



Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/R/ADG(Trf)/TRF-517/AEPL-2020/45928-45930

December 29, 2021

Subject: Decision of National Electric Power Regulatory Authority in the matter of Tariff Petition filed by Access Electric (Private) Ltd. regarding approval of Prior Period Development Costs under the Reference Generation Tariff (Case No. NEPRA/TRF-517/AEPL-2020)

Dear Sir,

Please find enclosed herewith subject Decision of the Authority along with Annex-I & II (11 Pages) in Case No. NEPRA/TRF-517/AEPL-2020.

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31 (7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

3. The Order Part along with Annex-I (Reference Tariff Table) & Annex-II (Debt Servicing Schedule) of the Decision are to be notified in the Official Gazette.

Enclosure: As above

Secretary
Ministry of Energy (Power Division)
'A' Block, Pak Secretariat
Islamabad

(Iftikhar Ali Khan)

29/12/21

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

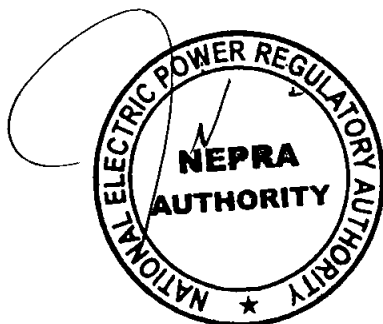
**DECISION OF NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF
TARIFF PETITION FILED BY M/S ACCESS ELECTRIC (PRIVATE) LIMITED REGARDING APPROVAL
OF PRIOR PERIOD DEVELOPMENT COSTS UNDER THE REFERENCE GENERATION TARIFF**

1. Access Electric (Pvt.) Ltd. (hereinafter referred to as the "AEPL" or "the petitioner" or "the company/project company") filed the subject petition vide its letter dated August 5, 2021 under Section 7 and 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 ("NEPRA Act") and Rule 3 of the NEPRA (Tariff Standards & Procedure) Rules, 1998 ("Tariff Rules") and enabling provisions of the law for approval of Prior Period Development Costs ("PPDC") in respect of its 10 MWp solar PV power project ("the Project") envisaged to be set up at Pind Dadan Khan, District Jhelum, Punjab.
2. Through the said tariff petition, AEPL requested the Authority for approval of PPDC of Rs.105.146 million in accordance with the Decision of the Authority issued on July 29, 2021 in the matter of modification of Tariff Determination dated December 30 2020. Following provision with regard to the PPDC was given in the aforesaid Decision:

"The Authority also considered the request of the petitioner with respect to allowing prior development cost. It was noted that the petitioner was asked to provide the information about those claims, however, AEPL submitted that it shall be submitting the same at the time of adjustment of tariff at COD. The Authority considered these details and decided that the compensation of legitimate cost of the project company due to its prolonged development period would be given due deliberations on the basis of verifiable documentary evidence before the financial close. For that purpose, the petitioner shall be required to file the tariff petition following the relevant provisions of applicable law"

3. The PPDC of Rs.105.146 million has been claimed from Financial Year (FY), 2012 to FY, 2020; detailed breakup of which is given hereunder:

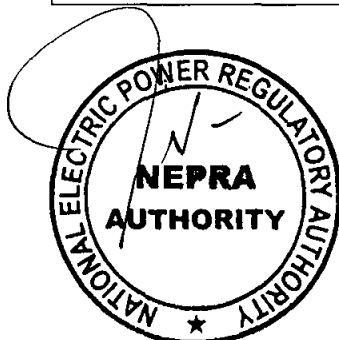
Description	Amount Million Rs.
Consultancy Fee	15.152
Audit Fee	0.385
Lenders Fee & Charges	5.771
Litigation Fee	6.515
Regulatory Fee	10.550
Technical Studies	4.401
Administrative Expenses	62.371
Total	105.146





4. Copies of the following documents were submitted by AEPL in support of its claim for PPDC:
- Contracts/Agreements/Purchase orders/emails;
 - Invoices;
 - Payment instruments including bank statements;
 - Computerised payment receipt issued by Federal Board of Revenue (FBR);
 - Audited Financial Statements for the FY from 2012 till 2020.
5. The Authority has noted that the proceedings for the Upfront Tariff, opted by AEPL, were initiated in May, 2012. As the claim of PPDC was recognized by the Authority for non-notification of AEPL's upfront tariff, therefore, the development expenses incurred by AEPL before the start of the proceedings of 1st upfront tariff i.e. the cost pertaining to FY 2012 (Rs. 13.098 million) is not considered in the PPDC.
6. Further, it is noted that AEPL has already been allowed Project Development Cost ("PDC") of about Rs. 40 million in the Tariff Determination dated December 30, 2020. It is found that LOIs were obtained by solar PV projects (whose tariffs are determined under cost plus regimes) about two years prior to filing of tariff petitions. In this way, PDC allowed to these companies cover the development expenses of those two years also. As the tariff petition was filed by the AEPL on March 24, 2020, therefore, the approved PDC is considered to cover the expenses from FY 2019. Accordingly, the claim of PPDC has been restricted till FY ending June 30, 2018. That is, the claim of Rs. 19.902 million, pertaining to FY 2019 and 2020, has not been considered.
7. Accordingly, the claimed amount pertaining to the period starting from FY 2013 till FY 2018 works out to be Rs. 72.146 million.
8. Based on the verification of the documentary evidence as submitted by the Petitioner, the PPDC being approved works out to be Rs. 49.413 million. Produced below is the comparison of claimed Vs approved PPDC;

Description	Claimed Amount Million Rs.	Approved Amount Million Rs.
Consultancy Fee	13.688	10.865
Audit Fee	0.217	0.207
Lenders Fee & Charges	5.771	4.389
Litigation Fee	6.515	2.500
Regulatory Fee	9.293	0.982
Technical Studies	1.129	0.450
Administrative Expenses	35.533	30.020
Total	72.146	49.413



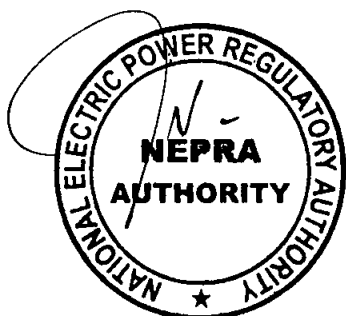


9. The broad reasons of difference of Rs. 22.733 million are (i) Rs. 11.168 million found not justified mainly on the pretext of the costs being not in the scope of the relevant contracts, (ii) Rs. 11.262 million could not be verified as complete documents of the same were not provided, (iii) Rs. 0.239 million of adjustable sales tax, (iv) Rs. 0.064 million due to exchange rates difference.
10. In view of the above, the Authority has decided to allow Rs. 49.413 million as PPDC to AEPL. The approved amount is being included in the project cost approved for AEPL in the Tariff Determination issued on December 30, 2020.

ORDER

11. In pursuance of section 7(3)(a) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 and NEPRA (Tariff Standards & Procedure) Rules, 1998, the Authority hereby determines and approves the generation tariff along with terms and conditions for Access Electric (Pvt.) Limited (AEPL) for its 10 MWp solar PV power project for delivery of electricity to the power purchaser as follows:

- Levelized tariff works out to be Rs. 7.1253/kWh (US Cents 4.2820/kWh).
- The tariff has been worked out on Build, Own and Operate basis.
- EPC cost of USD 5.600 million has been approved.
- Project Development Cost of USD 0.240 million has been approved.
- Prior Period Development cost of USD 0.297 million (Rs. 49.413 million) has been approved.
- Cost of Land of USD 0.085 million has been approved
- Insurance during construction at the rate of 0.4% of the allowed EPC cost has been approved.
- Financing Fee & Charges at the rate of 2% of the debt portion of the capital cost has been approved.
- Debt to Equity ratio of 80:20 has been approved.
- Tariff has been computed using 100% local financing under SBP Scheme.
- The cost of debt of 6% (SBP Scheme) has been used.
- Debt Repayment has been scheduled for 10 years from COD.
- Equity IRR of 13% has been allowed.
- O&M Cost of USD 10,000 per MW per year has been allowed.





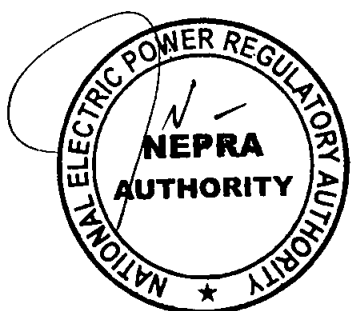
- Insurance during Operation has been calculated as 0.40% of the allowed EPC Cost.
- Construction period of 8 months has been allowed.
- Net Annual Plant Capacity Factor of 20.3505% has been approved.
- Degradation factor of 0.5% per year has been approved. The financial impact of the allowed degradation of USD 0.203 million has been taken into account in the approved project cost.
- Reference Exchange Rates of 166.40 PKR/USD has been used.
- IDC and ROEDC have been worked out using following drawdown schedule:

Month 1	5.00%
Month 2	5.00%
Month 3	5.00%
Month 4	15.00%
Month 5	15.00%
Month 6	15.00%
Month 7	20.00%
Month 8	20.00%

- Detailed component wise tariff is attached as **Annex-I** of this determination.
- Debt Servicing Schedule is attached as **Annex-II** of this determination.

A. One Time Adjustments at COD

- The EPC cost shall be verified and adjusted at actual considering the approved amount as the maximum limit. Applicable foreign portion of the EPC cost will be adjusted at COD on account of variation in PKR/USD parity during the construction period, on production of authentic documentary evidence by the petitioner to the satisfaction of the Authority. The adjustment in applicable foreign portion of the approved EPC cost shall be made for the currency fluctuation against the reference parity values.
- PDC including land cost, Insurance during construction and Financing Fee and Charges shall be adjusted at actual at the time of COD considering the approved amount as the maximum limit. The amounts allowed on these accounts in USD will be converted in PKR using the reference PKR/USD rate of 166.40 to calculate the maximum limit of the amount to be allowed at COD.
- Duties and/or taxes, not being of refundable nature, relating to the construction period directly imposed on the company up to COD will be allowed at actual upon production of verifiable documentary evidence to the satisfaction of the Authority.





- The tariff has been determined on debt : equity ratio of 80 : 20. The tariff shall be adjusted on actual debt : equity mix at the time of COD, subject to equity share of not more than 20%. For equity share of more than 20%, allowed IRR shall be neutralized for the additional cost of debt : equity ratio.
- IDC will be recomputed at COD on the basis of actual timing of debt draw downs (for the overall debt allowed by the Authority at COD) for the project construction period of 08 months starting from the date of financial close.
- For full/part of commercial foreign or local loan or a mix of both, if applicable and availed by the company, the IDC shall also be allowed adjustment for change in applicable LIBOR/KIBOR.
- The reference tariff has been worked out on the basis of cost of 6% stated under SBP financing scheme. In case cost negotiated by the company under SBP scheme is less than the said limit of 6%, the savings in that cost shall be shared between the power purchaser and the power producer in the ratio of 60:40 respectively.
- For full or part of commercial local or foreign loan, if any, the savings in the approved spreads shall be shared between the power purchaser and power producer in the ratio of 60:40.
- ROEDC will be adjusted at COD on the basis of actual equity injections (within the overall equity allowed by the Authority at COD) during the project construction period of 08 months from the date of financial close.

B. Indexations during operations

Insurance shall be allowed adjustment on yearly basis starting from either 1st July or 1st January. ROE, ROEDC and O&M Components shall be adjusted on quarterly basis to be applicable from 1st July, 1st October, 1st January and 1st April. Adjustment of Debt Servicing Component (if any) shall be made either quarterly/bi-annually/annual, depending upon the final terms approved by the Authority at the time of COD. The indexation mechanisms are given hereunder:

i) Operation and Maintenance Costs

O&M component of tariff shall be adjusted on account of change in local Inflation (N-CPI) as notified by the Pakistan Bureau of Statistics according to the following mechanism:

L. O&M (REV)	=	L. O&M (REF) * CPI (REV) / CPI (REF)
Where;		
L. O&M (REV)	=	The revised O&M Local Component of Tariff
L. O&M (REF)	=	The reference O&M Local Component of Tariff
CPI (REV)	=	The revised CPI (General)
N-CPI (REF)	=	The reference N-CPI (General) of 136.23 for the month of August, 2020



Note: The reference index of N-CPI shall be revised for making the required adjustments in O&M component at the time of COD. For the adjustment of O&M component at COD, the revised N-CPI value for the middle month of preceding quarter prior to the date of COD shall be considered. Thereafter, the N-CPI value taken at COD shall become reference for subsequent adjustments in the O&M component.

ii) **Insurance during Operation**

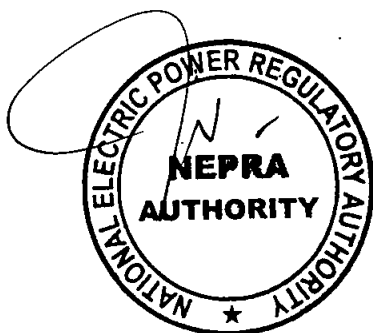

The actual insurance cost for the minimum cover required under contractual obligations with the power purchaser, not exceeding 0.4% of the approved EPC cost, will be treated as pass through. Insurance component of reference tariff shall be adjusted annually as per actual upon production of authentic documentary evidence according to the following formula:

AIC	=	$\text{Ins (Ref)} / \text{P (Ref)} * \text{P (Act)}$
Where;		
AIC	=	Adjusted insurance component of tariff
Ins (Ref)	=	Reference insurance component of tariff
P (Ref)	=	Reference premium @ 0.4% of approved EPC Cost at Rs. 166.40/USD
P (Act)	=	Actual premium or 0.4% of the approved EPC Cost converted into Pak Rupees on exchange rate prevailing on 1 st day of the insurance coverage period, whichever is lower

iii) **Return on Equity**

The ROE (ROE + ROEDC) components of the tariff will be adjusted quarterly on account of change in USD/PKR parity. The variation relating to these components shall be worked out according to the following formula:

ROE (Rev)	=	$\text{ROE (Ref)} * \text{ER (Rev)} / \text{ER (Ref)}$
Where;		
ROE (Rev)	=	Revised ROE Component of Tariff
ROE (Ref)	=	Reference ROE Component of Tariff
ER (Rev)	=	The revised TT & OD selling rate of US dollar on the last day of the preceding quarter as notified by the National Bank of Pakistan
ER (Ref)	=	The reference TT & OD selling rate of Rs. 166.40/USD



Note: The reference tariff component shall be revised after making the required adjustments at the time of COD.

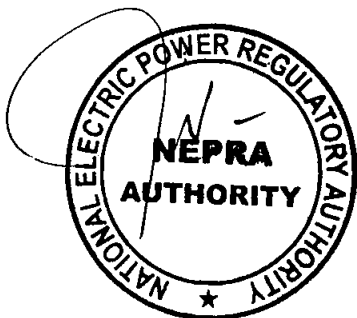
C. Terms and Conditions

The following terms and conditions shall apply to the determined tariff:

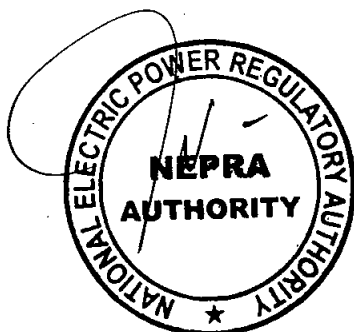
- All plant and equipment shall be new and of acceptable standards. The verification of the plant and equipment will be done by the Independent Engineer, duly appointed by the power purchaser, at the time of the commissioning of the plant.
- This tariff will be limited to the extent of net annual energy generation supplied to the power purchaser up to 20.3505% net annual plant capacity factor. Net annual energy generation supplied to the power purchaser in a year, in excess of 20.3505%, will be charged at the following tariffs:

<u>Net annual plant capacity factor</u>	<u>% of prevalent tariff allowed to power producer</u>
Above 20.35% to 20.50%	-
Above 20.50% to 21.25%	10%
Above 21.25% to 22.00%	20%
Above 22.00% to 22.75%	30%
Above 22.75%	40%

- The risk of solar resource shall be borne by the power producer.
- The maximum plant capacity shall not exceed as given in the Generation License.
- In the above 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, amended from time to time.
- The petitioner is directed to ensure that all the equipment is installed as per the details/specifications given in the generation license/tariff as awarded by NEPRA.
- The petitioner is hereby directed to secure the maximum available loan under the SBP Scheme. The savings in the cost of financing under SBP Scheme shall be shared between power purchaser and power producer in the ratio of 60:40 at the time of COD or during any time of the loan tenor, as applicable.



- In case the company shall secure full or part of local commercial loan then the tariff of company shall be computed/adjusted at the time of COD at applicable KIBOR + spread of 2.25%. The savings in the approved spreads anytime during the loan tenor shall be shared between the power purchaser and power producer in the ratio of 60:40. The tenor of the debt servicing shall not be less than thirteen years for this loan.
- In case the company shall secure full or part of foreign conventional loan then the tariff of company shall be computed/adjusted at the time of COD at applicable LIBOR + spread of 4.25%. The savings in the approved spreads any time during the loan tenor shall be shared between the power purchaser and power producer in the ratio of 60:40. The tenor of the debt servicing shall not be less than thirteen years for this loan.
- In case the company shall secure foreign loan under any credit insurance (Sinosure etc.) then the cost of that insurance shall be allowed to the maximum limit of 0.6% of the approved yearly outstanding principal and interest amounts. For financing with Sinosure, the spread/margin over LIBOR shall be adjusted to the extent such that the total financing cost (applicable LIBOR + Adjusted Margin + Sinosure) shall not exceed the financing cost without Sinosure (applicable LIBOR + Approved Margin).
- The Authority may consider making changes in the O&M cost while capping the allowed prevailing level, which shall be governed under legal framework to be approved by Authority in this regard.
- In case the company earns annual profit in excess of the approved return on equity (including ROEDC), then that extra amount shall be shared between the power producer and consumers through claw back formula to be decided by the Authority through the relevant framework. For that purpose, the share of producer as given in the bonus energy mechanism shall be taken into account.
- Allowed limit of degradation has been made part of the approved project cost. No extra financial compensation shall be provided in the EPA.
- The company will have to achieve financial close within one year from the date of issuance of Tariff Determination, i.e. by December 30, 2021. The tariff granted to the company will no longer remain applicable/valid, if financial close is not achieved by the company, for whatever reason, in the abovementioned timeline or its generation license is declined/revoked by NEPRA.
- The targeted maximum construction period from prescribed date/time of financial close is 8 months. No adjustment will be allowed in this tariff to account for financial impact of any delay in project construction. However, the failure of the company to complete construction within 8 months will not invalidate the tariff granted to it.
- Pre COD sale of electricity is allowed to the power producer, subject to the terms and conditions of EPA, at the reference tariff excluding debt servicing and return components.





However, pre COD sale will not alter the required COD stipulated in the EPA in any manner.

- In case 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, the exact amount paid by the company on these accounts shall be reimbursed on production of original receipts. This payment shall be considered as a pass-through payment. However, withholding tax on dividend shall not be allowed as pass through.
 - No provision for the payment of Workers Welfare Fund and Workers Profit Participation has been made in the tariff. In case, the company has to pay any such fund, that will be treated as pass through item in the EPA.
 - The approved tariff along with terms & conditions shall be made part of the EPA. General assumptions, which are not covered in this determination, may be dealt with as per the standard terms of the EPA.
12. The Order part along with 2 Annexures is recommended for notification by the Federal Government in the official gazette in accordance with Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

Rehmatullah Baloch
Member

Engr. Maqsood Anwar Khan
Member

Engr. Rafique Ahmed Shaikh
Member

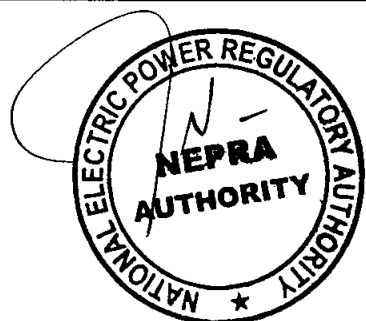
Tauseef H. Farooqi
Chairman



29-12-21

ACCESS ELECTRIC (PVT) LIMITED
REFERENCE TARIFF TABLE

Year	O&M Local	Insurance	Return on Equity	Return on Equity during Construction	Loan Repayment	Interest Charges	Tariff
	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh
1	0.9334	0.2091	1.4494	0.0571	3.7281	2.8845	9.2616
2	0.9334	0.2091	1.4494	0.0571	3.9569	2.6557	9.2616
3	0.9334	0.2091	1.4494	0.0571	4.1997	2.4129	9.2616
4	0.9334	0.2091	1.4494	0.0571	4.4574	2.1552	9.2616
5	0.9334	0.2091	1.4494	0.0571	4.7310	1.8817	9.2616
6	0.9334	0.2091	1.4494	0.0571	5.0213	1.5914	9.2616
7	0.9334	0.2091	1.4494	0.0571	5.3294	1.2833	9.2616
8	0.9334	0.2091	1.4494	0.0571	5.6564	0.9562	9.2616
9	0.9334	0.2091	1.4494	0.0571	6.0035	0.6091	9.2616
10	0.9334	0.2091	1.4494	0.0571	6.3719	0.2407	9.2616
11	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
12	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
13	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
14	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
15	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
16	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
17	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
18	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
19	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
20	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
21	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
22	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
23	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
24	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
25	0.9334	0.2091	1.4494	0.0571	-	-	2.6489
Levelized Tariff	0.9334	0.2091	1.4494	0.0571	3.1957	1.2806	7.1253



ACCESS ELECTRIC (PVT) LIMITED

Debt Servicing Schedule

Relevant Quarters	Base amount (Rs.)	Principal Repayment (Rs.)	Interest (Rs.)	Balance Principal (Rs.)	Total Debt Service (Rs.)	Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh
1	881,649,282	16,246,241	13,224,739	865,403,041	29,470,980	3.7281	2.8845
2	865,403,041	16,489,935	12,981,046	848,913,107	29,470,980		
3	848,913,107	16,737,284	12,733,697	832,175,823	29,470,980		
4	832,175,823	16,988,343	12,482,637	815,187,480	29,470,980		
5	815,187,480	17,243,168	12,227,812	797,944,312	29,470,980	3.9569	2.6557
6	797,944,312	17,501,816	11,969,165	780,442,497	29,470,980		
7	780,442,497	17,764,343	11,706,637	762,678,154	29,470,980		
8	762,678,154	18,030,808	11,440,172	744,647,346	29,470,980		
9	744,647,346	18,301,270	11,169,710	726,346,076	29,470,980	4.1997	2.4129
10	726,346,076	18,575,789	10,895,191	707,770,287	29,470,980		
11	707,770,287	18,854,426	10,616,554	688,915,861	29,470,980		
12	688,915,861	19,137,242	10,333,738	669,778,619	29,470,980		
13	669,778,619	19,424,301	10,046,679	650,354,318	29,470,980	4.4574	2.1552
14	650,354,318	19,715,665	9,755,315	630,638,652	29,470,980		
15	630,638,652	20,011,400	9,459,580	610,627,252	29,470,980		
16	610,627,252	20,311,571	9,159,409	590,315,680	29,470,980		
17	590,315,680	20,616,245	8,854,735	569,699,435	29,470,980	4.7310	1.8817
18	569,699,435	20,925,489	8,545,492	548,773,947	29,470,980		
19	548,773,947	21,239,371	8,231,609	527,534,576	29,470,980		
20	527,534,576	21,557,962	7,913,019	505,976,614	29,470,980		
21	505,976,614	21,881,331	7,589,649	484,095,283	29,470,980	5.0213	1.5914
22	484,095,283	22,209,551	7,261,429	461,885,732	29,470,980		
23	461,885,732	22,542,694	6,928,286	439,343,038	29,470,980		
24	439,343,038	22,880,835	6,590,146	416,462,203	29,470,980		
25	416,462,203	23,224,047	6,246,933	393,238,156	29,470,980	5.3294	1.2833
26	393,238,156	23,572,408	5,898,572	369,665,748	29,470,980		
27	369,665,748	23,925,994	5,544,986	345,739,754	29,470,980		
28	345,739,754	24,284,884	5,186,096	321,454,870	29,470,980		
29	321,454,870	24,649,157	4,821,823	296,805,713	29,470,980	5.6564	0.9562
30	296,805,713	25,018,895	4,452,086	271,786,818	29,470,980		
31	271,786,818	25,394,178	4,076,802	246,392,641	29,470,980		
32	246,392,641	25,775,091	3,695,890	220,617,550	29,470,980		
33	220,617,550	26,161,717	3,309,263	194,455,833	29,470,980	6.0035	0.6091
34	194,455,833	26,554,143	2,916,837	167,901,690	29,470,980		
35	167,901,690	26,952,455	2,518,525	140,949,235	29,470,980		
36	140,949,235	27,356,742	2,114,239	113,592,494	29,470,980		
37	113,592,494	27,767,093	1,703,887	85,825,401	29,470,980	6.3719	0.2407
38	85,825,401	28,183,599	1,287,381	57,641,802	29,470,980		
39	57,641,802	28,606,353	864,627	29,035,448	29,470,980		
40	29,035,448	29,035,448	435,532	(0)	29,470,980		

