



Ref: AEPL/04/20
March 24, 2020

The Registrar,
National Electric Power Regulatory Authority,
NEPRA Tower, Ataturk Avenue-East G-5/1,
ISLAMABAD.

Subject: Tariff Petition for Reference Generation Tariff

Dear Sir,

I, Amir Altaf, Manager Accounts of the Access Electric (Private) Limited ("AEPL" or the "Company"), being the duly Authorized Representative of the Company by virtue of the resolution of the Board of Directors dated March 15th, 2020, hereby submit the application for Reference Generation Tariff, under the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "NEPRA Act") before the National Electric Power Regulatory Authority the "Authority") being responsible inter alia, for determining tariffs and other terms and conditions for the supply of electricity through generation, transmission and distribution. The Authority is responsible for determining the process and procedures for reviewing tariffs and recommending tariff adjustments. Further, pursuant to the enabling provisions of the NEPRA Act, the procedure for tariff determination has been prescribed in the NEPRA (Tariff Standards and Procedures) Rules, 1998 (the "NEPRA Rules") and request for approval of the Authority.

I certify that the documents-in-support attached with this application are prepared and submitted in conformity with the prevailing provisions of the NEPRA Act and the NEPRA Rules, and I undertake to abide by the terms and provisions of the above-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.

We are submitting the Company's Tariff Petition (including its Annexures, in triplicate, along with Board resolution and the requisite Affidavit) for kind consideration and favorable approval by the Authority in accordance with the relevant laws and rules.

It is also submitted the requisite fee, amounting to PKR 364,928/- (Pakistan Rupees Three Hundred Sixty-Four Thousand and Nine Hundred Twenty Eighty only), on the matter related to subject Petition has already been submitted via cheque No. 61616197 dated January 3rd 2020, copy of which is again attached for ready reference.

Thanking you,

For and on behalf of
Access Electric (Private) Limited

Amir Altaf
(Authorized Representatives)



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PROJECT OFFICE Unit#2, 17 Aziz Avenue, Canal Bank, Lahore, Pakistan | +92 42 357 60173, 358 78879 | +92 42 357 60480

BEFORE
THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (NEPRA)

APPLICATION FOR NEPRA'S APPROVAL OF REFERENCE GENERATION TARIFF
("PETITION")

FOR

ACCESS ELECTRIC PRIVATE LIMITED

10 MWP SOLAR PHOTOVOLTAIC (PV) POWER GENERATION FACILITY

AT PIND DADAN KHAN , DISTRICT JHELUM, PUNJAB

Dated: March 24, 2020



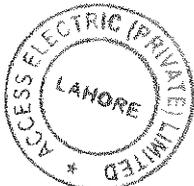
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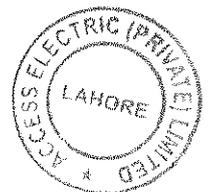
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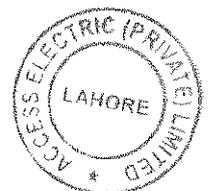
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LIST OF ACRONYMS

AEPL	Access Electric (Private) Limited
AEDB	Alternate Energy Development Board
APCF	Annual Plant Capacity Factor
BOO	Build, Own and Operate
CAPEX	Capital Expenditures
CCoE	Cabinet Committee on Energy
COD	Commercial Operations Date
CPI	Consumer Price Index
CPPA-G	Central Power Purchasing Agency (Guarantee) Limited
EPA	Energy Purchase Agreement
EPC	Engineering Procurement & Construction
Etc.	Et Cetera
IA	Implementation Agreement
IDC	Interest During Construction
IESCO	Islamabad Electric Supply Company
IHC	Islamabad High Court
KIBOR	Karachi Inter Bank Offer Rate
kWh	Kilo Watt Hour
LIBOR	London Inter Bank Offer Rate
LOI	Letter of Intent
LOS	Letter of Support
LPM	Licensee Proposed Modification
MoE	Ministry of Energy
MWp	Mega Watt Peak
NEPRA	National Electric Power Regulatory Authority
NTDC	National Transmission and Despatch Company
O&M	Operation and Maintenance
PKR	Pakistan Rupee
PV	Photovoltaic
ROE	Return on Equity
ROEDC	Return on Equity During Construction
SBP	State Bank of Pakistan
US CPI	United States Consumer Price Index
USD	United States Dollar
WPPF	Workers Profit Participation Fund
WWF	Workers Welfare Fund



1. DETAILS OF PETITIONERS

NAME AND ADDRESS

Access Electric (Private) Limited ("AEPL" or "Company")

Address: Unit No.02, 17 Aziz Avenue, Canal Bank Road, Lahore
Email: shahid.khan@techaccess.com
Phone: 042-35791325-35760173
Fax: 042-35759226

AUTHORIZED REPRESENTATIVE OF AEPL

Name: Amir Altaf
Designation: Manager Accounts

2. BACKGROUND & REGULATORY FRAMEWORK

2.1. PROJECT BACKGROUND

AEPL is a private limited company incorporated under the laws of Pakistan, which has been in the process of setting up a 10.00 MWp solar PV based power project (the "**Project**") at Pind Dadan Khan, District Jhelum, Punjab ("**Project Site**").

On February 13, 2014, the Alternate Energy Development Board ("**AEDB**") issued a Letter of Intent ("LOI") to sponsors of AEPL i.e. TechAccess FZ LLC for the development of a 10.00 MWp solar PV power plant at the Project Site.

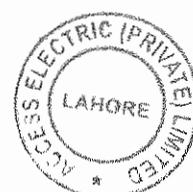
On February 20, 2014 the Company filed an application for the unconditional acceptance of the First Upfront Tariff, which was awarded to the Company vide letter no NEPRA/TRF-258/AEPL-2014/3022-3024 dated March 28, 2014 (the "**First Determination**"). Following the First Determination and provision of requisite bank guarantee, the Company received the Letter of Support ("**LOS**") for the Project from AEDB on December 22, 2014.

As per Section 2 of the Determination, Federal Government was intimated to notify the tariff in the official gazette pursuant to Section 31(4) of the NEPRA Act. However, no such notification was issued by the Federal Government.

As per the terms of the First Determination, the Company was required to achieve financial close by March 31, 2015, however, despite repeated reminders by the Company drafts of the Energy Purchase Agreement ("EPA") and Implementation Agreement ("IA") were not made available by AEDB and at the request of the Company the date of financial close was extended to December 31, 2015 by the Authority.

In the meanwhile, the Authority on January 22, 2015 announced the second upfront tariff for solar PV power projects which following a review was finalized on May 25, 2015 (the "**Second Upfront Tariff**"). Under the Second Upfront Tariff, the Central Power Purchasing Agency (Guarantee) Limited ("**CPPA-G**") and AEDB negotiated and finalized EPA's and IA's with projects having a capacity of 400 MW. Despite documents being available, the Company having a valid tariff and repeated reminders agreements were not finalized with the Company.

Finally, on September 22, 2015, CPPA-G through Letter No. CPPA(G)L/CEO/CE-II/MT-IV/AEPL/42-27-2p intimated to the Company, that signing an EPA under the First Upfront Tariff was against the interest of the power purchaser and the Company should opt for the Second Upfront Tariff. After many deliberations and being left with no choice, the Company on December 18, 2015 filed for an unconditional acceptance of the Second Upfront Tariff which was granted to the Company by the Authority on December 30, 2015 (the "**Second Determination**") and decision was intimated to Federal Government for notification in the official



gazette. However, neither was a notification made nor did CPPA-G commence negotiations with the Company on the EPA.

In the meanwhile, on December 16, 2015, the Authority issued the third upfront tariff (the **“Third Upfront Tariff”**).

Despite its reservations, the Company filed a Writ Petition before the honorable Islamabad High Court (“IHC”) against the injustices of CPPA-G, AEDB and the Federal Government. A decision on the matter was announced by the IHC on May 9, 2017 whereby para 19 stated hereunder:

“For what has been discussed above, it is declared that valuable rights have accrued in favour of the petitioners for giving effect to the approval of the Authority, vide letter dated 17-12-2015. The Authority, after issuing a notification, shall intimate the same to the Federal Government for publication in the official Gazette. In case the latter decides not to avail the remedy provided under the proviso of section 31(4) then it shall cause the notification to be published in the official Gazette. In the event that it elects to file a petition for reconsideration within the specified time prescribed under the provision of section 31(4), the Authority is then expected to complete the proceedings, having regard to the time mentioned ibid. the interested parties, including the Power Purchaser Company, shall be afforded a meaningful participation. On completion of the proceedings under section 31(4) or the proviso thereto, as the case may be, the notification regarding approval of the Authority shall be published in the official Gazette and thereafter the Power Purchase Company shall execute the agreement by incorporating the tariff notified under Section 31(4) of the Act of 1997.”

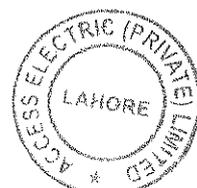
Consequently, a request seeking reconsideration of the Authority's decision dated December 30, 2015 was filed by the Federal Government through Ministry of Energy, Power Division (“MoE”) vide letter dated June 21, 2017. The decision on the matter was announced by the Authority on January 30, 2018 (the **“Third Determination”**).

Being aggrieved by certain aspects of the Third Determination, the Company filed Motion for Leave for Review on February 13, 2018 and a decision on the subject Motion was announced by the Authority on October 11, 2018 (the **“Fourth Determination”**) with a deadline of financial close within 6 months. However, despite clear instructions of the IHC, the Federal Government continued to delay the notification of the Fourth Determination.

As per the Company's understanding, the failure of the Federal Government to issue a notification originated from the Cabinet Committee on Energy's decision of 17th December, 2017 and February, 2018 (the **“CCoE Decision”**), which halted progress on all renewable energy power projects under pipeline. The CCoE's Decision was revised pursuant to an amendment dated April 4, 2019, whereby the Projects that had already been issued LOS were allowed to proceed towards the achievement of their requisite milestone as per the RE Policy 2006. The notification of the Fourth Determination continued to be delayed and was finally notified on August 23, 2019, however, such notification was inoperable as the financial close deadline under the Fourth Determination had already lapsed.

Consequently, the Company is once again filing this Petition for determination of a generation tariff for the Project.

As per Section C (Terms and Conditions), of the Fourth Determination, the Annual Plant Capacity Factor (“APCF”) of the Project was determined at 20.26% which was not achievable using polycrystalline PV panels technology on the basis of which the generation license (**“Generation License”**) was issued. Therefore, in order to meet the tariff requirements AEPL, was required to change the technology and use mono-crystalline or mono-bifacial PV panels with single axis tracking. Accordingly, the Company has filed for a Licensee Proposed Modification (**“LPM”**) in the Generation License on September 5, 2019 is pending before the Authority.



2.2. NEPRA ACT & NEPRA RULES

Under the NEPRA Act, the National Electric Power Regulatory Authority (“NEPRA” or the “Authority”) is responsible, inter alia, for determining tariffs and other terms and conditions for the supply of electricity by the generation, transmission and distribution companies and to recommend these to the Federal Government, subject to the need to comply with guidelines, not inconsistent with the provision of the NEPRA Act, laid down by the Federal Government. NEPRA is also responsible for determining the process and procedures for reviewing tariff and recommending tariff adjustments.

2.3. SUBMISSION

Pursuant to the relevant provisions of the NEPRA Act, the Company hereby submits herewith to the Authority, for its determination, this Petition/Application for determination of the Reference Tariff (“Petition”) for the Project.

Requisite information required by NEPRA for processing this Petition has been annexed herewith, AEPL will be pleased to submit any further information as and when required by NEPRA in connection with the Petition. Furthermore, the Company would reserve the right to provide any further information, clarifications or interpretations to support its case under the Petition if a need so arises.

The Petition has been drafted in line with the information required to be filed under Rule 3 of the Tariff Standards and Procedures Rules, 1998.

3. FACTS AND GROUNDS FOR THE PETITION

3.1. PROJECT BRIEF

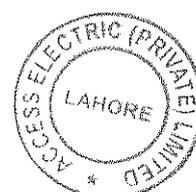
Access Electric (Private) Limited (“AEPL”), incorporated in 2011, was been established with the objective of setting up a 10.0 MWp single axis tracking solar photovoltaic (“PV”) power project at Pind Dadan Khan, District Jhelum, Punjab (“Projects”). The Project is located adjacent to a similar 11.5 MWp project being developed by an associated company Access Solar (Private) Limited (“ASPL”). 96 acres of land for the Projects have been acquired by ASPL of which 46 acres shall be leased to AEPL for the life of the Project. The Project is being developed on a Build, Own and Operate (“BOO”) basis under the Renewable Energy Policy 2006 the Company is expected to enter into a 25-year Energy Purchase Agreement (“EPA”) with Central Power Purchase Agency Guarantee Limited (“CPPA-G”). The Project will feed energy into the 11-kV grid of the Islamabad Electric Supply Company (“IESCO”).

TechAccess FZ LLC, Dubai, United Arab Emirates (“TechAccess”), a limited liability company incorporated in the Dubai Technology, Electronic Commerce & Media Free Zone, is the Main Sponsor of the Project. TechAccess is a leading value-added IT distributor, providing end-to-end business solutions to enterprise and mid-market sectors.

3.2. PROPOSED TARIFF AND INDEXATIONS

The proposed tariff for the Project along with indexations is provided in the Table below:

PKR/kWh	Year 1-10	Year 11-25	Indexation
O&M Local	0.6614	0.6614	Local CPI
O&M Foreign	0.6614	0.6614	US CPI, PKR/USD
Insurance	0.2593	0.2593	PKR/USD
Return on Equity	1.8328	1.8328	PKR/USD
Construction ROE	0.1027	0.1027	PKR/USD
Debt Servicing	6.5349		KIBOR, LIBOR, PKR/USD as applicable
Total	10.0524	3.4149	



Levelized (25 years)	7.9412	
Total (US cents/kWh)	6.4708	2.2642
Levelized (US cents/kWh)	5.1118	

The 25-year tariff table for the Project is provided as Annexure A to this Petition.

3.3. PROJECT TECHNOLOGY AND PLANT FACTORS

The original EPC design of the Project was based on the use of polycrystalline PV panels installed on a fixed tilt mounting structure. However, as per the Fourth Determination as well as under its recent determinations, the Authority has established the APCF in the range upwards of 20.0%, which was not achievable by the Project under the previous technology. In order to achieve the APCF within the Authority's range the Company now plans to develop the Project based on 450Wp mono-crystalline PV modules with a single axis tracking system. The estimated plant factor based on the Project location and Meteorom data is 20.3505% for a 1st year annual generation of 17,827,000 kWh. A simulation in this regard is attached as Annexure B.

3.4. PROJECT COST

3.4.1 Project Cost Assumptions

The estimated capital cost of the Project is provided below. Individual components are discussed in the following sections:

Break-Up of Project Cost	USD Million
EPC Package Cost	5,950,000
Land and Project Development Costs	538,090
Insurance during Construction	29,750
Financing Fees and Charges	156,428
Interest during Construction	120,549
Total Project Cost	6,794,817
<i>Total Project Cost per MW_p</i>	<i>0.679 million</i>

The above does not include capital cost adjustment due to annual degradation factor of 0.5%.

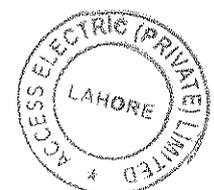
3.4.2 EPC Cost

The Authority in the Fourth Determination had allowed the Company an EPC Cost of 0.7035 million per MW based on single axis tracking in October 2018. Based on revised pricing parameters, an EPC cost of USD 0.595 million per MW is being proposed for the Project. The Authority may kindly note that on account of the smaller size of the Project, the need for cast in situ concrete piles as opposed to screw driven piles and the requirement of a flood protection embankment the EPC cost is comparable with recent determinations of the Authority. Details with respect to specific costs of the Project have been provided to the Authority previously and may be submitted, if required.

3.4.3 Land and Project Development Costs

The Authority in the Fourth Determination had allowed Project Development & Land Cost of USD 53,809 per MW. The same is proposed for the Project in the instant case. The Authority may kindly note that project development costs for a project typically remain the same in absolute terms irrespective of Project size.

3.4.4 Insurance Cost



The Authority had previously allowed insurance costs at the rate of 0.5% of the EPC cost. The same has been proposed in the instant case. The Authority is requested for due consideration of the size of the Project in the subject case.

3.4.5 Financing Fees & Charges

Financing Fees & charges have been assumed at 3.0% of the total debt of the Project. The Authority is requested for due consideration of the size of the Project in the instant case.

3.4.6 Interest during Construction

Construction interest has been calculated based on a construction period of 8 months and debt financing under the State Bank of Pakistan Refinancing Scheme for Renewable Projects at the rate of 6%. Disbursements have been assumed in equal monthly proportions.

3.4.7 Duties & Taxes

No custom duties, sales tax, withholding tax, infrastructure cess or other any form of tax/levy/duty has been assumed on the import of equipment for the Project. It is requested that the Authority allow recovery of any such taxes or levy through a one-time adjustment at COD based on verifiable documentary evidence. No sales tax or withholding tax has been assumed on services (off-shore or on-shore) rendered by contractors for the purpose of the Project. It is proposed that the Authority allow recovery of taxes of a non-refundable nature for the Project Company through a one-time adjustment at COD based on verifiable documentary evidence. Furthermore, any duties, charges or taxes in excess thereof (or any new taxes, charges or duties) or not listed above shall be either treated as pass-through to the Power Purchaser or a one-time adjustment at COD shall be allowed.

3.4.8 Degradation

An annual degradation of 0.5% is proposed to be included in addition to the above capital cost as part of the Project cost.

3.4.9 Prior Development Costs

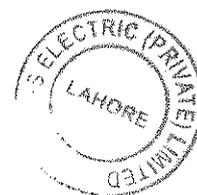
The Authority in Para 26 of the Third Determination and Para 9.5 of the Fourth Determination had considered and decided that the compensation of legitimate cost of the Company due to its prolonged development period would be given due deliberations on the basis of verifiable documentary evidence and the Company may consider applying for said expenses at the time of tariff adjustment request at COD or at an earlier date. It is proposed that the same may be reiterated in the final determination by the Authority.

3.5. OPERATING COSTS

The Authority had in the Fourth Determination allowed an O&M Cost of USD 15,180 MW. The same is proposed in this Petition. The Authority is requested for due consideration of the size of the Project in the instant case. As stated in Section 3.4.4 insurance during operations has been assumed at the rate of 0.5% of the EPC cost.

3.6. PROJECT DEBT

The Project is proposed to be financed under SBP Refinancing Scheme for Renewable Projects at the rate of 6% based on a debt repayment period of 10 years post COD. Debt to equity ratio is assumed at 80:20. However, the Company would, in case of non-availability of funding under the SBP Scheme, request the flexibility to arrange financing as per parameters stated in NEPRA's determination in other cases.



3.7. RETURN ON EQUITY

The Authority had in the Fourth Determination allowed a return on equity and a return on equity during construction of 15% per annum. The same has been proposed in the subject Petition.

4. OTHER KEY ASSUMPTIONS

- 4.1. The timing of drawdown of debt and equity may vary from those specified in this Petition; as such, the Project Cost may be adjusted on the basis of actual IDC at COD along with ROEDC.
- 4.2. Similarly, adjustments in all Project Cost due to variation in PKR/USD variations and LIBOR/KIBOR fluctuations, if applicable, may also be accounted for at the time of COD through a one-time adjustment.
- 4.3. No custom duties, sales tax, withholding tax, infrastructure cess or other any form of tax/levy/duty has been assumed on the import of equipment for the Project or onshore/offshore services related to the Project. It is requested that the Authority allow recovery of any such taxes or levies being of non-refundable nature through a one-time adjustment at COD based on verifiable documentary evidence.
- 4.4. The payments to Workers Welfare Fund and Workers Profit Participation Fund and Employees Old Age Benefits and Pension Contributions, have not been accounted for in the Project budget and have been assumed to be pass-through at actual to the Power Purchaser.
- 4.5. Zakat deduction on dividends as required under Zakat Ordinance is considered as pass-through.
- 4.6. No tax on income tax of Project Company (including proceeds against sale of electricity to CPPA-G/ NTDC) has been assumed. Corporate tax, turn over tax, general sales tax/provincial sales tax and all other taxes, excise duty, levies, fees etc. by any federal/provincial entity including local bodies as and when imposed, shall be treated as pass-through.
- 4.7. Any Excise Duty, Other Duty, levy, charge, surcharge or other impositions under the applicable laws whether Provincial or Federal not considered in the tariff will be treated as pass-through under the EPA.
- 4.8. No hedging cost is assumed for exchange rate fluctuations during construction and all cost overruns resulting from variations in the exchange rate during construction or if applicable after COD as per the provisions of the contracts shall be allowed as pass-through or a one-time adjustment;
- 4.9. Any costs incurred by Project Company, which are required to be incurred by the Power Purchaser pursuant to provisions of EPA, shall be treated as pass-through.
- 4.10. Cost of interconnection shall be borne by the relevant distribution company i.e. IESCO.
- 4.11. Cost incurred or suffered by the Company for any change in general assumptions on account of a requirement of the Power Purchaser shall be considered as a pass-through item.

In light of the foregoing submissions, the Company requests the learned Authority to kindly approve the proposed generation tariff together with the pertinent indexations to remain effective for a period of 25 years from COD on a fast-track basis.

The Company would be pleased to provide any further information, clarification or explanation that may be required by the Authority during its evaluation process.



ANNEXURE – A

Reference Tariff Table (PKR/kWh) Base									
Year	Foreign O&M	Local O&M	Insurance	ROE	ROEDC	Interest Payment	Principal Payment	Total Tariff	Tariff (US cents)
1	0.6614	0.6614	0.2593	1.8328	0.1027	2.8506	3.6843	10.0524	6.4708
2	0.6614	0.6614	0.2593	1.8328	0.1027	2.6245	3.9104	10.0524	6.4708
3	0.6614	0.6614	0.2593	1.8328	0.1027	2.3845	4.1503	10.0524	6.4708
4	0.6614	0.6614	0.2593	1.8328	0.1027	2.1299	4.4050	10.0524	6.4708
5	0.6614	0.6614	0.2593	1.8328	0.1027	1.8595	4.6753	10.0524	6.4708
6	0.6614	0.6614	0.2593	1.8328	0.1027	1.5727	4.9622	10.0524	6.4708
7	0.6614	0.6614	0.2593	1.8328	0.1027	1.2682	5.2667	10.0524	6.4708
8	0.6614	0.6614	0.2593	1.8328	0.1027	0.9450	5.5899	10.0524	6.4708
9	0.6614	0.6614	0.2593	1.8328	0.1027	0.6020	5.9329	10.0524	6.4708
10	0.6614	0.6614	0.2593	1.8328	0.1027	0.2379	6.2970	10.0524	6.4708
11	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
12	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
13	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
14	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
15	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
16	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
17	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
18	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
19	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
20	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
21	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
22	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
23	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
24	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
25	0.6614	0.6614	0.2593	1.8328	0.1027	-	-	3.5175	2.2642
Levelized	0.6614	0.6614	0.2593	1.8328	0.1027	1.2656	3.1581	7.9412	5.1118

