



The Pakistan Credit Rating Agency Limited

Rating Report

WAPDA | Sukuk | May-17

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Rating History

Dissemination Date	Long Term Rating	Short Term Rating	Outlook	Action	Rating Watch
28-Dec-2018	AAA	-	Stable	Maintain	-
28-Jun-2018	AAA	-	Stable	Maintain	-
20-Nov-2017	AAA	-	Stable	Initial	-
04-Apr-2017	AAA	-	Stable	Preliminary	-

Rating Rationale and Key Rating Drivers

The Water and Power Development Authority of Pakistan is in the process of the construction of DASU hydro power project (Dasu). Dasu, once completed would become second largest hydel project in Pakistan. Dasu is a run of the river project on Indus River located in Dasu Kohistan, Khyber Pakhtunkhwa about 345 KM from Islamabad. Stage 1 (2,160 MW) is expected to complete by 2023 with cost of USD ~4.247bln. For partial financing of the project, WAPDA is issuing debt instruments worth PKR 88bln (TFCs: 35.2bln, Sukuks: 52.8bln) in multiple tranches. For this purpose in May 2017 first tranche of debt instruments has been issued and WAPDA is planning to issue second tranche in 2019.

The ratings of PPTFCs (Tranche 1: PKR 10bln, Tranche 2: PKR 4.235bln) and Sukuks (Tranche 1: PKR 15bln, Tranche 2: PKR 6.353bln) reflects an unconditional and irrevocable guarantee by the Government of Pakistan (GoP). The guarantee covers the payment of total outstanding amount of the instruments and related profit component. GoP would pay the entire called amount immediately upon receiving a demand notice from the trustee. Additionally, WHE is maintaining a debt payment account (DPA) under the exclusive lien of the trustee. Within first fifteen days of each month, WHE deposits an amount equal to 1/6th of the upcoming instalment in the DPA. The rating apart from a debt payment and guarantee mechanism recognizes strong cashflows of WAPDA Hydro Electric - the core source of repayment. WAPDA also has strategic importance as the major hydroelectric power supplier to the country (18% in overall electricity generation in FY18).

WAPDA's revenues primarily emanate from WAPDA Hydro Electric (WHE) overlooked by the power wing. WHE receives tariff based revenue from CPPA-G against supply of electricity. WAPDA generated 26,775GWh electricity in FY18, generation has declined on the back of lower water availability, resulting in reduced profitability. WAPDA expects to generate additional ~7,000Gwh by completion of new hydel projects in next five years. For FY18 WAPDA's tariff petition inclusive of financial servicing of this facility has been approved by NEPRA after which cashflows will further improve.

WHE's financial profile draws comfort from strong cashflows. However, it remains dependent on repayment behavior of power purchaser. Continued compliance with the predefined covenants of Debt instruments, including maintenance of DPA would remain critical.

Disclosure

Name of Rated Entity	WAPDA Sukuk May-17
Type of Relationship	Solicited
Purpose of the Rating	Debt Instrument Rating
Applicable Criteria	Methodology Sukuk(Jun-18),Methodology Debt Instrument(Jun-18),Methodology Criteria Rating Modifier(Jun-18),Methodology IPP (Jun-18)
Related Research	Sector Study Power(Apr-18)
Rating Analysts	Faizan Arif faizan.sufi@pacra.com +92-42-35869504

WAPDA - PROFILE	
Incorporated	1958 – Through a statutory act
Major business lines	Power Generation Water Development
Legal status	PSE
Head office	Lahore
Chairman	LT. General (Retd.) Muzzamil Hussain
Installed Capacity	8,418 MW

INDUSTRY SNAPSHOT
<ul style="list-style-type: none"> ▪ Pakistan total power generation is increasing on the back of new power projects under CPEC ▪ Pakistan's energy mix is shifting towards Gas/RLNG and coal from Furnace Oil and other expensive sources ▪ Pakistan plans to add over 10,000MW hydel electricity in next decade. ▪ Going forward, cheap renewable electricity will be a challenge to viability of thermal power plants.

ISSUER PROFILE

- WAPDA is a statutory body fully owned by Government of Pakistan and was established through WAPDA Act 1958.
- WAPDA has the primary responsibility to develop Hydel Power Projects
- The entity has a total generation capacity of 8,418MW. It is the largest hydel energy producer in the country.
- WAPDA is in the process of constructing different projects which are to add ~8,192MW by 2024.

ABOUT THE SUKUK

- WAPDA has issued privately placed term finance certificates (TFC) of PKR 10bln and Sukuks of PKR 15bln to partially finance Dasu Hydropower Project (Dasu). Profit on the debt instruments will be payable semi-annually at 6MK + 1.45%. Till now WAPDA has made three profit payments amounting PKR 2,904mln both on TFC and Sukuk.
- The profit paid to the Sukuk certificates holders as of Nov-18 is PKR 602mln. The principal payment of the Sukuk certificate will start from Nov-22.
- WAPDA is planning to issue second tranche of TFCs and Sukuks amounting PKR 4.23bln and 6.35bln in 2019.
- Total project cost of Dasu is USD ~4.247bln which is to be financed from local and external financing. ECC has given approval of upto PKR 144bln as local financing for the project.
- WAPDA maintains Debt Payment Account (DPA) which is held under exclusive lien in favor of trustee. WAPDA replenishes the DPA with 1/6th of the upcoming installment.
- Shortfall occurring for three consecutive months will constitute event of default. Government guarantee will be callable by trustee after serving cure period of 45 days.
- The underlying agreements of the instruments include GoP guarantee, Trust Deed, and Investor Agreement. Further, to follow Islamic structure of Sukuks, Musharaka Agreement, Purchase Undertaking Agreement and Payment Agreement are signed between the issuer and Sukuk holder.

GOVERNANCE & MANAGEMENT

- WAPDA is a statutory body under the administrative control of the Federal Government.
- The Authority comprises Chairman, member of each wing (Water, Power, and Finance), and secretary WAPDA.
- Lt. General (Retd.) Muzzamil Hussain is the Chairman WAPDA since 2016.
- Mr. Hussain - a retired army professional and a diplomat brings experience of over 3 decades with him to the management of the WAPDA.
- The Ministry of Water Resources provides oversight to WAPDA.
- WAPDA has a highly experienced management team with most of them having long term association.

BUSINESS RISK

- WAPDA has total generation capacity of 8,418 MW while many projects are in pipeline including Dasu Hydro Power Project and Tarbela 5th Extensions. Neelum Jehlum is inaugurated in April-18 and has achieved 969MW capacity in August-18.
- WAPDA generation declined by 13% on the back of lower water availability (FY18: 26,775Gwh; FY17: 30,797Gwh).
- WAPDA's revenue decreased (FY18: PKR 59,317mln; FY17: PKR 65,235mln) on account of lower power generation.
- Lower power generation, reduced topline coupled with increased finance cost has resulted in lower profitability of PKR 9,184mln during FY18 (FY17: PKR 17,015mln).

FINANCIAL RISK

- WAPDA as part of its arrangements with provinces pays Net Hydel Profit @ 1.15Kwh to provinces. This amount is recoverable from CPPA-G via its tariff. CPPA-G approved WAPDA's tariff including Net Hydel Profit payable to provinces was approved in FY17. Consequently, WHE's receivables increased significantly (FY18: PKR 101,324mln; FY17: PKR 53,472mln). Thus, receivable days have also increased to 624 days at end-Jun18 (Jun17: 299 days; Jun16: 130 days).
- WAPDA's free cash flow from operation declined during FY18 (FY18: PKR 48,006mln; FY17: PKR 57,857mln) on the back of reduced profitability. Consequently, WAPDA's debt coverages have declined as well (FY18: 0.9x, FY17: 2.1x).
- During FY18 WAPDA has a highly leverage capital structure (64%) (FY17: 54%), on account of increased long term debt (FY18: PKR 343,141mln; FY17: PKR 229,164mln) and increase in debt service liabilities.

Financials (Summary)
The Pakistan Credit Rating Agency Limited
WAPDA Hydroelectric
BALANCE SHEET

	30-Jun-18	30-Jun-17	30-Jun-16	<i>PKR mln</i> 30-Jun-15
	<i>Annual</i>	<i>Annual</i>	<i>Annual</i>	<i>Annual</i>
<i>Non-Current Assets</i>	1,206,057	1,145,131	1,091,683	1,053,101
<i>Investments</i>	37,894	2,000	-	19
<i>Cash and Bank Balances</i>	62,699	58,086	46,940	55,777
<i>Inventories</i>	5,184	4,694	5,583	3,993
<i>Trade Receivables</i>	101,324	53,472	19,477	34,879
<i>Other Current Assets</i>	5,990	8,472	27,670	2,152
Total Assets	1,419,148	1,271,855	1,191,353	1,149,920
<i>Current Liabilities</i>	40,495	35,496	16,789	16,821
<i>Long Term Borrowings (Including Current Maturities)</i>	369,948	229,745	185,511	137,715
<i>Other Non Current Liabilities</i>	30,863	38,103	37,557	32,528
<i>Shareholders' Equity</i>	977,840	968,512	951,497	962,856
Total Liabilities & Equity	1,419,147	1,271,855	1,191,353	1,149,920

PROFIT & LOSS ACCOUNT

	30-Jun-18	30-Jun-17	30-Jun-16	30-Jun-15
<i>Turnover</i>	59,317	65,235	54,776	61,002
<i>Gross Profit</i>	34,142	36,250	25,399	40,079
<i>Other Income</i>	-	2,654	1,933	3,441
<i>Financial Charges</i>	(26,102)	(21,349)	(18,667)	(8,354)
Net Income	9,184	17,015	7,654	33,736

CASHFLOW STATEMENT

	30-Jun-18	30-Jun-17	30-Jun-16	30-Jun-15
<i>EBITDA</i>	49,948	60,450	49,808	56,157
<i>Free Cashflow from Operations (FCFO)</i>	48,006	57,857	47,790	54,746
<i>Net Cash provided by operating activities</i>	(31,438)	39,255	38,708	27,616
<i>Net Cash available from investing activities</i>	(104,676)	(71,393)	(53,943)	(25,785)
<i>Cashflow from financing activities</i>	140,728	43,284	6,398	26,796

RATIO ANALYSIS

	30-Jun-18	30-Jun-17	30-Jun-16	30-Jun-15
<i>Gross Margin</i>	57.6%	55.6%	46.4%	65.7%
<i>Pre-Tax Profit Margin</i>	15.5%	26.1%	14.0%	55.3%
<i>Net Profit Margin</i>	15.5%	26.1%	14.0%	55.3%
<i>Net Cash Cycle (Days)</i>	586.6	239.8	94.0	176.4
<i>Interest Coverage (X)</i>	1.8	2.7	2.6	6.6
<i>Debt Service Coverage</i>	0.9	2.1	1.2	2.1
<i>Debt Payback (X)</i>	7.7	4.0	3.9	2.5
<i>Capital Structure</i>	63.5%	54.2%	52.6%	45.0%

DEBT INSTRUMENT RATING SCALE & DEFINITIONS

The instrument rating reflects forward-looking opinion on credit worthiness of underlying debt instrument; more specifically it covers relative ability to honor financial obligations. The primary factor being captured on the rating scale is relative likelihood of default.

LONG TERM RATINGS		SHORT TERM RATINGS	
AAA	Highest credit quality. Lowest expectation of credit risk. Indicate exceptionally strong capacity for timely payment of financial commitments.	<p>A1+: The highest capacity for timely repayment.</p> <p>A1: A strong capacity for timely repayment.</p> <p>A2: A satisfactory capacity for timely repayment. This may be susceptible to adverse changes in business, economic, or financial conditions.</p> <p>A3: An adequate capacity for timely repayment. Such capacity is susceptible to adverse changes in business, economic, or financial conditions.</p> <p>B: The capacity for timely repayment is more susceptible to adverse changes in business, economic, or financial conditions.</p> <p>C: An inadequate capacity to ensure timely repayment.</p>	
AA+ AA AA-	Very high credit quality. Very low expectation of credit risk. Indicate very strong capacity for timely payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.		
A+ A A-	High credit quality. Low expectation of credit risk. The capacity for timely payment of financial commitments is considered strong. This capacity may, nevertheless, be vulnerable to changes in circumstances or in economic conditions.		
BBB+ BBB BBB-	Good credit quality. Currently a low expectation of credit risk. The capacity for timely payment of financial commitments is considered adequate, but adverse changes in circumstances and in economic conditions are more likely to impair this capacity.		
BB+ BB BB-	Moderate risk. Possibility of credit risk developing. There is a possibility of credit risk developing, particularly as a result of adverse economic or business changes over time; however, business or financial alternatives may be available to allow financial commitments to be met.		
B+ B B-	High credit risk. A limited margin of safety remains against credit risk. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favorable business and economic environment.		
CCC CC C	Very high credit risk. Substantial credit risk “CCC” Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments. “CC” Rating indicates that default of some kind appears probable. “C” Ratings signal imminent default.		
D	Obligations are currently in default.		

<p>Outlook (Stable, Positive, Negative, Developing) Indicates the potential and direction of a rating over the intermediate term in response to trends in economic and/or fundamental business/financial conditions. It is not necessarily a precursor to a rating change. ‘Stable’ outlook means a rating is not likely to change. ‘Positive’ means it may be raised. ‘Negative’ means it may be lowered. Where the trends have conflicting elements, the outlook may be described as ‘Developing’.</p>	<p>Rating Watch Alerts to the possibility of a rating change subsequent to, or in anticipation of, a) some material identifiable event and/or b) deviation from expected trend. But it does not mean that a rating change is inevitable. A watch should be resolved within foreseeable future, but may continue if underlying circumstances are not settled. Rating Watch may accompany Outlook of the respective opinion.</p>	<p>Suspension It is not possible to update an opinion due to lack of requisite information. Opinion should be resumed in foreseeable future. However, if this does not happen within six (6) months, the rating should be considered withdrawn.</p>	<p>Withdrawn A rating is withdrawn on a) termination of rating mandate, b) the debt instrument is redeemed, c) the rating remains suspended for six months, d) the entity/issuer defaults, or/and e) PACRA finds it impractical to surveil the opinion due to lack of requisite information</p>
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Rating Team Statements

(1) Rating is just an opinion about the creditworthiness of the entity and does not constitute recommendation to buy, hold or sell any security of the entity rated or to buy, hold or sell the security rated, as the case may be | Chapter III; 14-3-(x)

2) Conflict of Interest

i. The Rating Team or any of their family members have no interest in this rating | Chapter III; 12-2-(j)

ii. PACRA, the analysts involved in the rating process and members of its rating committee, and their family members, do not have any conflict of interest relating to the rating done by them | Chapter III; 12-2-(e) & (k)

iii. The analyst is not a substantial shareholder of the customer being rated by PACRA [Annexure F; d-(ii)] Explanation: for the purpose of above clause, the term "family members" shall include only those family members who are dependent on the analyst and members of the rating committee

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(4) PACRA does not disclose or discuss with outside parties or make improper use of the non-public information which has come to its knowledge during business relationship with the customer | Chapter III; 10-7-(d)

(5) PACRA does not make proposals or recommendations regarding the activities of rated entities that could impact a credit rating of entity subject to rating | Chapter III; 10-7-(k)

Conduct of Business

(6) PACRA fulfills its obligations in a fair, efficient, transparent and ethical manner and renders high standards of services in performing its functions and obligations; | Chapter III; 11-A-(a)

(7) PACRA uses due care in preparation of this Rating Report. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. PACRA does not, in every instance, independently verifies or validates information received in the rating process or in preparing this Rating Report.

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(9) PACRA ensures before commencement of the rating process that an analyst or employee has not had a recent employment or other significant business or personal relationship with the rated entity that may cause or may be perceived as causing a conflict of interest; | Chapter III; 11-A-(r)

(10) PACRA maintains principal of integrity in seeking rating business | Chapter III; 11-A-(u)

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(12) PACRA receives compensation from the entity being rated or any third party for the rating services it offers. The receipt of this compensation has no influence on PACRA's opinions or other analytical processes. In all instances, PACRA is committed to preserving the objectivity, integrity and independence of its ratings. Our relationship is governed by two distinct mandates i) rating mandate - signed with the entity being rated or issuer of the debt instrument, and fee mandate - signed with the payer, which can be different from the entity

(13) PACRA does not provide consultancy/advisory services or other services to any of its customers or to any of its customers' associated companies and associated undertakings that is being rated or has been rated by it during the preceding three years unless it has adequate mechanism in place ensuring that provision of such services does not lead to a conflict of interest situation with its rating activities; | Chapter III; 12-2-(d)

(14) PACRA discloses that no shareholder directly or indirectly holding 10% or more of the share capital of PACRA also holds directly or indirectly 10% or more of the share capital of the entity which is subject to rating or the entity which issued the instrument subject to rating by PACRA; | Reference Chapter III; 12-2-(f)

(15) PACRA ensures that the rating assigned to an entity or instrument is not be affected by the existence of a business relationship between PACRA and the entity or any other party, or the non-existence of such a relationship | Chapter III; 12-2-(i)

(16) PACRA ensures that the analysts or any of their family members shall not buy or sell or engage in any transaction in any security which falls in the analyst's area of primary analytical responsibility. This clause shall, however, not be applicable on investment in securities through collective investment schemes. | Chapter III; 12-2-(l)

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Monitoring and review

(18) PACRA monitors all the outstanding ratings continuously and any potential change therein due to any event associated with the issuer, the security arrangement, the industry etc., is disseminated to the market, immediately and in effective manner, after appropriate consultation with the entity/issuer; | Chapter III | 18-(a)

(19) PACRA reviews all the outstanding ratings on semi-annual basis or as and when required by any creditor or upon the occurrence of such an event which requires to do so; | Chapter III | 18-(b)

(20) PACRA initiates immediate review of the outstanding rating upon becoming aware of any information that may reasonably be expected to result in downgrading of the rating; | Chapter III | 18-(c)

(21) PACRA engages with the issuer and the debt securities trustee, to remain updated on all information pertaining to the rating of the entity/instrument; | Chapter III | 18-(d)

Probability of Default

(22) PACRA's Rating Scale reflects the expectation of credit risk. The highest rating has the lowest relative likelihood of default (i.e, probability). PACRA's transition studies capture the historical performance behavior of a specific rating notch. Transition behavior of the assigned rating can be obtained from PACRA's Transition Study available at our website. (www.pacra.com). However, actual transition of rating may not follow the pattern observed in the past | Chapter III | 14-(F-VII)

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Nature of Instrument	Size of Issue (PKR)	Tenor	Security	Quantum of Security	Nature of Assets	Trustee	Book Value of Assets (PKR mln)
Sukuk May17	15,000 mln	15 years	1. Un-conditional & irrevocable first demand guarantee covering principal and profit from the Ministry of Finance, GoP. 2. Exclusive lien over debt payment account for the benefit of investors.	Debt Payment Account (DPA) with the HBL (Facility Agent). During each month (not later than the fifteenth (15th) day of each month), WAPDA shall deposit amount equivalent to	WAPDA's own cash flows.	Pak Brunei Investment Company	100,000 100,000 0

The Pakistan Water and Development Authority | Sukuk | May-17

Name of Issuer	The Pakistan Water and Development Authority (WAPDA)
Issue size	PKR 15,000mln
Issue Date	May-17
Tenor	Upto 15 years (inclusive of five year grace period) from the date of first drawdown
Maturity	Nov-32
Profit Rate	6 MK + 1.45%
Principal Repayment	Equal consecutive installments payable semiannually in arrears. First such payment shall fall due at the end of 66th month
Security	1. Un-conditional & irrevocable first demand guarantee covering principal and profit from the Ministry of Finance, GoP. 2. Exclusive lien over debt payment account for the benefit of investors.

Payment Period	Date	Principal as at Start of Period	Principal Repaid	Profit Payments		Cumulative amount to be paid	Balance as at end of
				Interest			
0	May-17	15,000,000	-				15,000,000
1	Nov-17	15,000,000	-	574,685	574,685	574,685	15,000,000
2	May-18	15,000,000	-	566,059	566,059	1,140,744	15,000,000
3	Nov-18	15,000,000	-	601,907	601,907	1,742,651	15,000,000
4	May-19	15,000,000	-	567,750	567,750	2,310,401	15,000,000
5	Nov-19	15,000,000	-	567,750	567,750	2,878,151	15,000,000
6	May-20	15,000,000	-	567,750	567,750	3,445,901	15,000,000
7	Nov-20	15,000,000	-	567,750	567,750	4,013,651	15,000,000
8	May-21	15,000,000	-	567,750	567,750	4,581,401	15,000,000
9	Nov-21	15,000,000	-	567,750	567,750	5,149,151	15,000,000
10	May-22	15,000,000	-	567,750	567,750	5,716,901	15,000,000
11	Nov-22	15,000,000	-	567,750	567,750	6,284,651	15,000,000
12	May-23	15,000,000	750,000	567,750	567,750	6,852,401	14,250,000
13	Nov-23	14,250,000	750,000	539,363	539,363	7,391,764	13,500,000
14	May-24	13,500,000	750,000	510,975	510,975	7,902,739	12,750,000
15	Nov-24	12,750,000	750,000	482,588	482,588	8,385,327	12,000,000
16	May-25	12,000,000	750,000	454,200	454,200	8,839,527	11,250,000
17	Nov-25	11,250,000	750,000	425,813	425,813	9,265,340	10,500,000
18	May-26	10,500,000	750,000	397,425	397,425	9,662,765	9,750,000
19	Nov-26	9,750,000	750,000	369,038	369,038	10,031,803	9,000,000
20	May-27	9,000,000	750,000	340,650	340,650	10,372,453	8,250,000
21	Nov-27	8,250,000	750,000	312,263	312,263	10,684,716	7,500,000
22	May-28	7,500,000	750,000	283,875	283,875	10,968,591	6,750,000
23	Nov-28	6,750,000	750,000	255,488	255,488	11,224,079	6,000,000
24	May-29	6,000,000	750,000	227,100	227,100	11,451,179	5,250,000
25	Nov-29	5,250,000	750,000	198,713	198,713	11,649,892	4,500,000
26	May-30	4,500,000	750,000	170,325	170,325	11,820,217	3,750,000
27	Nov-30	3,750,000	750,000	141,938	141,938	11,962,255	3,000,000
28	May-31	3,000,000	750,000	113,550	113,550	12,075,805	2,250,000
29	Nov-31	2,250,000	750,000	85,163	85,163	12,160,968	1,500,000
30	May-32	1,500,000	750,000	56,775	56,775	12,217,743	750,000
31	Nov-32	750,000	750,000	28,388	28,388	12,246,131	-
		Total	15,000,000	12,246,031	12,246,031	27,246,031	-