National Electric Power Regulatory Authority
Islamic Republic of Pakistan

Registrar

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No. NEPRA/TRF-242/HSML-2014/7096-7098
May 12, 2017

Subject: **Decision of the Authority in the Matter of Request for One Time Adjustment of Upfront Tariff filed by Hamza Sugar Mills Limited (HSML) for its 15 MW New Bagasse Based High Pressure Co-generation Power Plant at Hamza Sugar Mills, Jetha Bhutta, Khanpur, District Rahim Yar Khan**

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I & II (12 pages) in Case No. NEPRA/TRF-242/HSML-2014.

2. The subject decision is being intimated to the Federal Government for the purpose of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).

3. Order of the Authority at para 4 of the Decision along with Annexures needs to be notified in the official Gazette.

Enclosure: As above

12.05.17

(Syed Safeer Hussain)

Secretary
Ministry of Water & Power
'A' Block, Pak Secretariat
Islamabad

CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.

DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST FOR ONE-TIME ADJUSTMENT OF UPFRONT TARIFF FILED BY HAMZA SUGAR MILLS LIMITED (HSML) FOR ITS 15 MW NEW BAGASSE BASED HIGH-PRESSURE CO-GENERATION POWER PLANT AT HAMZA SUGAR MILLS, JETHA BHUTTA KHANPUR, DISTRICT RAHIM YAR KHAN.

The National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") approved the upfront tariff for New bagasse based Co-generation projects to be set up under the framework of Co-generation policy of Government of Pakistan (hereinafter referred to as "GoP") on May 29, 2013 containing the reference approved tariff for 30 years along with the applicable terms and conditions for the Co-generation projects and notified by GoP vide SRO No. 771(l)/2013 dated September 3, 2013. The aforementioned decision of the Authority was modified to the extent of certain amendments in the terms and conditions on August 28, 2013 and notified by GoP vide SRO No.938(1)/2013 dated October 14, 2013. The Authority, vide its decision dated July 7, 2015 adjusted the upfront tariff as per the mechanism provided in its decision dated May 29, 2013.

2. Hamza Sugar Mills Limited (hereinafter referred to as the "applicant" or "HSML" or the "company") vide the Authority's decision dated June 11, 2014 was granted the upfront tariff for its high-pressure co-generation power plant (hereinafter referred to as the "project") at Hamza Sugar Mills, Jetha Bhutta Khanpur, district Rahim Yar Khan.

3. One Time Adjustment

3.1 The reference Upfront Tariff was allowed to be adjusted on May 31, 2015, i.e. the reference commercial operations date (COD) for all bagasse based power projects which opted for the upfront tariff, on account of project cost variations during the construction period of the projects. As per documentary evidence provided by the applicant, the project was declared to have achieved commercial operations w.e.f March 10, 2017 by the power purchaser. In view thereof, the adjusted upfront tariff is hereby granted to the applicant to be applicable w.e.f March 10, 2017, however, Debt servicing component of the said tariff is not admissible to be charged by the company to Central Power Purchasing Agency Guarantee Limited ("CPPA-G" or "power purchaser") for the power purchased from March 10, 2017 to March 31, 2017.

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4. ORDER

The Authority hereby approves the following Upfront Tariff for HSML for delivery of electricity to the power purchaser.

Tariff components	1-10 years (Rs/kWh)	11-30 years (Rs./kWh)	Indexations
Fuel Cost	5.9822	5.9822	Fuel price
Variable O&M Local	0.1197	0.1197	Local CPI
Variable O&M Foreign	0.3393	0.3393	PKR/US$, US CPI
Fixed O&M Local	0.3194	0.3194	Local CPI
Insurance	0.2204	0.2204	-
Working Capital	0.1733	0.1733	KIBOR
Debt Service	3.8970	-	KIBOR
Return on Equity	1.0346	1.0346	PKR/US$
Total	**12.0859**	**8.1888**	

i) The above reference tariff is applicable for 30 years from commencement of commercial operation date (COD).

ii) The above tariff is applicable for new Co-generation projects based on Bagasse.

iii) The above tariff has been worked out on the basis of reference PKR/US$ rate of Rs. 101.6.

iv) The reference component wise Adjusted Upfront Tariff table is attached herewith as Annex-I

v) The reference Adjusted Debt Service schedule is attached herewith as Annex-II.

I. Pass-Through Items

If the company is obligated to pay any tax on its income from generation of electricity, or any duties and/or taxes, not being of refundable nature, are imposed on the company up to the commencement of its commercial operations for import of its plant, machinery and equipment, the exact amount paid by the company on these accounts shall be reimbursed by the power purchaser on production of original receipts. This payment should be considered as a pass-through payment spread over a twelve months period. Furthermore, in such a scenario, the company shall also submit to the power

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purchaser details of any tax savings and the power purchaser shall deduct the amount of these savings from its payment to the company on account of taxation.

The adjustment for duties and/or taxes will be restricted only to the extent of duties and/or taxes directly imposed on the company. No adjustment for duties and/or taxes imposed on third parties such as contractors, suppliers, consultants, etc., excluding adjustment for taxes imposed on dividend as stated below, will be allowed.

Withholding tax on dividends will also be allowed as a pass through item just like other taxes. The power purchaser shall make payment on account of withholding tax at the time of actual payment of dividend, on production of original receipts, subject to maximum of 7.5% of return on equity. In case the company does not declare a dividend in a particular year or only declares a partial dividend, then the difference in the withholding tax amount (between what is paid in that year and the total entitlement as per the net return on equity) would be carried forward and accumulated so that the company is able to recover the same as a pass through from the power purchaser in future on the basis of the total dividend payout. Adjustment for variation in tax rate on dividend from 7.5% shall also be allowed as a pass through item by the power purchaser, after satisfying itself that tax rates have actually varied. The company shall also submit to the power purchaser details of any tax savings and the power purchaser shall deduct the amount of these savings from its payment to the company on account of taxation.

II. Indexation/adjustment

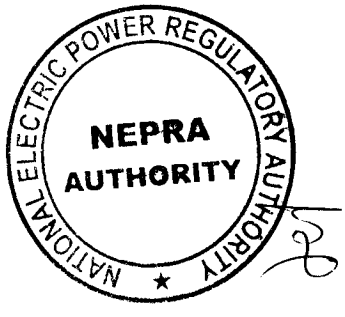
The following indexation shall be applicable to the reference upfront tariff:

a) Fuel Cost Component

Fuel cost component of tariff will be adjusted on account of variation in price of fuel (bagasse) on yearly basis in advance (w.e.f. 1st of October of each applicable year) as per the formula given hereunder.

$$FCC_{(Rev)} = FCC_{(Ref)} \times BFP_{(Rev)} / BFP_{(Ref)}$$

Where;



$FCC_{(Rev)}$	=	Revised fuel cost component of tariff for the applicable year.
$FCC_{(Ref)}$	=	Reference fuel cost component of tariff at the time of determination.
$BFP_{(Rev)}$	=	Revised price of bagasse in Rs/ton as determined in accordance with mechanism set out below.
$BFP_{(Ref)}$	=	Reference price of bagasse for the relevant year. Current reference price is Rs. 2966.23/ton
$BFP_{(Rev)}$	=	$CPCIF_{(Rev)}$ x 6905/23810

Where;

$CPCIF_{(Rev)}$	=	$\{CPFOB_{(Rev)} + MF_{(Rev)} + MI_{(Rev)}\}$ x $ER_{(Rev)}$

Where;

$CPCIF_{(Rev)}$	=	Revised CIF price of coal in Rs/ton for the applicable year.
$CPFOB_{(Rev)}$	=	Revised FOB price of coal expressed in US$/ton based on monthly average of prices published in the Argus McCloskey's API4 index for the relevant year.
$MF_{(Rev)}$	=	Revised marine freight of coal per ton as worked out below.
$MF_{(Rev)}$	=	US$ 18.83 x $BIX_{(Rev)}$ / $BIX_{(Ref)}$

Where;

$BIX_{(Rev)}$	=	Revised monthly average of the daily Bunker Index price for 380-CST published by the Bunker Index for the relevant year.
$BIX_{(Ref)}$	=	Reference monthly average of the daily Bunker Index price of 380-CST published by the Bunker Index. Current reference is US$ 629.6417/ton.
$MI_{(Rev)}$	=	$CPFOB_{(Rev)}$ x 0.1%

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$ER_{(Rev)}$ = Revised monthly average PKR/US$ exchange rate for the relevant month.

The constants such as 6905, 23810 and US$ 18.83 are fixed values representing LHV value of bagasse in btu/kg, LHV value of coal in btu/kg and fixed value of marine freight charges per ton of coal respectively.

Note:

1. Applicable year means, the year for which adjustment/indexation of fuel cost component is required starting from 1st of July and ending on 30th of June.
2. Relevant year means the year immediately preceding the applicable year for adjustment/indexation of fuel cost component.

b) O&M Cost Component

The local O&M component will be adjusted on account of local Inflation and foreign O&M component will be adjusted on account of variation in Rupee/Dollar exchange rate and US CPI. Quarterly adjustments for inflation and exchange rate variation will be made on 1st July, 1st October, 1st January & 1st April respectively on the basis of the latest available information with respect to Pakistan CPI (general), US CPI (notified by US bureau of labor statistics) and revised TT&OD Selling rate of US Dollar (notified by the National Bank of Pakistan). The mode of indexation will be as under:

i) Fixed O&M Local

$$F\ O\&M_{(REV)} = O\&M_{(REF)} * CPI_{(REV)} / CPI_{(REF)}$$

Where:

$F\ O\&M_{(REV)}$ = The revised applicable Fixed O&M local component of tariff indexed with Pakistan CPI.

$O\&M_{(REF)}$ = The reference fixed O&M local component of tariff.

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$CPI_{(REV)}$ = The Revised Consumer Price Index (General) for the relevant month.

$CPI_{(REF)}$ = The Consumer Price Index (General) of 198.16 for the month of April 2015 as notified by the Federal Bureau of Statistics.

ii. Variable O&M

$V\ O\&M_{(LREV)} = O\&M_{(LREF)} * CPI_{(REV)} / CPI_{(REF)}$

$V\ O\&M_{(FREV)} = O\&M_{(FREF)} * USCPI_{(REV)} / USCPI_{(REF)} * ER_{(REV)} / ER_{(REF)}$

Where:

$V\ O\&M_{(LREV)}$ = The revised applicable Variable O&M local component of tariff indexed with CPI.

$V\ O\&M_{(FREV)}$ = The revised applicable Variable O&M foreign component of tariff indexed with US CPI and exchange rate variation.

$O\&M_{(LREF)}$ = The reference variable O&M local component of tariff.

$O\&M_{(FREF)}$ = The reference variable O&M foreign component of tariff.

$CPI_{(REV)}$ = The Revised Consumer Price Index (General) for the relevant month.

$CPI_{(REF)}$ = The Consumer Price Index (General) of 198.16 for the month of April 2015 as notified by the Federal Bureau of Statistics.

$US\ CPI_{(REV)}$ = The Revised US Consumer Price Index (All Urban Consumers) notified by the US Bureau of Labor Statistics.

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US CPI (REF) = Reference US CPI (All Urban Consumers) of 236.119 as notified by the Bureau of Labor Statistics for the month of March 2015.

ER(REV) = The revised TT&OD selling rate of US dollar as notified by the National Bank of Pakistan.

ER (REF) = Reference TT and OD selling rate of US dollar of Rs. 101.60.

c) Adjustment of working capital cost

The cost of working capital shall be adjusted on account of variation in 3-month KIBOR over the reference KIBOR of 7.99% while premium over KIBOR 2% remaining the same for the entire tariff control period.

d) Adjustment of debt servicing component

The interest part of fixed charge component will remain unchanged throughout the tariff control period except for the adjustment due to variation interest rate as a result of variation in quarterly KIBOR according to the following formula;

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 9.5\%) / 4$$

Where:

ΔI = the variation in interest charges applicable on local loan corresponding to variation in quarterly KIBOR. ΔI can be positive or negative depending upon whether $KIBOR_{(REV)}$ > or < 9.50%. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each quarter under adjustment applicable on quarterly basis.

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$P_{(REV)}$ = is the outstanding principal (as indicated in the attached debt service schedule to this order) on a quarterly basis on the relevant quarterly calculations date.

e) Return on Equity

Return on equity (ROE) as well as Return on Equity during Construction (ROEDC) component of tariff shall be adjusted for variation in PKR/US$ exchange rate according to the following formula:

$ROE_{(REV)} = ROE_{(REF)} * ER_{(REV)}/ER_{(REF)}$

$ROEDC_{(REV)} = ROEDC_{(REF)} * ER_{(REV)}/ER_{(REF)}$

Where;

$ROE_{(REV)}$ = Revised Return on Equity component of tariff expressed in Rs/kWh adjusted with exchange rate variation for the relevant period.

$ROEDC_{(REV)}$ = Revised Return on Equity during Construction component of tariff in Rs/kWh adjusted with exchange rate variation for the relevant period.

$ROE_{(REF)}$ = Reference Return on Equity component of tariff expressed in Rs/kWh.

$ROEDC_{(REF)}$ = Reference Return on Equity during Construction component of tariff expressed in Rs/kWh.

$ER_{(REV)}$ = Revised TT and OD selling rate of US dollar as notified by the National Bank of Pakistan.

$ER_{(REF)}$ = Reference TT and OD selling rate of US dollar of Rs. 101.60.

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III. Terms and conditions of Upfront Tariff

i) The Upfront tariff is applicable for power generation using bagasse.

ii) The Adjusted Upfront Tariff will be applicable and become effective on June 01, 2015 (i.e. after the reference Commercial Operation Date).

iii) The decision of the applicant to opt for upfront tariff is irrevocable.

iv) All energy offered for sale by the Co-generation projects shall be taken by the power purchaser on priority.

v) This tariff will be applicable for a period of thirty years (30) from the reference commercial operations date.

vi) In the Upfront Tariff no adjustment for certified emission reductions has been accounted for. However, upon actual realization of carbon credits, the same shall be distributed between the power purchaser and the power producer in accordance with the applicable GoP Policy, as amended from time to time.

vii) The project is allowed to use other biomass fuel such as rice husk, cotton stalk etc. in combination with Bagasse or separately. However use of coal imported or local is not allowed.

viii) To safeguard interest of consumers, the Authority may review the fuel pricing mechanism stipulated above in accordance with NEPRA applicable law, after due consultation with the affected/interested parties, if it is deemed that there is exorbitant/unreasonable increase in international coal prices. Similarly, to mitigate risk to the power producer and to encourage the investors to put up bagasse based(indigenous fuel) cogeneration projects, the reference CIF coal price of US$ 100.67/ton used at the time of this determination shall be considered the floor/minimum price for the purpose of the Fuel cost Component.

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5. The EPA/PPA executed shall be consistent with all applicable documents including Generation License and NEPRA's Tariff determination for the power producer. Any provision of EPA/ PPA which is inconsistent with NEPRA's Tariff Determination shall be void to that extent and its financial impact shall not be passed on to the end consumer.

6. The order at paragraph 4 along with all Annexures is recommended for notification by the Federal Government in the official gazette in accordance with Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

(Himayat Ullah Khan)
Member

(Syed Masood ul Hassan Naqvi)
Member

(Major (Rtd.) Haroon Rasheed)
Member

(Saif Ullah Chattha)
Member/ Vice Chairman
8.5.2017

(Tariq Saddozai)
Chairman

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12.05.17

Reference Adjusted Upfront Tariff for HSML

Year	Fuel cost component	Variable O&M Local	Variable O&M Foreign	Fixed O&M Local	Insurance	Working capital cost	Return on Equity	ROE During Construction	Loan Repayment	Interest Charges	Total Tariff
	Rs./kWh	Rs./kWh	Rs./kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs./kWh	Rs. / kWh
1	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	1.1926	2.7045	12.0859
2	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	1.3488	2.5483	12.0859
3	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	1.5254	2.3716	12.0859
4	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	1.7252	2.1718	12.0859
5	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	1.9512	1.9458	12.0859
6	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	2.2068	1.6903	12.0859
7	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	2.4958	1.4012	12.0859
8	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	2.8227	1.0743	12.0859
9	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	3.1925	0.7046	12.0859
10	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	3.6106	0.2864	12.0859
11	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
12	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
13	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
14	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
15	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
16	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
17	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
18	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
19	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
20	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
21	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
22	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
23	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
24	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
25	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
26	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
27	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
28	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
29	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
30	5.9822	0.1197	0.3393	0.3194	0.2204	0.1733	0.9380	0.0965	-	-	8.1888
Levelized Tariff	**5.9822**	**0.1197**	**0.3393**	**0.3194**	**0.2204**	**0.1733**	**0.9380**	**0.0965**	**1.3073**	**1.2328**	**10.7290**

Levelized Tariff (1-30 years) discounted at 10% per annum = US Cents 10.5601/kWh at reference exchange rate of 1US$=Rupees 101.60

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Reference Adjusted Upfront Tariff for HSML
Debt Servicing Schedule For the purpose of Indexation Only (Foreign and/or Local Loan)

	Local Debt					Local Debt					Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh	Annual Debt Service Rs./kWh
Period	Principal Million $	Repayment Million $	Mark-Up Million $	Balance Million $	Debt Service Million $	Principal Million Rs.	Repayment Million Rs.	Mark-Up Million Rs.	Balance Million Rs.	Debt Service Million Rs.			
	0.7836	0.0101	0.0245	0.7735	0.0346	79.6104	1.0262	2.4878	78.5842	3.5141	0.2845	0.6897	0.9743
	0.7735	0.0104	0.0242	0.7630	0.0346	78.5842	1.0583	2.4558	77.5259	3.5141	0.2934	0.6808	0.9743
	0.7630	0.0107	0.0238	0.7523	0.0346	77.5259	1.0914	2.4227	76.4345	3.5141	0.3026	0.6717	0.9743
	0.7523	0.0111	0.0235	0.7412	0.0346	76.4345	1.1255	2.3886	75.3090	3.5141	0.3120	0.6622	0.9743
1	0.7836	0.0423	0.0960	0.7412	0.1383	79.6104	4.3015	9.7548	75.3090	14.0563	1.1926	2.7045	3.8970
	0.7412	0.0114	0.0232	0.7298	0.0346	75.3090	1.1607	2.3534	74.1483	3.5141	0.3218	0.6525	0.9743
	0.7298	0.0118	0.0228	0.7180	0.0346	74.1483	1.1969	2.3171	72.9514	3.5141	0.3318	0.6424	0.9743
	0.7180	0.0121	0.0224	0.7059	0.0346	72.9514	1.2343	2.2797	71.7170	3.5141	0.3422	0.6320	0.9743
	0.7059	0.0125	0.0221	0.6933	0.0346	71.7170	1.2729	2.2412	70.4441	3.5141	0.3529	0.6213	0.9743
2	0.7412	0.0479	0.0905	0.6933	0.1383	75.3090	4.8649	9.1914	70.4441	14.0563	1.3488	2.5483	3.8970
	0.6933	0.0129	0.0217	0.6804	0.0346	70.4441	1.3127	2.2014	69.1314	3.5141	0.3639	0.6103	0.9743
	0.6804	0.0133	0.0213	0.6671	0.0346	69.1314	1.3537	2.1604	67.7777	3.5141	0.3753	0.5989	0.9743
	0.6671	0.0137	0.0208	0.6534	0.0346	67.7777	1.3960	2.1181	66.3817	3.5141	0.3870	0.5872	0.9743
	0.6534	0.0142	0.0204	0.6392	0.0346	66.3817	1.4396	2.0744	64.9420	3.5141	0.3991	0.5751	0.9743
3	0.6933	0.0542	0.0842	0.6392	0.1383	70.4441	5.5021	8.5542	64.9420	14.0563	1.5254	2.3716	3.8970
	0.6392	0.0146	0.0200	0.6246	0.0346	64.9420	1.4846	2.0294	63.4574	3.5141	0.4116	0.5626	0.9743
	0.6246	0.0151	0.0195	0.6095	0.0346	63.4574	1.5310	1.9830	61.9264	3.5141	0.4245	0.5498	0.9743
	0.6095	0.0155	0.0190	0.5940	0.0346	61.9264	1.5789	1.9352	60.3475	3.5141	0.4377	0.5365	0.9743
	0.5940	0.0160	0.0186	0.5779	0.0346	60.3475	1.6282	1.8859	58.7193	3.5141	0.4514	0.5228	0.9743
4	0.6392	0.0612	0.0771	0.5779	0.1383	64.9420	6.2228	7.8335	58.7193	14.0563	1.7252	2.1718	3.8970
	0.5779	0.0165	0.0181	0.5614	0.0346	58.7193	1.6791	1.8350	57.0402	3.5141	0.4655	0.5087	0.9743
	0.5614	0.0170	0.0175	0.5444	0.0346	57.0402	1.7316	1.7825	55.3086	3.5141	0.4801	0.4942	0.9743
	0.5444	0.0176	0.0170	0.5268	0.0346	55.3086	1.7857	1.7284	53.5229	3.5141	0.4951	0.4792	0.9743
	0.5268	0.0181	0.0165	0.5087	0.0346	53.5229	1.8415	1.6726	51.6814	3.5141	0.5105	0.4637	0.9743
5	0.5779	0.0693	0.0691	0.5087	0.1383	58.7193	7.0378	7.0185	51.6814	14.0563	1.9512	1.9458	3.8970
	0.5087	0.0187	0.0159	0.4900	0.0346	51.6814	1.8990	1.6150	49.7824	3.5141	0.5265	0.4478	0.9743
	0.4900	0.0193	0.0153	0.4707	0.0346	49.7824	1.9584	1.5557	47.8240	3.5141	0.5429	0.4313	0.9743
	0.4707	0.0199	0.0147	0.4508	0.0346	47.8240	2.0196	1.4945	45.8045	3.5141	0.5599	0.4143	0.9743
	0.4508	0.0205	0.0141	0.4303	0.0346	45.8045	2.0827	1.4314	43.7218	3.5141	0.5774	0.3968	0.9743
6	0.5087	0.0783	0.0600	0.4303	0.1383	51.6814	7.9597	6.0966	43.7218	14.0563	2.2068	1.6903	3.8970
	0.4303	0.0211	0.0134	0.4092	0.0346	43.7218	2.1478	1.3663	41.5740	3.5141	0.5955	0.3788	0.9743
	0.4092	0.0218	0.0128	0.3874	0.0346	41.5740	2.2149	1.2992	39.3591	3.5141	0.6141	0.3602	0.9743
	0.3874	0.0225	0.0121	0.3649	0.0346	39.3591	2.2841	1.2300	37.0750	3.5141	0.6333	0.3410	0.9743
	0.3649	0.0232	0.0114	0.3417	0.0346	37.0750	2.3555	1.1586	34.7195	3.5141	0.6530	0.3212	0.9743
7	0.4303	0.0886	0.0497	0.3417	0.1383	43.7218	9.0022	5.0541	34.7195	14.0563	2.4958	1.4012	3.8970
	0.3417	0.0239	0.0107	0.3178	0.0346	34.7195	2.4291	1.0850	32.2904	3.5141	0.6735	0.3008	0.9743
	0.3178	0.0247	0.0099	0.2932	0.0346	32.2904	2.5050	1.0091	29.7855	3.5141	0.6945	0.2798	0.9743
	0.2932	0.0254	0.0092	0.2677	0.0346	29.7855	2.5833	0.9308	27.2022	3.5141	0.7162	0.2581	0.9743
	0.2677	0.0262	0.0084	0.2415	0.0346	27.2022	2.6640	0.8501	24.5382	3.5141	0.7386	0.2357	0.9743
8	0.3417	0.1002	0.0381	0.2415	0.1383	34.7195	10.1814	3.8749	24.5382	14.0563	2.8227	1.0743	3.8970
	0.2415	0.0270	0.0075	0.2145	0.0346	24.5382	2.7473	0.7668	21.7909	3.5141	0.7617	0.2126	0.9743
	0.2145	0.0279	0.0067	0.1866	0.0346	21.7909	2.8331	0.6810	18.9578	3.5141	0.7855	0.1888	0.9743
	0.1866	0.0288	0.0058	0.1578	0.0346	18.9578	2.9216	0.5924	16.0362	3.5141	0.8100	0.1642	0.9743
	0.1578	0.0297	0.0049	0.1282	0.0346	16.0362	3.0129	0.5011	13.0232	3.5141	0.8353	0.1389	0.9743
9	0.2415	0.1133	0.0250	0.1282	0.1383	24.5382	11.5150	2.5413	13.0232	14.0563	3.1925	0.7046	3.8970
	0.1282	0.0306	0.0040	0.0976	0.0346	13.0232	3.1071	0.4070	9.9161	3.5141	0.8614	0.1128	0.9743
	0.0976	0.0315	0.0030	0.0661	0.0346	9.9161	3.2042	0.3099	6.7119	3.5141	0.8883	0.0859	0.9743
	0.0661	0.0325	0.0021	0.0335	0.0346	6.7119	3.3043	0.2097	3.4076	3.5141	0.9161	0.0582	0.9743
	0.0335	0.0335	0.0010	0.0000	0.0346	3.4076	3.4076	0.1065	0.0000	3.5141	0.9447	0.0295	0.9743
10	0.1282	0.1282	0.0102	0.0000	0.1383	13.0232	13.0232	1.0331	0.0000	14.0563	3.6106	0.2864	3.8970