (" <b>PEA</b> ") Area 3 (South) (LOT11)	GNP	18/01/2018	17/01/2020
7	Construction of 115 kV substation at Lum Rang substation of Rang Ngern Solution Co., Ltd. ("RNS") and construction of 115 kV transmission line system	KWE	3/05/2018	3/05/2020

Source: The Company, FEC, and a summary conducted by the IFA.

Remarks :1/ This project includes construction of 15 works in which each work has construction that shall be completed at different point of time, resulting in different performance warranty periods. According to certificate dated July 21, 2017, there were 14 completed works and performance warranty start dates were in the range of September 30, 2016 - June 25, 2017. For construction of the last work, the management of FEC informed that the construction was completed on April 11, 2018 and performance warranty period for the last work shall last until April 11, 2020.

#### (7) Risk of being liable for the unpaid portion of the registered capital

By entering into the transaction of GPD (a subsidiary of the Company) will acquire 10,000,000 ordinary shares of FEC with a par value of THB 10 per share, representing 100 percent of FEC's total shares. FEC's ordinary shares have not been paid in a full amount in which the paid-up capital is equal to THB 47,500,000. According to the Civil and Commercial Code, the responsibility of shareholders is limited, that is only a specific amount of unpaid share capital. If a force majeure happens and causes FEC to be liable for any damages which may impact GPD, a shareholder of FEC, to be responsible by making a payment for share capital that still has not been paid in an amount of THB 52,500,000.

In this regard, the management of the Company said that subsequent to the entering into the transaction, GPD has no plan of paying for share capital in full, unless FEC must act in accordance with the law or for benefits to FEC's operation in the future.

2.5 Comparison of Advantages and Disadvantages between Transaction Made with the Connected Person and Transaction Made with External Party, Necessity to make Transaction with Connected Persons, and Reasons that the Company does not Make Transaction with External Party

Prior to this transaction, the Company has not received any offer or conditions for the transfer of the business in the same manner. Therefore, this transaction, currently, is the best available terms and conditions for the Company.

## 2.5.1 Benefits and advantages of entering into the transaction with the connected person, compared with the non-connected person

- (1) Entering into a business of construction of electrical system with state enterprises such as EGAT, MEA, and PEA requires one of major qualifications of bidders, that is, bidders must have past performance of construction of electrical system as stated in tender documents, for example, past performance of construction works of overhead transmission line, underground cable, or substation, in which, currently, the Company still does not have the aforementioned works. If the Company plans to have works in this field, the Company must start from participating in the bidding through a joint venture with other companies having the Provisional Acceptance Certificate (PAC), which mainly start from the project with the value is not relatively high. However, finding companies that have the PAC in order to establish a joint venture with the Company, which has none, is relatively complicated and may take a long period of time as the establishment of a joint venture with the Company can be considered as assisting the Company to enter into the industry as a new player or a future competitor. Therefore, the acquisition of shares in FEC shall help the Company to have the PAC under the name of FEC and enter into a business of construction of electrical system abruptly.
- (2) Acquisition of shares in FEC from related parties instead of acquisition of other companies that operate the same business as FEC will help eliminate the risk of conflict of interest in business operation in the future. If the Company were to acquire other companies in order to participate in the bidding and sign construction contracts of electrical system with state agencies, this shall be considered as operating a business that directly competes with FEC (which has the same major shareholder as the Company).
- (3) The Company also receives a good payment term from related parties in which the Company is not required to make a full payment for the purchase of shares in one time on the transaction date. This allows the Company to reduce financing burdens to pay for the entire amount of shares.

## 2.5.2 Disadvantages of entering into the transaction with the connected person, compared with the non-connected person

- (1) Entering into the Connected Transaction in which the transaction size is more than 3 percent of the net tangible assets of the Company, the Company must comply with the Connected Transactions Notification which causes additional costs related to an appointment of the Independent Financial Advisor (IFA) to provide an opinion to the shareholders of the Company and the arrangement of the shareholders' meeting.
- (2) As the Company and FEC have the same major shareholder, Dhumrongpiyawut family, holding voting rights of more than 50 percent of the total voting rights of each company, the acquisition of shares in FEC by the Company is considered a business combination under common control, and resulting in deficit from business combination under common control of THB 592.50 million, according to the Company's projection. This Transaction will result in a decrease in shareholders' equity, which shall cause an increase in a ratio of debt to shareholders' equity. According to the pro forma financial statements of the Company, as per Table 2-1 and 2-2, subsequent to entering into the transaction, as of March 31, 2018, the debt to shareholders' equity of the Company shall increase from 2.41 times to 2.59 times.

# Part 3: Opinion of Independent Financial Advisor on Appropriateness of Transaction Price and Terms of Transaction

In considering the appropriateness of the Transaction Price, the IFA used the information obtained from the Company and FEC, as well as interviews with the management of the Company and FEC, documents received from the Company and FEC such as assumptions used in the preparation of projection, contracts related to the Transaction, audited or reviewed financial statements, and documents relevant to the Transaction. In addition, the IFA also used information disclosed to the public such as Annual Registration Statements (Form 56-1), audited or reviewed financial statements, financial information from various websites, and information that the Company and FEC disclosed to the public on the SEC's website (www.sec.or.th) and the SET's website (www.set.or.th), as well as a study of business and financial information of other comparable companies, etc.

However, the IFA's opinions are based on the assumptions that the aforementioned information and important documents are complete, comprehensive, and correct as well as considering the current situation and available information. Any significant changes to those factors may impact FEC's operation and valuation as well as the shareholders' decision to determine the fairness of the Transaction Price.

The preparation of the report will cover (1) The appropriateness of the Transaction Price, and (2) The appropriateness of terms of the Transaction.

### 3.1 Book Value Approach

The IFA has determined FEC's share price by using the following five approaches:

- 1. Book Value Approach
- 2. Adjusted Book Value Approach
- 3. Market Price Approach
- 4. Market Comparable Approach
  - 4.1 Price to Book Value Approach: P/BV Ratio
  - 4.2 Price to Earnings Ratio Approach : P/E Ratio
  - 4.3 Price to Sales Ratio Approach: P/S Ratio
  - 4.4 Enterprise Value to EBITDA Approach: EV/EBITDA Ratio
  - 4.5 Enterprise Value to Sales Approach: EV/S Ratio
- 5. Discounted Cash Flow Approach: DCF

These share valuation approaches can be summarized as follow:

#### 3.1.1 Book Value Approach

This valuation approach will show the overall FEC's equity value at any point of time. As for this valuation of FEC by book value approach, the company's value is based on the financial statements as of March 31, 2018 which is the most up-to-date financial statements as reviewed by Thaikit Bunchi Co., Ltd.

Under this approach, the Company's value is calculated from the shareholders' equity. The calculation is shown as follow:



Table 3-1: Calculation of the FEC's equity value by using Book Value Approach

Details	March 31, 2018 (reviewed) THB Million
Paid-in Capital 1/	47.50
Additional Paid-in Capital	ı
Retained Earnings – Legal Reserved	10.00
Retained Earnings – Unrestricted	32.41
Total Shareholders' Equity	89.91

Source: Financial statements as of March 31, 2018, reviewed by Thaikit Bunchi Co., Ltd.

Remark: 1/ FEC has a registered capital of THB 100 million and but a paid-up capital of THB 47.50 million.

According to the book value approach (under the prevailing paid-up capital), the equity value of FEC is equivalent to **THB 89.91 million.** 

#### 3.1.2 Adjusted Book Value Approach

The adjusted book value approach is calculated from the company's total assets deducted by the total liabilities including the commitments and contingent liabilities based on the financial statement as of March 31, 2018 and adjusted by the items which may have significant impacts after the first quarter of the financial statement. The aforementioned items are such as the increase or decrease in the revaluation of the Company's assets which have not been booked in the financial statements; the reversal of allowance of doubtful account or bad debt, tax saving from losses carries forward, the contingent liabilities from legal cases, and etc. The purpose of the adjustments is to reflect the fair market value of the Company's assets.

Based on the financial statement as of March 31, 2018, the IFA found that the majority of assets of FEC are current assets (74.31% of total assets) whereas fixed assets under property, plants and equipment are only 4.35% of total assets. The IFA therefore do not make any adjustments under this approach. The equity value of FEC under adjusted book value approach thus equals to its book value of **THB 89.91 million**.

#### 3.1.3 Market Price Approach

This approach takes into consideration of the demand-supply sides in the stock market (SET) that is the historical trading prices of FEC at various periods. The IFA considered the SEC's ruling i.e. the volume weighted average price of the (Market capitalization of listed securities/ its trading volume) based on the 7-15 business days prior to GUNKUL's BOD resolution ton enter into this Transaction.

Nevertheless, FEC is a non-listed company; the IFA cannot determine the fair valuation under market price approach.

### 3.1.4 Market Comparable Approach

Market comparable approach is based on the assumption that a company's market trading price correctly reflects the company's fair value. Therefore, FEC can be valued using relevant trading price multiples of companies in the same or similar businesses of engineering services and/or construction of electricity generating systems.

Based on FEC's revenue structure, it shows that more than 90% of its total revenue derives from revenue from construction contracts (based on 2017's reported earnings). The IFA, therefore, selected the comparable companies based on the similarities of the industry and its businesses, considering: listed companies which have their proportion of the revenue from engineering services, in coupled with the interviews with FEC's management on its direct competitors. Moreover, the IFA has crosschecked the list of FEC's competitors from the list of contractors participating in the bidding



of the construction of electrical system with Provincial Electrical Authority ("PEA") on PEA's website 1. Then, the IFA has an opinion that there are five listed companies as the comparable companies of FEC ("Comparable Companies"). Details of comparable companies are as follows:

Table 3-2: Comparable companies

Company  Abbreviation (Ticker)	Business Nature	Proportion of Revenues from Engineering Services to Total Revenue 1/
Demco PLC DEMCO	DEMCO operates in 5 core businesses; 1) design, construction and contract all kinds of electrical engineering works such as transmission line, substation, renewable energy power plant 2) design, construction mechanic and electrical system 3) energy conservation business 4) telecommunications 5) fabrication and distribution of steel structure for transmission Line, and billboard signs.	64.7%
Eastern Technical Engineering PLC ETE	ETE and its subsidiaries have engaged in 4 business segments.1) Management service such as Manpower Management service, Business Process Outsourcing service and Car Rental Management. 2) Engineering services including Electrical Power Engineering systems and Telecommunication Engineering. 3) Generating and distributing electricity from Solar power, and 4) Trading	34.8%
Interlink Communication PLC ILINK	ILINK and its subsidiaries have engaged in 3 main business segments. (1) Distribution: The Company is the large importer and distributor of computer and telecommunication cabling in Thailand by distributing top brand in the world, such as LINK and COMMSCOPE (old name: AMP brands) and under the trademark of the company is 19" GERMANY EXPORT RACK brand. (2) Telecom: divided into 2.1 Service providing high-speed data integrated (Data Service). 2.2 The installation of telecommunication service. 2.3 Data Center Service (3) Engineering: Design/Construction and Contractors (Submarine Cable) mix with fiber optic cable (Composite cable) Transmission Line Project (Transmission Line) underground cable (Under Ground Cable) Substation (Substation) or projects related to electric power systems	27.1%
Loxley PLC LOXLEY	LOXL:EY's businesses are divided into 4 sectors as follows: 1) Technology Business: being the service provider of entire products/services ranges, including survey, design, installation, network setup, system development as customers' requirements, maintenance, consultancy service in IT and telecommunication, infrastructure system projects, energy system projects, TV and radio communication system projects, electrical system projects, and specific projects involving high technology products 2) Trading Business: being distributor of consumer products and industrial chemical products with an expansion to overseas country 3) Services Business: being provider of total security solution services and management of airports as well as other related services, and 4) Joint Venture Business: being joint venture with internationally experienced and recognized business partners	11.0% 1/
Power Line Engineering PLE	The Company offers the services of design, procurement and installation of complete systems for government and private sectors through being main contractor or sub-contractor. The works are generated from direct bidding, business negotiation and in the form of joint venture company and Consortium. The main 5 systems in the services (1) General Civil Construction (2) Electrical System (3) Air Conditioning System (4) Sanitary & Plumbing and Fire Protection System (5) Telecommunication System	47.4%

The Share Exchange of Thailand and summarized by the IFA Source:

These market multiples that the IFA considered for the valuation of FEC's equity can be summarized as follow:

Remarks: 1/ Form 56-1 of each company
2/ LOXLEY does not itemize its engineering services revenue like other comparable. The figures above show service revenue as a percentage to total revenue.

<sup>1</sup> https://www.pea.co.th/webApplications/tender bid/Show/PublicSearchData.aspx

## 3.1.4.1 Price to Book Value Approach: P/BV Ratio

Under this approach, the fair valuation of the FECs equity is based on FEC's book value from its latest reviewed financial statement dated March 31, 2018 (by the approved auditors) multiplied by the median of P/BV multiple from FEC's comparable companies.

The P/BV multiples from its peers within the 7 business days, 15 business days, 30 business days, 60 business days, 90 business days, 180 business days, and 360 business days prior to May 14, 2018 (one day prior to the Board of Director's meeting No. 4/2018 to be approved at the EGM No. 1/2018 for entering into this Transaction) as shown in the following table.

Table 3-3: P/BV ratio 7 to 360 working days prior

Unit : Times (x)	P/BV (x)							
	7-Day	15-Day	30-Day	60-Day	90-Day	120-Day	180-Day	360-Day
GUNKUL 1/	2.40 x	2.39 x	2.41 x	2.69 x	2.88 x	2.96 x	3.02 x	3.23 x
DEMCO	1.17 x	1.19 x	1.21 x	1.24 x	1.31 x	1.34 x	1.39 x	1.52 x
ETE 2/	1.57 x	1.48 x	1.40 x	1.49 x	1.58 x	1.62 x	1.75 x	N/A
ILINK	1.29 x	1.30 x	1.29 x	1.25 x	1.38 x	1.51 x	1.68 x	1.98 x
LOXLEY	0.87 x	0.87 x	0.85 x	0.86 x	0.88 x	0.89 x	0.98 x	1.07 x
PLE	0.87 x	0.87 x	0.85 x	0.86 x	0.88 x	0.89 x	0.98 x	1.07 x
Mean	1.13 x	1.11 x	1.09 x	1.12 x	1.17 x	1.24 x	1.39 x	1.43 x
Median	1.17 x	1.19 x	1.21 x	1.24 x	1.31 x	1.34 x	1.39 x	1.34 x

Source: Bloomberg and summarized by the IFA

Remark: 1/ For reference and comparison only. These multiples are not includes in the calculation of mean and median.

2/ ETE was listed on the SET on February 15, 2017. The figure for 360 business days is thus not available

The median of P/BV multiple (closing 7- 360 business days prior) from comparable is in the range of **1.17 – 1.39 times**.

The following table shows the calculation of FEC's value by using P/BV multiple from the comparable.

Table 3-4: Calculation of FEC's fair value using Price to Book Value approach (P/BV)

Unit : THB Million	Minimum of the median range	Maximum of the median range
FEC's equity value 1/	89.91	89.91
Median of P/BV (times)	1.17x	1.39x
Equity Value of FEC	105.19	124.97

Remark: 1/ Latest data as at March 31, 2018 as reviewed by Thaikit Bunchi Co., Ltd.

The shareholders equity is calculated from the market comparable approach by using P/BV ratio from comparable is in the range of **THB 105.19 – 124.97 million**.



## 3.1.4.2 Price to Earnings Ratio Approach: P/E Ratio

Under this approach, the fair valuation of the FECs equity is based on FEC's trailing twelve months earnings multiplied by the median of P/BV multiple from FEC's comparable companies. The trailing twelve months earnings of FEC were based on the audited statements of 2017 and its latest reviewed financial statement dated March 31, 2018 (by the approved auditors).

The P/E multiples from its peers within the 7 business days, 15 business days, 30 business days, 60 business days, 90 business days, 180 business days, and 360 business days prior to May 14, 2018 (one day prior to the Board of Director's meeting No. 4/2018 to be approved at the EGM No. 1/2018 for entering into this Transaction) as shown in the following table.

Table 3-5: P/E ratio 7 to 360 working days prior

Unit : Times (x)	<b>P/E</b> (x)							
	7-Day	15-Day	30-Day	60-Day	90-Day	120-Day	180-Day	360-Day
GUNKUL 1/	34.17 x	34.04 x	34.27 x	38.28 x	40.93 x	43.68 x	47.51 x	54.98 x
DEMCO	57.84 x	58.96 x	59.71 x	61.51 x	64.64 x	57.62 x	47.89 x	28.13 x
ETE 2/	17.79 x	16.72 x	15.81 x	17.47 x	18.76 x	20.09 x	23.34 x	N/A
ILINK	59.52 x	59.60 x	59.40 x	85.39 x	109.34 x	97.90 x	75.29 x	52.91 x
LOXLEY	N/A	N/A	N/A	28.03 x	55.81 x	82.39 x	109.18 x	72.46 x
PLE	1.58 x	1.53 x	1.49 x	1.55 x	1.50 x	N/A	N/A	N/A
Mean	34.18 x	34.20 x	34.10 x	38.79 x	50.01 x	64.50 x	63.92 x	51.17 x
Median	37.82 x	37.84 x	37.60 x	28.03 x	55.81 x	70.00 x	61.59 x	52.91 x

Source: Bloomberg and summarized by the IFA

Remark: 1/ For reference and comparison only. These multiples are not includes in the calculation of mean and median.

2/ ETE was listed on the SET on February 15, 2017. The figure for 360 business days is thus not available

N/A Non applicable or has a negative value

The median of P/E multiple (closing 7- 360 business days prior) from comparable is in the range of **28.03 – 70.00 times**.

The following table shows the calculation of FEC's value by using P/E multiple from the comparable.

Table 3-6: Calculation of FEC's fair value using Price to Earnings approach (P/E)

Unit : THB Million	Minimum of the median range	Maximum of the median range
FEC's trailing twelve months earnings 1/	168.85	168.85
Median of P/E (times)	28.03x	70.00x
Equity Value of FEC	4,732.87	11,819.50

Remark: 1/ Trailing twelve months earnings of FEC from April 1, 2017 to March 31, 2018

The shareholders equity is calculated from the market comparable approach by using P/E multiple from comparable is in the range of **THB 4,732.87 – 11,819.50 million**.



## 3.1.4.3 Price to Sales Ratio Approach: P/S Ratio

Under this approach, the fair valuation of the FECs equity is based on FEC's trailing twelve months sales (or revenue) multiplied by the median of P/S multiple from FEC's comparable companies. The trailing twelve months sales of FEC were based on the audited statements of 2017 and its latest reviewed financial statement dated March 31, 2018 (by the approved auditors).

The P/S multiples from its peers within the 7 business days, 15 business days, 30 business days, 60 business days, 90 business days, 180 business days, and 360 business days prior to May 14, 2018 (one day prior to the Board of Director's meeting No. 4/2018 to be approved at the EGM No. 1/2018 for entering into this Transaction) as shown in the following table.

Table 3-7: P/S ratio 7 to 360 working days prior

Unit : Times (x)	<b>P/S</b> (x)								
	7-Day	15-Day	30-Day	60-Day	90-Day	120-Day	180-Day	360-Day	
GUNKUL 1/	4.64 x	4.62 x	4.65 x	5.19 x	5.55 x	5.75 x	6.11 x	7.89 x	
DEMCO	0.80 x	0.81 x	0.82 x	0.85 x	0.89 x	0.88 x	0.85 x	0.77 x	
ETE 2/	0.85 x	0.80 x	0.75 x	0.82 x	0.87 x	0.91 x	0.99 x	N/A	
ILINK	0.70 x	0.70 x	0.70 x	0.72 x	0.82 x	0.95 x	1.15 x	1.57 x	
LOXLEY	0.35 x	0.36 x	0.35 x	0.35 x	0.35 x	0.36 x	0.40 x	0.46 x	
PLE	0.25 x	0.24 x	0.23 x	0.24 x	0.23 x	0.23 x	0.26 x	0.24 x	
Mean	0.59 x	0.58 x	0.57 x	0.59 x	0.63 x	0.67 x	0.73 x	0.76 x	
Median	0.70 x	0.70 x	0.70 x	0.72 x	0.82 x	0.88 x	0.85 x	0.62 x	

Source: Bloomberg and summarized by the IFA

Remark: 1/ For reference and comparison only. These multiples are not includes in the calculation of mean and median.

2/ ETE was listed on the SET on February 15, 2017. The figure for 360 business days is thus not available

N/A Non applicable or has a negative value

The median of P/S multiple (closing 7- 360 business days prior) from comparable is in the range of **0.62 – 0.88 times**.

The following table shows the calculation of FEC's value by using P/S multiple from the comparable.

Table 3-8: Calculation of FEC's fair value using Price to Sales approach (P/S)

Unit : THB Million	Minimum of the median range	Maximum of the median range
FEC's trailing twelve months sales 1/	894.69	894.69
Median of P/S (times)	0.62x	0.88x
Equity Value of FEC	554.71	787.33

Remark: 1/ Trailing twelve months sales of FEC from April 1, 2017 to March 31, 2018

The shareholders equity is calculated from the market comparable approach by using P/S multiple from comparable is in the range of **THB 554.71 – 787.33 million**.



## 3.1.4.4 Enterprise Value to EBITDA Approach: EV/EBITDA Ratio

Under this approach, the fair valuation of the FECs equity is based on FEC's trailing twelve months EBITDA multiplied by the median of EV/EBITDA multiple from FEC's comparable companies. The trailing twelve months EBITDA of FEC were based on the audited statements of 2017 by the approved auditors.

Enterprise Value to EBITDA (EV/EBITDA) is the enterprise value (calculated from market capitalization added by debt and deducted by cash) divided by earnings before interest expenses, taxes, and depreciation and amortization (EBITDA) within the trailing twelve months. EV/EBITDA represents the enterprise value in comparison with EBITDA from the latest 12 months

The EV/EBITDA multiples from its peers within the 7 business days, 15 business days, 30 business days, 60 business days, 90 business days, 180 business days, and 360 business days prior to May 14, 2018 (one day prior to the Board of Director's meeting No. 4/2018 to be approved at the EGM No. 1/2018 for entering into this Transaction) as shown in the following table.

Table 3-9: EV/EBITDA ratio 7 to 360 working days prior

Unit : Times (x)	EV/EBITDA (x)								
	7-Day	15-Day	30-Day	60-Day	90-Day	120-Day	180-Day	360-Day	
GUNKUL 1/	24.87 x	24.81 x	24.91 x	26.62 x	27.75 x	28.46 x	29.78 x	35.91 x	
DEMCO	43.05 x	43.62 x	44.01 x	44.93 x	46.53 x	47.14 x	49.37 x	46.83 x	
ETE 2/	12.06 x	12.06 x	12.06 x	12.37 x	12.74 x	13.29 x	N/A	N/A	
ILINK	14.99 x	14.99 x	14.99 x	14.69 x	15.71 x	15.29 x	14.65 x	14.57 x	
LOXLEY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
PLE	28.73 x	28.66 x	28.77 x	30.75 x	32.05 x	110.25 x	197.26 x	205.09 x	
Mean	24.71 x	24.83 x	24.96 x	25.68 x	26.76 x	46.49 x	87.09 x	88.83 x	
Median	21.86 x	21.82 x	21.88 x	22.72 x	23.88 x	31.21 x	49.37 x	46.83 x	

Source: Bloomberg and summarized by the IFA

Remark: 1/ For reference and comparison only. These multiples are not includes in the calculation of mean and median.

2/ ETE was listed on the SET on February 15, 2017. The figure for 360 business days is thus not available

N/A Non applicable or has a negative value

The median of EV/EBITDA multiple (closing 7- 360 business days prior) from comparable is in the range of **21.82 – 49.37 times**.

The following table shows the calculation of FEC's value by using EV/EBITDA multiple from the comparable.

Table 3-10: Calculation of FEC's fair value using EV/EBITDA approach

Unit : THB Million	Minimum of the median range	Maximum of the median range
FEC's EBITDA 1/	222.49	222.49
Median of EV/EBITDA (times)	21.82x	49.37x
Enterprise Value of FEC	4,854.73	10,984.33
less: net debt	(208.63)	(208.63)
Equity Value of FEC	4,646.10	10,775.70

Remark: 1/ EBITDA = Earnings before interest expenses, taxes, and depreciation and amortization of FEC from Jan 1, 2017 to December 31, 2017

The shareholders equity is calculated from the market comparable approach by using EV/EBITDA multiple from comparable is in the range of **THB 4,646.10 – 10,775.70 million**.



## 3.1.4.5 Enterprise Value to Sales Approach: EV/S Ratio

Under this approach, the fair valuation of the FECs equity is based on FEC's trailing twelve months sales multiplied by the median of EV/S multiple from FEC's comparable companies. The trailing twelve months sales of FEC were based on the audited statements of 2017 and its latest reviewed financial statement dated March 31, 2018 (by the approved auditors).

The EV/S multiples from its peers within the 7 business days, 15 business days, 30 business days, 60 business days, 90 business days, 180 business days, and 360 business days prior to May 14, 2018 (one day prior to the Board of Director's meeting No. 4/2018 to be approved at the EGM No. 1/2018 for entering into this Transaction) as shown in the following table.

Table 3-11: EV/S ratio 7 to 360 working days prior

Unit : Times (x)	EV/S (x)								
	7-Day	15-Day	30-Day	60-Day	90-Day	120-Day	180-Day	360-Day	
GUNKUL 1/	7.92 x	7.90 x	7.93 x	8.47 x	8.83 x	8.98 x	9.31 x	11.17 x	
DEMCO	1.16 x	1.18 x	1.19 x	1.21 x	1.25 x	1.24 x	1.20 x	1.08 x	
ETE 2/	1.37 x	1.37 x	1.37 x	1.43 x	1.49 x	1.52 x	1.62 x	N/A	
ILINK	1.06 x	1.06 x	1.06 x	1.10 x	1.20 x	1.32 x	1.51 x	1.85 x	
LOXLEY	0.50 x	0.50 x	0.50 x	0.49 x	0.50 x	0.51 x	0.57 x	0.63 x	
PLE	5.33 x	5.31 x	5.33 x	5.66 x	5.88 x	6.09 x	6.45 x	7.43 x	
Mean	1.88 x	1.88 x	1.89 x	1.98 x	2.06 x	2.14 x	2.27 x	2.75 x	
Median	1.16 x	1.18 x	1.19 x	1.21 x	1.25 x	1.32 x	1.51 x	1.46 x	

Source: Bloomberg and summarized by the IFA

Remark: 1/ For reference and comparison only. These multiples are not includes in the calculation of mean and median.

2/ ETE was listed on the SET on February 15, 2017. The figure for 360 business days is thus not available

N/A Non applicable or has a negative value

The median of EV/S multiple (closing 7- 360 business days prior) from comparable is in the range of **1.16 – 1.51 times**.

The following table shows the calculation of FEC's value by using EV/S multiple from the comparable.

Table 3-12: Calculation of FEC's fair value using EV/S approach

Unit : THB Million	Minimum of the median range	Maximum of the median range
FEC's trailing twelve month sales 1/	894.69	894.69
Median of EV/S (times)	1.16x	1.51x
Enterprise Value of FEC	1,037.84	1,350.98
less: net debt	(208.63)	(208.63)
Equity Value of FEC	829.21	1,142.35

Remark: 1/ Trailing twelve months sales of FEC from April 1, 2017 to March 31, 2018

The shareholders equity is calculated from the market comparable approach by using EV/S multiple from comparable is in the range of **THB 829.21 – 1,142.35 million**.



## 3.1.5 Discounted Cash Flow Approach: DCF

The valuation by using Discounted Cash Flow Approach (DCF) is the approach that considers the business performance in the future perspective by calculating the sum amount of the present value of future's cash flow discounted by the appropriate discount rate. The IFA calculates the Weighted Average Cost of Capital (WACC) and use this as the discount rate. Moreover, the IFA forecasts the company's future cash flow for forward 5 years (2018 – 2022) on the Going Concern Basis condition of FEC's business without any significant changes and pursuing under current economic conditions and circumstances.

The IFA has forecasted the financial performance of FEC based on the relevant information, with the assumptions taken from FEC and the Company, and the interviews from relevant management and staff with the purpose of determining the intrinsic price of FEC. The intrinsic price will only be determined for the Company's purpose. However, should there be any changes in economic conditions, or other external factors or any internal issues affected the Company's business performance, the intrinsic price will also be affected.

FEC is engaged in a construction business with the current core business of FEC in a business of construction of electrical systems such as substation, transmission line system, distribution line system, underground cable system, and lighting system, etc. In preparation of financial projection, the IFA referred to historical data, business plan of FEC, and estimates prepared by the management of the Company and FEC, as well as current contracts. Key assumptions of the financial projection of FEC can be summarized as follows:

#### (1) Revenue Structure

Since 2017 onwards, FEC's main revenue comes from revenue from construction contract. The revenue structure of FEC is as follows:

Table 3-13: Revenue structure of FEC during 2015 - Q1/2018

T of Dansey	2015		2016		201	7	Q1/2018	
Type of Revenue	THB Million	%	THB Million	%	THB Million	%	THB Million	%
Revenue from sales	3.45	0.30	0.14	0.02	43.16	5.02	-	-
2. Revenue from construction contract	1,144.81	98.19	617.85	97.69	799.48	92.98	50.92	94.40
2.1 Revenue from construction of power plant	1,042.52	89.42	534.94	84.58	2.12	0.25	-	-
2.2 Revenue from construction of electrical system	102.29	8.77	82.91	13.11	797.36	92.73	50.92	94.40
3. Other revenue	17.59	1.51	14.49	2.29	17.22	2.00	3.02	5.60
Total revenue	1,165.85	100.00	632.48	100.00	859.86	100.00	53.94	100.00

Source: The Company

Revenue projection can be classified by type of revenue which can be summarized as follows;

#### 1.1 Revenue from sales

This type of revenue is derived from sales of materials and equipment. In 2017, revenue from sales was THB 43.02 million due to FEC is a supplier of material and equipment used in the construction work, and this is a special contract. However, in order to have conservative forecast, the IFA does not consider this type of revenue in the projection as the management provided information that revenue from sales of material and equipment is normally included in the construction value based on construction contract.



#### 1.2 Revenue from construction contract

In 2015-2017, FEC's main revenue came from revenue from construction contract of THB 1,144.81 million, THB 617.85 million, and THB 799.48 million, representing more than 90 % of total revenue in 2015, 2016, 2017, and for the first 3 months of 2018 respectively. Revenue from construction contracts of FEC came from construction of renewable energy power plants and construction of electrical systems. Since 2017 onwards, FEC had almost all revenue from construction contract derived from construction of electrical systems, according to the government's policy to decelerate signing of power purchase agreement (PPA for renewable energy plants). As a result, there will be less demand for construction works of power plants of FEC. However, the business of construction of electrical system has a growth prospect due to all 3 agencies responsible for electricity, including EGAT, MEA, and PEA have investment plans to improve electrical systems in order to support the growth of Thailand with a total investment amount of several hundred billions baht.

In addition, the management of FEC forecasted that revenue from construction contract of FEC will come from the construction of electrical system only. Therefore, the IFA projected that revenue from construction contracts of FEC shall be derived from revenue from construction of electrical system only. The assumptions used in the projection can be summarized as follows:

#### 1. Revenue from construction of electrical system-from current projects

At present, FEC has 3 construction projects of electrical systems in which revenue shall be recognized during 2018-2019. Details can be summarized as follows;

Table 3-14: Construction projects of electrical system – current projects

No.	Project Name	Type of works	Name of Counterparty	Contract Signing Date	Date of Completion	Project value (include VAT) (THB Million)	Estimated revenue to be recognized in 2018-19 (include VAT) (THB Million)
1.	Construction and improvement of distribution line system to underground cable in Provincial Electricity Authority ("PEA") Area 3 (South) (LOT11)	33 kV <u>underground</u> <u>cable</u> with a length of 11.88 circuit–km	PEA	21/03/2016	14 projects on June 25, 2017 1 project on April 10, 2018	110.53	25.10
2.	Construction of 115 kV transmission line system during Mae Sai substation - Chiang Saen substation of Provincial Electricity Authority ("PEA")	115 kV <u>overhead</u> transmission line with a length of 34 circuit–km	PEA	12/12/2017	Expected completion within 630 days. The Certificate is expected to be received at the end of 2019	107.00	107.00
3.	Construction of four 115-22 kV substations, including Tha Li substation, Wang Saphung substation, Khon Kaen 1 substation, and Sakon Nakhon 4 substations of Provincial Electricity Authority ("PEA")	Four 115-22 kV substations	PEA	15/12/2017	Expected completion within 540 days. The Certificate is expected to be received at the end of 2019	543.00	543.00
	•					Total	675.10

Source: The Company

## 2. Revenue from construction of electrical system-from future projects

The management of the Company and FEC provided information that revenue from construction of electrical system in the future of FEC will come from construction works from participation in various biddings held by Provincial Electricity Authority (PEA). Estimated revenue is based on consideration of projects and plans that will be implemented at present and in the future of PEA (For more details, please refer to Appendix 2, Section 6.2 of this report), along with consideration of number of projects that FEC expected to participate in the biddings, as well as the possibility to win these biddings. Details can be summarized as follows:

- In 2018-2019, this is considered as a near-term revenue projection. The management on Strategic Planning and Investment Division of the Company and FEC's executive (which are



not the connected persons on this Transaction) have identified a number of projects and value of projects that FEC intended to participate in the biddings, along with estimates of on the probability to sign construction contracts. The probability of winning these biddings is likely to be in the range of 5-42%. The IFA has an opinion that value of projects that FEC to participate in the biddings is in line with the market value of the industry of electrical systems in 2018-2019, along with the discussion with the management regarding the possibility to sign such construction contracts. The IFA has an opinion that, due to these projects are expected to take place in the near term; the management has relatively abundant information to consider the opportunity and possibility. Therefore, the IFA has used the information based on the management's expectation.

In 2020-2022, this is considered as a medium-term revenue projection. The management provided the assumptions used in revenue projection based on estimates of a number of projects and value of projects that FEC intended to participate in the biddings, along with estimates of probability of signing construction contracts. The probability that FEC shall sign construction contract is approximately 12%. This is based the facts there are 6-7 major competitors in the market, and by including FEC the total will be 8 companies. The probability of each company has an equal market share of approximately 12.5%. However, the IFA has studied information of competition in the market based on the bidding results of PEA 2 in 2016-2017. The findings showed that there were 1-22 companies in each project which are FEC's competitors (considered only electrical engineering system projects). The average number of competitors (including FEC) that were participating in the biddings was 12 companies. If assuming that a chance of winning the bidding of all companies is equal, each will have an equal market share of 8.33%. In addition, the IFA also analyzed the value of projects that FEC expected to sign construction contracts compared to the value of electrical system projects that PEA shall hold the auctions at 2.65% and 8.57%, respectively. Based on the aforementioned information, the IFA has projected revenue of FEC by considering the total value of projects that FEC shall participate in the biddings which is in line with the market value of the industry of electrical engineering system and the probability that FEC shall sign construction contract at 8.3%.

Revenue recognition of each project shall be in accordance with standards of construction contract of electrical system signed with PEA, which can be summarized as follows:

- Advance payment: client/employer shall make an advance payment to contractor 10% of contract price.
- Payment during construction: client/employer shall make a payment to contractor in a proportion of 80% of contract price in which the payment shall be made in installments based on the progress of actual work of each installment.
- Final payment: client/employer shall make the final payment to a contractor of 10% of contract price after client/employer already issued a construction certificate to contractor.

Table 3-15: Estimated size of construction market of electrical power systems industry during 2018-2022

Item Unit: THB Million	2018F	2019F	2020F	2021F	2022F
Total investment value according to plans of Provincial Electricity Authority ("PEA")  (For illustration of overview of the electrical systems construction industry)	79,414.00 <sup>1/</sup>	18,104.00 <sup>2/</sup>	18,104.00 <sup>2/</sup>	18,104.00 <sup>2/</sup>	18,104.00 <sup>2/</sup>
Total project value that FEC expects to participate in the biddings <sup>3/</sup>	6,262.86	9,509.76	6,240.99	6,240.00	6,240.00
Total project value of construction contracts that FEC expected to sign	1,015.44	874.81	518.00	517.92	517.92

Source:

The Company and projection conducted by the IFA.

Note:

- 1/ Based on projects and plans that will be implemented at present and in the future of PEA, with a total value of current projects of THB 79,414 million.
- 2/ Based on projects and plans that will be implemented at present and in the future of PEA in which the construction period is in the range of 2019-2023, with a total investment value of THB 90,520 million. Therefore, the average investment value in 5 years will be at approximately THB 18,104 million per year. (For additional information, please refer to Appendix 2, Section 6.2, Table B-10 of this report).

<sup>2</sup> https://www.pea.co.th/webApplications/tender bid/Show/PublicSearchData.aspx



3/ Estimates obtained from FEC's executive and the Company's management, Strategic Planning and Investment Division which are not connected persons in this Transaction

#### 1.3 Other revenue

Other revenue, in the past, came from interest income from FEC's extended loans. However, as the aforesaid loans, as of March 31, 2018, had been fully repaid, the IFA determined that other revenue during projection periods to be zero.

The assumptions used in revenue projection above can be summarized as follows:

Table 3-16: Estimated revenue of FEC during 2018-2022 according to the base case

Type of Revenue	2018	3F	2019	F	202	2020F		21F	2022F	
	THB Million	%								
1. Revenue from sales	ı		-		-		-		ı	
Revenue from construction contract	-		-		-		-		-	
2.1 Revenue from construction of power plant	1		-		1		1		1	
2.2 Revenue from construction of electrical system	509.96	99.4%	1,289.23	100.0%	833.72	100.0%	546.98	100.0%	517.92	100.0%
3. Other revenue	3.02	0.6%	-		-		-		1	
Total revenue	512.98	100.0%	1,289.23	100.0%	833.72	100.0%	546.98	100.0%	517.92	100.0%

Source: The Company and projection by the IFA.

#### (2) Expenses

In preparation of financial projection, the IFA used major assumptions as follows:

#### 2.1 Cost of construction of electrical system

In 2015-2017, and for the first 3 months of 2018, costs of construction contracts were THB 803.38 million, THB 392.80 million, THB 531.05 million, and THB 32.36 million, or representing 68.9 %, 62.1%, 61.8%, and 60.0% respectively. In preparation of financial projection, the IFA used major assumptions as follows:

Cost of construction of electrical system will depend on type of electrical system which can be classified into 2 main types, which are, substation and transmission line system. The management forecasted that cost of construction of electrical system shall be in the range of 73-75% of total project value which is based on FEC's current cost structure for the construction of electrical systems with government agencies. The estimated cost of construction of electrical system shall be an estimate of individual project in order to determine cost to be in line with type of work, resulting in fluctuations in a proportion of cost to revenue in each year in accordance with changing proportion of revenues from substation and transmission line system.

#### 2.2 Other expenses

Other expenses or selling expenses comprise of staff expenses and other expenses (consisting of building expenses, utility expenses, and maintenance expenses, etc.). In projection of other expenses, the IFA referred to information based on historical financial data of FEC, along with the consideration of trend of the costs expected by the management. Assumptions used in the projection are as follows:

Staff expenses comprise of wages, over-time, bonus, cost of living, and other related expense, etc. The management provided information that the expansion of operation under construction contracts required additional staff to support such expansion. Therefore, staff



expenses in 2018 shall be equal to THB 30.18 million and staff expenses shall increase by 5% per annum from 2019-2022.

- Building expenses, which comprise of head office rental expenses and cleaning service expenses, etc., shall increase by 3% per annum based on the management's assumptions
- Audit fees (internal/external) shall increase by 5% per annum, according to the management's assumptions from the sales in 2015-2017 and for the first 3 months of 2018.

Table 3-17: Total expenses in 2015-Q1/2018

Item (Million Baht)	2015	2016	2017	Q1/2018
Cost of construction of electrical system	803.38	392.80	531.05	32.36
as % of total revenue	68.9	62.1	61.8	60.0
Other expenses	45.46	42.34	64.92	19.60
as % of total revenue	3.9	6.7	7.6	36.3
Total expenses	848.84	435.14	595.97	51.96
Earnings before interest, taxes, and depreciation Margin (EBITDA margin) (%)	27.02	31.19	25.88	12.99

Source: The Company.

Table 3-18: Estimated cost of sales in 2018-2022

Item (Million Baht)	2018F	2019F	2020F	2021F	2022F
Cost of construction of electrical system	374.79	953.14	613.46	404.47	383.26
as % of total revenue	73.1	73.9	73.6	73.9	74.0
Other expenses <sup>1/</sup>	60.37	90.31	83.20	81.47	80.93
as % of total revenue	11.8	7.0	10.0	14.9	15.6
Total expenses	435.15	1,043.45	696.66	485.95	464.19
Earnings before interest, taxes, and depreciation Margin (EBITDA margin) (%)	15.17	19.06	16.44	11.16	10.37

Source: The Company and projection by the IFA.

Remarks: 1/ The increase was in line with the increase in FEC's revenue, especially in 2019 with revenue growth of 151% from 2018. Additional expenses are for example the expenses related to employees such as overtime (OT), allowance and travel expenses since employees must stay at the project's sites, mostly in the provinces, for a longer time as the amount of work has increased and other expenses related to operate the project.

#### (3) Depreciation

The IFA determined each type of assets and its depreciation by using straight line method which is shown under the Company's policy as follow;

Table 3-19: Depreciation period

Type of Property	Depreciation period (year)
Buildings	15-20
Vehicle	5
Office supplies	5
Machinery and equipment	5

Source: FEC

#### (4) Corporate Income Tax

The corporate income tax rate for FEC is 20% throughout the projection period.



#### (5) Capital Expenditure

The management forecasted that the capital expenditure for 2018 shall be only THB 1.5 million and there will no longer be capital expenditure in the future since most investments of FEC shall be investments in office supplies only. The IFA assumed that the depreciation period of capital expenditure is 5 years due to the fact that major capital expenditures are purchase of vehicles, machinery and equipment with a 5-year depreciation period based on FEC's depreciation policy.

#### (6) Working Capital Turnover Ratio

The management of FEC forecasted that the efficiency of working capital will remain the same level in 2017 due to FEC's main revenue, and in the future, will come from the construction of electrical systems, which is line with 2017.

Days of trade account and other receivables outstanding: approximately 60.0 days

Days of trade account and other payables outstanding: approximately 60.0 days

Income tax payable: approximately 2.5% of the total revenue.

Other current liabilities: approximately 12.5% of the cost of sales.

In this regard, FEC's executive has indicated that the working capital turnover ratios above have reflected FEC's business structure related to its construction of electrical systems with government agencies in the future.

### (7) Terminal Growth Rate

The IFA has determined the terminal growth rate of the cash flow after the year of 2022 which is estimated to be 1.00% by using conservative basis as well as considering the terminal value calculated to be THB 720.72 million and equals to EV/EBITDA of 16.14x which is close to EV/EBITDA of FEC's comparable companies for the past 7 days in which the mean and the median are equal to 24.71 and 21.82 times, respectively. (For more information regarding EV/EBITDA of FEC's comparable companies, please refer to Table 3-9). In addition, due to electrical system is considered as basic infrastructure that is essential to the growth of nation, the growth rate of electrical system improvement (construction contract of electrical system) should be in line with economic growth rates in which, in the previous 3 years, Thailand has economic growth rates in the range of 2.9 - 4.3%.

#### (8) <u>Discount Rate = Weighted Average Cost of Capital or WACC</u>

The IFA determined the WACC by following components:

WACC	=	$K_e\left(\frac{E}{V}\right) + K_d(1-t)\left(\frac{D}{V}\right)$	=	8.53%
$K_e$	=	Cost of Equity (calculated as below)	=	11.77%
$K_d$	=	Cost of Debt 1/	=	5.50%
t	=	Corporate Income Tax Rate	=	20.00%
V	=	D+E which D means amount of debt and E means amount of equity	=	100.00%
$\left(\frac{D}{V}\right)$	=	Proportion of debt to investor-supplied capital	=	44.00%
$\left(\frac{E}{V}\right)$	=	Proportion of equity to investor-supplied capital	=	56.00%

#### Cost of Equity: Ke

$$K_e = R_f + \beta (R_m - R_f)$$

where:

Risk Free Rate, Rf

= Risk free rate of return ( $R_f$ ) as of May 11, 2018 is **2.43% per annum**  $^{2/}$ , which is calculated based on three-year daily mean of 10-year Thailand government bond (median equals to 2.41%)



Beta,  $\beta$ 

Beta is a coefficient that reflects the risk of investment in FEC. As FEC is a nonlisted firm, there is no beta of FEC. The IFA has valuated Beta  $\beta$  of FEC based on the information from listed companies operating similar business as FEC, representing the Unlevered Beta  $\beta$ , in which Unlevered Beta = Levered Beta /  $\{1 + 1\}$ ((1- Marginal Tax Rate) \* D/E)} and to be adjusted to Levered Beta of FEC with the average capital structure of comparable companies (calculation of Unlevered Beta is shown in Table 3-20).

Beta  $\beta$  of FEC is equal to 1.08. <sup>3/</sup>

Market premium,  $R_m - R_f$ 

Note:

The difference between the expected market return  $(R_m)$  and the risk free rate of return  $(R_f)$ . As of May 14, 2018, the premium is equivalent to **8.64%** <sup>4/</sup>, which was calculated based on three-year daily mean of market risk premium. (the mean of market rate  $(R_m)$  is equal to 11.07% and the median is equal to 11.00%).

1/ Calculation by the IFA based on information of FEC's financial statements in the previous 3 years.

2/ 3/ 4/ Bloomberg.

Table 3-20: Calculation of Unlevered Beta of FEC's comparable listed companies

Company Name (Symbol)	Levered Beta <sup>1/</sup>	Market Value of Liabilities	Market Value of Equity	Debt (D) / Equity (E)	Debt (D) / D+E	Marginal Tax Rate	Unlevered Beta <sup>2/</sup>
Demco Plc. (DEMCO)	1.078	2,082.0	3,045.0	68.4%	40.6%	20.0%	0.697
Eastern Technical Engineering Plc. (ETE)	1.077	1,042.0	883.5	117.9%	54.1%	20.0%	0.554
Interlink Communication Plc. (ILINK)	0.984	2,021.7	3,178.4	63.6%	38.9%	20.0%	0.653
Loxley Plc. (LOXLEY)	1.124	4,124.3	6,294.0	65.5%	39.6%	20.0%	0.737
Power Line Engineering Plc. (PLE)	1.154	2,042.2	2,314.0	88.3%	46.9%	20.0%	0.676
Mean	1.083			80.7%	44.0%		0.663
Median	1.078			68.4%	40.6%		0.676

Source: Bloomberg as of May 14, 2018 which was the last business day prior to the Board of Directors' meeting which has

approved the entering into the transaction. Shareholders can study more details of FEC's comparable listed companies in Table 3-2.

1/ Levered Beta is coefficient that takes into account the effect of liabilities of each company which is the average for the previous 3 years.

2/ Unlevered Beta = Levered Beta / {1 + ((1- Marginal Tax Rate) \* D/E)}

Table 3-21: Sensitivity Analysis of Weighted Average Cost of Capital on Changes in Costs of Debt and **Debt to Equity Ratio** 

WACC		Cost of Debt $(K_d)$							
	466	3.50%	4.50%	5.50%	6.50%	7.50%			
	24.00%	7.98%	8.17%	8.37%	8.56%	8.75%			
Debt to	34.00%	7.90%	8.17%	8.45%	8.72%	8.99%			
Equity	44.00%	7.82%	8.17%	8.53%	8.88%	9.23%			
Ratio (%)	54.00%	7.74%	8.18%	8.61%	9.04%	9.48%			
- '	64.00%	7.67%	8.18%	8.69%	9.21%	9.72%			

Note: 1 A range of Weighted Average Cost of Capital (WACC) considered by the IFA are within the lined box only.

Table 3-22: A range of Weighted Average Cost of Capital (WACC) used by the IFA for Calculation and Analysis.

Low Value	Base Value	High Value
8.17%	8.53%	9.04%



<sup>2</sup> Rate of change of each variable shall be based on the base case and adjusted up/down in line with FEC's financial structure and average/median of the financial structure of comparable listed companies.

#### (9) Summary of Financial Projections in 2018 - 2022

Table 3-23: Financial projections of FEC in 2018 - 2022

Unit: THB Million	2018F	2019F	2020F	2021F	2022F
Total revenue	512.98	1,289.23	833.72	546.98	517.92
Earnings before interest, taxes, and depreciation (EBITDA)	77.82	245.78	137.06	61.04	53.73
Earnings before interest and taxes (EBIT)	73.38	241.50	133.92	60.48	53.43
Net profit	57.78	193.20	107.14	48.38	42.75
Cash flow from operating activities	565.82	298.64	71.73	27.43	43.06
Cash flow from investing activities	(0.0)	(0.0)	0.0	0.0	(0.0)
Cash flow from financing activities	(530.72)	0.00	0.00	0.00	0.00
Net increase (decrease) in cash	35.10	298.64	71.73	27.43	43.06
Unit: THB Million	31/12/2018	31/12/2019	31/12/2020	31/12/2021	31/12/2022
Current assets	404.73	639.66	588.45	615.44	658.50
Non-current assets	87.15	82.86	79.72	79.17	78.87
Total assets	491.88	722.52	668.18	694.60	737.36
Trade account payable	124.66	189.51	75.00	62.49	62.49
Total liabilities	347.96	385.41	223.92	201.97	201.98
Shareholders' equity	143.91	337.11	444.25	492.63	535.38

Source: Projected and summarized by the IFA.

### (10) Summary of FEC's share price valuation

According to information and assumptions above, FEC's free cash flow can be calculated as follow:

Table 3-24: FEC's Free Cash Flows in 2018 - 2022

Unit: THB Million except Discount Factor	Q2-Q4/2018F	2019F	2020F	2021F	2022F
Free Cash Flow to Firm	89.50	117.22	128.64	73.10	53.73
Discount Factor	0.9405	0.8665	0.7984	0.7357	0.6779
Net present value of cash flow	84.17	101.58	102.71	53.78	36.42

Source: Projected and summarized by the IFA

From the cash flow shown in the table, the intrinsic share price of FEC is as follow;

Table 3-25: Calculation of FEC's net present value of free cash flow

FEC	THB Million
Present value of terminal value	488.55
Total present value of free cash flow	867.21
Add Cash and short-term investment as of March 31, 2018	29.15
Less: Outstanding interest bearing debts as of March 31, 2018	(237.78)
Net present value of Free Cash Flow - Base Case	658.58

Source: Projected and summarized by the IFA



#### (11) Sensitivity Analysis

Due to the fact that FEC's share price valuation is based on various assumptions, the IFA has conducted sensitivity analysis in purpose of covering all impacts from changes in significant factors.

The relevant factors to be analyzed are based on FEC's historical data considering the factor that is correlated to the revenue, expense, and cash flow which directly impacts to the FEC's share price. Moreover, the analysis includes the rate of changes taking in the past of each factor to determine the range for conducting sensitivity analysis. The main factors used in sensitivity analysis comprise of changes in terminal growth rate and Weighted Average Cost of Capital (WACC). The IFA has considered that the terminal growth rate is the key factor contributing to the FEC's value. This terminal growth rate reflects FEC's future growth in both revenue and cash flow after the projection period. Table 3-25 above shows that the present value of net cash flow after the projection period accounted for 56.34% of the present value of total cash flow, while the present value of net cash flow in the projection period (2018-2022) accounted for 43.67% of the present value of cash flow. The hypothesis that the IFA used to estimate the revenue during the projection period is the estimation based on the conservative basis by using the market information on the industry, the information from the management of FEC and the Company and the study of FEC's past competitiveness by the IFA. Therefore, the IFA is of the opinion that the sensitivity analysis on the terminal growth rate is sufficient to reflect the effect of change in FEC's future revenue and cash flow on the FEC's value.

Table 3-26: Sensitivity analysis of FEC's share price to changes in WACC and terminal growth rate

		Weighted Average Cost of Capital (WACC)					
FEC's share price (THB Million)		8.17%	8.53%	9.04%			
	0.00%	625.94	597.04	559.89			
Terminal	0.50%	657.88	625.89	585.05			
growth	1.00%	693.27	658.58	613.33			
rate	1.50%	736.12	695.92	645.37			
	2.00%		738.98	681.96			

Remarks:

- 1. FEC's share prices considered by the IFA are within the frame only.
- 2. A range of Weighted Average Cost of Capital (WACC) is based on Table 3-22. WACC of 8.17% 9.04% shall reflect the impact in case that a range of increase /decrease in WACC as considered by the IFA
- 3. Rate of change of each variable shall be based on the base case and adjusted up/down in line with FEC's financial structure and average/median of the financial structure of comparable listed companies.

#### 3.1.6 Summary of Opinion of the IFA on FEC's Intrinsic Value

Summary of FEC's share valuation based on the different valuation approaches is as follow:

Table 3-27: Summary of a range of FEC's fair price

Valuation Approach	FEC's Fair Valuation		Higher (Lower) than FEC's Purchase Value			Appropriateness of Valuation Approach	
	(THB	Milli	on)	(TI	HB Mil	lion)	, pp. odo
1) Book value approach	89	.91		(	(560.0	9)	Inappropriate
2) Adjusted book value approach	89	.91		(	(560.0	9)	Inappropriate
3) Market value approach		-			-		N/A
4) Market comparable approach							
4.1) Price to book value ratio (P/BV)	105.19	-	124.97	(544.81)	-	(525.03)	Inappropriate
4.2) Price to earnings ratio (P/E)	4,732.9	-	11,819.5	4,082.9	-	11,169.50	Inappropriate
4.3) Price to Sales Ratio (P/S)	554.71	-	787.33	(95.29)	-	137.33	Inappropriate
4.4) EV/EBITDA <sup>1/</sup>	4,646.1	-	10,775.7	3,996.10	-	10,125.70	Inappropriate
4.5) EV/Sales	829.21	-	1,142.4	179.21	-	492.35	Inappropriate
5) Discounted cash flow approach (DCF) Base case	658	3.58			8.58		Appropriate
Sensitivity Analysis	559.89	-	784.75	(90.11)	-	134.75	Appropriate

Projected and summarized by the IFA. Source:

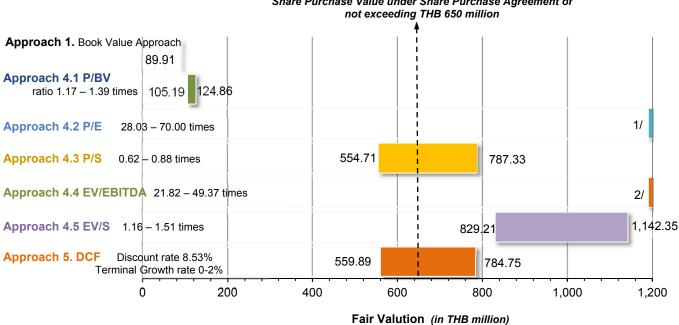
Remarks: N/A - Cannot be calculated.

Value of shares purchase and connected transaction is THB 650 million.

1/ EV/EBITDA is a ratio of Enterprise Value to Earnings before Interest, Taxes, Depreciation and Amortization.

Share Purchase Value under Share Purchase Agreement of not exceeding THB 650 million 89.91

Figure 3-1: Summary of Valuation of FEC's Fair Price



Source: Projected and summarized by the IFA.

Remarks: 1/ Shareholders' equity calculated by P/E ratio is in the range of THB 4,732.90 million - THB 11,819.50 million

2/ Shareholders' equity calculated by EV/EBITDA ratio is in the range of THB 4,646.10 million - THB 10,775.70 million

According to the diagram above, FEC's fair price is in the range of THB 559.89 million - THB 784.75 million.

There are both advantages and disadvantages from using each valuation approach to reflect FEC's fair price as follow;

### 1) Book Value Approach

This approach reflects FEC's operating results and financial position as of March 31, 2018 only and does not reflect current market value of assets. It also does not reflect FEC's profitability in the future and FEC's competitiveness. Therefore, the IFA has an opinion that this valuation approach does not reflect the appropriate value of FECs' equity.

#### 2) Adjusted Book Value Approach

Under this approach, the revaluation of FEC's assets should be included in order to reflect the fair market value more than book value approach. The adjusted book value is reflected by the revaluation of the assets, investment in securities, tax saving from losses carried forward, and contingent liabilities from the legal issues and any situations after the Company's fiscal year. However, the IFA cannot make any revaluations. Therefore, valuation of share price by adjusted book value approach is equal to book value approach, which does not reflect the appropriate value of FECs' equity.

#### 3) Market Value Approach

Due to FEC's shares are not listed on the SET, the IFA <u>cannot</u> valuate share value by market value approach.

#### 4) Market Comparable Approach

This valuation approach reflects the investor's perspective on FEC and related industry outlook by considering FEC's net asset value, profitability, at present, but ignoring FEC's future performance. This approach compares several market multiples among the listed companies which operate in the same or similar type of business or industry as FEC. However, there are limitations under this approach such as the differences among the comparable listed companies, accounting policy, target customer, business size, and market capitalization, etc. Therefore, the IFA has an opinion that this approach is <u>not appropriate</u> for the valuation of FEC's fair value.

### 5) Discounted Cash Flow Approach (DCF)

This valuation approach is based on the analysis of FEC's historical performance which is used to reflect ability to generate cash flow and FEC's future performance by considering various factors that are likely to impact business operation such as policy and business operation plan, competitiveness of business, or revenue structure etc. On the assumptions regarding the projection of FEC's performance, FEC's historical performance and future business operation plan from the management team as well as the industry overview of electrical systems are taken into consideration. Therefore, the IFA has an opinion that this valuation approach is appropriate for the valuation of FEC's fair value.

Under the discounted cash flow approach, the approach is to calculate the Company's future cash flow from the financial projection on the assumptions given from FEC and set up under current economic conditions and circumstance. However, should there be any changes in the future of such factors which could impact to the assumptions, FEC's financial projection might be distorted from the forecast or the relevant factors to forecast might change, and also FEC's intrinsic price would change.

The IFA has an opinion that <u>discounted cash flow approach is the most appropriate approach for fair valuation of FEC's due to this approach is able to reflect FEC's operating results and profitability in the future.</u> In summary, the IFA has calculated FEC's shareholders' equity which is in the range of THB 559.89 million - THB 784.75 million and FEC's shares purchase price of not exceeding THB 650 million which is in the range of the aforesaid fair valuation. Therefore, the IFA has an opinion that **shares purchase price of not exceeding THB 650 million is appropriate.** 



## 3.2 Appropriateness of Terms of Transaction

Under the purchase agreement of FEC's shares with a transaction price not exceeding THB 650 million, there are several key conditions in the agreement as follow:

Table 3-28: Appropriateness of the Terms of the Transaction

	Key Terms	Rational
Coi	nditions Precedent	
1)	The parties' warranties as stated in the share purchase agreement are correct and true.	A common commercial term
2)	The parties have not breached any obligations under the share purchase agreement	A common commercial term
3)	The parties have been approved by the Board of Directors and / or the shareholders of the legitimate buyers as required by law for entering into the transaction under the share purchase agreement.	A common commercial term
4)	The Company has been approved by the shareholders meeting of the Company to enter into the transaction under the share purchase agreement as required by law.	■ This transaction is deemed an acquisition of assets according to the Notification of the Capital Market Supervisory Board No. TorJor 20/2551 Re: Rules on Entering into Material Transactions Deemed as Acquisition or Disposal of Assets, and the Notification on Acquisition or Disposal of Assets between a listed company or any of its subsidiaries and a non-listed company with the transaction value, calculated in accordance with the Notification, greater than 50% but less than 100%.
		■ This transaction is also considered as a connected transaction under the Notification of Capital Market Supervisory Board, TorJor 21/2551 Re: Rules on Connected Transactions as well as the Notification of the Board of Governors of the SET Re: Disclosures of Information and Other Acts of Listed Companies Concerning Connected Transactions B.E. 2546 (2003) (collectively known as "Connected Transaction Notification").
5)	The sellers proceed to ensure that Future Electrical Control Co., Ltd obtains consent to the change of the shareholders structure of Future Electrical Control Co., Ltd from the counterparty under any contracts which prohibit changes of shareholders.	A common commercial term (According to FEC's legal due diligence report dated May 4, 2018, the IFA concluded that the only agreements to be amended for change of the shareholders structure <sup>1/</sup> of FEC is the loan agreement between FEC and one of its financial institutions.)
6)	There is no any significant negative impact on Future Electrical Control Co., Ltd.	■ A common commercial term
Pay	rment Terms	
	The Company will pay for above shares to the Sellers by cash into two tranches  Tranche 1: 50% of consideration will be paid	<ul> <li>A term that reduces the burden of the Company of financing the entire amount of consideration (for the purchase price of FEC shares) at the transaction date.</li> </ul>
	at the transaction date  Tranche 2 the remaining portion will paid in December 31, 2018	

Key Terms	Rational
Source of funding for this transaction	
The Company uses working capital and cash from operating results of the Company that will be received as normal during the development of the Company's projects.	<ul> <li>As per the Company's consolidated financial statement ended March 31, 2018, the Company had cash and cash equivalent of THB 1,399.19 million and current investment of THB 96.32 million, totaled THB 1,495.51 million, which is sufficient for entering into this acquisition transaction.</li> </ul>

Remarks: Managements of the Company has inserted that there is no any clause to prohibit changes of FEC's shareholders on two on-going agreements between FEC and PEA.

When considering terms of the transaction and source of funds used in entering into the transaction, the IFA has an opinion that <u>terms of the acquisition of assets and connected transaction are appropriate</u> due to these are normal terms of general business transactions, as well as there are no conditions that will result in the loss of benefits of the Company and the Company's shareholders.

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## Part 4: Conclusion of Opinion of Independent Financial Advisor

The acquisition of FEC's ordinary shares to enter into the construction of electrical system business has the advantages, disadvantages and risk of entering into the transaction. Summarized are as follows.

Advantages of this Transaction consisting of: (1) an investment that abruptly allows the Company to enter into the business of construction of overhead transmission line system, underground cable system, and substation; (2) an investment that creates opportunities for the Company's future growth in entering into the construction business of electrical system which is in a growth phase; (3) a diversification of investment risks that increases a variety of construction business and sources of revenue; (4) an investment that can abruptly recognize revenue from the business of construction of electrical systems and allow the Company to have better operating result in overall; (5) an investment in the company that is ready in terms of staff for the business of construction of electrical system; (6) an investment with a payment term that is beneficial to the Company due to it reduces financing burdens to fully pay for the entire shares on the transaction date; and (7) an investment in assets with a reasonable purchase price

**Disadvantages of this Transaction** consisting of (1) an investment that increases the Company's debt burdens and financing costs

Risk that may arise from entering into this Transaction include: (1) risk of not receiving construction works of electrical systems as targeted; (2) Risk of increasing costs resulting from penalty of not being able to deliver engineering services to meet customer deadline; (3) Risk of reliance on engineering staff; (4) Risk of reliance on major customers which are the government agencies and state enterprises; (5) Risk of increasing costs due to changes in material price and low-quality subcontractors; (6) Risk of Performance Warranty; and (7) Risk of being liable for the unpaid portion of the registered capital

Moreover, this Transaction is a Connected Transaction which has benefits and advantages of entering into the transaction with the connected persons, compared with the non-connected person namely: (1) the acquisition of shares in FEC shall help the Company to have the PAC under the name of FEC and enter into a business of construction of electrical system abruptly; (2) the acquisition of shares in FEC will help eliminate the risk of conflict of interest in business operation in the future; and (3) the Company receives a good payment term from related parties in which the Company is not required to make a full payment for the purchase of shares in one time on the transaction date. This allows the Company to reduce financing burdens to pay for the entire amount of shares. However, disadvantages of entering into the transaction with the connected person compared with the non-connected person are: (1) the Company shall have to comply the SET/SEC ruling which result in additional costs related to an employment of the Independent Financial Advisor (IFA) to provide an opinion to the shareholders of the Company and the arrangement of the shareholders' meeting; and (2) results in deficit from business combination under common control of THB 592.50 million, according to the Company's projection. This Transaction will result in a decrease in shareholders' equity, which shall cause an increase in a ratio of debt to shareholders' equity.

As regards the appropriateness of price, the IFA has an opinion that <u>discounted cash flow approach is the most appropriate approach for fair valuation of FEC's due to this approach is able to reflect FEC's operating results and profitability in the future. In summary, the IFA has calculated FEC's shareholders' equity which is in the range of THB 559.89 million - THB 784.75 million and FEC's shares purchase price of not exceeding THB 650 million which is in the range of the aforesaid fair valuation. Therefore, the IFA has an opinion that **share purchase price of not exceedingTHB 650 million is appropriate.**</u>

Moreover, the IFA has an opinion that <u>terms of the acquisition of assets and connected transaction are appropriate</u> due to these are normal terms of general business transactions, as well as there are no conditions that will result in the loss of benefits of the Company and the Company's shareholders.

Based on all information and reasons mentioned above, the IFA is of the opinion that shareholder should **approve** this Asset Acquisition and Connected Transaction.

Please see additional conclusion of the Independent Financial Advisor's opinion in the **Executive Summary** on Page 3 of this report.

Nonetheless, in deciding whether to approve or disapprove the said Transaction, the shareholders can make consideration thereon based on the above reasons and opinion rendered by the Independent Financial Advisor. The final decision depends on the shareholders' individual judgment.

The Independent Financial Advisor's opinion is based on the assumptions that all information in consideration was complete and accurate, and reflects the operating environment and most up-to-date information at the time of issuance of this report. Any changes in the information used to formulate an opinion could have a significant impact on the valuation, the Independent Financial Advisor's opinion and the decision of the shareholders. The purpose of this report is to provide a recommendation to shareholders of the Company and the opinion of the IFA should not be misconstrued as an endorsement to enter into the Transaction, or a guarantee of the outcome of the Transaction.

I V Global Securities PLC, as the Independent Financial Advisor hereby certifies that we have provided the opinion fairly using independent professional judgments, by placing the interest of the shareholders at the utmost importance

Yours Faithfully, Independent Financial Advisor I V Global Securities Public Company Limited

(Mr. Pisit Jeungpraditphan, CFA, CAIA) Senior Vice President Supervisor

Financial Advisory

(Mrs. Sriporn Sudthipongse)
President and CEO

## **Attachment 1**

## Company Information and Operating Results of Gunkul Engineering Public Company Limited

(Source: Form 56-1 of Gunkul Engineering Public Company Limited)

#### 1. General Information

Name : Gunkul Engineering Public Company Limited (the "Company" or "GUNKUL")

Business : Details of the business operations of the Company as follows:

1. Business to produce, procure and supply equipment for electrical system in domestic and international.

2. Business to produce, procure and supply energy-saving products, including appropriate alternative energy:

 To produce and supply lighting lamp type LED, BIPV Glass, Flexible Solar PV

2.2 To produce and supply solar cell module including supplying equipment related to the electricity production system of solar energy

3. Business to produce and distribute electricity from renewable energy resources in local and international

3.1 Solar Energy

3.2 Wind Farm

3.3 Biomass Energy

4. Engineering Procurement and Construction

5. Operating and Maintenance

Website : http://www.gunkul.com

Head Office : 1177 Pearl Bangkok Building FL 8 Phaholyothin Rd, Phaya Thai, Phaya Thai,

Bangkok

Telephone : 0-2242-5800 Fax : 0-2242-5818-9

Registered Capital : THB 1,982,967,060.25

Divided into 7,931,868,241 original shares with a par value of THB 0.25

Paid-up Capital : THB 1,854,655,373.25

As of 31 Dec 17 Divided into 7,418,621,493 original shares with a par value of THB 0.25



#### 2. Nature of Business

#### 2.1 Background

Gunkul Engineering Public Company Limited ("GUNKUL" or the "Company") has established on August 5, 1982 by Mr. Gunkul Dhumrongpiyawut. The objective of the Company is to import and sell the electricity equipment to both public and private organizations. The Company has changed to the public company on August 10, 2009 and has been listed in the Stock Exchange of Thailand (SET) on October 15, 2010.

#### 2.2 Business Goals

In 2018, the Company has a business goal defined as follows;

- 1) Maintain the customer base of the organization, including the Provincial Electricity Authority (PEA), Metropolitan Electricity Authority, the Electricity Generating Authority of Thailand, private sector both domestically and internationally, and the Electricity Authority of the Republic of the Union of Myanmar, Lao People's Democratic Republic, Japan and Malaysia etc.
- 2) Expand both domestic and international customer base to increase the market share.
- 3) Provide new products to meet customer needs.
- 4) Study an investment and expand a renewable energy business both in domestically and internationally.
  - Electricity generating business by applying to a government agencies for direct electricity purchase agreement including joint ventures with other operators which have power purchase agreements.
  - Distribution of renewable energy equipment.
  - Power plant maintenance business.
  - Consulting business related to renewable energy.
  - Any other business related
- 5) Complete the construction of the renewable energy power plant as specified in the power purchase agreement with the counterparties.
- 6) Study in construction of biomass power plants, both in domestically and internationally.
- 7) Increase business partnerships to increase business security.
- 8) Enhance the efficiency of operations to support the expansion of business by adopting advanced technologies, such as information network in the enterprise, video conferencing.
- 9) Develop staff ability to keep pace with the growth of the Company.
- 10) Support the Corporate Social Responsibility (CSR) of the Company.
- 11)Control the Company's performance and the Group to comply with the rules of the corporate governance and with an effective internal control.
- 12) Encourage the organization to comply with anti-corruption measures.

#### 2.3 Type of Business

The Company operates businesses in 5 segments:

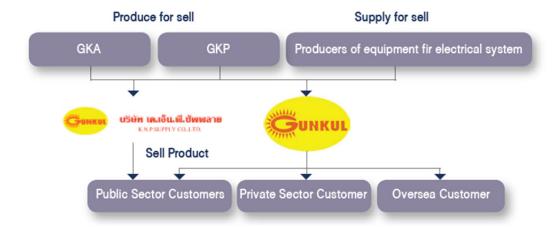
1) Business to produce, procure and supply equipment for electrical system in domestic and international.

The Company has operated in producing, supplying, and selling equipment for electrical system and renewable energy business covering electricity generation and transmission from power plant to end users. The Company is one of the leading supplier of equipment for power systems and renewable energy systems, covering in all stages of transmission and distribution of electricity from power plants to consumers with goods. More than 5,000 items to meet the needs and characteristics of the different



customer groups and both the household level to the macro level of government, the Group has expanded its business into the manufacture and sale of electricity from renewable energy as well. All kind of goods which are produced from the subsidiaries and/or supplying by producers in Thailand and overseas who are acceptable on goods' quality and standard such as USA, Germany, Sweden, Japan, China and etc. The company's products can be classified into five categories based on the usage as follows: (1) Protection and transmission system control equipment and distribution lines (2) Transmission and distribution lines equipment including cables (Cable) (3) Tools and equipment (4) Street lighting equipment and (5) Group of equipment for the system of renewable energy.

Figure A-1: Diagram shows business conduct structure of the group of companies to produce, procure and supply equipment for electrical



- 2) Business to produce, procure and supply equipment for energy-saving products including appropriate alternative energy
- 2.1 To produce and supply lighting lamp type LED, BIPV Glass, Flexible Solar PV

In 2018, Gunkul Lighting LED Co., Ltd. changed its name to "Gunkul Energy Solutions and Lighting Co., Ltd." to expand its business of integrated power system services.

Figure A-2: Structure under GUNKUL ENERGY SOLUTION & LIGHTING: GES



2.2 To produce and supply solar cell module including supplying equipment related to the electricity production system of solar energy

Public Sector Customers

Private Sector Customer

Oversea Customer

Figure A-3: Structure under solar cell module

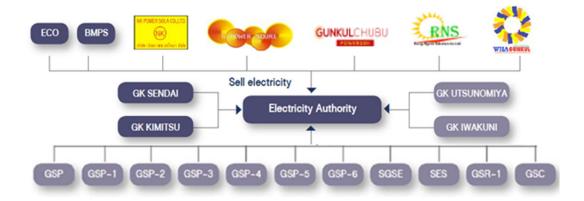
#### 3) Business to produce and distribute electricity from renewable energy resources

The Company has conducted the business of electricity generation from renewable energy to sell to government agencies based on the government policy to support electricity generation from renewable energy. This business can be classified into 3 types as follows.

#### 3.1 Solar Power Plant Business

#### 3.1.1 Solar Farm and Solar PV Rooftop

Figure A-4: Structure under Solar Power Plant business



#### 3.1.2 Solar PV Rooftop for self-consumption

The Company is aware of the investment direction in the business group with a lot of potential and is not obliged to have a power purchase agreement with government agencies. It has decided to penetrate the solar installation business on the roof of the factory including commercial buildings, residential group, organizations and government agencies and other business groups that need to use large quantities of electricity. In addition, some customers have utilized land which they can use the land to make electricity projects on the ground for their own use within the organization as well. Currently, the Company has been trusted by many customers by selecting the Company as a project operator.

#### 3.1.3 Solar Floating

The Company has studied the possibility of installing solar panels on the water in order to produce electricity and connect with the transmission line system to be used. At present, the Company has implemented 1 Solar Floating power plant project (Electricity Generating Authority, Sirindhorn Dam) with a capacity of 256 kilowatts.

#### 3.2 Wind Farm

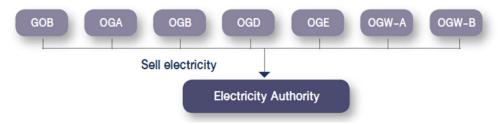
Figure A-5: Structure under wind farm business



#### 3.3 Biomass Energy including supply of raw materials for biomass power plants

#### 3.3.1 Biomass Power Plant

Figure A-6: Structure under biomass power plant business



## 3.3.2 Supply of raw materials for biomass power plants

Figure A-7: Structure under supply of raw materials for biomass power plant business



## 4) Business to construct alternative energy power plant

Due to active promotion of alternative energy utilization by government agencies in effort to reduce global warming, the Group views that businesses related to alternative energy are of great potential for development and investment.

Furthermore, generation of power based on alternative energy, though being a fresh idea, has shown a promising start and strong growth in the future. The Company has provided construction services for power plant projects of its affiliates, subsidiaries and other companies.

Producers of equipment for Electrical System

Sub-Contractor

Engineering Consultants

Power Plant Owner

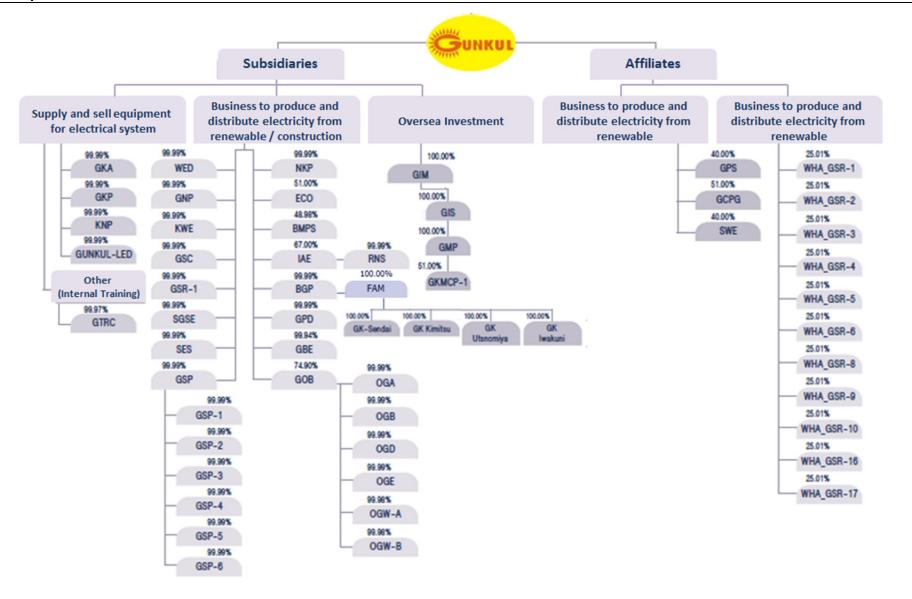
Figure A-8: Structure under business to construct alternative energy power plant

## 5) Business to operation and maintenance

The Company has earned the trust of its business alliance as well as other operators to be the provider of post-construction maintenance services for their solar farms. The services under operation and maintenance agreements with these clients include controlling and monitoring the efficiency of operations and sale of the solar farms. At present, the Company renders maintenance services for 14 companies 34 power plant projects of a total capacity of 163.37 MW.

GUNKULCHUBU CONER SOURE WEAGUNKUL WEAGUNKUL WEAGUNKUL

Figure A-9: Structure under business to operation and maintenance



# **Subsidiaries**

No	Company Name Symbol Type of Business		% of Holding	Registered Capital (THB Million)	
1	G.K. Assembly Co., Ltd.	99.99	200.00		
2	G.K. Power Products Co., Ltd.	GKP	Production of equipment and control system for power transmission and distribution lines under the Group's brands "GUNKUL" and "GK". By focusing on the safety equipment and joining systems such as electrical wiring, fuses and switches to distribute to Gunkul Engineering Public Company Limited and K.N.P. Supply Co., Ltd.	99.99	100.00
3	K.N.P. Supply Co., Ltd.	P. Supply Co., Ltd.  KNP  Distribution of electrical system equipment and other systems related to public sector customers directly. Acting as a contactor and participating in the bidding for the procurement of the various customer segments. The main customers being Electricity Generating Authority of Thailand (EGAT), the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA).		99.99	50.00
4	Wind Energy Development	WED	Production and distribution of electricity from renewable energy using renewable solar energy amount 60 MW by generating to the EGAT and PEA.	99.99	1,575.00
5	Greenovation Power Co., Ltd.	GNP	Production and distribution of electricity from renewable energy using renewable solar energy amount 60 MW by generating to the EGAT.	99.99	1,485.00
6	Korat Wind Energy	KWE	Production and distribution of electricity from renewable energy using renewable solar energy amount 50 MW by generating to the EGAT	99.99	1,107.00
7	NK Power Solar Co., Ltd. 1/	NKP	Production and distribution of electricity from renewable energy in the capacity of 1 MW by generating to the PEA	99.99	2.60
8	Gunkul Solar Power 1 Co.,Ltd.	GSP-1	Produces and sells electricity from renewable energy to sell to government agencies	Shareholding by GSP 99.99	100.00
9	Gunkul Solar Power 2 Co., Ltd.	GSP-2	Produces and sells electricity from renewable energy to sell to government agencies	Shareholding by GSP 99.99	100.00
10	Gunkul Solar Power 3 Co., Ltd.	GSP-3	Produces and sells electricity from renewable energy to sell to government agencies	Shareholding by GSP 99.99	100.00
11	Gunkul Solar Power 4 Co., Ltd.	GSP-4	Produces and sells electricity from renewable energy to sell to government agencies	Shareholding by GSP 99.99	100.00
12	Gunkul Solar Power 5 Co., Ltd.	GSP-5	Produces and sells electricity from renewable energy to sell to government agencies	Shareholding by GSP 99.99	100.00
13	Bright Green Power Co., Ltd.	BGP	Production and distribution of electricity from Renewable Energy by generating to the government entities and investing on the business related to renewable energy.	99.99	120.00
14	Siam Gunkul Solar Energy Co., Ltd.	SGSE	Produces and sells electricity from renewable energy to sell to government agencies.	99.97	40.90
15	Solar Energy Society Co., Ltd.	SES	Produces and sells electricity from renewable energy to sell to government agencies.	99.99	20.40
16	Gunkul Solar Roof 1 Co., Ltd.	GSR-1	Produces and sells electricity from renewable energy to sell to government agencies.	99.99	21.00
17	Gunkul Training Center Co.,Ltd. (Formerly: Gunkul Solar Roof 2 Co., Ltd "GSR-2") (Registered name change: on March 16, 2017)	GTRC	Education services, Management of seminars, training management and other related to education.	99.97	1.00
18	Gunkul Solar Community Co., Ltd.	GSC	Production and distribution of electricity from renewable energy by generating to the government agencies	99.99	1.00
19	Gunkul Power Development Co., Ltd.	GPD	Power plants construction and distribution systems for electrical equipment and other systems related to the	99.99	50.00

No	Company Name	Symbol	Type of Business	% of Holding	Registered Capital (THB Million)
			construction of power plants		
20	Gunkul LED Lighting Co., Ltd. (Changed name: Gunkul Energy Solutions & Lighting Co., Ltd. "GES") (Registered name change on February 21, 2018)	GUNKUL- LED	Production and distribution of Lighting Bulb Type LED	99.99	100.00
21	Infinite Alternative Energy Co., Ltd. <sup>2/</sup>	IAE	Shareholding in Rang Ngern Solution Co., Ltd. 99.99% which the company produces and distributes electricity from renewable energy in the capacity of 87 MW to the PEA	67.00	1,590.00
22	Rang Ngern Solution Co., Ltd. 2/	RNS	Production and distribution of electricity from renewable energy in the capacity of 87 MW by generating to the PEA	Shareholding by IAE 99.99	1,355.00
23	GO Bioenergy Co., Ltd.	GOB	Produces and sells electricity from renewable energy to sell to government agencies.	74.90	34.30
24	Outgrow A Co., Ltd.	OGA	Production and distribution of electricity from biomass by generating to government entities	Shareholding by GOB 99.99	8.00
25	Outgrow B Co., Ltd.	OGB	Production and distribution of electricity from biomass by generating to PEA	Shareholding by GOB 99.99	8.00
26	Outgrow D Co., Ltd.	OGD	Production and distribution of electricity from biomass by generating to PEA	Shareholding by GOB 99.99	40.00
27	Outgrow E Co., Ltd.	OGE	Production and distribution of electricity from biomass by generating to PEA	Shareholding by GOB 99.99	8.00
28	Outgrow Wood Supply A Co., Ltd.	OGW-A	Distributor wood as raw material	Shareholding by GOB 99.99	1.00
29	Outgrow Wood Supply B Co., Ltd.	OGW-B	Distributor wood as raw material	Shareholding by GOB 99.99	1.00
30	Eco Thai Energy Co., Ltd.	ECO	Production and distribution of electricity from biomass by generating to PEA	51.00	76.50
31	Gunkul Bio Energy Co., Ltd.	GBE	Production and distribution of electricity from alternative energy power plant by generating to the government agencies	99.94	0.50
32	Gunkul Solar Power Co., Ltd.	GSP	Produces and sells electricity from renewable energy to sell to government agencies	99.99	599.9988
33	Gunkul Solar Power 6 Co., Ltd.	GSP-6	Produces and sells electricity from renewable energy to sell to government agencies	Shareholding by GSP 99.99	100.00
34	BMP Solar Co., Ltd.	BMPS	Produces and sells electricity from solar panels installed on the ground of 8.0 MW for distribution to the PEA	48.98	0.98
35	Gunkul International (Mauritius)	GIM	Oversea Investment	100.00	USD 134,825,624
36	Gunkul Investment (Singapore) Pte. Ltd. <sup>3/</sup>	GIS	Oversea Investment	Shareholding by GIM 100.00	SGD 432,423
37	Gunkul Myanmar Power (Hlawga) Pte. Ltd. <sup>3/</sup>	GMP	Oversea Investment	Shareholding by GIS 100.00	SGD 243,684
38	Gunkul Myanmar Central Power 1 Co., Ltd. 4/	GKMCP-1	Production and distribution of electricity from Gas Engine by generating to the government in Myanmar	51.00	USD 100,000
39	Sendai Okura Mega Solar Godo Kaisha <sup>5/</sup>	GK Sendai	Production and distribution of electricity from solar panels installed on the ground of 31.75 MW by generating to the Tohoku Electric Power Co., Inc. in Japan	Investment in the total a JPY 4,125	mount of
40	Kimitsu Okura Mega Solar Godo Kaisha <sup>5/</sup>	GK Kimitsu	Production and distribution of electricity from solar panels installed on the ground of 33.50 MW by generating to the Tokyo Electric Power Company (TEPCO) in Japan	Investment in the total a JPY 4,246	mount of
41	GD Solar Utsunomiya Goda Kaishar <sup>6/</sup>	GK Utsunomiy a	Production and distribution of electricity from solar panels installed on the ground of 66.78 MW by generating to the Tokyo Electric Power Company (TEPCO) in Japan	Investment in G in the total JPY 3,070	amount of
42	East Japan Solar 13	GK	Production and distribution of electricity from renewable energy in the capacity of 75 MW by generating to	Investment in the total a	

No	Company Name	Symbol	Type of Business	Type of Business % of Holding		
				(THB Mill		
	Godo Kaisha <sup>n</sup>	lwakuni	Chogoku Electric Power Company Inc. in Japan	JPY 1,810,000,000		
	Future Asset Management Kabushiki Kaisha	FAM	Investment in renewable energy business	100.00	JPY 377,710,000	

Remarks: 1/ GUNKUL is one of shareholder of N.K. Power Solar Co., Ltd. by holding 23,058 common shares and 2,940 preferred shares. The right of voting for common share is one share per one vote and preferred share is one share per 20 votes.

- 2/ On 19th August 2015, the Extra-Ordinary General Meeting of Shareholders No. 1/2558 passed the approval resolution to acquire IAE's common shares in proportion of 67 percent which IAE is a majority shareholder in RNS in the proportion of 99.99 percent.
- 3/ GUNKUL is shareholder of GIM by holding 100.00 percent of shares and GIM holds in GIS at 100.00 percent of shares and GIS hold in GMP at 100.00 percent of shares.
- 4/ GMP is shareholder of GKMCP-1 by holding 51 percent.
- 5/ On 19th August 2015, the Extra-Ordinary General Meeting of Shareholders No. 1/2558 passed the approval resolution to invest in GK Sendai and GK Kimitsu through GIM at the ratio of 100 percent.
- 6/ On 25th August 2016, the Board of Director's meeting No. 6/2559 passed the approval resolution to invest in GK Utsunomiya through GIM at the ratio of 100 percent (Signed on 25th August 2016).
- 7/ On 29th November 2016, the Extra-Ordinary General Meeting of Shareholders No. 2/2559 passed the approval resolution to invest in GK Utsunomiya through GIM at the ratio of 100 percent (Signed on 29th November 2016).

## **Affiliates**

N o.	Company Name	Symbol	Type of Business	% of Holding	Registered Capital (THB million)
1	G – Power Source Co., Ltd.	GPS	Production and distribution of electricity from renewable energy in the capacity of 26 MW by generating to the PEA	40.00	930.00
2	Gunkul Chubu Powergen Co., Ltd. <sup>1/</sup>	GCPG	Production and distribution of electricity from renewable energy in the capacity of 30.9 MW by generating to the PEA	51.00	992.00
3	Siam Wind Energy Co., Ltd Registration of dissolution on June 19, 2017 - Registration of liquidation on August 2, 2017	SWE	To carry out the production and distribution of electricity from renewable energy for sale to government entities.	40.00	1.00
4	WHA Gunkul Green Solar Roof 1 Co., Ltd.	WHA_GSR-1	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	11.50
5	WHA Gunkul Green Solar Roof 2 Co., Ltd. - Registration of dissolution of June 19, 2017 - Registration of liquidation on August 2, 2017	WHA_GSR-2	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	1.00
6	WHA Gunkul Green Solar Roof 3 Co., Ltd.	WHA_GSR-3	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	14.50
7	WHA Gunkul Green Solar Roof 4 Co., Ltd. - Registration of dissolution on September 12, 2017 - Registration of liquidation on October 12, 2017	WHA_GSR-4	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	1.00
8	WHA Gunkul Green Solar Roof 5 Co., Ltd.  - Registration of dissolution on September 12, 2017  - Registration of liquidation on on October 12, 2017	WHA_GSR-5	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	1.00
9	WHA Gunkul Green Solar Roof 6 Co., Ltd.	WHA_GSR-6	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	14.50
10	WHA Gunkul Green Solar Roof 8 Co., Ltd. - Registration of dissolution on September 12, 2017 - Registration of dissolution on October 12, 2017	WHA_GSR-8	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	0.10
11	WHA Gunkul Green Solar	WHA_GSR-9	Production and distribution of electricity from Solar PV	25.01	0.10

N o.	Company Name Symbol Type of Business		% of Holding	Registered Capital (THB million)	
	Roof 9 Co., Ltd.  - Registration of dissolution on September 12, 2017  - Registration of dissolution on October 12, 2017		Rooftop by generating to the PEA and MEA		
12	WHA Gunkul Green Solar Roof 10 Co., Ltd.  - Registration of dissolution on September 12, 2017  - Registration of dissolution on October 12, 2017	WHA_GSR-10	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	15.50
13	WHA Gunkul Green Solar Roof 16 Co., Ltd Registration of dissolution on September 12, 2017 - Registration of dissolution on October 12, 2017	WHA_GSR-16	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	0.10
14	WHA Gunkul Green Solar Roof 17 Co., Ltd.	WHA_GSR-17	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	25.01	16.00

Remarks: 1/ Gunkul Chubu Powergen Co., Ltd. is a joint venture. The Board authorized the signing of joint control.

## 2.5 Revenue Structure

Table A-1: Revenue of the Company by business

	Y20	15	Y20	16	Y2017		
Type of Income	THB million	%	THB million	%	THB million	%	
Income from production and supply of equipment for power systems and renewable energy							
1.1 Provision for distribution	3,346.59	75.03	791.97	24.68	521.74	10.94	
1.2 Provision for sale	425.67	9.54	559.42	17.43	679.30	14.25	
Income from production and sale of electricity from renewable energy							
- Manufacture and sale of electricity from solar energy	51.16	1.15	867.93	27.05	1,535.56	32.21	
Income from construction of renewable energy plants	566.76	12.71	909.5	28.34	1,962.58	41.17	
4. Income service	70.12	1.57	80.07	2.50	68.09	1.43	
Total revenue	4,460.30	100.00	3,208.89	100.00	4,767.27	100.00	

Sources: Form 56-1 and the Company's financial statements as at December 31, 2017

Table A-2: Revenue of the Company by customers

	Y20	15	Y20 <sup>-</sup>	16	Y2017			
Type of Income	THB million	%	THB million	%	THB million	%		
Public sector clients								
<ul><li>Revenue from electricity and renewable energy equipment</li><li>Revenue from electricity sales</li></ul>	259.09 51.16	5.81 1.158	504.89 867.93	15.73 27.05	304.19 1,533.22	6.38 32.16		
Private client group     Revenue from electricity and renewable energy equipment     Revenue from construction the power plant	3,544.09 566.76	79.68 12.71	894.33 909.50	27.87 28.34	930.13 1,962.58	19.51 41.17		
Foreign customers	29.20	0.65	32.24	1.01	37.15	0.78		
Total revenues	4,460.30	100.00	3,208.89	100.00	4,767.27	100.00		

## 3. Shareholders

Table A-3: Top 10 major shareholders as of January 20, 2018

No.	Name - Surname	No. of shares (shares) <sup>1/</sup>	Percentage
1.	Dhumrongpiyawat Family Group	4,003,811,454	53.970%
	1.1 Gunkul Group Company Limited	3,693,859,400	49.792%
	1.2 Mr. Gunkul Dhumrongpiyawat	309,592,726	4.17%
	1.3 Miss Naruechon Dhumrongpiyawat	359,328	0.005%
2.	Siam Commercial Bank Public Company Limited	232,400,000	3.133%
3.	UOB KAY HIAN (HONG KONG) LIMITED - Client Account	216,355,253	2.916%
4.	Bualuang Long-Term Equity Fund	158,730,500	2.140%
5.	CPYI CLT	139,983,900	1.887%
6.	Thai NVDR Co., Ltd	131,600,327	1.774%
7.	Raffles Nominee (PTE) Limited	70,864,080	0.955%
8.	Mr. Prakin Sricharoen	69,745,151	0.940%
9.	Mr. Suraphong Triamchanchai	65,966,405	0.889%
10.	Bualuang Long-Term Equity Fund 75/25	63,209,900	0.852%
	Top ten major shareholders of the Company	5,152,666,970	69.456%

Sources: Form 56-1 and SET Remarks: 1/ Par Value = THB 0.25

Gunkul Group Co., Ltd is the Holding Company. As of 22 January 2018, the registered capital is THB 110,000,000.00. The major shareholder is Dhumrongpiyawat Family Group who holds 99.64% of its registered capital.

Table A-4: Shareholder list of Gunkul Group Co., Ltd.

Name - Surname	No. of shares	%
1. Dhumrongpiyawat Family Group	1,096,000	99.64
1.1 Mr. Gunkul Dhumrongpiyawat	465,000	42.27
1.2 Miss Naruechon Dhumrongpiyawat	211,000	19.18
1.3 Miss Sopacha Dhumrongpiyawat	210,000	19.09
1.4 Master Arpakorn Dhumrongpiyawat	210,000	19.09
2. Mr. Chaloempon Sricharoen	3,000	0.27
3. Miss Nanpapatr Piyapootinun	1,000	0.09
Total	1,100,000	100.00

Sources: The Company

## 4. Directors and Executives

As of 15 May 2018, Board of Directors comprised of ten persons as follow:

Table A-5: List of Board of Directors

No.	Name - Surname	Position
1.	Mr. Gunkul Dhumrongpiyawat 1/	Chairman of the Board of Directors (Non-Executive Director)
2.	Dr. Djitt Laowattana <sup>1/</sup>	Director / Independent Director Chairman of the Audit Committee
3.	Dr. Chongrak Rarueysong	Director / Independent Director Audit Committee Chairman of the Good Corporate Governance Committee
4.	Mrs. Panarat Panmanee	Director / Independent Director Audit Committee
5.	Mr. Tarakorn Angpubate	Director / Independent Director
6.	Miss Sopacha Dhumrongpiyawat	Director / Chief Executive Officer  Member of the Risk Management Committee
7.	Dr. Somboon Aueatchasai	Director and Secretary of the Board of Directors Executive Director / Managing Director
8.	Miss Naruechon Dhumrongpiyawat	Director / Executive Director
9.	Mr. Chaloempon Sricharoen	Director / Executive Director
10.	Mrs Areewan Chalowmdan	Director / Executive Director

Source: Form of 56-1 and www.set.or.th

Remarks: 1/ Non-Executive Directors having experience in work related to the Company's business and the Subsidiary.

2/ Miss Chantra Jongjamareeseethong as the Company's secretary

## <u>Authorized Director</u>

Authorized director who can sign documents that will have impact to the Company is Mr. Gunkul Dhumrongpiyawut or Miss Sopacha Dhumrongpiyawut or Miss Naruechon Dhumrongpiyawut gives signature together with another signature from Mr. Somboon Aueatchasai or Mrs. Areewan Chaloemdan or Mr. Chaloempon Sricharoen and then gets the Company's stamp.

Or Mrs. Areewan Chaloemdan, Mr. Chaloempon Sricharoen and Mr. Somboon Aueatchasai all sign their names and get the Company's stamp.

# 5. Summary of Financial Highlights and Analysis of Operational Performance and Financial Status

## Statement of Financial Status

Table A-6: Statement of Financial Status - Assets

Table A-6: Statement of Financial Status - Assets						(Units: THB Million)			
Statement of Financial Position	1Q/2	1Q/2018		Y2017		)16	Y2015		
	тнв м	%	ТНВ М	%	ТНВ М	%	ТНВ М	%	
Cash and cash equivalent	1,399.19	4.19	1,048.23	3.45	2,468.24	9.64	3,570.79	18.98	
Current investments	96.32	0.29	605.02	1.99	964.36	3.77	367.23	1.9	
Bank deposits pledged as collateral	1,056.03	3.16	964.05	3.17	585.11	2.29	-	0.00	
Trade receivable	1,758.17	5.27	1,182.39	3.89	730.12	2.85	1,091.65	5.80	
Unbilled receivables	543.53	1.63	759.61	2.50	336.76	1.32	328.10	1.74	
Other receivables	359.89	1.08	322.36	1.06	237.30	0.93	83.81	0.45	
Revenue Department receivable	67.14	0.20	100.73	0.33	348.77	1.36	371.82	1.98	
Short-term loan to related parties	0.00	0.00	-	0.00	-	0.00	-	0.00	
Inventories	427.87	1.28	403.77	1.33	402.34	1.57	361.42	1.92	
Total Current Assets	5,708.13	17.10	5,386.17	17.73	6,072.99	23.73	6,174.81	32.82	
Fixed deposits pledged as collateral	323.52	0.97	40.77	0.13	47.01	0.18	216.75	1.1	
Investments in associates	383.42	1.15	381.41	1.26	356.89	1.39	351.68	1.87	
Investments in joint ventures	1,050.34	3.15	1,005.23	3.31	939.04	3.67	880.07	4.68	
Investments in subsidiaries	0.00	0.00	-	0.00	-	0.00	-	0.00	
Investment property	0.00	0.00	-	0.00	-	0.00	-	0.00	
Property, plant and equipment	20,392.56	61.08	18,125.00	59.67	13,604.87	53.15	7,646.25	40.64	
Intangible assets and Goodwill	163.48	0.49	4,431.27	14.59	3,358.59	13.12	2,952.23	15.69	
Advance for share subscription	4,268.36	12.78	-	0.00	180.00	0.70	-	0.00	
Deposit for purchase of shares	367.30	1.10	362.14	1.19	384.82	1.50	-	0.00	
Prepaid land rental	216.03	0.65	215.44	0.71	209.44	0.82	179.76	0.96	
Deferred tax assets	77.18	0.23	21.51	0.07	37.35	0.15	24.00	0.13	
Other non-current assets	438.01	1.31	408.08	1.34	404.82	1.58	389.72	2.07	
Total Non-Current Assets	27,680.19	82.90	24,990.84	82.27	19,522.84	76.27	12,640.45	67.18	
Total Assets	33,388.32	100.00	30,377.02	100.00	25,595.83	100.00	18,815.26	100.00	

Sources: Form 56-1 and the Company's financial statement

Table A-7: Statement of Financial Status – Liabilities and Equity

	Elabilitios and Equity			(Gritis: TTTB Williams)				
Statement of Financial Status	1Q/2	2018	Y2017		Y2016		Y2015	
	ТНВ М	%	тнв м	%	тнв м	%	тнв м	%
Short-term loans from financial institutions	2,703.55	7.35	2,231.93	7.35	3,980.80	15.55	3,875.61	20.60
Trade and other payable - related parties	0.00	0.00	-	0.00	-	0.00	100.50	0.53
Trade payable	677.31	2.34	712.12	2.34	526.07	2.06	666.92	3.54
Revenue received in advance	103.18	0.65	196.21	0.65	220.55	0.86	3.30	0.02
Payable for purchase of assets	1,331.46	5.61	1,702.85	5.61	745.73	2.91	1,188.51	6.32
Revenue Department payable	8.60	0.03	10.63	0.03	12.78	0.05	5.71	0.03
Retention payables	541.89	1.06	322.15	1.06	292.19	1.14	14.37	0.08
Other payables	714.61	1.09	332.05	1.09	197.00	0.77	388.80	2.07
Current portion of long-term loans	860.55	2.08	632.32	2.08	528.35	2.06	38.77	0.21
Current portion of obligation under Debenture	280.00	0.92	280.00	0.92	300.00	1.17	-	0.00
Current portion of obligation under finance lease	11.69	0.04	12.40	0.04	12.86	0.05	15.50	0.08
Tax payable	114.34	0.11	33.81	0.11	5.14	0.02	73.84	0.39
Total Current Liabilities	7,347.17	21.29	6,466.47	21.29	6,821.46	26.65	6,371.82	33.87
Long-term Loans	11,903.36	32.10	9,750.70	32.10	6,781.77	26.50	3,027.19	16.09
Debentures	3,765.50	12.40	3,765.50	12.40	1,780.00	6.95	300.00	1.59
Retention payables	244.44	0.84	255.59	0.84	159.12	0.62	57.16	0.30
Obligation under finance lease	17.91	0.07	20.14	0.07	29.25	0.11	42.11	0.22
Employee benefit obligation	45.37	0.14	43.64	0.14	22.64	0.09	19.20	0.10
Deferred tax liabilities	219.72	0.73	220.37	0.73	220.95	0.86	402.03	2.14
Other Non-Current Liabilities	59.38	0.17	51.94	0.17	31.38	0.12	5.52	0.03
Total Non-Current Liabilities	16,255.68	46.44	14,107.89	46.44	9,025.11	35.26	3,853.21	20.48
Total Liabilities	23,602.85	67.73	20,574.36	67.73	15,846.58	61.91	10,225.03	54.34
Authorized share capital	1,982.97	6.53	1,982.97	6.53	1,699.69	6.64	1,374.91	7.31
Issued and Paid up share capital	1,854.66	6.11	1,854.66	6.11	1,589.69	6.21	1,283.25	6.82
Premium on share capital	5,179.47	17.05	5,179.47	17.05	5,179.22	20.23	4,272.86	22.71
Retained earnings			-	0.00	-	0.00	-	0.00
Appropriated: Legal reserve	198.30	0.65	198.30	0.65	159.00	0.62	129.00	0.69
Unappropriated	2,132.02	7.38	2,241.13	7.38	2,176.59	8.50	2,265.01	12.04
Surplus on business restructuring under	93.62	0.31	93.62	0.31	93.62	0.37	93.62	0.50
Other components of shareholders' equity	(302.05)	(1.19)	-362.63	-1.19	-90.16	-0.35	19.65	0.10
Equity attributable to owners of the Company	9,156.02	30.30	9,204.55	30.30	9,107.96	35.58	8,063.38	42.86
Non-controlling interests of the subsidiary	629.45	1.97	598.10	1.97	641.29	2.51	526.84	2.80
Total Shareholders' equity	9,785.48	32.27	9,802.66	32.27	9,749.26	38.09	8,590.22	45.66
Total Liabilities and shareholders' equity	33,388.32	100.00	30,377.02	100.00	25,595.83	100.00	18,815.26	100.00

(Units: THB Million)

Sources: Form 56-1 and the Company's financial statement

# Statement of Comprehensive Income

**Table A-8: Statement of Comprehensive Income** 

(Units: THB Million except for earnings per shares)

Statement of Comprehensive Income	1Q/2	2018	Y20	017	Y20	Y2016 Y2015		)15
Statement of Comprehensive income	ТНВ М	%	ТНВ М	%	ТНВ М	%	ТНВ М	%
Revenue from sale	279.87	16.64	1,201.04	24.74	1,351.39	40.14	3,761.28	81.93
Revenue from sale of electricity	295.06	17.54	1,114.88	22.96	778.98	23.14	50.21	1.09
Revenue from rendering of services	23.38	1.39	68.09	1.40	80.07	2.38	70.12	1.53
Revenue from construction services	961.14	57.13	1,962.58	40.42	909.50	27.01	566.76	12.35
Revenue from adder	88.99	5.29	420.68	8.66	88.95	2.64	11.94	0.26
Dividend income	0.00	0.00	-	0.00	-	0.00	-	0.00
Net foreign exchange gain	0.00	0.00	6.16	0.13	-	0.00	14.00	0.30
Interest Income	1.32	0.08	27.31	0.56	84.23	2.50	-	0.00
Other income	32.65	1.94	54.54	1.12	73.71	2.19	116.39	2.54
Total revenue	1,682.40	100.00	4,855.28	100.00	3,366.83	100.00	4,590.69	100.00
Cost of sale	182.28	10.83	829.72	17.09	930.26	27.63	2,930.10	63.83
Cost of sale of electricity	137.15	8.15	492.99	10.15	277.93	8.26	10.57	0.23
Cost of rendering of services	22.00	1.31	64.57	1.33	51.55	1.53	36.39	0.79
Cost of construction services	510.11	30.32	1,674.10	34.48	834.48	24.79	448.18	9.76
Selling expenses	11.28	0.67	50.94	1.05	40.80	1.21	51.72	1.13
Administrative expenses	131.81	7.83	662.17	13.64	492.74	14.64	469.31	10.22
Unwind foreign exchange option contract fee	588.11	34.96	-	-	-	-	-	-
Net foreign exchange loss	56.79	3.38	-	0.00	24.34	0.72	-	0.00
Total expenses	1,639.53	97.45	3,774.48	77.74	2,652.10	78.77	3,946.27	85.96
Share of profit of associated and joint ventures	71.49	4.25	269.26	5.55	271.82	8.07	280.00	6.10
Profit before finance costs and income tax expenses (income)	114.36	6.80	1,350.07	27.81	986.55	29.30	924.43	20.14
Finance costs	136.04	8.09	568.73	11.71	329.80	9.80	115.89	2.52
Profit before income tax expense (income)	(21.68)	(1.29)	781.34	16.09	656.75	19.51	808.54	17.61
Income tax expense (income)	52.84	3.14	69.78	1.44	41.38	1.23	134.97	2.94
Profit for the year	(74.52)	(4.43)	711.56	14.66	615.37	18.28	673.57	14.67
Other comprehensive income								
Components of other comprehensive income that will be reclassified to profit or loss								
Exchange differences on translating financial statement	60.26	3.58	(272.49)	(5.61)	(109.81)	(3.26)	19.68	0.43
Net change in fair value of available-for-sale investment	0.33	0.02	0.02	0.00	-	0.00	-	0.00
Total component of other comprehensive income that will not be reclassified to profit or loss	60.59	3.60	(272.47)	(5.61)	(109.81)	(3.26)	19.68	0.43
Component of other comprehensive income that will not be reclassified to profit or loss  Defined benefit plan actuarial losses	-	-	(17.92)	(0.37)	-	0.00	(2.81)	(0.06)
Income tax relating to comprehensive income that will not be reclassified to profit or loss	-	-	3.58	0.07	-	0.00	-	0.00
Total component of other comprehensive incor that will not be reclassified to profit or loss	-	-	(14.33)	(0.30)	-	0.00	(2.81)	(0.06)
Other comprehensive income (loss) for the year, net of income tax	60.59	3.60	(286.81)	(5.91)	(109.81)	(3.26)	16.87	0.37
Total comprehensive income for the year	(13.93)	(0.83)	424.75	8.75	505.56	15.02	690.44	15.04
Profit attributable to:								

Statement of Comprehensive Income	1Q/2	2018	Y2017		Y20	)16	S Y2015	
·	ТНВ М	%	ТНВ М	%	ТНВ М	%	ТНВ М	%
Owners of parent	(109.11)	(6.49)	635.36	13.09	537.72	15.97	685.14	14.92
Non-controlling interests	34.60	2.06	76.19	1.57	77.65	2.31	-11.57	-0.25
Profit for the year	(74.52)	(4.43)	711.56	14.66	615.37	18.28	673.57	14.67
Total comprehensive income attributable to:								
Owners of parent	(48.53)	(2.88)	348.56	7.18	427.91	12.71	702.01	15.29
Non-controlling interests	34.60	2.06	76.19	1.57	77.65	2.31	-11.57	-0.25
Total comprehensive income for the year	(13.93)	(0.83)	424.75	8.75	505.56	15.02	690.44	15.04
Basic earnings per shares	(0.02)		0.09		0.07		0.59	_

Sources: Form 56-1 and the Company's financial statement

## Cash flow Statement

**Table A-9: Cash flow Statement** 

Description (Unit: THB Million)	3-Month Period of 2018	Y2017	Y2016	Y2015
Net cash from (used in) operating activities	(189.06)	929.80	963.04	40.41
Net cash from (used in) investment activities	(2,177.07)	(4,734.67)	(8,529.09)	(7,110.65)
Net cash from (used in) financial activities	2,722.82	2,396.56	6,547.25	9,133.91
Cash and cash equivalents Increase (decrease) in cash	356.69	(1,408.30)	(1,018.80)	2,063.66
Cash and cash equivalents as at December 31	1,399.19	1,048.23	2,468.24	3,570.80

Sources: Form 56-1 and the Company's financial statement

# Summary of Key Financial Ratio

**Table A-10: Key Financial Ratios** 

Ratio	Unit	3-Month Period of 2018	Y2017	Y2016	Y2015
Liquidity Ratio					
Liquidity Ratio	Time	0.78	0.83	0.97	0.97
Quick Liquidity Ratio	Time	0.72	0.77	0.91	0.91
Cash Flow Liquidity Ratio	Time	0.19	0.16	0.52	0.62
Trade Account Receivable Turnover	Time	1.12	3.17	2.51	4.30
Average Collection Period	Days	325.55	115.19	145.66	84.90
Inventory Turnover	Time	1.99	7.58	5.21	9.48
Average Selling Period	Days	183.40	48.14	70.11	38.51
Payable Turnover	Time	1.23	4.94	2.93	5.01
Credit Term	Days	297.78	73.81	124.69	72.89
Cash Cycle	Days	211.17	89.51	91.08	50.53
Profitability Ratio					
Gross Profit Margin	%	48.34	35.78	34.74	23.21
Operating Profit Margin	%	39.66	28.32	34.74	23.21
Net Profit Margin	%	(4.52)	14.93	19.18	15.10
Return of Equity	%	(0.76)	7.26	6.25	7.84

Ratio	Unit	3-Month Period of 2018	Y2017	Y2016	Y2015
Efficiency Ratio					
Return on Assets	%	(0.22)	2.34	2.89	3.58
Return on Fixed Assets	%	(0.27)	2.85	3.99	5.33
Asset Turnover	Times	0.05	0.16	0.15	0.24
Financial Ratio					
Debt to Equity Ratio	Times	2.41	2.10	1.31	1.19
Interest Coverage Ratio	Times	(0.55)	1.25	3.41	5.98
Dividend Payout Ratio	%	N/A	50.00	84.02	48.17
Other Ratios					
Earnings Per Share 1/	THB	N/A	0.09	0.10	0.58
Basic Earnings Per Share 2/	THB	(0.02)	0.09	0.08	0.13
Book Value Per Share 2/	THB	N/A	1.32	1.33	6.37

Sources: Form 56-1

Remarks: 1/ Earnings per Share: to calculate with the number of all average weighted common shares which have been paid up.

## **Operating Results and Financial Analysis of the Company Operations**

#### **Overall Performance**

#### Revenue

The Group sells goods both domestically and internationally. The proportion of domestic sales was approximately 80% of total sales revenue of the Group in the years 2015 - 2017. Main customers of the Group are the government agencies both domestic and foreign and electricity generating business customers from renewable energy.

The main revenue of the Group during the years 2016 - 2017 comes from three main types of revenue: the revenue from manufacturing, supply and distribution of electrical equipment business, renewable power plant business and construction services business which began in 2016 and 2017, the Group generated THB 4,767.27 million from sales revenue according to consolidated financial statements 48.56% increase compared to 2016. The significant increase in revenue is from sales of electricity that increased by THB 667.64 million, or 76.92% and from construction services of renewable power plants for unrelated companies or subsidiaries that increased by THB 1,053.08 million or 115.79%.

The Company had revenue from supply and distribution of electrical equipment for the year ended December 31, 2017 amounting to THB 1,201.04 million, decreased from the same period of last year with the total amount THB 1,351.39 million or decreased by THB 150.35 million or 11.13% due to the government has changed its procurement method from the E-Bidding format to the E-Auction since August 23, 2016, the government and state enterprises have to develop regulations and procedures to support such procedures. As a result, the number of delinquent proclamations has decreased. This effect has slowed down in the first quarter of 2018.

The Company has revenue from electricity production and distribution for the year ended December 31, 2017, total amount THB 1,535.56 million, increased from the same period of last year with the total amount THB 867.96 million or increased by THB 667.64 million or 76.92%. This is a 60 MW increase in commercial electricity sales, up from 10 MW in the previous year, as well as sales of commercial electricity from solar energy. The Company has revenue from construction services for the year ended December 31, 2017, total amount THB 1,962.58 million, increased from the same period of last year with the total amount THB 909.50 million or increased by THB 1,053.08 million or 115.79%.

As a result of the overall revenue, the Company has generated revenue from commercial electricity of renewable energy, which generates electricity for all projects with also revenue from the

<sup>2/</sup> Basic Earnings per Share and Book Value per Share: to calculate with the total number of all paid up common stocks at the end of the period by using the par value of the shares at THB 0.25 per share to be used for comparison.

construction business grew as a result of revenue recognition under the Company's operating plan. The delivery of the service is in accordance with the construction contract.

## Cost of Sales and Gross margin

The Group's gross profit margin was 35.78% and 34.74% in 2017 and 2016, respectively. This trend of gross margin was in line with the increase in proportion of revenue from sale of electricity of wind and solar energy including an increase in revenue from the construction of the successful completion of the target of the company.

## Sales and Administrative Expenses

Sales and administrative expenses of the Company accounted for approximately 10-13% of total revenue of the Group, which was higher in proportion to the increase in revenue and the number of executive under the use of a flexible control budget system.

The Group's selling and administrative expenses were THB 713.10 million and THB 557.88 million, accounted for 14.96% and 17.39% of sales and service income for the year 2017 and 2016, respectively, which was the ratio that varies with sales and expansion expenses including accounting standards.

#### Net Profit

The Company's net profit for the year 2017 was THB 711.56 million, the year 2016 was THB 615.37 million, decrease by THB 96.19 million, considering the normal operating performance of the Company and subsidiaries based on the consolidated financial statements for the year 2017 compared with the same period last year. Due to the company discharged 60 MW of commercial electricity into the system and the cost of generating electricity were not very high compared to the received revenue. Therefore, the profit margin is higher than the revenue.

## Overall Performance for the first 3 months of 2018

The Company's performance for the three-month period ended 31st March 2018 had a loss on the share of profit (loss) attributable to the Company, net loss was THB 109.11 million, compared with THB 186.10 million for the same period last year with the net loss incurred for the three-month period ended 31st March 2018, the Company's revenue and gross margin were higher than the target. However, the impact of operating expenses on fees for canceling foreign currency contracts and foreign exchange losses, as a result of the import of equipment for the development of three wind turbine projects in foreign currency (USD) of the Company. The development of the project requires a long period of time and the budget for importing three equipments from abroad is over THB 10,000 million. In recent years, the appreciation of the Thai baht has been accelerating from THB 36 to THB 31 per US dollar. The Management has decided to terminate the Foreign Currency Contracts Agreement and recognize the termination fee in the statements of income of the Company for the three-month period ended March 31, 2018 amounting to THB 588.10 million and net foreign exchange loss of THB 56.78 million. When calculating the normal business operation and excluding the above effects, the Company will have the profit attributable to the parent company in the amount of THB 535.77 million. In this regard, the Company further clarified that such transaction did not affect what was offered at the time of the investment.

#### Revenue

The Company's total revenues for the three months ended 31st March 2018 amounted to THB 1,682.40 million, an increase of THB 952.93 million from the same period last year, an increase of THB 729.47 million or increased by 76.55%. The significant increase in revenue in this period was from:

- Construction Income for the three-month period ended 31st March 2018 was THB 961.13 million, an increase of THB 248.09 million from the same period last year, an increase of THB 713.04 million or an increase of 287.41% as the Company accelerated the construction of 2 wind turbines (110 MW) to complete as the plan.
- Sales of goods for the three months ended 31st March 2018 was THB 279.87 million, an increase of THB 229.20 million from the same period of last year, an increase of THB 50.67 million or an increase of 22.10%. This is due to the normal sales in this quarter. Since the fourth quarter of last year, the Company was affected by the government's change in the E-bidding method and delays in order processing.

Revenue from sales of electricity and surcharges Electricity purchase price for the three-month period ended 31st March 2018 was THB 384.04 million, decreased from the same period last year by THB 396.01 million, a decrease of THB 11.97 million or a decrease of 3.02%. This is due to in the first quarter of 2018, the FT rate was lower than the same period last year but with the current situation, the fuel prices for energy production are likely to increase due to the impact of rising crude oil prices. Moreover, the Company is expected that the revenue from electricity sales and the increase in electricity purchase prices will increase as the Company Commercial electricity distribution in the 60 MW (MW) for the second turbine power plant project (GNP) on 27th March 2018 and it is also anticipated that commercial electricity will be available for the third turbine power plant project in early June 2018. This will result in the Company has revenue from electricity sales and electricity purchase increased significantly since the second quarter of this year.

## Gross Profit Margin

The gross margin for the three months ended 31st March 2018 was 49.38%, an increase of 46.23% from the same period last year, an increase of 6.81%. This is due to the construction income was recognized for this quarter has the higher gross margin which is also proportional to the higher construction income.

## Expense

Selling and administrative expenses and finance costs for the three-month period ended 31st March 2018 compared to the same period last year, the change has not materialized.

## Share of the profit and loss in associates and joint ventures

Share of profit and loss in associates and joint ventures for the three-month period ended 31st March 2018 amounted to THB 71.48 million, compared with THB 68.69 million for the same period of the previous year, an increase of THB 2.79 million or an increase of 4.06%. This is due to the Company has improved the efficiency of the damaged solar panels and proceed with the claims made by the manufacturers in the solar power plant projects through joint ventures and joint ventures.

## Financial Position as of Y2015 to Y2016

#### Total Assets

The Company's total assets at the end of 2017 and 2016 are 30,377.02 million THB, 25,595.83 million THB and 7,259.20 million THB, respectively. The main items of current assets are Accounts Receivables and merchandise Inventory, which vary according to sales. Also the construction of renewable power plants for external companies and the ability of the Group to invoice customer. Investments in subsidiaries increase; as well as, the cash flow that the Company must reserve for investment, operation and dividend payments. The main items of non-current assets are buildings and equipment invested by the Group to generate electricity.

In providing financing for working capital and investing in fixed assets, the Group has financing both from the capital increase and borrowing from financial institutions and disposal of investment. As a result, the Group debt-to-equity ratios are 2.10 times and 2.63 times, according to the consolidated financial statements as at the end of 2017 and 2016, respectively.

## Total Liabilities

The Company's total liabilities at the end of 2017, 2016 and 2015 are THB 20,574.36 million THB, THB 15,846.58 million and THB 10,225.03 million, respectively. In 2017, the Group began to have a higher total liability. Since in 2017, the Company and its subsidiaries have grown and expanded. The Company has issued debentures to raise funds for investment expansion. As a result, the Company has short-term and long-term loans project and trust receipts to support sales and the increasing construction since 2016 to 2017.

Total liabilities of the Company contain mostly current liabilities such as, short-term loans from financial institutions accounted for 11-20% of the Group's total liabilities. Accounts payable accounted for approximately 12% of total liabilities of the Group and Long-term loans accounted for 65.59% of total liabilities. These 4 lists, the Company are used as a source of funds for the procurement of raw materials and commercial credits and construction of power plants of the Group.

The Group's liquidity ratio according to the consolidated financial statements for the year 2017-2015 was 0.83 times 0.97 times and 0.97 times, respectively. For quick liquidity ratios, 0.77 times, 0.91 times and 0.91 times, the average repayment period was 74 days, 125 days and 73 days. The Company

has a cash cycle of 90 days, 91 days and 51 days, respectively. The selling period was 48 days, 71 days and 39 days. The collection period was 115 days, 146 days and 85 days, respectively. There was more time to collect revenue due to the increase in construction income and there was a way to recognize revenue including payment which was different from the case of the purchase.

In 2017 and 2016, the Company's debt-to-equity ratio increased significantly from 2.10 times to 1.31 times. The Company has higher debt to equity ratio, due to issuance of debentures for investment in public utilities from renewable energy.

#### Shareholders' Equity

Shareholders' equity of the Company was THB 8,690.92 million, THB 8,600.08 million and THB 7,648.42 million at the end of the year 2017, 2016 and 2015, according to the separate financial statements, respectively.

For the consolidated financial statements as at the end of 2017, 2016 and 2015, The Group's shareholders' equity was THB 9,802.66 million, THB 9,749.25 million and THB 8,590.22 million, respectively. The increase in shareholders' equity in 2017, 2016 and 2015, as compared to the separate financial statements, was the result of the consolidation of assets, liabilities and operating results of subsidiaries. There was a surplus on business combination under common control, which was the difference between the acquisition cost of the subsidiary and the increasing book value of the subsidiary's net assets in 2017, due to the registration of capital increase and share premium. In order to invest in the construction of a solar power plant for outsider and from financial investments in subsidiaries, due to the acquisition of control in domestic and foreign subsidiaries, respectively.

#### Financial Position as of 31 March 2018

As of March 31, 2018, the Company had total assets of THB 33,388.32 million, growing by THB 3,011.31 million or 9.91% from year-end 2017. The main reason was due to the increase in Property, plant and equipment of THB 2,267.56 million

As of March 31, 2018, the Company had total liabilities of THB 23,602.85 million, growing by THB 3,028.49 million or 14.72% from year-end 2017. The main reason was due to the increase in Long-term loans from financial institutions of THB 2,152.66 million and the increase in Short-term loans from financial institutions of THB 471.62 million

As of March 31, 2018, the Company had total shareholders' equity of THB 9,785.48 million, decreeing by THB 17.18 million or 0.18% from year-end 2017. The main reason was due to the decrease in unappropriated retained earnings because the company has net loss of THB 109.11 million in 1Q/2018.

## **Attachment 2**

# Company Information and Operating Results of Future Electrical Control Company Limited ("FEC")

#### 1. General Information

Company name : Future Electrical Control Company Limited ("FEC")

Type of business: Engaged in projects bidding and entering as a contractual party in the construction

of power plants. Businesses of FEC can be classified into 2 types as follows;

1. Construction of solar power plant.

2. Construction of electricity generating system.

Website : http://www.future-electrical.com

Head office : 1177, Pearl Bangkok Building, 12A Floor, 12A01 Room, Phaholyothin Road,

Phayathai Sub-District, Phayathai District, Bangkok.

Telephone : 0-2242-5800 ext. 5924, 5925

Fax : 0-2243-4072

Registered capital: THB 100,000,000.00

Divided into 10,000,000 ordinary shares with a par value of THB 10 per share.

Paid-up capital : THB 47,500,000.00

As of 31 Mar 2018 Divided into 3,000,000 ordinary shares with a par value of THB 10 per share and

7,000,000 ordinary shares with a par value of THB 2.50 per share.

Auditor : Thaikit Bunchi Company Limited.

#### 2. Nature of Business of FEC

## 2.1 Background

Established on July 2<sup>nd</sup>, 1998 by Miss Sopacha Dhumrongpiyawut, Future Electrical Control Company Limited ("**FEC**") was registered with a capital of THB 1 million. Initially, FEC was engaged in the import of products for electricity generating system in order to distribute to GKE's group. In 2008 FEC changed its business to a construction contractor in which FEC currently operates its business as one of construction contractors of electricity generating system such as substation, transmission line, distribution line, underground cable, and lighting system, etc.

FEC has a strong and significant partner, Gunkul Engineering Public Company Limited, which contributed extensively to FEC to respond to all types of electricity generating systems, both low voltage works and high voltage works. To date, FEC has served all types of customers, including educational institutes, military affairs, and various private companies. FEC has gained trust of its customers by delivering high quality and standards of its construction work.

Since its inception, FEC has important works related to construction of electricity generating system as follows: In 2009, FEC had a construction work of manholes and underground duct bank of MRT Lat Phrao station with voltage of 115 kV (Ratchavipha grade separation), Vibhavadi Rangsit Road (civil work). In 2010, FEC had a construction work of manholes and underground duct bank in Rama 3 Road, replacing original duct which was damaged, for 115 kV underground cables (civil work) from Metropolitan Electricity Authority (MEA). Simultaneously, in the same year, the company participated in the construction of a 33 kV underground cable with a length of 2.06 circuit–km near Karon Beach Road from Provincial Electricity Authority (PEA).



With its proven expertise and experiences in the construction of electricity generation system since 1998, FEC has signed a civil work contract for the construction of a 4.4 MW solar power plant in 2010. In the same year, FEC also increased its registered capital to THB 100 million to support the expansion of the business with a technology of "Smart Piling" used for foundation work to support solar panels. The foundation work can be constructed up to 3 times faster than normal piling. With its quality and speed of construction, FEC gained trust of Gunkul Engineering Public Company Limited by receiving additional construction works of 26 MW and 23.5 MW solar power plant projects. Moreover, FEC has also been entrusted by private companies such as Solarta Co., Ltd. and C.K. & Sun Co., Ltd. to construct 2 solar power plant projects with a capacity of 8 MW for each project, including Rang Ngern Solution Co., Ltd. and private customers. To date, FEC has construction works for solar power plants with a total capacity of 217.60 MW.

By 2015, the construction works of solar power plants in Thailand declined in accordance with market conditions (due to the government slowed down on the issuance of licenses). As a result, the company began to enter into a construction contract of 115 kV transmission line with a length of 30.24 circuit-km from Wind Energy Development. In addition in 2016, FEC signed another 4 high valued construction projects, including the construction and improvement of distribution line system to 33 kV underground cable with a length of 11.88 circuit-km from Provincial Electricity Authority Area 3 (South) (LOT11), a construction of a 115-22 kV substation at Lum Rang substation, and a construction of 115 kV transmission line with a length of 2.6 circuit-km from Rang Ngern Solution Co., Ltd. (RNS), as well as, a construction of 115 kV transmission lines with a length of 57.11 circuit-km and 51.99 circuit-km from Greenovation Co., Ltd. and Korat Wind Energy Co., Ltd.

In late 2017, FEC signed a construction contract of 115 kV transmission line with a length of 34 circuit-km adjacent to Mae Sai substation - Chiang Saen substation in the amount of THB 107 million and the construction contracts of four 115-22 kV substations, namely: Tha Li substation, Wang Saphung Substation, Khon Kaen 1 Substation, and Sakon Nakhon 2 Substation in the amount of THB 543 million, totaling 2 projects in the amount of THB 650 million from Provincial Electricity Authority (PEA).

With proven experienced management team and staff in managing the construction of electricity generating systems and power plants, FEC has a strong commitment to grow as one of leading construction contractors in Southeast Asia to support the establishment of ASEAN community.

#### 2.2 Nature of Business

Nature of business of FEC can be classified into 2 types as follows;

#### 2.2.1 Construction of solar and wind power plants

FEC operates a business of design and construction, including being an advisor to manage and control the construction of solar power plants. FEC has expertise in the area of foundation system to support solar panels. Since 2010, FEC expanded its business to renewable energy business.

Table B-1: Past performance of solar power plants projects and wind power plants projects

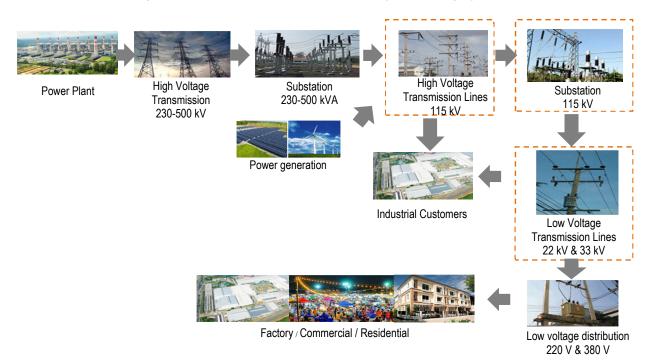
No.	Project	Project Owner	Location	Capacity (MW)	Project Value (THB Million)	Project End Date
1	Solar Power Plant Tao Pun Sub-District, Song District, Phrae.	Rang Ngern Solution Co., Ltd. (a subsidiary of GKE)	Phare	8.0	91.99	30 Apr 16
2	Solar Power Plant Thung Kwao Sub-District, Muang Pan District, Lampang.	Rang Ngern Solution Co., Ltd. (a subsidiary of GKE)	Lampang	7.0	72.86	24 Dec 16
3	Solar Power Plant Lum Lang Sub-District, Bophloi District, Kanchanaburi.	Rang Ngern Solution Co., Ltd. (a subsidiary of GKE)	Kanchanaburi	8.0	89.29	N/A
4	Solar Power Plant Don Sa Laeb Sub-District, Huai Krachao District, Kanchanaburi.	Rang Ngern Solution Co., Ltd. (a subsidiary of GKE)	Kanchanaburi	8.0	88.71	N/A
5	Solar Power Plant Tub Sa Kae 1 District, Prachuab Khiri Khan.	Rang Ngern Solution Co., Ltd. (a subsidiary of GKE)	Prachuab Khiri Khan	8.0	90.35	19 Apr 16
6	Solar Power Plant Tub Sa Kae 2 District,	Rang Ngern Solution Co., Ltd. (a subsidiary of GKE)	Prachuab Khiri Khan	8.0	89.56	19 Apr 16

No.	Project	Project Owner	Location	Capacity (MW)	Project Value (THB Million)	Project End Date
	Prachuab Khiri Khan.					
7	Solar Power Plant Tub Sa Kae 3 District, Prachuab Khiri Khan.	Rang Ngern Solution Co., Ltd. (a subsidiary of GKE)	Prachuab Khiri Khan	8.0	91.52	19 Apr 16
8	Solar Power Plant Klat Luang Sub-District, Tha Yang District, Petchaburi.	Rang Ngern Solution Co., Ltd. (a subsidiary of GKE)	Petchaburi	8.0	89.01	29 Dec 16
9	Ta Khit Solar Power Plant	G-Power Source Co., Ltd. (a subsidiary of GKE)	Nakorn Sawan	6.5	45.75	29 Feb 12
10	Ta Sang Solar Power Plant	G-Power Source Co., Ltd. (a subsidiary of GKE)	Nakorn Sawan	6.5	45.75	29 Feb 12
11	Dong Khon Solar Power Plant	G-Power Source Co., Ltd. (a subsidiary of GKE)	Nakorn Sawan	6.5	45.75	29 Feb 12
12	Bung Sam Phan 1 Solar Power Plant	G-Power Source Co., Ltd. (a subsidiary of GKE)	Phetchaboon	6.5	51.33	31 Jan 13
13	Bung Sam Phan 2 Solar Power Plant	G-Power Source Co., Ltd. (a subsidiary of GKE)	Phetchaboon	3.0	74.63	31 Mar 13
14	Ban Kluai Solar Power plant	Gunkul Powergen Co., Ltd. (a subsidiary of GKE)	Phetchaboon	4.4	55.59	27 Sep 12
15	Wichian Buri Solar Power Plant	Gunkul Powergen Co., Ltd. (a subsidiary of GKE)	Phetchaboon	8.0	209.54	31 Mar 13
16	Non Por Solar Power Plant	Gunkul Powergen Co., Ltd. (a subsidiary of GKE)	Phichit	4.5	114.14	28 Feb 13
17	Sri Chula Solar Power Plant	Gunkul Powergen Co., Ltd. (a subsidiary of GKE)	Nakhon Nayok	8.0	229.06	31 Mar 13
18	Solarta Solar Power Plant	Solarta Co., Ltd.	Suphanburi	8.0	90.00	30 Sep 12
19	C.K. & Sun Solar Power Plant	C.K. & Sun Co., Ltd.	d. Buriram		96.03	31 Jan 13
20	Dan Khun Tod Wind Power Plant	Gunkul Engineering Public Company Limited (GKE)	Nakhon Ratchasima	60.0	340.00	24 Apr 16
		,	Total	192.9	2,100.86	

Source: Company and www.future-electrical.com

## 2.2.2 Construction of Electricity Generating System

Figure B-1: Transmission Line and Electricity Generating System



Remark: The types of business that FEC engaging in are shown in the dotted boxes



FEC provides services of design, procurement, construction, and installation of electricity generating system which can be divided into the followings:

## 1) High Voltage Substation

Construction and improvement of 22-115 kV substations to transformer for appropriate voltage level during electricity delivery between High Voltage (HV) transmission line system and Medium Voltage (MV) distribution line (which is the connection between the transmission line and distribution line system).



## 2) High Voltage Transmission Line System

Construction and improvement of High Voltage Transmission Line System that transmits electricity from generating source such as hydro power plant of thermal plant to HV Substation or between HV switching stations at voltage level in a range of 69-115 kV.



## 3) Medium Voltage Distribution Line

Construction of pole and line setup, as well as, improvement of MV Distribution Line at 22 kV or 33 kV from substations to both customers and end-users national wide.



## 4) Underground Cable System

Construction of 0.6/1-115 kV conduit in which the transmission line of underground cable system will be used as a power transmission system.



## 5) Electrical Lighting System

Construction and improvement of electrical lighting system outside buildings.



Table B-2: Past performance of construction of electricity generating system of FEC

No	Category	Project Name	Project Owner	Location	Project Value (THB Million)	Project End Date
		Completed	Projects		l.	
1	High Voltage Transmission Line System	Contract for improvement of high voltage air brake switch. (Contract no. 49/2553)	Finance Division Chiang Mai University	Chiang Mai	1,949,999.00 (include VAT)	19 Aug 10
2	Electrical Lighting System	Contract for utility system improvement project (part 3) to improve electrical lighting system within Khon Kaen University (Contract no. Sortor. 68/2550).	Khon Kaen University	Khon Kaen	7,500,000.00 (include VAT)	11 Jun 08
3	Substation	Contract for installation service of additional 115 kV switchgear systems at Bang Samak1 substation, Chachoengsao. (Contract no. DSRP.2-BSM/2552)	Provincial Electricity Authority (PEA)	Chachoeng sao	38,042,230.00 (include VAT)	15 Nov 10
4	Underground Cable System	Contract for construction and improvement of distribution line system to underground cable in accordance with the project to increase the reliability of electrical system, phase 3, in Provincial Electricity Authority Area 3 (South) (LOT11).  (Contract no. Jor.Por. 28/2559 dated 21 Mar 17)	Provincial Electricity Authority (PEA)	Songkhla, Phatthalung area Pattani area	87,135,932.00 (include VAT) 23,640,540.00 (include VAT)	25 Jun 17 10 Apr 18
5	High Voltage Transmission Line System	Contract for construction of 115 kV transmission line system from Sarhanlom Wind Farm high voltage substation to rural highway no. 3059 km 21+800 and from rural highway no. 3059 km 2+970 to rural highway no. 201 km 8+840, including the connection of both ends to the substation.  (Contract no. GNP59/024)	Greenovation Co., Ltd.	Nakhonratc hasima	190,817,500.00	29 Jan 18 (AC Witness)
6	High Voltage Transmission Line System	Contract for construction of 115 kV transmission line systems from SP A station to SP B station of Provincial Electricity Authority (PEA).  (Contract no. GNP59/025)	Greenovation Co., Ltd.	Nakhonratc hasima	122,794,995.00	29 Jan 18 (AC Witness)
7	High Voltage Transmission Line System	Contract for construction of 115 kV transmission line system on rural highway no. 201 during km 8+840 to km 0+000 and on rural highway no. 2 during km 101+100 to km 111+200 (Si Kiw 2 high voltage substation of Electricity Generating Authority of Thailand). (Contract no. GNP59/026)	Greenovation Co., Ltd. and Korat Wind Energy Co., Ltd. (50 : 50 )	Nakhonratc hasima	122,898,000.00	2 May 18 (AC Witness)
8	High Voltage Transmission Line System	Contract for construction of 115 kV transmission line systems from mittaphap wind farm high voltage substation to rural highway no. 201 km 8+840, including the connection of both ends to the substation. (Contract no. KWE59/020)	Korat Wind Energy Co., Ltd.	Nakhonratc hasima	212,577,500.00	2 May 18 (AC Witness)
9	Underground Cable System	Construction work of manholes and underground duct bank in Rama 3 Road, replacing original duct which was damaged, for 115 kV.TTT-792 transmission line (Krung Thep Bridge-North South Road) Bangkok (labor cost together with some part of materials cost and machine tool.  (Contract no. ForKorSor. 3/2554).	Metropolitan Electricity Authority (MEA)	Bangkok	22,580,004.60 (exclude VAT)	6 May 15
10	High Voltage Transmission Line System	Contract for supply and installation of distribution line system, head office,part 5. (Contract no. 46/9-8N-1808)	Electricity Generating Authority of Thailand	Nonthaburi	6,885,500.00 (exclude VAT)	9 Apr 07
11	High Voltage Transmission Line System	Contract for repair of Thung Si Kan High Voltage Power System. (Contract no. 218/2550)	Directorate of Civil Engineering, Royal Thai Air Force Headquarters Support Groups	Bangkok	2,570,000.00 (include VAT)	26 Dec 07

No	Category	ry Project Name Project Owner		Location	Project Value (THB Million)	Project End Date
			Si Kan Sub-District			
12	High Voltage Transmission Line System	Contract for alteration of LINE F-1 high voltage transmission line from AOT.1 Substation (extension) to RISER POLE behind power plant building. (Contract no. 7CH2-510002)	Airports of Thailand Public Company Limited	Bangkok	497,550.00 (include VAT)	25 Jan 08
13	Underground Cable System	Underground high voltage power supply system project for a dormitory of medical students, Faculty of Medicine, Pathum Wan District.  (Contract no. 4300000158)	Faculty of Medicine, Chulalongkorn University, Pathum Wan District, Bangkok.		21,973,553.32 (include VAT)	6 Oct 09
14	Underground Cable System	Employment of construction project of underground high voltage power supply system, Faculty of Education, Chulalongkorn University.  (Contract no. 427000015)	Faculty of Education, Chulalongkorn University, Pathum Wan District, Bangkok.	Bangkok	8,640,000.00 (include VAT)	12 Dec 08
15	Underground Cable System	underground duct bank of MRT Lat Phrao station (Ratchavipha grade separation) Vibhavadi Rangsit Road. (Contract no. ForKorSor. 43.2552)	Metropolitan Electricity Authority (MEA)	Bangkok	35,343,772.00 (exclude VAT)	2 Feb 11
16	Underground Cable System	Repair work of electrical system, Faculty of Humanities and Social Sciences. (Contract no. Aor.2/2553)	Chandrakasem Rajabhat University, Chatuchak District, Bangkok.	Bangkok	1,998,500.00 (include VAT)	22 Jul 10
17	Distribution Line System Pole and Line Setup	Contract for improvement of electrical system in Sattahip (Naval Ordnance Department and Royal Thai Marine Corps), Sattahip District, Chonburi. (Contract no. 16/NgorPor.2550)	Sattahip Naval Base Headquarters Chonburi		58,850,000.00 (include VAT)	23 Jun 10
18	Distribution Line System Pole and Line Setup	Contract for improvement of electrical system of Royal Thai Navy (Royal Thai Fleet and Sattahip Naval Base Lodging). (Contract no. 19/NgorPor.2552)	Sattahip Naval Base Chont Headquarters		48,959,999.00 (include VAT)	11 Dec 11
19	Distribution Line System Pole and Line Setup	Contract for installation of transformer with accessories in the area of Naval Rating School, Naval Education Department.  (Contract no. 18/NgorPor.2553)	Sattahip Naval Base Headquarters	Chonburi	15,033,000.00 (include VAT)	17 Feb 13
20	Distribution Line System Pole and Line Setup	Sales of transformer for replacement in Sattahip Naval Base Headquarters. (Contract no. 19/NgorPor.2553)	Sattahip Naval Base Headquarters	Chonburi	14,254,000.00 (include VAT)	17 Dec 11
21	Electrical Lighting System	Contract for installation of street luminaires with mercury vapor lamps 250 watt. (Contract no. 35/2553)	Bansuan Town Municipality Office, Bang Pla Soi Sub- District, Muang District, Chon Buri	Chonburi	3,320,000.00 (include VAT)	7 Oct 10
22	Electrical Lighting System	Contract for installation of 9-meter tapered steel poles (single bracker) with high pressure sodium lamps 250 Watts. (Contract no. HorHor.23/2553)	Prachuap Khiri Khan Highway District (Hua Hin), Prachuap Khiri Khan	Khan	(include VAT)	24 Aug 10
23	Underground Cable System	Contract for improvement of distribution line system to underground cable in the area of Karon Beach Road, Phuket (Civil work).  (Contract no. 29/2553)	Karon Sub-District Municipality Office, Karon Sub-District, Mueang Phuket District, Phuket		19,254,650.00 (include VAT)	23 Feb 11
24	Underground Cable System	Contract for improvement of distribution line system to underground cable in the area of Karon Beach Road, Phuket (Electrical work).  (Contract no. Jor.219/2553)	Phuket Provincial Electricity Authority	Phuket	24,190,780.80 (exclude VAT)	29 May 11
		Projects in p	progress	1	<u> </u>	1
25	High Voltage Transmission Line System	Construction work of 115 kV LOOP Line transmission line system at Mae Sai substation - Chiang Saen substation in accordance with the transmission line improvement project phase 1.	Provincial Electricity Authority	Chiang Rai	107,000,000.00 (include VAT)	In progress
26	Substation	Improvement of Tha Li substation (Loei), Sakon Nakhon 2 substation (Sakon	Provincial Electricity Authority	Tha Li District,	543,000,000.00 (include VAT)	In progress

No	Category	Project Name	Project Owner	Location	Project Value (THB Million)	Project End Date
		Nakhon), Khon Kaen (switchyard) substation (Khon Kaen), and Wang Saphung substation (Loei). (Contract no. TSDP9.2-3.5/2560)		Loei Wang Saphung District, Loei Khon Kaen Sakon Nakhon		

Source: Company and www.future-electrical.com

## 2.3 Revenue Structure

Table B-3: Revenue structure of FEC classified by type of business

Type of revenue	Quarter 1	/2018	2017	7	2016		2015	
(Unit: THB Million)	Amount	%	Amount	%	Amount	%	Amount	%
1. Revenue from sales	-	-	43.16	5.0	0.14	0.0	3.45	0.3
2. Revenue from construction contract	50.92	94.4	799.48	93.0	617.85	97.7	1,144.81	98.2
Construction of power plant     Solar power plant     Wind power plant	-	-	2.12	- 0	252.76 282.18	40.0 44.6	984.70 57.82	84.5 5.0
2.2 Construction of electricity generating system - High voltage substation	27.88	51.7	3.02	0.4	57.40	9.1	-	-
High voltage transmission line system and Medium voltage distribution line system Underground cable system	23.04	42.7	662.83 81.75	77.1 9.5	14.89 10.58	2.4 1.7	99.22	8.5
- Other systems	-	-	49.76	5.8	0.04	0.0	3.07	0.3
3. Other revenue	3.02	5.6	17.22	2.0	14.49	2.3	17.59	1.5
Total revenue	53.94	100.0	859.86	100.0	632.48	100.0	1,165.86	100.0

Source: Company and FEC

# 3. List of FEC's Directors

Table B-4: Directors of FEC as of April 18, 2018

	Name of Directors	Nationality	Position
1.	Mr. Chaisiri Wattanacharnnarong	Thai	Authorized Director
2.	Mr. Kulavit Nualngam	Thai	Authorized Director

Source: The affidavit of FEC as issued by Ministry of Commerce dated April 18, 2018
Remark: Two of the above directors co-signing together with the company's seal

## • <u>List of Directors before and after this transaction</u>

Please refer to Table 1-3, Part 1 of this Report.



#### List of FEC's Shareholders 4.

Table B-5: Shareholders of FEC as of April 18, 2018

	Name of Shareholders	No. of shares <sup>1/</sup>	%	Registered Capital (THB)	Paid-up Capital (THB)
1.	Gunkul Group Co., Ltd (" <b>GKG</b> ") 1/	9,500,00	95.00	95,000,000.00	42,500,000.00
2.	Ms. Sopacha Dhumrongpiyawut	140,000	1.40	1,400,000.00	1,400,000.00
3.	Mr. Gunkul Dhumrongpiyawut	80,000	0.80	800,000.00	800,000.00
4.	Mr. Chaloempon Sricharoen	70,000	0.70	700,000.00	700,000.00
5.	Ms. Naruechon Dhumrongpiyawut	70,000	0.70	700,000.00	700,000.00
6.	Ms. Nanpapat Piyaputtinan	70,000	0.70	700,000.00	700,000.00
7.	Mr. Pawich Dhumrongpiyawut	70,000	0.70	700,000.00	700,000.00
	Total	10,000,000	100.00	100,000,000.00	47,500,000.00

Source: List of Shareholders (BorJor. 5) of shareholders issued on April 18, 2018

Remark: 1/ Par value of THB 10 per share

- 2/ GKG is incorporated in Thailand with its propose to invest in other companies. As of April 18, 2017, its registered capital is THB 110 million. In this regard, GKG's shareholding consists of
  - 1. Dhumrongpiyawut family holds 99.636% (including (1.1) Mr. Gunkul with 42.273% (1.2) Ms. Naruechon with 19.182% (1.3) Ms. Sopacha with 19.091% (1.4) and Mr. Arpakorn with 19.091%), 2. Mr. Chaloempon holds 0.273%, and 3. Ms. Nanprapat holds 0.091% of total shares.

For more information related to GKG' shareholders, please refer to Table A-6 in Attachment 1 of this report.

## List of Shareholders before and after this transaction

Please refer to Table 1-4, Part 1 of this Report.

# 5. Summary of Financial Highlights and Analysis of Operational Performance and Financial Status of FEC

## Statement of Financial Status

Table B-6: Statement of Financial Status

(Units: THB Million)	1Q/2	018	Y20	17	Y20	016	Y2015	
(Gints. 1112 Willion)	THB m.	%	THB m.	%	THB m.	%	THB m.	%
<u>Assets</u>								
Current Assets								
Cash and cash equivalent	29.15	8.28	56.64	5.98	161.81	24.46	45.86	5.88
Current investments	0.00	0.00	40.00	4.22	0.00	0.00	0.00	0.00
Trade receivables	147.87	41.99	302.20	31.89	84.17	12.72	168.03	21.56
Short-term loan	0.00	0.00	402.39	42.47	227.49	34.39	212.99	27.33
Inventories	4.94	1.40	5.21	0.55	40.53	6.13	179.25	23.00
Other Current Assets	<u>79.77</u>	22.65	42.12	<u>4.45</u>	33.08	<u>5.00</u>	35.73	<u>4.59</u>
Total Current Assets	261.73	74.32	848.56	89.55	547.08	82.71	641.86	82.36
Non-current Assets								
Restricted Deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Long-term Loan	0.00	0.00	19.00	2.01	19.00	2.87	0.00	0.00
Property, Plants & Equipment's	15.33	4.35	15.39	1.62	18.64	2.82	12.43	1.59
Other non-current assets	<u>75.13</u>	<u>21.33</u>	64.59	<u>6.82</u>	76.75	<u>11.60</u>	125.07	<u>16.05</u>
Total Non-Current Assets	90.45	25.68	98.97	10.45	114.40	17.29	137.49	17.64
Total Assets	352.18	100.00	947.54	100.00	661.47	100.00	779.36	100.00
Current Liabilities								
Short-term loans from financial institutions	60.00	17.04	40.04	4.23	0.60	0.09	0.00	0.00
Trade and other payables	24.49	6.95	87.73	9.26	68.47	10.35	172.31	22.11
Unearned revenue	0.00	0.00	0.00	0.00	4.15	0.63	20.23	2.60
Current portion of obligation under finance lease	2.33	0.66	2.91	0.31	3.58	0.54	1.72	0.22
Short-term loans from financial institutions	0.00	0.00	0.00	0.00	0.00	0.00	100.00	12.83
Corporate Tax payable	21.22	6.03	21.22	2.24	18.80	2.84	20.37	2.61
Other current Liabilities	<u>119.12</u>	33.82	146.59	<u>15.47</u>	89.30	<u>13.50</u>	146.19	<u>18.76</u>
Total Current Liabilities	227.16	64.55	298.50	31.50	184.90	27.95	460.82	59.13
Retention Payables	26.58	7.54	24.81	2.62	21.84	3.30	17.71	2.27
Obligation under finance lease	<u>8.53</u>	2.42	8.09	<u>0.85</u>	10.23	<u>1.55</u>	5.30	<u>0.68</u>
Total Current Liabilities	35.11	9.97	32.91	3.47	32.07	4.85	23.01	2.95
Total Liabilities	262.27	74.47	331.41	34.98	216.97	32.80	483.83	62.08
Shareholders' Equity								
Registered share capital								
10 million common shares: at value of THB10/share	100.00	28.39	100.00	10.55	100.00	15.12	100.00	12.83
Paid-up Capital								
3 million common shares: at value of THB10/share	30.00	8.52	30.00	3.17	30.00	4.54	30.00	3.85
7 million common shares: at value of THB2.50/share	17.50	4.97	17.50	1.85	17.50	2.65	17.50	2.25
Retained earnings								
Restricted: Legal reserve	10.00	2.84	10.00	1.06	10.00	1.51	10.00	1.28
Unrestricted	32.41	9.20	558.63	58.96	387.00	58.51	238.03	30.54
Total Shareholders' equity	89.91	25.53	616.13	65.02	444.50	67.20	295.53	37.92
Total Liabilities and shareholders' equity	352.18	100.00	947.54	100.00	661.47	100.00	779.36	100.00

Source: The Company

#### Statement of Income

Table B-7: Statement of Income

Unit: THB Million	1Q/2	1Q/2018		Y2017		Y2016		Y2015	
Cinn 1112 ministr	THB m.	%	THB m.	%	THB m.	%	THB m.	%	
Revenue									
Revenue from sale	-	-	43.16	5.02	0.14	0.02	3.45	0.30	
Revenue from construction services	50.92	94.40	799.48	92.98	617.85	97.69	1,144.81	98.20	
Other income	3.02	5.60	17.22	2.00	14.49	2.29	17.59	1.51	
Total revenue	53.94	100.00	859.86	100.00	632.48	100.00	1,165.86	100.00	
Expenses									
Cost of sale	-	-	41.39	4.81	0.07	0.01	1.98	0.17	
Cost of Construction Contracts	32.36	59.99	531.05	61.76	392.80	62.11	803.38	68.91	
Selling expenses	2.30	4.26	7.02	0.82	5.20	0.82	4.53	0.39	
Administrative expenses	13.41	24.84	62.63	7.28	42.15	6.66	44.33	3.80	
Total expenses	48.07	89.09	642.09	74.67	440.23	69.60	854.22	73.27	
Profit before finance costs and income tax	5.87	10.88	217.76	25.33	192.25	30.40	311.64	26.73	
Finance costs	0.72	1.33	(1.60)	(0.19)	(4.65)	(0.74)	(13.61)	(1.17)	
Profit before income tax expense (income)	5.15	9.55	216.16	25.14	187.60	29.66	298.03	25.56	
Income tax expense (income)	1.38	2.55	(44.54)	(5.18)	(38.22)	(6.04)	(60.02)	(5.15)	
Profit for the year	3.77	7.00	171.63	19.96	149.38	23.62	238.01	20.41	

Sources: The Company

## Summary of Key Financial Ratios

**Table B-8: Key Financial Ratios** 

Ratio	Unit	1Q 2018	Y2017	Y2016	Y2015
Liquidity Ratio	Times	1.15	2.84	2.96	1.39
Gross Profit Margin 1/	%	36.45	32.07	36.43	29.86
Net Profit Margin 1/	%	7.40	20.37	24.17	20.73
Return of Equity	%	16.77	27.86	33.61	80.54
Return on Assets	%	4.28	18.11	22.58	30.54
Debt to Equity Ratio	Times	2.92	0.54	0.49	1.64

Sources: Calculated by the IFA with reference to the financial statements of FEC

Remarks: 1/ Based on Total Revenue but exclude Other Income

# Operating Results and Financial Analysis of FEC's Operations

## Overview of operating performance during 2015-2017

#### Total revenue

During 2015 - 2017, FEC had main revenue from revenue from construction contract of THB 1,144.81, 617.85, and 799.48 million, representing 98.65%, 98.20%, and 92.98% of total revenue in 2015, 2016 and 2017, respectively.

In 2015, FEC had total revenue of THB 1,165.86 million, increased from the previous year by THB 935.71 million, or 406.60 percent. An increase in revenue in 2015 was driven by an increase in revenue from construction contract of THB 917.77 million due to FEC signed a construction contract of solar



power plant and utility system in the solar power plant. In 2015, FEC delivered completed works approximately 90 percent of the total contracted revenue.

In 2016, FEC had total revenue of THB 632.48 million, decreased from the previous year by THB 533.38 million, or 45.75 percent. A decline in revenue in 2016 came from a decrease in revenue from construction contract of THB 526.96 million as most construction works were the works that continued from year 2015 in which most of them had already been delivered in the previous year.

In 2017, FEC had total revenue of THB 859.86 million, increased from the previous year by THB 227.38 million, or 35.95 percent. An increase in revenue in 2017 came from an increase in revenue from construction contract of THB 181.63 million due to FEC signed a construction contract of 115 kV high voltage transmission line system and a construction contract of underground cable system which is a mega project of the government. In addition, an increase in revenue from sales of THB 43.02 million from being a supplier of construction materials for its construction projects in an increasing proportion.

#### Cost of sales, cost of construction contract, and gross profit

FEC had a gross profit of THB 360.50, 239.61, and 287.41 million, representing 29.86%, 36.43%, and 32.07% of total revenue in 2015, 2016, and 2017, respectively. Fluctuation in gross profit margin was as a result of by different types of works. Gross profit margin of each type of works will depend on several factors such as difficulty, constraints of works and competitors. In addition, the construction contracts with the government sector and private sector are different both in terms of procurement, rules and regulations, which result in discrepancy in cost and profit.

## Selling and administrative expenses

FEC had selling expenses of THB 4.53, 5.20, and 7.02 million, representing 0.39%, 0.82%, and 0.82% of total revenue in 2015, 2016, and 2017, respectively. The proportions of selling expenses to total revenue in the last 2 years were relatively stable.

FEC had administrative costs of THB 44.33, 42.15, and 62.63 million, representing 3.80%, 6.66%, and 7.28% of total revenue in 2015, 2016, and 2017, respectively. The proportions of administrative expenses to total revenue were likely to increase continuously. The main administrative expense that increased was expenses on staff due to increasing use of staff in line with the increasing amount of construction works. Some types of works such as the construction of 115 kV transmission line systems are a work that requires experienced staff with knowledge and ability.

#### Net profit (loss)

During 2015 – 2017, FEC had operating profit of THB 238.01, 149.38, and 171.63 million, representing net profit margin of 20.73%, 24.17%, and 20.37%, respectively. Fluctuation in net profit was derived mainly from increase or decrease in revenue from construction contracts.

## Overall operating performance for the first 3 months of 2018

FEC had a net profit of THB 3.78 million, representing 7.40 % of total revenue. Net profit of FEC came from revenue from construction contract of THB 50.92 million (94.40% of total revenue), which covered selling and administrative expenses of THB 15.69 million (29.09% of total revenue).

#### Financial position at the end of 2015 - 2017

#### Assets

As of December 31, 2015, FEC's total assets were THB 779.36 million. Most of assets were current assets of THB 641.86 million, or 82.36% of total assets. Key items of current assets included trade account and other receivables, short-term lending, and inventories which accounted for 21.56%, 27.33%, and 23.00% of total assets, respectively.

As of December 31, 2016, FEC's total assets were THB 661.47 million. Most of assets were current assets of THB 547.08 million, or 82.71% of total assets. Main items of current assets included cash, trade account and other receivables, and short-term lending which accounted for 24.46%, 12.72%, and 34.39% of total assets, respectively. A decrease in trade account and other receivables from 2015 of THB 83.86 million was as a result of the repayment of construction contract debtors and clearing status of postdated cheque transferred to FEC's deposit account.

As of December 31, 2017, FEC's total assets were THB 947.54 million. Most of assets were current assets of THB 848.53 million, or 89.55% of total assets. Major items of current assets included



trade account and other receivables and short-term lending which accounted for 31.89% and 42.47% of total assets, respectively. An increase in trade account and other receivables from 2016 of THB 218.03 million was as a result of the issuance of invoice of transmission line project that was fully recognized 100% at the end of 2016, resulting in outstanding receivables in 2017, as well as, an increase in short-term loans from 2016 of THB 174.90 million.

#### Liabilities

As of December 31, 2015, FEC's total liabilities were THB 483.83 million. Most of liabilities were current liabilities of THB 460.82 million, or 95.24% of total liabilities. Key items of current liabilities included trade account and other payables, and other current liabilities. Major item of non-current liabilities was an amount of retention on construction contacts of THB 17.71 million.

As of December 31, 2016, FEC's total liabilities were THB 216.97 million. Most of liabilities were current liabilities of THB 184.90 million, or 85.22% of total liabilities. Main items of current liabilities included trade account and other payables, and other current liabilities. Major item of non-current liabilities was an amount of retention on construction contacts of THB 21.84 million.

As of December 31, 2017, FEC's total liabilities were THB 331.41 million. Most of liabilities were current liabilities of THB 184.90 million, or 90.07% of total liabilities. Major items of current liabilities included trade account and other payables, and other current liabilities. Key item of non-current liabilities was an amount of retention on construction contacts of THB 24.81 million.

#### Shareholders' equity

At the end of 2017, FEC had a registered capital of THB 100.00 million and paid-up capital of THB 47.50 million.

At the end of 2015, 2016, and 2017, FEC's shareholders' equities were THB 295.53, 444.50, and 616.13 million respectively. Continuous increases in shareholders' equity were as a result of net profits from operations.

#### Financial position as of 31 March 2018

#### Assets

As of December 31, 2018, FEC's total assets were THB 352.18 million. Most of assets were current assets of THB 261.73 million, or 74.32% of total assets. Major items of current assets included trade account and other receivables which accounted for 41.99% of total assets. A decrease in trade account and other receivables from 2017 of THB 154.33 million was as a result of the repayment of construction contract debtors and short-term lending from 2017.

#### Liabilities

As of December 31, 2018, FEC's total liabilities were THB 262.28 million. Most of liabilities were current liabilities of THB 227.16 million, or 64.50% of total liabilities. Key items of current liabilities included trade account and other payables, and other current liabilities. Main item of non-current liabilities was an amount of retention on construction contacts of THB 26.58 million.

#### Shareholders' equity

As of March 31, 2018, FEC had a registered capital of THB 100.00 million and a paid-up capital of THB 47.50 million. At the end of 2017, FEC had retained earnings of THB 558.63 million (excluding appropriated reserve). However, FEC has announced interim dividends in quarter 1/2018 of THB 530.00 million, resulting in a decrease in retained earnings balance to be equal to THB 28.63 million. As of March 31, 2018, FEC reported a net profit of THB 3.78 million, therefore, FEC had unrestricted retained earnings of THB 32.41 million, representing 9.20% of liabilities.



## 6. Electrical industry in Thailand

#### 6.1 Overview of electrical industry

Curgently, the structure of electrical industry in Thailand consists of;

- 1) <u>Electricity Generating Authority of Thailand</u> ("**EGAT**") is an electricity producer and, at the same time, an electricity purchaser from domestic private power plants or abroad in order to distribute electricity through transmission line system to Metropolitan Electricity Authority (MEA) and Provincial Electricity Authority (PEA).
- 2) <u>Metropolitan Electricity Authority</u> ("**MEA**") is responsible for distributing electricity to consumers in the area of 3 provinces, including Bangkok, Nonthaburi, and Samut Prakan.
- 3) <u>Provincial Electricity Authority</u> ("**PEA**") is responsible for distributing electricity to consumers in other provinces apart from Bangkok, Nonthaburi and Samut Prakan.

In addition, some private electricity producers can sell electricity directly to industrial customers. For the sale of electricity to consumers, MEA and PEA will be the owner of substation, transmission line system, distribution line system, transformer, low voltage distribution line system, and power meter only.

## 6.2 Trend of electrical industry in Thailand (transmission and distribution line systems only)

Trend of electrical industry in part of transmission and distribution line systems will depend on power development plans of the Ministry of Energy and three electricity authorities. Currently, major development plans can be summarized as follows;

#### **Thailand Power Development Plan (PDP2015)**

The Ministry of Energy has collaborated with the Electricity Generating Authority of Thailand (EGAT) to conduct Thailand Power Development Plan (PDP2015) in which the plan has focused on: enhancing the stability of electrical systems with a distribution of fuel in electricity production, a decrease in dependence on natural gas, an increase in the proportion of electricity production from clean coal technology, an increase in supply of electricity from abroad, an increase in the proportion of electricity production from renewable energy, and the development of electricity transmission line system - distribution line system to support the development of renewable energy and the entering into ASEAN Economic Community (AEC). In order to achieve goals in production and distribution of electricity to consumers, EGAT has prepared projects and plans to develop electricity transmission line system to be implemented in the period stated in PDP2015 which included the following projects;

- 9 projects of Transmission line system development project to meet the increasing demand for electricity
- 7 Projects of Transmission line system development project to enhance the stability of electrical system.
- 5 Projects of Transmission line system improvement project for lifetime degeneration.
- 9 Projects if Transmission line system expansion project to accommodate the connection of power plants (to support the purchase of electricity from IPP, SPP, and from abroad).
- International electricity transmission line systems link project in a format of grid to grid.
- Smart Grid electrical system development project.

The aforementioned transmission line system development projects are projects and plans that EGAT has been approved and are under construction of 13 projects. There are another 19 projects that EGAT has a study plan in order to get approval.

#### Plan of adjustment overhead transmission line system to underground cable system of MEA

Metropolitan Electricity Authority (MEA) began to focus on the quality of electricity supply and reliability of electrical system, therefore, since a plan of improvement and expansion of electricity distribution system No. 5, MEA has initiated since 1984 to adjust overhead transmission line system to underground cable system in major areas. Up until now, MEA has 12 electrical system development plans in which the current plan is a plan of improvement and expansion of electricity distribution system No. 12 (2017–2021). Total investment budget under the plan is equal to THB 84,694 million which can



be classified into the investment in substations of THB 27,536 million and the investment in transmission lines of THB 50,305 million.

Currently, most of area that MEA is responsible for electricity distribution, electricity has been supplied with overhead transmission line system. There are only areas of Silom project, Pathum Wan project, Chit Lada project, Phaholyothin project, Phaya Thai project, and Sukhumvit project, with a total distance of 40.6 km, in which electricity has already been supplied with underground cable system. According to "Plan of adjustment overhead transmission line system to underground cable system 2008-2013 (revised edition)" 1, which the Cabinet has approved on January 31, 2017, the project to adjust overhead transmission line system to underground cable system of MEA is in progress with a total distance of 175 km and a total investment amount of THB 66,705 million. Details can be summarized as follows:

Table B-9: Project of adjustment overhead transmission line system to underground cable system of MEA which is in progress with a total distance of 175 km.

No.	Project name	Distance	Investment amount	Period of operation
		(km.)	(THB Million)	
1	Pathum Wan, Chit Lada, and Phaya Thai projects (additional)	6.0	554	2008-2016
2	Non Si project	8.3	2,900	2008-2020
3	Rama 3 project	10.9	5,635	2008-2021
4	Ratchadapisek-Asoke project	8.2	4,555	2013-2021
5	Ratchadapisek-Rama 9 project	14.3	4,334	2013-2021
6	Plan of adjustment overhead transmission line system to underground cable system for serving as a metropolis of ASEAN with a scope of 39 routes, consisting of:	127.3	48,717	2016-2025
	- 34 routes in Bangkok with a total distance of 88.1 km.			
	- 2 routes in Nonthaburi with a total distance of 13.5 km.			
	- 3 routes in Samut Prakan with a total distance of 25.7 km.			

Source: MEA's website (www.mea.or.th)

(Plan of adjustment overhead transmission line system to underground cable system 2008-2013 (revised edition)).

#### Electrical system development plan of PEA

The Independent Financial Advisor (IFA) has studied information from PEA's website and found that PEA updated information as of March 12, 2018 for "*Projects and plans that will be implemented at present and in the future*." <sup>2</sup> The IFA has summarized and presented only current and future projects in line with types of construction works that FEC is currently serving as follows;

Table B-10: Projects and plans that will be implemented at present and in the future of PEA which are in line with types of construction works that FEC is currently serving

No.	Project name	Period of operation	Status as of Dec 30, 2017	Investment amount (THB Million)
1	Transmission and distribution line system development project phase 1 (KorPorJor.1), nationwide.	Current project	Project has a 2.40 % progress. The Cabinet has approved the project on 1 Nov 16.	62,679
2	Voltage adjustment project in Southern region from 33 kV to 22kV phase 1, Ranong and Phuket.	Current project	Project is under consideration to change from a project to a long-term plan.	1,065

<sup>1</sup> Plan of adjustment overhead transmission line system to underground cable system 2008-2013 (revised edition) dated February 3, 2017.

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Shareholders can study more information regarding the report at http://www.mea.or.th/upload/download/file 5e7090eebdbff9c767c02bf78cd2f973.pdf

<sup>2</sup> Projects and plans that will be implemented at present and in the future, dated March 12, 2018 Shareholders can study more information regarding the report at http://www.pea.co.th/Portals/0/Document/cpd/60-4%20PEA%20Website.pdf

No.	Project name	Period of operation	Status as of Dec 30, 2017	Investment amount (THB Million)
3	Electrical system development project in major cities phase 1 (KorPorYor.) in 4 municipalities, including Chiang Mai Municipality, Nakhonratchasima City Municipality, Pattaya City, and Hatyai City Municipality.	Current project	Project has a 1.07 % progress. The Cabinet has approved the project on Feb 14, 2017.	11,670
4	Electrical system development project to support the establishment of Special Economic Zone phase 2 (KorPorPor.2) in Chiang Rai (Mae Sai District, Chiang Saen District, Chiang Khong District), Nakhon Phanom (Tha-Uthen District, Muang District), Kanchanaburi (Muang District), and Narathiwat (Sungai Kolok District, Tak Bai District, Waeng District, Yi-ngo District, Muang District).	Current project	Project is under operation. The Cabinet has approved the project on Aug 1, 2017.	4,000
5	Transmission and distribution line system development project phase 2 (KorPorJor.2), nationwide.	2019-2023	Project is under collection and summary of workload from Provincial Electricity Authority Area.	77,620
6	Electrical system development project in major cities phase 2 (KorPorYor.) in 4 municipalities, including Nakhon Sawan Municipality, Khonkaen Municipality, Hua-Hin Municipality, and Phuket City Municipality.	2019-2023	Project is under study of project feasibility.	7,900
7	Electrical system optimization plan. (Long-term plan for construction of underground cable system), nationwide.	2019-2023	Project is under presentation to PEA's Board of Directors for an approval.	5,000

Source: PEA's website (www.pea.co.th)
(Projects and plans that will be implemented at present and in the future, latest version dated 12 March 2018)