



The Pakistan Credit Rating Agency Limited

Rating Report

WAPDA Dasu Sukuk-B

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Rating History

Dissemination Date	Long Term Rating	Short Term Rating	Outlook	Action	Rating Watch
23-Nov-2022	AAA	-	Stable	Maintain	-
23-Nov-2021	AAA	-	Stable	Initial	-
29-Jan-2021	AAA	-	Stable	Preliminary	Yes

Rating Rationale and Key Rating Drivers

The Water and Power Development Authority of Pakistan ("WAPDA") has issued the second tranche of sukuk on 29-Jul-21. WAPDA utilized this amount to partially finance the construction of the Dasu hydropower project ("The project" or "Dasu"). Dasu, once completed would become the second-largest hydel project in Pakistan. Dasu is a run of river project on the Indus river located in Dasu Kohistan, Khyber Pakhtunkhwa about 350 KM from Islamabad. The project started in 2017 and is expected to be completed in May'27. The project is expected to be completed in two stages, the installed capacity would be 4,320MW (stage-I 2,160MW) and the annual energy which would be produced is 21,485 GWh (Stage-I 12,220 GWh). Stage -I project includes the construction of a hydraulic structure on the Indus River and underground power generation facilities, out of the total land required (5005 acres) for the project 4630 acres have been acquired. The Project would be financed through a mix of WAPDA internally generated cash (15%) and borrowing (85%) i) Long-term (local & foreign) ii) Bonds Issuance (Islamic & Conventional).

The assigned rating of sukuk incorporates an unconditional and irrevocable guarantee by the Government of Pakistan (GoP). The guarantee is covering the payment of the total outstanding amount of the sukuk and the related profit component. GoP would pay the entire called amount immediately upon receiving a demand notice from the issue agent. Additionally, WAPDA has maintained a debt payment account (DPA) under the exclusive lien of the issue agent. Within the first fifteen days of each month commencing from the Musharaka Contribution Date (as defined in the Musharaka Agreement dated March 29, 2017), WAPDA is depositing an amount equal to 1/6th of the upcoming installment in the DPA. The rating apart from a debt payment and guarantee mechanism recognizes WAPDA's strategic importance as the major hydroelectric power supplier to the country. WAPDA generated 32,073GWh electricity in FY21. WAPDA expects to generate an additional ~8,070MW by the completion of new hydel projects in the next four years.

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

Disclosure

Name of Rated Entity	WAPDA Dasu Sukuk-B
Type of Relationship	Solicited
Purpose of the Rating	Debt Instrument Rating
Applicable Criteria	Methodology Corporate Rating(Jun-22),Methodology Debt Instrument Rating(Jun-22),Methodology Rating Modifiers(Jun-22)
Related Research	Sector Study Power(Jan-22)
Rating Analysts	Madiha Sohail madiha.sohail@pacra.com +92-42-35869504

Issuer Profile

Profile WAPDA is a statutory body fully owned by the Government of Pakistan, established through WAPDA Act 1958. WAPDA was unbundled in the year 2007 whereby the functions of its Power wing were redefined as Hydel Power Generation and Operation & Maintenance (O&M) of powerhouses. Following unbundling of its power wing, WAPDA's mandate is now the development of water and hydropower resources in an efficient manner. Thus it has the primary responsibility to develop Hydel Power Projects. The entity generates a total of 32,295Gwh. It is the largest hydel energy producer in the country. WAPDA is in the process of constructing different projects which are to add ~8,502MW by 2024.

Ownership WAPDA is an autonomous and statutory body under the administrative control of the Federal Government, which maintains tight control of the authority. The Authority's budget and accounts require government approval, as do changes in its powers, duties and projects. The government funds the majority of WAPDA's projects via grants, re-lending and loans. It also provides a favorable tariff scheme, sufficiently meeting WAPDA's operating costs and provides a reasonable return on investment.

Governance The Authority comprises the Chairman, a member of each wing (Water, Power, and Finance), and secretary WAPDA. Lt. General (Retd.) Sajjad Ghani is the Chairman of WAPDA since 2022 a retired army professional and a diplomat brings the experience of over 3 decades with him to the management of the WAPDA. The Ministry of Water Resources provides oversight to WAPDA.

Management WAPDA has a highly experienced management team with most of them having long term associations

Business Risk 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. It plans to add over 10,000MW hydel electricity in the next decade. Going forward, cheap renewable electricity will be a challenge to the viability of thermal power plants. WAPDA has a total generation capacity of 32,295Gwh, while many projects are in pipeline including Tarbela 5th Extension, Diamer Bhasha Dam, Mohmand Dam and Dasu Hydro Power Project. The aforementioned projects with a maximum capacity of 8,890 MW are expected to complete in the year 2026, 2029, 2025 and 2027 respectively. There is a slight change in WAPDA's generation in FY21: 32,073GWh as compare to FY20: 32,295GWh. WAPDA's revenue increase by 6% in FY21: PKR 66,769 (FY20: PKR 62,763mln).

Financial Risk WAPDA as part of its arrangements with provinces pays Net Hydel Profit @ 1.155Kwh to provinces. This amount is recoverable from CPPA-G via its tariff. NEPRA approved WAPDA's tariff including Net Hydel Profit payable to provinces was approved in FY17. Consequently, WHE's receivables increased significantly in FY21 to PKR 243mln (FY20: PKR 220mln). Thus, receivable days have also increased to 1,264 days as at June-21 (as at June-20: 1,197days). WAPDA's free cash flow from operation (FCFO) during FY21 is PKR 56mln (FY20: PKR 47mln). Consequently, WAPDA's debt service ratio in FY21 is 13x. (FY20: 17x). During FY21, WAPDA's leverage capital structure stood at 68% (FY20: ~62%), on account of the increase in long term debt (FY21: PKR 172mln, FY20 PKR 104mln) and also an increase in short-term debt service liabilities.

Instrument Rating Considerations

About The Instrument WAPDA has issued a rated, secured, privately placed, Islamic certificate WAPDA Dasu Sukuk-B ("Sukuk") of PKR 6,352.94mln on 29-Jul-21 to partially finance stage-1 of Dasu Hydropower Project, a 2,160MW run-of-river project. Stage -I project includes the construction of a hydraulic structure on the Indus River and underground power generation facilities. The Sukuk has a tenor of 11 years and carries a profit rate of 6MK + 1.45% p.a paid semi-annually in arrears, calculated on a 365 days basis on the outstanding principal amount. Sukuk will redeem after twenty equal semi-annual installments amounting to PKR 317.65mln which commenced from 8-Nov-22. The Sukuk is fully secured by an unconditional & irrevocable first demand guarantee covering principal and profit from the Ministry of Finance, GoP and Exclusive lien over debt payment account for the benefit of investors. There is also a call option attached to the Sukuk, exercisable after the expiry of grace period subject to a 30 days prior written irrevocable notice to the facility agent.

Relative Seniority/Subordination Of Instrument The claims of the Sukuk holders will rank superior to the claims of other stakeholders.

Credit Enhancement The Sukuk facility is covered through the GoP Guaranteed Backed Facilities i.e. Unconditional and irrevocable First Demand Guarantee covering principal and profit amount and any other amounts becoming due for payment in respect of the facilities from the Ministry of Finance, Government of Pakistan without SLR eligibility. WAPDA will also maintain a Debt Payment Account with the Investment Agent which will be held under exclusive lien in favour of the Security Agent. During each month WAPDA shall deposit equivalent to the 1/6th of the instalment amount into the Debt Payment Account (not later than the 15th day of each month of the instalment period) so that the aggregate amount available in the Debt Payment Account on the upcoming instalment date is equal to the relevant instalment amount.



Pakistan Water and Development Authority (Hydroelectric - N Power)	Jun-21 12M	Jun-20 12M	Jun-19 12M	Jun-18 12M
A BALANCE SHEET				
1 Non-Current Assets	605	528	440	401
2 Investments	-	-	-	-
3 Related Party Exposure	-	-	3	31
4 Current Assets	427	320	291	234
<i>a Inventories</i>	-	-	-	-
<i>b Trade Receivables</i>	243	220	192	137
5 Total Assets	1,032	848	735	667
6 Current Liabilities	107	95	70	29
<i>a Trade Payables</i>	16	5	4	6
7 Borrowings	470	358	362	370
8 Related Party Exposure	3	2	2	2
9 Non-Current Liabilities	218	170	89	56
10 Net Assets	234	223	211	210
11 Shareholders' Equity	234	223	211	210
B INCOME STATEMENT				
1 Sales	67	63	66	59
<i>a Cost of Good Sold</i>	(26)	(26)	(24)	(19)
2 Gross Profit	41	36	42	40
<i>a Operating Expenses</i>	(2)	(2)	(1)	(3)
3 Operating Profit	39	35	41	37
<i>a Non Operating Income or (Expense)</i>	8	13	3	12
4 Profit or (Loss) before Interest and Tax	47	48	44	49
<i>a Total Finance Cost</i>	(30)	(32)	(38)	(31)
<i>b Taxation</i>	-	-	-	-
6 Net Income Or (Loss)	17	15	6	18
C CASH FLOW STATEMENT				
<i>a Free Cash Flows from Operations (FCFO)</i>	56	47	52	44
<i>b Net Cash from Operating Activities before Working Capital Changes</i>	56	47	52	44
<i>c Changes in Working Capital</i>	(10)	(10)	(32)	(98)
1 Net Cash provided by Operating Activities	45	37	21	(54)
2 Net Cash (Used in) or Available From Investing Activities	(52)	(14)	12	(47)
3 Net Cash (Used in) or Available From Financing Activities	90	(37)	(44)	111
4 Net Cash generated or (Used) during the period	83	(14)	(11)	9
D RATIO ANALYSIS				
1 Performance				
<i>a Sales Growth (for the period)</i>	6.4%	-5.1%	11.5%	--
<i>b Gross Profit Margin</i>	61.4%	58.0%	64.2%	67.3%
<i>c Net Profit Margin</i>	25.2%	24.3%	8.9%	30.2%
<i>d Cash Conversion Efficiency (FCFO adjusted for Working Capital/Sales)</i>	67.8%	58.9%	31.4%	-91.2%
<i>e Return on Equity [Net Profit Margin * Asset Turnover * (Total Assets/Sh</i>	7.4%	7.0%	2.8%	8.5%
2 Working Capital Management				
<i>a Gross Working Capital (Average Days)</i>	1264	1197	910	846
<i>b Net Working Capital (Average Days)</i>	1209	1172	882	810
<i>c Current Ratio (Current Assets / Current Liabilities)</i>	4.0	3.4	4.2	8.2
3 Coverages				
<i>a EBITDA / Finance Cost</i>	2.0	1.8	1.6	1.6
<i>b FCFO / Finance Cost+CMLTB+Excess STB</i>	0.3	0.2	0.2	0.2
<i>c Debt Payback (Total Borrowings+Excess STB) / (FCFO-Finance Cost)</i>	13.3	17.0	19.5	24.1
4 Capital Structure				
<i>a Total Borrowings / (Total Borrowings+Shareholders' Equity)</i>	66.7%	61.7%	63.2%	63.7%
<i>b Interest or Markup Payable (Days)</i>	22.7	10.4	11.8	37.6
<i>c Entity Average Borrowing Rate</i>	6.8%	8.4%	9.9%	8.1%

Credit Rating

Credit rating reflects forward-looking opinion on credit worthiness of underlying entity or 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.

Scale	Long-term Rating Definition
AAA	Highest credit quality. Lowest expectation of credit risk. Indicate exceptionally strong capacity for timely payment of financial commitments
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.
AA-	
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.
A-	
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.
BBB-	
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.
BB	
BB-	
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.
B-	
CCC	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.
CC	
C	
D	Obligations are currently in default.

Scale	Short-term Rating Definition
A1+	The highest capacity for timely repayment.
A1	A strong capacity for timely repayment.
A2	A satisfactory capacity for timely repayment. This may be susceptible to adverse changes in business, economic, or financial conditions.
A3	An adequate capacity for timely repayment. Such capacity is susceptible to adverse changes in business, economic, or financial
A4	The capacity for timely repayment is more susceptible to adverse changes in business, economic, or financial conditions. Liquidity may not be sufficient.



**The correlation shown is indicative and, in certain cases, may not hold.*

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’.

Rating Watch Alerts to the possibility of a rating change subsequent to, or, in anticipation of some material identifiable event with indeterminable rating implications. 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 rating outlook of the respective opinion.

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.

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.

Harmonization A change in rating due to revision in applicable methodology or underlying scale.

Surveillance. Surveillance on a publicly disseminated rating opinion is carried out on an ongoing basis till it is formally suspended or withdrawn. A comprehensive surveillance of rating opinion is carried out at least once every six months. However, a rating opinion may be reviewed in the intervening period if it is necessitated by any material happening.

Note. This scale is applicable to the following methodology(s):

- a) Broker Entity Rating
- b) Corporate Rating
- c) Debt Instrument Rating
- d) Financial Institution Rating
- e) Holding Company Rating
- f) Independent Power Producer Rating
- g) Microfinance Institution Rating
- h) Non-Banking Finance Companies Rating

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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

Restrictions

(3) No director, officer or employee of PACRA communicates the information, acquired by him for use for rating purposes, to any other person except where required under law to do so. | Chapter III; 10-(5)

(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 | Clause 11-(A)(p).

(8) PACRA prohibits its employees and analysts from soliciting money, gifts or favors from anyone with whom PACRA conducts business | Chapter III; 11-A-(q)

(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)

(11) PACRA promptly investigates, in the event of a misconduct or a breach of the policies, procedures and controls, and takes appropriate steps to rectify any weaknesses to prevent any recurrence along with suitable punitive action against the responsible employee(s) | Chapter III; 11-B-(m)

Independence & Conflict of interest

(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)

(17) PACRA has established policies and procedure governing investments and trading in securities by its employees and for monitoring the same to prevent insider trading, market manipulation or any other market abuse | Chapter III; 11-B-(g)

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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Regulatory and Supplementary Disclosure

Nature of Instrument	Size of Issue (PKR)	Years	Security	Quantum of Security	Nature of Assets	Issue Agent
Sukuk-B	6,352.94 mln	11 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.	WAPDA maintains a 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 the 1/6th share of the Installment into the DPA	WAPDA's own cash flows.	Pak Brunei Investment Company

Name of the Issuer	Water and Power Development Authority
Issue Date	Jul-21
Maturity	May-32
Option	N/A

PKR in '000'

Payment Period	Date	Opening Principal	Principal Repayment	Profit Payments	Installment Payable	Principal Outstanding
				Interest 6MK+1.45%		
0	Jul-21	6,352,940	-	0	0	6,352,940
1	Nov-21	6,352,940	-	160,577	160,577	6,352,940
2	May-22	6,352,940	-	320,902	320,902	6,352,940
3	Nov-22	6,352,940	317,647	527,047	844,694	6,035,293
4	May-23	6,035,293	317,647	487,235	804,882	5,717,646
5	Nov-23	5,717,646	317,647	469,242	786,889	5,399,999
6	May-24	5,399,999	317,647	437,158	754,805	5,082,352
7	Nov-24	5,082,352	317,647	415,964	733,611	4,764,705
8	May-25	4,764,705	317,647	384,659	702,306	4,447,058
9	Nov-25	4,447,058	317,647	362,982	680,629	4,129,411
10	May-26	4,129,411	317,647	335,213	652,860	3,811,764
11	Nov-26	3,811,764	317,647	309,428	627,075	3,494,117
12	May-27	3,494,117	317,647	283,642	601,289	3,176,470
13	Nov-27	3,176,470	317,647	262,107	579,754	2,858,823
14	May-28	2,858,823	317,647	231,437	549,084	2,541,176
15	Nov-28	2,541,176	317,647	207,982	525,629	2,223,529
16	May-29	2,223,529	317,647	179,508	497,155	1,905,882
17	Nov-29	1,905,882	317,647	156,414	474,061	1,588,235
18	May-30	1,588,235	317,647	128,220	445,867	1,270,588
19	Nov-30	1,270,588	317,647	104,276	421,923	952,941
20	May-31	952,941	317,647	76,932	394,579	635,294
21	Nov-31	635,294	317,647	51,855	369,502	317,647
22	May-32	317,647	317,647	25,715	343,362	0
		Total	6,352,940	5,918,493	12,271,433	-