

### JAMSHORO POWER COMPANY LIMITED

(GOP OWNED CORPORATE ENTITY)

#### **Chief Executive Officer**

No: CEO/JPCL/TD/ 99-100

Dated 07-02-2018

Registrar, NEPRA,

NEPRA Tower, Attaturk Avenue (East),

Sector G-5/1, Islamabad

Phn No: 051-9206500 & Fax No: 051-2600026.

Attention: Mr.Iftikhar Ali Khan (Director Registrar Office)

Subject. MODIFICATION IN GENERATION LICENCE (GL/01/2002)

**Reference:** (1)Nepra Letter No.NEPRA/DG(M)/LAG-02/19642 Dated 30.11.2017

(2)Nepra Letter No.NEPRA/DG(M&E)/LAG-02/423 Dated 10.01.2018

This is with reference to letters referred above, JPCL has desired following modifications in Generation License No GL / 01 / 2002 which was issued to JPCL:

S.No	Reference No as per MGL	Plant Name & Unit No.	Gross Installed Capacity (MW)	Modification Required
1	Schedule-I (Plant - I and II)	TPS Jamshoro (Unit-1~4) and GTPS Kotri (Unit-3~7)	880 + 144 = 1024 MW	in Clause 11.2 of SCHEDULE-I i.e.in prescribed limits for Auxiliary Consumption % in respect of Jamshoro Power Station and Kotri Power Station
2	Schedule-II (Plant - I and II)	TPS Jamshoro (Unit-1~4) and GTPS Kotri (Unit-3~7)	880 + 144 = 1024 MW	in SCHEDULE-II i.e.in net capacity of Jamshoro Power Station and de-rated gross and net capacity of Kotri Power Station

In the light of above, we submit the application along with following documents:

- a. Demand Draft ABC No. BBB 13268254 amounting Rs.764, 640/-(Seven Lacs Sixty Four-Thousands & Six Hundred & Forty Rupees) in the Name of NEPRA on account of modification fee.
- **b.** Text of Proposed Modification.
- **c.** Statement of the Reasons in support of the Modification.
- **d.** Statement showing the impact on tariff, quality of service and the performances by JPCL of its obligation under the License.

**Board Resolution** is under process and will be provided soon, so it is requested that Licensee Proposed Modification (LPM) case may please be start & process accordingly.

It is submitted that the modification in the Generation License of JPCL at Serial No.1 & 2 above may please be approved as per Regulation 10 (2) of the NEPRA Licensing (Application & Modification Procedure) Regulations, 1999.

### Documents Attached / As above

Chief Executive Officer JPCL (GENCO-I)

#### Distribution:

1. Chief Executive Officer (GHCL), 1st Floor Overseas Pakistani Foundation (OPF) Building Shahrah-e-Jamhuriat Sector G-5/2, Islamabad.

Address: Mohra Jabal Dadu Road, Jamshoro \_ Phone No.022-9213706, Fax No.022-9213708.

### (A) TEXT OF LICENSEE PRPOSED MODIFICATION:

The Generation License No.GL/01/2002 was issued to Jamshoro Power Company Limited (JPCL) on dated 01.07.2002 and last modification (Modification-II) was carried out in 11.08.2014.

### MODIFICATION REQUESTED IN PRESCRIBED LIMITS OF AUXILIARY CONSUMPTION %

The Jamshoro Power Company Limited has desired Modification in <u>Clause 11.2 of</u> <u>SCHEDULE-I</u> i.e.in prescribed limits for Auxiliary Consumption % in respect of Jamshoro Power Station and Kotri Power Station as under:

### (11.2) Plant Characteristics: Auxiliary Consumption % (TPS JAMSHORO)

Description	Unit No.1	Unit No.2	Unit No.3	Unit No.4				
Existing Auxiliary % Limits in Generation License	8-9	8-9	8-9	8-9				
Request for modification in Auxiliary % Limits in Generation License according to 100% De-rated Tested Capacity on variable loads.	8.43 ~	9.19 ~ 14.88	8.51 ~ 13.73	8.32 ~ 13.48				
See Annexure-A to D								

### (11.2) Plant Characteristics: Auxiliary Consumption % (GTPS KOTRI)

Description	Unit No.3	Unit No.4	Unit No.5	Unit No.6	Unit No.7
Existing Auxiliary % Limits in Generation License	0.40	0.40	1.36	1.25	7.23
Request for modification in Auxiliary % Limits in Generation License	0.51	0.63	0.82	0.76	7.45

### See Annexure-E

BENGTARE WEEK TO SERVICE TELEFORE

### MODIFICATION REQUESTED IN DE-RATD CAPACITY (MW) GROSS / NET

The Jamshoro Power Company Limited has further desired Modification in <u>SCHEDULE-II</u> i.e.in net capacity of *Jamshoro Power Station* and de-rated gross and net capacity of *Kotri Power Station* as under:

Power Station	Unit Detail	Installed Capacity (MW)	l .	De-Rated Capacity (MW)		Net Capacity (MW)		
	Unit-1	250	Unit-1	200	Unit-1	182.45		
	Unit-2	210	Unit-2	170	Unit-2	154.73		
TPS Jamshoro (Plant-I)	Unit-3	210	Unit-3	170	Unit-3	155.36		
(1 14111-1)	Unit-4	210	Unit-4	170	Unit-4	156.48		
	Sub-Total-	880	-	710	_	649.02		
	Unit-5	660	Unit-5	660	Unit-5	600		
TPS Jamshoro (Plant-II)	Unit-6	660	Unit-6	660	Unit-6	600		
(1 lant-11)	Sub-Total- II	1320	-	1320	-	1200		
	Unit-3	25	Unit-3	18.09	Unit-3	18		
	Unit-4	25	Unit-4	18.11	Unit-4	18		
	Unit-5	25	Unit-5	18.15	Unit-5	18		
GTPS Kotri	Unit-6	25	Unit-6	18.14	Unit-6	18		
	Unit-7	44	Unit-7	37.28	Unit-7	34.5		
	Sub-Total- III	144	-	109.77	-	106.50		
	Grand Total	2344	-	2139.77	_	1955.52		

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# (B) STATEMENT OF THE REASONS IN SUPPORT OF THE MODIFICATION:

- 1. It is submitted that the net capacity of JPCL Power Stations i.e. TPS Jamshoro and GTPS Kotri was revised and same was approved by Nepra vide Clause 9.1.6 of the tariff determination dated September 12, 2014 as 649.02 MW and 106.50 MW respectively; which consequently have resulted in revision of the limits for auxiliary power consumption in respect of units of JPCL Power Stations.
- 2. It is further added that the existing limits of percentage auxiliaries as mentioned in Schedule-I Clause 11.2 were prescribed on 100% maximum de-rated load on service mode at the time of issuance of Generation License in 2002. Whereas TPS Jamshoro usually operates in service mode throughout the year on variable load as per system operator requirement. Result in auxiliary percentage limit varies time to time according to the operation of the plant. Hence the prescribed limit as mentioned in generation license might not maintain during the whole year during service mode.
- 3. Likewise in case of availability of gas from SSGC, NPCC operates GTPS Kotri keeping in view of its system requirements as a peak load plant or keep on standby as per no demand. Hence the prescribed limit as mentioned in generation license might not maintain during the whole year during service mode in case of GTPS Kotri too.
- **4.** Further, TPS Jamshoro Units have passed 27 years of useful life whereas GTPS Kotri Units are 37 years old; the capacity of these units has considerably de-rated due to ageing factor which results in the higher percentage auxiliary consumption.
- 5. This issue was also highlighted during the hearing that was held on dated 10.10.2017 in the matter of Show Cause Notice issued by NEPRA to JPCL due to excess auxiliary consumption during the Years 2012, 2013 and 2014. The JPCL replied the same as mentioned at Para 1 to 4 above.
- 6. NEPRA accepted the arguments of JPCL during the hearing of show cause and directed vide Letter No.NEPRA/DG (M)/LAG-02/19642 & 423 Dated 30.11.2017 and 10.01.2018 respectively to file an LPM (Licensee Proposed Modification) for revised capacity and align the auxiliary consumption limits of units of JPCL in accordance with revised tariff determination.
- 7. In the light of above mentioned reasons, the percentage limits of auxiliary consumption on variable load in service mode as well as revised capacity may kindly be approved and revised in Schedule-I Clause 11.2 and Schedule-II of the Generation License respectively.

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# (C) IMPACT ON TARIFF, QUALITY OF SERVICE AND THE PERFORMANCE BY THE LICENSEE OF ITS OBLIGATIONS UNDER THE LICENSE.

The revision in capacity of JPCL Units will have no impact on the tariff as the tariff of JPCL Units has already been approved vide Nepra Tariff Determination No. NEPRA /TRF-255/JPCL-2014/10516-10518 September 12, 2014 on the basis of this capacity. JPCL is requesting to include the same determined capacity in Generation License as a License Proposed Modification (LPM).

Further the modification in prescribed limits of percentage auxiliary consumption is also in accordance with tariff determination and this will avoid further loss to the company.

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# Current Dependabale Capacity Test conducted on 29.06.2013 on Maximum Derated Capacity 200 MW of Unit No.1

CDC Test Operating Hours	Gross Generati	Average Gross Load	Auxiliary consumed from own system	Auxiliary consumed from Station T/F	Compensa ted Auxiliary	Total Auxiliary Consumed	Net Electrical Output (NEO)	% Auxiliary Consumpti on
Hrs	KWh	KWh	KWh	KWh	KWh	KWh	KWh	BTU/kWh
2	398272	199.136	31744	1636	194	33574	364698	8.43

	ı	1		1		
%	Installed	De-rated Capacity	Tested	Gross	Total Auxiliary	Auxiliary Consumption % on
Loading	Capacity	on Variable	Hours	Generation	Consumed	variable
		Loads				Loads
79.654	250	199.136	2	398272	33574	8.43
79	250	197	2	393272	33574	8.54
78	250	194	2	388272	33574	8.65
77	250	192	2	383272	33574	8.76
76	250	189	2	378272	33574	8.88
75	250	187	2	373272	33574	8.99
74	250	184	2	368272	33574	9.12
73	250	182	2	363272	33574	9.24
72	250	179	2	358272	33574	9.37
71	250	177	2	353272	33574	9.50
70	250	174	2	348272	33574	9.64
69	250	172	2	343272	33574	9.78
68	250	169	2	338272	33574	9.93
67	250	167	2	333272	33574	10.07
66	250	164	2	328272	33574	10.23
65	250	162	2	323272	33574	10.39
64	250	159	2	318272	33574	10.55
63	250	157	2	313272	33574	10.72
62	250	154	2	308272	33574	10.89
61	250	152	2	303272	33574	11.07
60	250	149	2	298272	33574	11.26
59	250	147	2	293272	33574	11.45
58	250	144	2	288272	33574	11.65
57	250	142	2	283272	33574	11.85
56	250	139	2	278272	33574	12.07
55	250	137	2	273272	33574	12.29
54	250	134	2	268272	33574	12.51
53	250	132	2	263272	33574	12.75
52	250	129	2	258272	33574	13.00
51	250	127	2	253272	33574	13.26
50	250	125	2	250502	33574	13.40

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# Current Dependabale Capacity Test conducted on 21.05.2013 on Maximum Derated Capacity 170 MW of Unit No.2

•	CDC Test Operating Hours		Average Gross Load	Auxiliary consumed from own system	Auxiliary consumed from Station T/F	Compensa ted Auxiliary	Total Auxiliary Consumed	Net Electrical Output (NEO)	% Auxiliary Consumpti on
	Hrs	KWh	KWh	KWh	KWh	KWh	KWh	KWh	BTU/kWh
	2	340671	170.3355	30144	1064	92.48	31300	309371	9.19

% Loading	Installed Capacity	De-rated Capacity on Variable Loads	Tested Hours	Gross Generation	Total Auxiliary Consumed	Auxiliary Consumpti on % on variable Loads
81.112	210	170.336	2	340671	31300	9.19
80	210	168	2	336471	31300	9.30
79	210	166	2	332271	31300	9.42
78	210	164	2	328071	31300	9.54
77	210	162	2	323871	31300	9.66
76	210	160	2	319671	31300	9.79
75	210	158	2	315471	31300	9.92
74	210	156	2	311271	31300	10.06
73	210	154	2	307071	31300	10.19
72	210	151	2	302871	31300	10.33
71	210	149	2	298671	31300	10.48
70	210	147	2	294471	31300	10.63
69	210	145	2	290271	31300	10.78
68	210	143	2	286071	31300	10.94
67	210	141	2	281871	31300	11.10
66	210	139	2	277671	31300	11.27
65	210	137	2	273471	31300	11.45
64	210	135	2	269271	31300	11.62
63	210	133	2	265071	31300	11.81
62	210	130	2	260871	31300	12.00
61	210	128	2	256671	31300	12.19
60	210	126	2	252471	31300	12.40
59	210	124	2	248271	31300	12.61
58	210	122	2	244071	31300	12.82
57	210	120	2	239871	31300	13.05
56	210	118	2	235671	31300	13.28
55	210	116	2	231471	31300	13.52
54	210	114	2	227271	31300	13.77
53	210	112	2	223071	31300	14.03
52	210	109	2	218871	31300	14.30
51	210	107	2	214671	31300	14.58
50	210	105	2	210421	31300	14.88

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# Current Dependabale Capacity Test conducted on 22.05.2013 on Maximum Derated Capacity 170 MW of Unit No.3

	CDC Test Operating Hours	Gross Generati on	Average Gross Load	Auxiliary consumed from own system	from	Compensa ted Auxiliary	Total Auxiliary Consumed	Net Electrical Output (NEO)	% Auxiliary Consumption
ĺ	Hrs	KWh	KWh	KWh	KWh	KWh	KWh	KWh	BTU/kWh
	2	339520	169.76	27120	1671	92.48	28883	310637	8.51

			· · · · · · · · · · · · · · · · · · ·			Auxiliary
		De-rated		_	Total	Consumptio
%	Installed	Capacity	Tested	Gross	Auxiliary	n % on
Loading	Capacity	on Variable	Hours	Generation	Consumed	variable
		Loads			-	Loads
80.838	210	169.760	2	339520	28883	8.51
80	210	168	2	335320	28883	8.61
79	210	166	2	331120	28883	8.72
78	210	163	2	326920	28883	8.84
77	210	161	2	322720	28883	8.95
76	210	159	2	318520	28883	9.07
75	210	157	2	314320	28883	9.19
74	210	155	2	310120	28883	9.31
73	210	153	2	305920	28883	9.44
72	210	151	2	301720	28883	9.57
71	210	149	2	297520	28883	9.71
70	210	147	2	293320	28883	9.85
69	210	145	2	289120	28883	9.99
68	210	142	2	284920	28883	10.14
67	210	140	2	280720	28883	10.29
66	210	138	2	276520	28883	10.45
65	210	136	2	272320	28883	10.61
64	210	134	2	268120	28883	10.77
63	210	132	2	263920	28883	10.94
62	210	130	2	259720	28883	11.12
61	210	128	2	255520	28883	11.30
60	210	126	2	251320	28883	11.49
59	210	124	2	247120	28883	11.69
58	210	121	2	242920	28883	11.89
57	210	119	2	238720	28883	12.10
56	210	117	2	234520	28883	12.32
55	210	115	2	230320	28883	12.54
54	210	113	2	226120	28883	12.77
53	210	111	2	221920	28883	13.02
52	210	109	2	217720	28883	13.27
51	210	107	2	213520	28883	13.53
50	210	105.210	2	210420	28883	13.73

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## Current Dependabale Capacity Test conducted on 30.06.2013 on Maximum Derated Capacity 170 MW of Unit No.4

CDC Test Operating Hours	Gross Generati on	Average Gross Load	Auxiliary consumed from own system	from	Compensa ted Auxiliary	Total Auxiliary Consumed	Net Electrical Output (NEO)	% Auxiliary Consumption
Hrs	KWh	KWh	KWh	KWh	KWh	KWh	KWh	BTU/kWh
2	341248	170.624	27904	392	92.48	28388	312860	8.32

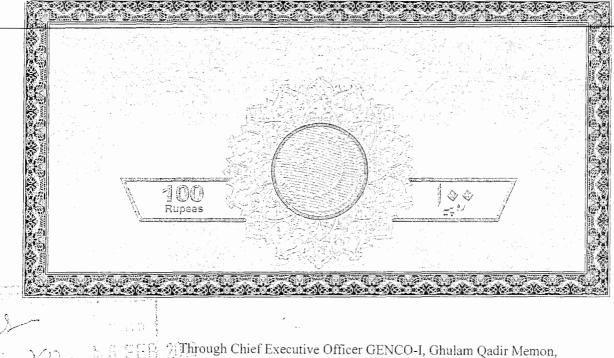
% Loading	Installed Capacity	De-rated Capacity on Variable Loads	Tested Hours	Gross Generation	Total Auxiliary Consumed	Auxiliary Consumpti on % on variable Loads
81.250	210	170.624	2	341248	28388	8.32
80	210	169	2	337048	28388	8.42
79	210	166	2	332848	28388	8.53
78	210	164	2	328648	28388	8.64
77	210	162	2	324448	28388	8.75
76	210	160	2	320248	28388	8.86
75	210	158	2	316048	28388	8.98
74	210	156	2	311848	28388	9.10
73	210	154	2	307648	28388	9.23
72	210	152	2	303448	28388	9.36
71	210	150	2	299248	28388	9.49
70	210	148	2	295048	28388	9.62
69	210	145	2	290848	28388	9.76
68	210	143	2	286648	28388	9.90
67	210	141	2	282448	28388	10.05
66	210	139	2	278248	28388	10.20
65	210	137	2	274048	28388	10.36
64	210	135	2	269848	28388	10.52
63	210	133	2	265648	28388	10.69
62	210	131	2	261448	28388	10.86
61	210	129	2	257248	28388	11.04
60	210	127	2	253048	28388	11.22
59	210	124	2	248848	28388	11.41
58	210	122	2	244648	28388	11.60
57	210	120	2	240448	28388	11.81
56	210	118	2	236248	28388	12.02
55	210	116	2	232048	28388	12.23
54	210	114	2	227848	28388	12.46
53	210	112	2	223648	28388	12.69
52	210	110	2	219448	28388	12.94
51	210	108	2	215248	28388	13.19
50	210	105	2	210628	28388	13.48

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# Initial Dependabale Capacity Test conducted on 12.01.2005 on Maximum Derated Capacity of GTPS Kotri Block-III (Unit No.3~7)

Unit No.	IDC Test Operating Hours	Avg Net Load MW	Corrected Avg Net Load MW	Corrected Net Gen Kwh	Auxilary Cons. kWh	Corrected Gross Generation kwh	Auxilary %	Corrected Avg Gross Load MW
GT-3	6	20.148	18.00	108000	550	108550	0.51	18.09
GT-4	6	20.148	18.00	108000	684	108684	0.63	18.11
GT-5	6	20.148	18.00	108000	890	108890	0.82	18.15
GT-6	6	20.148	18.00	108000	830	108830	0.76	18.14
CC-7	6	36.275	34.50	207000	16670	223670	7.45	37.28
Total	-	116.866	106.50	639000	19624	658624	-	109.77

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Through Chief Executive Officer GENCO-I, Ghulam Qadir Memon, In the name of National Electric Power Regulatory Authority NEPRA

### BEFORE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

### **AFFIDIVIT**

I <u>Ghulam Qadir Memon</u> Chief Executive Officer Jamshoro power Company Limited certify that the document in support of Modification in Generation License attached with this application are prepared and submitted in conformity with the provisions of National Electric Power Regulatory Authority Licensing (Application & Modification Procedure) Regulations, 1999. I undertake to abide by the terms and provisions of the said regulations. I further undertake and confirm that the information provided in the attached documents in-support is true and correct to the best of my knowledge and belief.

Deponent

(Ghulam Qadir Memon)
Chief Executive Officer
Jamshoro power Company Limited

Verified on oath this \_\_\_\_\_\_ day of February 2018 that the contents are correct & true to the best of my knowledge & belief and nothing has been concealed.

Deponent

(Ghulam Qadir Memon)
Chief Executive Officer
Jamshoro power Company Limited

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