

Ratchaburi Electricity Generating Holding PCL

Management Discussion and Analysis

For the Three-month and Six-month Periods Ended 30 June, 2018



(Translation)

1. Significant events of the 2nd quarter of 2018

1.1 The Expansion of Electricity and Steam Generation Capacity of Nava Nakorn Electricity Generating Company Limited

Nava Nakorn Electricity Generating Company Limited (an indirect joint venture in which Ratchaburi Electricity Generating Company Limited, the Company's direct subsidiary, holds 40 percent stake), the operator of a small power producer in Nava Nakorn Industrial Promotion Zone, invested in an expansion for an addition of 60 megawatts of electricity generation capacity and 30 tons per hour of steam generation capacity with the project cost of approximately Baht 3,105 million (the debt proportion is approximately 75 percent and the equity proportion is approximately 25 percent). The capacity expansion project is planned to begin construction in August 2018 and is expected to be completed and commence commercial operation approximately in August 2020. After the operation, Nava Nakorn Electricity Generating Company Limited will have the total electricity generation capacity of approximately 185 megawatts and the net steam generation capacity of approximately 40 tons per hour.

1.2 The Signing of Project Development for Xe Kong 4A and 4B Hydroelectric Power Project in the Lao People's Democratic Republic

On May 29, 2018, the Company and the Government of the Lao People's Democratic Republic signed Power Development Agreement for Xe Kong 4A and 4B Hydroelectric Power Project with an installed capacity of approximately 340 megawatts. The project cost is approximately USD 835 million. The project's joint investors are the Company (60 percent), Lao World Engineering & Construction Company Limited (20 percent), and B.Grimm Power Public Company Limited (20 percent).

1.3 Securities Sale Deed to increase investment proportion in RATCH-Australia Corporation Limited

On April 20, 2018, RH International (Singapore) Corporation Ptd. Limited, a subsidiary, entered into a Securities Sale Deed with Broadspectrum Pty Limited to acquire 20 percent of the shares of RATCH-Australia Corporation Limited, a subsidiary, held by Broadspectrum Pty Limited and as part of the repayment of the outstanding long-term loans from Broadspectrum Pty Limited, including related rights under the terms of the agreement for an amount of AUD 53.50 million. Subsequently, on May 3, 2018, RH International (Singapore) Corporation Ptd. Limited acquired such shares from Broadspectrum Pty Limited and repaid such outstanding long-term loans to Broadspectrum Pty Limited. As a result, the proportion of investment in RATCH-Australia Corporation Limited of the Group changed from 80 percent to 100 percent.

1.4 The Collapse of the Saddle Dam of Xe-Pian Xe-Namnoy Hydroelectric Power Project

On July 23, 2018, the Saddle Sam D of Xe-Pian Xe-Namnoy Hydroelectric Power Project, located in Champasak district, Lao PDR, of Xepian Xe-Namnoy Power Company Limited (“PNPC”), a joint venture which the Company holds 25 percent stake, collapsed. The Saddle Dam fractured which caused the water to flow to the downstream area. PNPC evacuated the people residing around the affected area for safety. PNPC has insurance coverage for loss of and damage to properties and persons as a result of this event. Currently, PNPC together with its insurers is in the process of assessing the situation.

Xe-Pian Xe-Namnoy Power Company Limited, the developer of Xe-Pian Xe-Namnoy Hydroelectric Power Project with a capacity of 410 megawatts, is a joint venture company among SK Engineering & Construction Company Limited (26 percent), Korea Western Power Company Limited (25 percent), Lao Holding State Enterprise (24 percent) and the Company (25 percent). The project is located in Attapeu and Champasak Provinces in Lao PDR.

1.5 Changes in Accounting Policy

On January 1, 2018, the Company had applied accounting policy for derivative financial instruments and hedge accounting. The changes have been applied retrospectively. The significant principles are as follows:-

Derivative financial instruments are used to manage exposure to foreign exchange and interest rate risks, which are recognized initially at fair value. Subsequent to initial recognition, they are remeasured at fair value, gain or loss on remeasurement to fair value is recognized immediately in profit or loss. However, where derivatives qualify for hedge accounting, recognition of any resultant gain or loss depends on the nature of the item being hedged.

In case of Cash Flow hedges, only the effective portion of changes in the fair value of the derivative financial instrument is recognized in other comprehensive income. Any ineffective portion is recognized immediately in profit or loss.

The consolidated statement of financial position as at 31 December 2017, the consolidated statements of comprehensive income for the three-month and six-month periods, the consolidated of changes in equity, and cash flows for the six-month period ended 30 June 2017, comparative information, have been adjusted regarding the accounting policy changes. The impacts on the consolidated statement of financial position and the consolidated statements of comprehensive income are summary as follows:-

Unit : Million Baht

Statement of Financial Position	Dec 31, 2017	Jan 1, 2017
Assets		
Total Assets - Previously Reported	94,224.83	96,391.09
Derivative Assets Increase / (Decrease)	143.51	488.56
Investments in Associates and Joint Ventures Increase / (Decrease)	(573.93)	(785.71)
Total Assets - Restated	93,794.41	96,093.94
Liabilities		
Total Liabilities - Previously Reported	30,943.65	33,938.32
Derivative Liabilities Increase / (Decrease)	3,838.44	3,872.25
Deferred Tax Liabilities Increase / (Decrease)	2.82	0.70
Total Liabilities - Restated	34,784.91	37,811.27
Equity		
Total Equity - Previously Reported	63,281.18	62,452.77
Retained Earnings Increase / (Decrease)	(3,109.45)	(3,041.29)
Other Components of Equity Increase / (Decrease)	(472.33)	(488.75)
Non-Controlling Interests Increase / (Decrease)	(689.90)	(640.06)
Total Equity - Restated	59,009.50	58,282.67

Unit : Million Baht

Statement of comprehensive income	Y2017	
	Quarter 2	Quarter 1-2
Profit Attributable to Owner of the Parent - Previously Reported	2,200.99	3,559.43
Finance Costs (Increase) / Decrease	(114.61)	(297.48)
Share of Profit of Associates and Joint Ventures Increase / (Decrease)	(46.53)	(47.86)
Income Tax Expense (Increase) / Decrease	(1.13)	(1.54)
Non-controlling interests (Increase) / Decrease	9.30	39.94
Profit Attributable to Owner of the Parent - Restated	2,048.02	3,252.49

2. Operation performance according to consolidated financial statement

For the three-month period (April 1, 2018 – June 30, 2018)

Unit : Million Baht

	Quarter 2		Increase (Decrease)	%
	2018	2017 *		
Revenue from sale and rendering of services (excluding Fuel Cost)	1,588.22	1,775.42	(187.20)	(10.5)
Revenue from financial leases	853.62	1,021.65	(168.03)	(16.4)
Share of profit of associates and joint ventures	1,727.16	1,336.85	390.31	29.2
Other incomes	243.44	262.25	(18.81)	(7.2)
Total revenues	4,412.44	4,396.17	16.27	0.4
Cost of sale and rendering of services (excluding Fuel Cost)	1,163.53	1,333.23	(169.70)	(12.7)
Administrative expenses	372.11	389.70	(17.59)	(4.5)
Finance costs	403.07	484.24	(81.17)	(16.8)
Income tax expense	164.03	234.39	(70.36)	(30.0)
Total expenses	2,102.74	2,441.56	(338.82)	(13.9)
	2,309.70	1,954.61	355.09	18.2
Non-controlling Interests	(3.04)	45.39	(48.43)	(106.7)
Profit Attributable to Owner of the Company before exchange rate	2,306.66	2,000.00	306.66	15.3
Gain (loss) on exchange rate	(174.79)	48.02	(222.81)	(464.0)
Profit Attributable to Owner of the Company	2,131.87	2,048.02	83.85	4.1
Earnings per share (Baht)	1.47	1.41		
Fuel Cost	8,296.77	8,090.95		

* Restated

The operating result according to the consolidated financial statements of the Company and its subsidiaries for the 2nd quarter of 2018 showed the profit of Baht 2,131.87 million or Baht 1.47 per share, increasing by Baht 83.85 million, or 4.1 percent, compared to the profit of Baht 2,048.02 million or Baht 1.41 per share of the 2nd quarter of 2017, the significant transactions were as follows:-

2.1 Share of profits of associates and joint ventures

Share of profits in associates and joint ventures for the 2nd quarter of 2018 was Baht 1,727.16 million, increasing by Baht 390.31 million or 29.2 percent from Baht 1,336.85 million in the 2nd quarter of 2017. The main reason was the profit of Hongsa Power Company Limited ("HPC"), a joint venture, in a portion of 40 percent increased in the amount of Baht 320.61 million. The main reason was due to the gain on exchange rate in the 2nd quarter of 2018, in the amount of Baht 481.61 million; while loss on exchange rate in the 2nd quarter of 2017 was in the amount of Baht 38.23 million. However, without consideration of foreign exchange rate effect, the profit decreased in the amount of Baht 199.23 million, due to the fact that Hongsa Power Plants generated less electricity than the same period of the previous year.

2.2 Cost of sale and rendering of services (excluding fuel costs)

Cost of sale and rendering of services for the 2nd quarter of 2018 was Baht 1,163.53 million (excluding fuel costs of Baht 8,296.77 million), decreasing by Baht 169.70 million, or 12.7 percent from the cost of sale and rendering of services in the 2nd quarter of 2017 in the amount of Baht 1,333.23 million (excluding fuel costs of Baht 8,090.95 million). The main reason was from the decrease in cost of sale of Ratchaburi Electricity Generating Company Limited by Baht 144.22 million, as the shutdowns for planned maintenance during the year 2018 were less than those of the previous year.

2.3 Revenue from Finance Leases Contracts

Revenue from finance leases contracts for the 2nd quarter of 2018 was Baht 853.62 million, decreasing by Baht 168.03 million or 16.4 percent from Baht 1,021.65 million in the 2nd quarter of 2017. The change was due to the decreased lease receivable, calculated according to the Effective Interest Method.

2.4 Revenue from Sales and Rendering of Services (excluding fuel costs)

Revenue from sale and rendering of services for the 2nd quarter of 2018 was Baht 1,588.22 million (excluding fuel costs of Baht 8,296.77 million), decreasing by Baht 187.20 million or 10.5 percent from revenue from sale and rendering of services in the 2nd quarter of 2017 of Baht 1,775.42 million (excluding fuel costs of Baht 8,090.95 million). The main reason was the decrease in revenue from sale of Ratchaburi Electricity Generating Company Limited, a subsidiary, in the amount of Baht 161.06 million due to the decrease in Base Availability Credit in 2018 compared to that of 2017, as specified in the Power Purchase Agreement.

2.5 The effect of exchange rate of the Company and its subsidiaries

In the 2nd quarter of 2018, the Company recorded loss on exchange rate of Baht 174.79 million, due to the depreciation of AUD currency in relative to USD currency, resulting in the decrease of net asset value in AUD currency. In contrast, the Company recorded gain on exchange rate of Baht 48.02 million in the 2nd quarter of 2017 due to the appreciation of AUD currency in relative to USD currency, resulting in the increase of net asset value in AUD currency.

3. Operation performance according to consolidated financial statement

For the six-month period (January 1, 2018 – June 30, 2018)

Unit : Million Baht

	Quarter 1-2		Increase (Decrease)	%
	2018	2017 *		
Revenue from sale and rendering of services (excluding Fuel Cost)	3,142.43	3,499.32	(356.89)	(10.2)
Revenue from financial leases	1,738.85	2,077.87	(339.02)	(16.3)
Share of profit of associates and joint ventures	2,615.99	1,862.23	753.76	40.5
Other incomes	355.52	471.60	(116.08)	(24.6)
Total revenues	7,852.79	7,911.02	(58.23)	(0.7)
Cost of sale and rendering of services (excluding Fuel Cost)	2,358.38	2,671.13	(312.75)	(11.7)
Administrative expenses	777.74	825.43	(47.69)	(5.8)
Finance costs	564.84	1,067.48	(502.64)	(47.1)
Income tax expense	393.12	481.85	(88.73)	(18.4)
Total expenses	4,094.08	5,045.89	(951.81)	(18.9)
	3,758.71	2,865.13	893.58	31.2
Non-controlling Interests	18.64	106.34	(87.70)	(82.5)
Profit Attributable to Owner of the Company before exchange rate	3,777.35	2,971.47	805.88	27.1
Gain (loss) on exchange rate	(518.89)	281.02	(799.91)	(284.6)
Profit Attributable to Owner of the Company	3,258.46	3,252.49	5.97	0.2
Earnings per share (Baht)	2.25	2.24		
Fuel Cost	14,836.32	15,165.10		

* Restated

The operating result, for the first six-month period of the year 2018, without consideration of the effect of foreign exchange rate of the Company and its subsidiaries, showed the profit of Baht 3,777.35 million, compared to the profit of Baht 2,971.47 million of the first six-month period of the year 2017 (restated), increasing by Baht 805.88 million, or 27.1 percent. Considering the effect of foreign exchange rate, the operating result according to the consolidated financial statements of the Company and its subsidiaries for the first six-month period of the year 2018 showed the profit of Baht 3,258.46 million or Baht 2.25 per share, increasing by Baht 5.97 million or 0.2 percent, compared to the profit of Baht 3,252.49 million or Baht 2.24 per share of the first six-month period of the year 2017 (restated). The significant transactions were as follows:-

3.1 The effect of exchange rate of the Company and its subsidiaries

In the first six-month period of the year 2018, the Company recorded loss on exchange rate of Baht 518.89 million, due to the depreciation of AUD currency in relative to USD currency, resulting in the decrease of net asset value in AUD currency. In contrast, the Company recorded gain on exchange rate of Baht 281.02 million in the first six-month period of the year 2017 due to the appreciation of AUD currency in relative to USD currency, resulting in the increase of net asset value in AUD currency.

3.2 Share of profits of associates and joint ventures

Share of profits in associates and joint ventures for the first six-month period of the year 2018 was Baht 2,615.99 million, increasing by Baht 753.76 million or 40.5 percent from Baht 1,862.23 million in the first six-month period of the year 2017. The main reason was the profit of Hongsa Power Company Limited ("HPC"), a joint venture, in a portion of 40 percent, increased in the amount of Baht 758.80 million; the main reason was due to the gain on exchange rate in the first six-month period of the year 2018 in the amount of Baht 133.40 million. In contrast, the loss on exchange rate for the first six-month period of the year 2017 was in the amount of Baht 448.57 million. However, without consideration of foreign exchange rate effect, the profit increased in the amount of Baht 176.83 million, as Hongsa Power Plants generated more electricity than the same period of the previous year.

3.3 Cost of sale and rendering of services (excluding fuel costs)

Cost of sale and rendering of services for the first six-month period of the year 2018 was Baht 2,358.38 million (excluding fuel costs of Baht 14,836.32 million), decreasing by Baht 312.75 million, or 11.7 percent from the cost of sale and rendering of services in the first six-month period of the year 2017 in the amount of Baht 2,671.13 million (excluding fuel costs of Baht 15,165.10 million). The main reason was from the decrease in cost of sale of Ratchaburi Electricity Generating Company Limited by Baht 240.93 million, as the shutdowns for planned maintenance during the year 2018 were less than those of the previous year.

3.4 Revenue from Finance Leases Contracts

Revenue from finance leases contracts for the first six-month period of the year 2018 was Baht 1,738.85 million, decreasing by Baht 399.02 million or 16.3 percent from Baht 2,077.87 million in the first six-month period of the year 2017. The change was due to the decreased lease receivable, calculated according to the Effective Interest Method.

3.5 Revenue from Sales and Rendering of Services (excluding fuel costs)

Revenue from sale and rendering of services for the first six-month period of the year 2018 was Baht 3,142.43 million (excluding fuel costs of Baht 14,836.32 million), decreasing by Baht 356.89 million or 10.2 percent from revenue from sale and rendering of services in the first six-month period of the year 2017 of Baht 3,499.32 million (excluding fuel costs of Baht 15,165.10 million). The main reason was the decrease in revenue from sale of Ratchaburi Electricity Generating Company Limited, a subsidiary, in the amount of Baht 276.54 million due to the decrease in Base Availability Credit in 2018 compared to that of 2017, as specified in the Power Purchase Agreement.

3.6 Finance Costs

Finance costs for the first six-month period of the year 2018 was Baht 564.84 million, decreasing by Baht 502.64 million or 47.1 percent from Baht 1,067.48 million in the first six-month period of the year 2017. The main reason was the change in accounting policies decreased finance costs in the amount of Baht 502.46 million resulting from the change in fair value of derivatives.

4. Analysis of Statements of Financial Position

4.1 Analysis of Assets

As at June 30, 2018, the total assets were Baht 103,684.06 million, increasing by Baht 9,889.65 million or 10.5 percent from Baht 93,794.41 million as at December 31, 2017. The details were as follows:

(Million Baht)

	Jun 30, 2018	Dec 31, 2017 *	Increase (Decrease)	%
Current assets	28,933.71	23,542.13	5,391.58	22.9
Non-current assets	74,750.35	70,252.28	4,498.07	6.4
Total Assets	103,684.06	93,794.41	9,889.65	10.5

* Restated

4.1.1 Cash and cash equivalents increased in the amount of Baht 5,180.03 million. The details are described in no.5.

4.1.2 Assets of Mount Emerald Wind Farm Project and Collinsville Solar Power Project; projects under RATCH-Australia Corporation Limited, a subsidiary located in Australia, increased in the total amount of AUD 151.03 million.

4.1.3 Investment in associates and joint ventures increased in the amount of Baht 2,513.10 million, the main reason was from share of profits during the period in the total amount of Baht 2,615.99 million; as follows:-

<u>Company</u>	<u>Million Baht</u>
Hongsa Power Company Limited	1,903.79
Ratchaburi World Cogeneration Company Limited	134.61
Ratchaburi Power Company Limited	134.01
Nava Nakorn Electricity Generating Company Limited	109.09
Solarta Company Limited	98.95
Phu Fai Mining Company Limited	70.22
SouthEast Asia Energy Limited	68.86
Solar Power Company Limited (Korat 3 4 7)	46.27
Others	<u>50.19</u>
Total	<u>2,615.99</u>

4.1.4 Trade accounts receivable from related parties of Ratchaburi Electricity Generating Company Limited, a subsidiary, increased in the amount of Baht 1,709.46 million, as the electricity sales in May and June 2018 were higher than the electricity sales in November and December 2017.

4.1.5 Financial lease receivables from related party decreased in the amount of Baht 1,785.80 million.

4.2 Analysis of Liabilities

As at June 30, 2018, total liabilities were Baht 43,434.75 million, increasing by Baht 8,649.84 million or 24.9 percent from Baht 34,784.91 million as at December 31, 2017. The details were as follows:

(Million Baht)

	Jun 30, 2018	Dec 31, 2017 *	Increase (Decrease)	%
Current Liabilities	12,518.69	9,650.40	2,868.29	29.7
Non-Current Liabilities	30,916.06	25,134.51	5,781.55	23.0
Liabilities	43,434.75	34,784.91	8,649.84	24.9

* Restated

4.2.1 RATCH-Australia Corporation Limited, a subsidiary, received long-terms loan from financial institutions during the period in the net amount of AUD 348.00 million.

4.2.2 In March 2018, RH International (Singapore) Corporation Pte. Limited, a subsidiary, partially repurchased existing notes that will be due in 2019 in aggregate principal amount of USD 193 million, and completed its issuance and offering of USD 300 million notes with a tenor of 10 years (maturity date in 2028), and a fixed interest rate of 4.50 percent per annum.

4.2.3 Trade accounts payable of Ratchaburi Electricity Generating Company Limited, a subsidiary increased in the amount of Baht 1,010.19 million as Ratchaburi Power Plants generated more electricity in May and June 2018 than that of in November and December 2017, resulting in the increase in fuel consumption.

4.2.4 Derivative liabilities decreased in the amount of Baht 3,436.53 million. The main reason was RATCH-Australia Corporation Limited, a subsidiary, unwinded its interest rate swap contracts with financial institutions in Australia.

4.2.5 On May 3, 2018, RH International (Singapore) Corporation Pte. Limited acquired shares from Broadspectrum Pty Limited to increase investment proportion in RATCH-Australia Corporation Limited from 80 percent to 100 percent, and repaid long-term loans to Broadspectrum Pty Limited in the amount of AUD 39.75 million. The details are described in No. 1.3.

4.3 Analysis of Equity

As at June 30, 2018, equity was Baht 60,249.31 million, increasing by Baht 1,239.81 million or 2.1 percent from Baht 59,009.50 million as at December 31, 2017. The main reasons were as follows:

4.3.1 The profit of the first six-month period of the year 2018 in the amount of Baht 3,258.46 million

4.3.2 The dividend payment in accordance with shareholders' resolution in the Annual General Meeting of Shareholders in April 2018 decreased retained earnings in the amount of Baht 1,812.50 million.

5. Analysis of Cash Flows

Cash and cash equivalents of the Company and its subsidiaries as at June 30, 2018 were Baht 14,467.48 million, increasing by Baht 5,180.03 million from Baht 9,287.46 million on December 31, 2017. The details were summarized below:

	(Million Baht)
Net cash from operating activities	3,634.36
Net cash used in investing activities	(3,507.07)
Net cash from financing activities	5,062.26
Effect of exchange rate changes on balances held in foreign currencies	(9.52)
Net cash increase during the period	<u>5,180.03</u>

5.1 Net cash from operating activities increased cash flow in the amount of Baht 3,634.36 million. The reason was the operating result of the first six-month period of the year 2018 improved cash position by Baht 2,330.21 million, together with the change in operating assets and liabilities in the amount of Baht 1,304.15 million.

5.2 Net cash used in investing activities decreased cash flow in the amount of Baht 3,562.20 million. The main reason was RATCH-Australia Corporation Limited, a subsidiary, invested in Mount Emerald Wind Farm Project and Collinsville Solar Power Project in Australia in the total amount of AUD 151.03 million.

5.3 Net cash from financing activities increased cash flow in the amount of Baht 5,062.26 million. The main reasons were as follows:-

5.3.1 RH International (Singapore) Corporation Pte. Limited, a subsidiary, repurchased existing notes in aggregate principal amount of USD 193 million, and completed its issuance and offering of USD 300 million notes. The details are described in No. 4.2.2.

5.3.2 RATCH-Australia Corporation Limited, a subsidiary, secured long-term loan from financial institution in the net amount of AUD 348 million.

5.3.3 RATCH-Australia Corporation Limited, a subsidiary, unwinded its interest rate swap contracts with financial institutions in Australia and incurred the unwinding cost in the amount of Baht 3,058.60 million.

6. Significant Financial Ratios (Excluded the effect of foreign exchange rate)

Ratios		Quarter 2	
		2018	2017 **
1) Current Ratio	(Times)	2.31	1.96
2) Profit to Total Revenue (excluded fuel costs)	(%)	52.35	44.46
3) Return on Equity ***	(%)	10.81	9.50
4) Return on Assets ***	(%)	6.35	5.75
5) EBITDA *	(Million Baht)	3,181	3,075
6) EBITDA to Total Assets	(%)	3.16	3.19
7) Debt to Equity Ratio	(Times)	0.72	0.64
8) Debt Service Coverage Ratio	(Times)	9.21	1.52
9) Book Value per Share	(Baht)	41.55	40.52
* Not included the change in lease receivable	(Million Baht)	1,835.20	2,028.12

** Restated

*** Data for 12-month period