

FORM-1A	
Jodhpur Vidyut Vitran Nigam Limited	
Investment proposals for the financial year	2017-18 *
Write up on investment proposal	Refer Petition for detailed write-up on investment plan
FORM-1 B	
Jodhpur Vidyut Vitran Nigam Limited	
Investment proposals for the financial year	2017-18 *
Calculations of overall cost of generation/transmission/average cost of supply with and without approval of investment plan.	
Average cost of supply with approval of investment plan	Rs. 7.85/kWh
Average cost of supply without approval of investment plan	Rs. 7.90/kWh
Details of Cost of Supply (CoS)	
ARR (Rs. Cr)	14198
Sales (in MU's)	17968
Wheeling Charges (Rs. Cr)^	4032
Network Charges (Rs./kWh)	Rs. 2.24/kWh
Consumer Services (Rs./kWh)*	Rs. 7.90/kWh
Energy cost per unit^^	Rs. 5.02/kWh
* Average CoS	
^ As per Regulation 86 (1) of RERC Tariff Regulations 2014	
^^ Power Purchase Expenses/Sale of Power	

CALCULATIONS (without approval)	
Sales (MU)	17967.69
Cost of power purchase	9,014.10
10% O&M charges	116.69
Transmission charges	985.02
Interest on security deposit of consumers	50.32
Total (a)	10166.14
ARR (for FY 2015-16)(b)	14197.93
Wheeling charges=arr- total (a)	4031.80
Network charges=wheeling charges/sales*10	2.24
Consumer services=arr/sales*10	7.90
Energy cost=cost of power purchase/sales*10	5.02

CALCULATIONS (with approval)	
sales	17967.69
Cost of power purchase	9014.10
10% O&M charges	116.69
Transmission charges	985.02
Interest on security deposit of consumers	50.32
Total (a)	10166.14
ARR (for FY 2015-16) (b)	14103.48
Wheeling charges=arr- total (a)	3937.34
Network charges=wheeling charges/sales*10	2.19
Consumer services=arr/sales*10	7.85
Energy cost=cost of power purchase/sales*10	5.02

* Note- The ARR figures considered as per the ARR projections made for FY 2015-16. The same will be updated and resubmitted along with the ARR Petition for FY 2017-18.

FORM-2

Jodhpur Vidyut Vitran Nigam Limited

Investment proposals for the financial year 2015-16

(Physical and financial targets and achievements)

S.No.	Particular of work	Total cost of Scheme/works for FY 2017-18 (Rs. in Crores)	Year of start of scheme	Date/Year of Commissioning	Cost-Benefit Ratio in \$(%) by Net Present Value Method		Physical targets			Expenditure incurred (Rs. Cr.)		Remarks
					At the end of 5 Years	10 Years	Units#	For FY 2016-17	Proposed for FY 2017-18	During FY 2016-17 (up to Oct'16)	Proposed during FY 2017-18	
(I)	Approved Schemes											
1	New works to be taken up under below mentioned heads											
A	Sub-Transmission and distribution		2017-18	2017-18	NA	NA						
1	33/11 KV S/s	485.00			Intangible & tangible benefits including loss reduction, increase in system reliability and better monitoring of power		mVA	258	355	162.69	485.00	
2	33 KV lines						No.s	60	100			
3	Other remaining works						Kms	390	800			
B	Rural Electrification											
1	Normal RE works incl. release of new connections	500.00	2017-18	2017-18	Intangible & tangible benefits including creation of infrastructure to increase system reliability and to achieve complete electrification in un electrified areas		No's	100000	125000	275.75	500.00	
2	Domestic Connections Rural						No's	7445	10000			
3	Energisation of wells											
C	Rajiv Gandhi G.V. Yojana											
1	Dhanies (Unelectrified & Partly Electrified) under RGGVY	372.00	2017-18	2017-18			Nos	7740	7740	113.23	372.00	
2	Release of BPL domestic connections		2017-18	2017-18			Nos	50000	100000			
3	Villages		2017-18	2017-18			Nos	39	-			
D	Feeder Improvement Programme (FIP)	10.00	2014-15	2017-18			Nos	6749	1529	39.94	10.00	
E	Substation Improvement Programme (SIP)	17.00	2014-15	2017-18			Nos	1515	315	29.20	17.00	
F	DDUGJY	446.00	2017-18	2017-18			Nos			0.00	446.00	
1.1	Dhanies (Unelectrified & Partly Electrified)		2017-18	2017-18			Nos	172	9650			
1.2	Domestic connection for BPL		2017-18	2017-18			Nos	50	48828			
1.3	Domestic connection for APL		2017-18	2017-18			Nos	100	128890			

FORM-2

Jodhpur Vidyut Vitran Nigam Limited

Investment proposals for the financial year 2015-16

(Physical and financial targets and achievements)

S.No.	Particular of work	Total cost of Scheme/works for FY 2017-18 (Rs. in Crores)	Year of start of scheme	Date/Year of Commissioning	Cost-Benefit Ratio in \$(%) by Net Present Value Method		Physical targets			Expenditure incurred (Rs. Cr.)		Remarks
					At the end of 5 Years	10 Years	Units#	For FY 2016-17	Proposed for FY 2017-18	During FY 2016-17 (up to Oct'16)	Proposed during FY 2017-18	
2	Feeder Separation		2017-18	2017-18			Nos	10	211			
3	Metering		2017-18	2017-18			Nos	70	1260			
4	System Strengthening (New 33/11 KV S/S + AUG.)		2017-18	2017-18			Nos	2	9			
e	Sansad Adarsh Gram Yojna		2017-18	2017-18			Nos	13	13			
H	IPDS	185.00	2017-18	2017-18				56	56	0.00	185.00	
2	Ongoing											
G	R-APDRP-A	25.00	2014-15	2015-16		IT enabled activities improves monitoring	Nos	31	31	1.56	25.00	
H	R-APDRP-B	0.00	2014-15	2015-16		strengthening of existing network	Nos	30	-	66.90	0.00	
	Total PLAN	2040.00								689.27	2040.00	

NOTE-

1. Sub categorization for each category shall be as per investment guidelines.
2. @ details will be shown for each scheme, prepared by Nigam and submitted to commission/financial institution/government for approval.
3. # specify appropriate unit e.t.KW,KVA,KVAR,KVARh,Nr.,KM.
4. \$ specify LCA(least cost alternative)/NA where cost benefit ratio in inapplicable.

FORM-3

Jodhpur Vidyut Vitran Nigam Limited

Investment proposals for the financial year 2017-18

(Sources of funding)

S. No	Particulars of work	Total cost of works (Rs Cr.)	Sources of cost to be funded in FY 2017-18 (Rs Cr.)					Sources of cost funded in FY 2016-17 (Rs Cr.) (Up to Oct'16)					Sources of cost funded in FY 2015-16 (Rs Cr.)					Remarks
			Equity	Debt	Consumers contribution	Grants/ Subsidy	Total	Equity	Debt	Consumers contribution	Grants/ Subsidy	Total	Equity	Debt	Consumers contribution	Grants/ Subsidy	Total	
A	Approved Schemes																	
	New works to be taken under respective heads																	
1	Sub-Transmission & Distribution	485.00	46.79	438.21	0.00	0.00	485.00											
2	Rural Electrification Works :																	
	a- Agriculture																	
	b- Domestic																	
	Total 2 (a+b)	500.00	140.38	359.62	0.00	0.00	500.00											
3	Rajiv Gandhi G.V. Yojana	372.00	0.00	37.20	0.00	334.80	372.00											
4	R-APDRP-A	25.00	0.00	25.00	0.00	0.00	25.00											
5	R-APDRP-B	0.00	0.00	0.00	0.00	0.00	0.00	39.20	482.90	0.00	0.00	522.10	400.42	956.88	32.29	0.00	1389.59	
6	DDUGJY	446.00	0.91	65.99	0.00	379.10	446.00											
7	IPDS	185.00	1.87	72.13	0.00	111.00	185.00											
8	MMSLVY																	
9	FIP	10.00	7.80	2.20	0.00	0.00	10.00											
10	SIP	17.00	6.24	10.76	0.00	0.00	17.00											
	TOTAL	2040.00	204.00	1011.10	0.00	824.90	2040.00	39.20	482.90	0.00	0.00	522.10	400.42	956.88	32.29	0.00	1389.59	

Form-4

Jodhpur Vidyut Vitran Nigam Limited

Investment proposals for the financial year 2017-18

(Abstract of Physical & Financial targets and achievements)

S.No.	Particulars/Sources of Funding (Rs. In Crores)	During FY 2015-16 (Rs. In Crores)				During FY 2016-17 (up to Oct'16)				Proposed for 2017-18 (Rs. In Crores)			
		Equity	Debt	Grants/ Subsidies/ Consumer Contribution	Total	Equity	Debt	Grants/ Subsidies/ Consumer Contribution	Total	Equity	Debt	Grants/ Subsidies	Total
1	Loss reduction schemes/ works	400.42	956.88	32.29	1389.59	39.20	482.90	0.00	522.10	15.91	85.09	111.00	212.00
2	System improvement/ stability/ reliability schemes/ works									46.79	438.21	0.00	485.00
3	Rural electrification schemes/ works including RGGVY									141.29	462.81	713.90	1318.00
4	Consumers servicing schemes/ works									0.00	0.00	0.00	0.00
5	Load despatch/SCADA/Communication/RAPDRPA schemes/works									0.00	25.00	0.00	25.00
	Total	400.42	956.88	32.29	1389.59	39.20	482.90	0.00	522.10	204.00	1011.10	824.90	2040.00

B	Physical Targets Distribution Lines	During FY 2015-16		During FY 2016-17 (Up to Oct'16)		Proposed for FY 2017-18	
		ckt.Kms	Av.cost/Km	ckt.Kms	Av.cost/Km	ckt.Kms	Av.cost/Km
(d)	33 KV	788	5.97	397.92	5.57	800	5.57
(e)	11 KV	8262	3.01	1784.04	2.94	8500	2.94
(f)	LT lines	1706	2.23	1094.14	2.18	1500	2.18
(g)	Other lines @ AB cable	3652	2.05	1842.23	2.01	4000	2.01

C	Substations	During FY 2015-16			During FY 2016-17			Proposed for FY 2017-18		
		Numbers	Transformation Capacity (in		Numbers	Transformation		Numbers	Transformation	
New (MVA)	Augmentation		New (MVA)	Augmentation		New	Augmentation			
4	(d) 33/11 KV	110	382	62 MVA	45	173.70	23.75	100	355	
5	(e) 11/0.4 KV (Three phase/single phase)	20654	675		14136			20000		

D	Reactive Compensation	During FY 2015-16		During FY 2016-17		Proposed for FY 2017-18	
		KVAr.	Av.Cost/KVAr.	KVAr.	Av.Cost/ KVAr.	KVAr.	Av.Cost/KVAr.
1	Shunt Reactor						
	(b) 33 KV	NIL	NIL	NIL	NIL	NIL	NIL
	(c) 11 KV	NIL	NIL	NIL	NIL	NIL	NIL
	(d) at Other KV s/s	NIL	NIL	NIL	NIL	NIL	NIL
2	Shunt Capacitors						
	(d) at 33 KV s/s	NIL	NIL	NIL	NIL	NIL	NIL
	(e) at 11 KV s/s	NIL	NIL	NIL	NIL	NIL	NIL
	(f) at LT						
	6KVAR						
	9KVAR						
3	Series Capacitors(Specify details)	NIL	NIL	NIL	NIL	NIL	NIL
4	Dynamic Compansation(Specify details)	NIL	NIL	NIL	NIL	NIL	NIL

E.	Meters	During FY 2015-16		During FY 2016-17		Proposed for FY 2017-18	
		Number Procured	Av.Cost/Meter (Rs)	Number Procured upto March 2017	Av.Cost/Meter	Number Procured	Av.Cost/Meter (5% Inc on last year cost)
1	ABT complaint	NA	NA	NA	NA		
2	HT meters	980	2790	-	-		
3	3 phase trivector	-	-	-	-		
4	3 phase LT	41193	2120	1500	2000	52735	2100
5	1 phase LT	550000	799.00	600000	713.5	688746	721.35
6	Prepaid Meters single Phase	2577	4832.00	-	-		
	Prepaid Meters Three Phase	16700	9500.00	-	-		

F.	Release of Service connections(tariff category wise)	During FY 2015-16			During FY 2016-17 (Upto Aug'16)		
		No.of connections	Total Expenditure (lakhs)	Av.Cost/connection^ (lakhs)	No.of connections(Active/Regulator)	Total Expenditure (lakhs)	Av.Cost/co nnection^ (lakhs)
1	Domestic	189681	NA	NA	67564	NA	NA
2	Non-Domestic	14682	NA	NA	5024	NA	NA
3	Public Street Light	123	NA	NA	40	NA	NA
4	Agriculture (Metered)	17198	NA	NA	2085	NA	NA
5	Small Indutstry + Water Works	1931	NA	NA	812	NA	NA
6	Medium Industry + Water Works	526	NA	NA	207	NA	NA
7	Large Industry+ Water works	113	NA	NA	57	NA	NA
8	Mixed Load	288	NA	NA	98	NA	NA
	Total	224542			75887		

FORM-5		
Jodhpur Vidyut Vitran Nigam Limited		
Investment proposals for the financial year 2017-18		
(Calculations of overall cost of generation/Transmission/Average cost of supply with and without approval of investment plan)		
Distribution	Consumer Service/KWh*	Net work Charges/KWh^
Average cost of supply with approval of investment plan	Rs. 7.85/kWh	Rs. 2.19/kWh
Average cost of supply without approval of investment plan	Rs. 7.90/kWh	Rs. 2.24/kWh
Energy cost per unit^^	Rs. 5.02/kWh	Rs. 5.02/kWh
*Average CoS		
^ As per Regulation 86 (1) of RERC Tariff Regulations 2014		
^^ Power Purchase Expenses/Sale of Power		