

BEFORE THE HON'BLE A.P. ELECTRICITY REGULATORY COMMISSION
AT IT'S OFFICE AT V FLOOR, SINGARENI BHAVAN, RED HILLS, HYDERABAD
OP.No. 17 of 2019

File No. of 2018
Case No. of 2018

In the matter of:

Petition seeking relief under Section 61(d), 86(1)(b) & 86(1)(f) of Electricity Act, 2003 read with Regulation 55 (1) & (2) of APERC business regulations 2 of 1999, article 23, 24 and 25 of the Regulation No.01/2015 (Terms and Conditions for Tariff Determination for Wind Power Projects in the State of Andhra Pradesh for the period FY2015-16 to FY2019-20) and provisions under PPAs enabled in the APERC orders dated 13.12.2017 to revise the tariff fixed for Wind power projects (pursuant to APERC regulation 01 of 2015) - Reg.

In the matter of:

1. *Southern Power Distribution Company of Andhra Pradesh Limited,
Rep. by its Chairman & Managing Director,
Beside Srinivasa Kalyana Mandapam, Tiruchanoor Road,
Tirupathi - 517501.*
2. *Eastern Power Distribution Company of Andhra Pradesh Limited,
Rep. by its Chairman & Managing Director,
P & T Colony, Seetammadhara, Vishakhapatnam - 530020.*

.... *Petitioners*

And

1. *M/s Karam Chand Thapar & Bros Limited,
Thapar House, #25, Brabourne Road, Kolkata.*
2. *M/s Jindal Aluminium Ltd,
jindal Nagar, Tumkur Road, Bangalore - 560073.*
3. *M/s Mythrah Vaayu (Indravathi) Pvt Ltd.
8001 S.No 109, Q-City NANAKRAMGUDA, GACHIBOWLI, Hyderabad.*
4. *M/s Mangalam Fashions Limited
Registered Office Address: 22, Camac Street, Kolkata-700016.*
5. *M/s. Shree Ram Industries,
C-80, Marudhar Industrial Area, Basni -2, Jodhpur -342005.*
6. *M/s. Om Prakash Soni,
113, PWD Colony, Jodhpur, Rajasthan.*
7. *M/s Sai Pet Preforms
Sy No 157/2, Sanklapur Industrila Estate, Hospet-583201, Karnataka.*

8. *M/s. Manoj Agarwalla,
PO- Dhansar, Dhanbad, Jharkhand -828106.*
9. *M/s Imperial Arts,
G-618-619, EPIP Boranada, Jodhpur -342012.*
10. *M/s Prince Art Exporter,
F-288-89, M.I.A., 2nd phase, BASNI, Jodhpur -342005.*
11. *M/s Kaushaliya Devi Dhoot.
Lodha Street, 1st A Road, Sardarpura, Jodhpur-342011.*
12. *M/s satyanaryana Dhoot.
Lodha Street, 1st A Road, Sardarpura, Jodhpur-342001(Raj.)*
13. *M/s Dinesh Enterprises
E-274, M.I. Area, II Phase, Basni, Jodhpur-342 005 (India)*
14. *M/s RBA PROPERTIES LTD,
22, CAMAC Street, Kolkata -700020.*
15. *M/s RENEW Wind Energy Pvt Ltd
10th floor, DLF Square, M-Block, Jacaranda Marg,
DLF City, Phase-II, Gurgaon-122002*
16. *M/s. Ostro AP Wind Pvt Ltd
Unit No. G-O, Ground Floor, Mira Corporate, Suites, 1 & 2,
Iswar Industrial Estate, Madhura Road,
New Delhi-110065.*
17. *M/s Levelstate Systems Pvt.Ltd.
Regd.Office: Productivity Road, Signature I, 404,
Vasodara-390 0007, India.*
18. *M/s Woodside Fashions Limited,
22, Camac Street, Kolkata - 700016 (WB).*
19. *M/s Shrinath Gum & Chemicals.
E-278, M.I.A. 2nd Phase, Basni, Jodhpur-342005(India).*
20. *M/s Eenadu Television Pvt Ltd.
H.No.1-10-76, Fair Fields, Begumpet, Hyderabad-500016.*
21. *M/s Ushodaya Enterprises Private Limited
Eenadu Corporate Office, Ramoji Film City,
Anajpur Village, Hayathnagar Mandal.
R.R.Dist-501 512. Telangana State.*
22. *M/s Hi-Tech Systems & Services Ltd,
White House, 119, Park street,
Kolkata - 700016(WB).*
23. *M/s Chimique (India) Ltd,
13/3 New Grain Market,
Siwani Mandi-127046, Bhiwani Haryana.*
24. *M/s Rajasthan Gum Private Limited,
H.O: E-8-9, G-234-236 & SP-6, Agro Food Park,
Boranada, Jodhpur - 342012 (Raj.)*
25. *M/s Jai Bharat Gum & Chemicals Ltd.
Regd. Office: Siwani Mandi -127046,
Distt. Bhiwani, Haryana (India).*

26. *M/s Sandla Wind Power Project Limited.
RO: 11-103, GCP Business Center,
Vijay Char Rasta, Memnagar,
Ahmedabad,Gujarat,India -380052.*
27. *M/s ORANGE URAVAKONDA WIND POWER PVT LTD
F-9,First Floor,Manish Plaza 1, Plot No7,MLU,
Sector-10, Dwaraka,Delhi - 110075.*
28. *M/s. Helios Infratech Pvt Ltd,
Plot No#402, 1-2-605, Vaibhav Kunj Apartments,
Lower Tank bund, Hyderabad,Telagana - 500 080.*
29. *M/s.Poonawalla Aviation Pvt Ltd,
212/2, Hadpsar, Off Soli Poonawalla road,
Pune, India - 411028.*
30. *M/s. Poonawalla Shares & Securities Pvt Ltd,
Sarosh Bhavan, 16-B\1,Dr. Ambedkar Road,
Pune - 411001 India.*
31. *M/s.Cyrus Poonawalla Family Trust,
11, Poonawalla Park, Pune - 411037,
Maharashtra State, India*
32. *M/s. Poonawalla Estates Stud &
Agri Farm Pvt Ltd, 212/2,
Hadapsar, Off Soli Poonawalla Road,
Pune - 411028 India*
33. *M/s. Chanda Investments & Trading Co. Pvt. Ltd.,
AT & Post Theur, Pune, India - 412110.*
34. *M/s. Adurjee & Bros. Private Limited.
Sarosh Bhavan, 16-B/1, Dr. Ambedkar Road,
Pune, India - 411001*
35. *M/s. Naukhal Investment Pvt Ltd,
Sarosh Bhavan, 16-B/1, DR.Ambedkar Road,
Pune-411001,Maharashtra.*
36. *M/s Arkas Energy LLP,
Premises No. 29, C C, Basant Lok,
Vasant Vihar, New Delhi - 110 057,*
37. *M/s. Adani Wind Energy (AP) Limited,
Adani House, Nr Mithakhali Circle,
Navrangpura, Ahamadbad-380 009,
Gujarat, India.*
38. *M/s. Cyza Chem Private Limited,
Sarosh Bhavan, 16-B/1, DR.Ambedkar Road,
Pune-411001, India,*
39. *M/s. Villoo's Greenfield Farms,
Gat No: 587, Mukkam Post,Theur, Taluka
Haveli, 412110, India,*
40. *M/s.Mayank Green Energy,
P-10 New Howrah Bridge Approach Road,
1st Floor Amar Bhawan, Kolkata -70001,*

41. *M/s. Skiron Renewable Energy (Amidyala)Pvt Ltd,
Plot No. Godrej Millennium,5 th Floor, 9,
Koregaon Park Road, Pune - 411 001.*
42. *M/s DANU WIND PARKS PVT LTD
1-111/RC/11-B & 12-B/201, Survey No.60,
Raghavendra Colony, Kondapur 500084*
43. *M/s NATCO POWER PVT. LTD
Natco House, Road No.2, Banjara Hills,
Hyderabad - 500034*
44. *M/s. Fujin Wind Parks Pvt Ltd,
1-111/RC/11-B & 12-B/201, Survey No.60,
Ragavendra Colony, Kondapur, Hyderabad - 500 084.*
45. *M/s. Aeolus Wind Parks Pv t Ltd,
1-111/RC/11-B & 12-B/201,
Survey No.60, Ragavendra Colony,
Kondapur, Hyderabad - 500 084.*
46. *M/s Dindore Winds Private Limited,
H.No.63/493, Motilal Nagar- III, M.G.Road,
Goregaon (West), Mumbai - 400090.*
47. *M/s. Axis Wind Energy (MPR Dam),
Plot No.1366, Road No.45, Jubilee Hills,
Hyderabad - 500 033. Telangana,India.*
48. *M/s Axis Wind Energy (Anantapur) Pvt Ltd.,
H.No:6-3-680/8/3, plot no.3, 2nd floor, PMR Plaza,
Thakur Mansion lane, Somajiguda,
Hyderabad - 500 082.*
49. *M/s. Axis wind Farms (Rayalaseema) Private Limited,
2nd floor, Plot No.3, H.No. 6-3-680/8/3, PMR Plaza,
Thakur Mansion lane, Somajiguda,
Hyderabad - 500 082.*
50. *M/s PTC Energy Limited,
2nd floor, NBCC Tower, 15
Bhikaji Cama place, New Delhi-110066.*
51. *M/s. Green Infra Wind Solutions Limited
5th floor, Tower C, BuildingNo.8,
DLF Cybercity, Gurugram, Haryana - 122002.*
52. *M/s.Mytrah Vayu (Tungabhadra) Pvt Ltd,
8001, Q-City, S.No.109, Nanakramguda,
Gachibowli, Hyderabad, -500 032*
53. *M/s.Mytrah Vayu (Krishna) Pvt Ltd,
8001, Q-City, S.No.109, Nanakramguda,
Gachibowli, Hyderabad, -500 032*
54. *M/s ZR RENEWABLE ENERGY PVT LTD
6-3-249/6, Road.No.1, Banjara Hills,
Hyderabad- 500034*
55. *M/s. Guttaseema Wind Energy Company Private Limited,
Plot No. 1366,Road No. 45,*

Jubilee Hills, Hyderabad - 500033, Telangana.

56. *M/s OSTRO ANANTAPUR PVT LTD
Unit No.G-0,Ground Floor,Mira Corporate Suites,
Mathura Road, 1&2 Ishwar Industrial Estate,
Mathura Road, New Delhi- 110065*
57. *M/s. Vayuputhra Energy Pvt Ltd,
Plot No. 1071, Road No. 44, Jubilee Hills,
Hyderabad - 500033, Telangana, India.*
58. *M/s. Kanhur Wind Power Pvt Ltd,
Plot No. 1366, Road No. 45,Jubilee Hills,
Hyderabad - 500033, Telangana.*
59. *M/s. Vayu Urja Bharat Pvt Ltd,
Flat No.402, D.No.1-2-605,Vaibhav Kunj APTS,
Lower Tank Bund, Hyderabad, 500080.*
60. *M/s Ostro Andhra Wind Pvt Ltd,
138, Ansal Chambers-II, Bhikaji Cama Place, NewDelhi-110066.*
61. *M/s. Animala Wind Power PVT Ltd,
Plot No. 1366, Road No. 45,Jubilee Hills,
Hyderabad - 500033, Telangana, India.*
62. *M/s. Saipuram Wind Energies Pvt Ltd,
Plot No. 1071, Road No.44,Jubilee Hills,
Hyderabad - 500 033,Telangana, India.*
63. *M/s Tata Power Renewable Energy Limited,
A Block, 34, Sant Tukaram Road,
Carnac Bunder, Mumbai - 400 009, Maharashtra, India*
64. *M/s KCT RENEWABLE ENERGY PVT LTD,
#25,Thapar House, Brabourne Road, Kolkata.*
65. *Sri KPR Infra & Projects Limited,
5th floor, KPR House, Near Anand Theatre,
SP Road, Secunderabad-500 003, India.*
66. *M/s Bommidala Enterprises Pvt Ltd,
Bommidala House, D.No. 8.-24-53,
Mangalagiri Road, Guntur - 522001,
Andhra Pradesh.*
67. *M/s. HC Commercial Ltd,
5, Middleton Street, Kolkata - 700 071, India,*
68. *M/s. Amrit Bottlers Pvt Ltd,
P-18, Dobson Lane, 7th Floor No.A-3,
Madhusudan Apartments,Howarah - 711 101(W.B), India.*
69. *M/s. RSM Estates Ltd,
Ideal Plaza,11/1 , Sarat Bose road,
2nd Floor, Room no: 207 & 209, Kolkata - 700020.*
70. *M/s. Daulat Financial Services Private Limited,
11/1, Sart Bose Road, Ideal Plaza, 2nd floor,
Room no: 207 & 209, Kolkata - 700 020.*

71. *M/s Molagavalli Renewable Private Limited,
46MW Futura, Blok B, 8th Floor, No. 334,
Rajiv Gandhi Salai, Sholinganallur, Chennai-600119, India.*
72. *M/s NREDCAP Ltd
Head Office: # 12-464/5/1, River Oaks Apartment,
CSR Kalyana Mandapam Road, Tadepalli, Guntur District,
Pin : 522 501*
73. *M/s Vibrant Green tech India Ltd
D.No.4-3-377/1,Bank Street, Koti,
Hyderabad - 500095.*
74. *M/s Sunwin Power tech India (p) ltd.
6-3-883/A/10, Padmavathi place,
Punjagutta, Hyderabad.*
75. *M/s JED SOLAR PARKS PVT LTD
Plot No.1131/A,Sai Square
Road No 36, Jubilee Hills-500033*
76. *M/s POLY SOLAR PARKS PVT LTD
PLOT NO.1131/A, SAI SQUARE, RDNO 36,
Jubilee Hills, Hyderabad-500033*
77. *M/s STERLING AGRO INDUSTRIES LTD,
11th Floor, Aggarwal Cyber Plaza-II,
Netaji Subhash Place, Pithampura, 110034*
78. *M/s. TSSS Infotech and Infra Ltd,
Flat 303, Satya Sai Residency,
Botanical Garden Road, Kondapur, Hyderabad - 500 084.*
79. *M/s. Saptagir Camphor Ltd,
Vaishnavi's Cynosure, 5th Floor, (E&F) Units,
Survey No.18, Telecom Nagar,
Gachibowli, Hyderabad - 500 032.*
80. *M/s HETERO WIND POWER(PENNAR) PVT., LTD
#7-2-A2,3rd floor, Industrial Estate,
Sanath Nagar, Hyderabad.*
81. *M/s The KTM Jewellery Pvt Ltd,
Vivaaga Building, No.636, Oppanakara Street,
Coimbatore - 641001, India.*
82. *M/s Orange Anantapur Wind Power Pvt Limited.
F-9,First Floor,Manish Plaza 1, Plot No7,
MLU, Sector-10, Dwaraka, Delhi - 110075.* Respondents

Petition under Section 61(d), 86(1)(b) & 86(1)(f) of Electricity Act, 2003 read with Section 55 (1) & (2) of APERC business regulations 2 of 1999 and the article 23, 24 and 25 of the APERC Regulation No.01/2015 dtd:31.07.2015.

1. This petition is filed subject to the provisions envisaged under Section 61(d) & 86(1)(b) of Electricity Act, 2003, which is re-iterated as stated below:

“ Section 61. (Tariff regulations): The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-

(d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;

Section 86. (Functions of State Commission): --- (1) *The State Commission shall discharge the following functions, namely:*

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from The Electricity Act, 2003.”

2. The Hon'ble Commission also has wide powers to revise/ amend the tariff de hors to the powers of review of civil court powers Sub clause 1 & 2 of clause 55 of APERC conduct of business regulations 2 of 1999 read as under:

“Nothing in these Regulations shall be deemed to limit or otherwise effect the inherent power of the Commission to make such orders as may be necessary for meeting the ends of the justice or to prevent the abuse of the process of the commission.”

“Nothing in these Regulations shall bar the Commission from adopting a procedure, which is at variance with any of the provisions of these Regulations, if the commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing deems it necessary or expedient”.

3. Further, article 23, 24 and 25 of the APERC Regulation No.01/2015 dtd:31.07.2015 envisage the following provisions:

23. Power to Relax:

The Commission may, by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected, relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.

24. Issue of Orders and Practice Directions:

Subject to the provisions of the Act, the Andhra Pradesh Electricity Reform Act, 1998 and these Regulations, the Commission may, from time to time, issue orders and practice directions in regard to the implementation of these Regulations, the procedure to be followed and other matters, which the Commission has been empowered by these Regulations to specify or direct.

25. Power to Amend:

The Commission may, at any time, vary, alter, modify or amend any provisions of these Regulations.

4. Further, it is also to submit that, the Hon'ble Commission has passed orders dt:13.07.2018 in O.P.No.05 of 2017 as follows:

“ (a) In exercise of the powers conferred on the Commission by Section 181 of the Electricity Act, 2003, Section 54 of the Andhra Pradesh Electricity Reform Act, 1998 and clause 1 (2) of The Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Tariff Determination for Wind Power Projects) Regulations, 2015, Regulation 1 of 2015, it is hereby declared that the Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Tariff Determination for Wind Power Projects) Regulations, 2015, Regulation 1 of 2015 shall be deemed to have remained in force upto 31-03-2017 and shall be deemed to have ceased to be in force with effect from 01-04-2017;

(b) The petitioners are at liberty to procure power through a transparent process of bidding in accordance with the guidelines for tariff based competitive bidding process for procurement of power from grid connected wind power projects formulated and issued by the Ministry of Power, Government of India dated 08-12-2017 under Section 63 of the Electricity Act, 2003;

(c) The petitioners are also at liberty to procure power from wind power projects in accordance with Sections 61, 62, 64 and 86 (1) (b) of the Electricity Act, 2003 and Sections 21 and 26 of the Andhra Pradesh Electricity Reform Act, 1998 and rules, regulations, practice directions and orders issued there under until an appropriate regulation in that behalf is made by this Commission and any Power Purchase Agreement or tariff there under for such procurement shall be guided by the principles contained in the provisions of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2017;

(d) The order of the Commission dated 13-12-2017 in the matter of 41 Power Purchase Agreements between Southern Power Distribution Company of Andhra Pradesh Limited and various wind power developers and the order of the Commission in O.P.No.15 of 2017 dated 30-03-2017 shall be subject to this order as already stated in the said two orders respectively;

(e) This operative portion of this order shall be notified and published in the official Gazette of the State of Andhra Pradesh.”

5. In lieu of the aforesaid provisions envisaged and in the interest of end consumers, the petitioners submit the following:

6. The petitioners submit that Government of Andhra Pradesh has announced Andhra Pradesh Wind Power Policy, 2015 on 13.02.2015. An extract from the 'Andhra Pradesh Wind Power Policy, 2015' dated 13.02.2015 which says;

“Considering, the good wind power potential existing in the State and to achieve 4000 MW capacity addition through wind power during the next 5 years period, there is a need to bring out comprehensive wind power policy.”

7. The annual wind power capacity addition plan as indicated under the ‘Power For All’ agreement signed between GoAP and Government of India is as follows:

Year	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	Total
NCE-Wind Power (MW)	250	600	800	1000	1500	4150

8. Subsequently Hon’ble Andhra Pradesh Electricity Regulatory Commission (Hon’ble Commission) in exercise of the powers conferred under Sections 61 and 86 read with section 181 of the Electricity Act, 2003 (Central Act 36 of 2003), and all other powers enabling it in this behalf and after previous publication, the Andhra Pradesh Electricity Regulatory Commission passed Regulation No.1 of 2015 dtd:31.07.2015 stating the terms and conditions for determination of tariff for Wind Power Projects in the state of Andhra Pradesh considering the following parameters for the period FY:2015-16 to FY:2019-20.

	Parameter	Value
A	Tariff Period	25 years
B	Useful Life	25 years
C	Capital Cost	600 lakhs / MW (including evacuation cost)
D	O & M Expenses	8.57 lakhs / MW
E	O&M Expenses’ Escalation	5.72% p.a.
F	Depreciation for the first 10 years	7% p.a.
G	Depreciation for the remaining useful life of the plant	1.33 % p.a.
H	Capacity Utilization Factor (CUF)	23.5%
I	Return on Equity	16% (MAT/Income Tax pass through)
J	Interest Cost on Debt	13%
K	Tenure of Loan	10 years
L	Interest on Working Capital	13.5%
M	Debt Equity Ratio	70 : 30

The above regulations stipulate tariff determination year on year based on capital indexation mechanism.

9. The petitioners submit that considering the unjust burden on DISCOMs due to higher values of norms stated in the regulations, petitioners vide letter dtd.30.10.2015 requested the Hon’ble Commission to amend the APERC regulations 1 of 2015, besides amendment of tariff order dated.01.08.2015 applicable for FY:2015-16 in respect of the following parameters.
- i. Capital cost.
 - ii. Depreciation.
 - iii. Return on Equity.
 - iv. Operation and Maintenance Expenses.

- v. CDM benefits.
 - vi. Subsidy or incentive by the Government.
 - vii. Capacity Utilization Factor.
 - viii. Rebate.
10. In reply, vide letter dtd.15.02.2016 the Hon'ble Commission has informed that *“the amendments sought for in regulation 01 of 2015 have been noted in the commission and as the said regulation was notified only on 31st July 2015, its efficacy or otherwise needs to be observed for a reasonably sufficient period of time and thereafter the commission may take necessary action as deemed fit”*.
11. During the course of time, subsequent to the aforesaid regulations 01 of 2015, this Hon'ble Commission passed orders dtd: 01.08.2015, 26.03.2016 & 30.03.2017 determining the tariff for wind power projects to enter PPA during the FY:2015-16, FY:2016-17 and FY:2017-18 respectively, considering the following parameters.

	Parameter	Values		
		FY 2015-16	FY 2016-17	FY 2017-18
A	Tariff Period (yrs)	25	25	25
B	Useful Life (yrs)	25	25	25
C	Capital Cost lakhs / MW (including Evacuation cost)	600	600.9	586.37
D	O & M Expenses lakhs/MW	8.57	9.06	9.58
E	O&M Expenses' Escalation (% p.a.)	5.72	5.72	5.72
F	Depreciation for the first 10 years (% p.a.)	7	7	7
G	Depreciation for the remaining useful life of the plant (% p.a.)	1.33	1.33	1.33
H	Capacity Utilization Factor (CUF) (%)	23.5	23.5	23.5
I	Return on Equity (%)	16	16	16
J	Interest Cost on Debt (%)	13	12.76	12.3
K	Tenure of Loan (years)	10	10	10
L	Interest on Working Capital (%)	13.5	13.26	12.8
M	Debt Equity Ratio	70 : 30	70 : 30	70:30
N	Discount Rate (%)	10.81	10.64	11.04
O	Tariff Rs/unit	4.83	4.84	4.76

12. However, this Hon'ble Commission while issuing orders in O.P.No.05 of 2017 stated that *“Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Tariff Determination for Wind Power Projects) Regulations, 2015, Regulation 1 of 2015 shall be deemed to have remained in force upto 31-03-2017 and shall be deemed to have ceased to be in force with effect from 01-04-2017”*.
13. The petitioners submit that, prior to said regulation the Ministry of New and Renewable Energy (MNRE), Government of India had announced the continuation of the scheme of Generation based Incentive (GBI) on 04 September 2013. The scheme was applicable for 15,000 MW installed during the

12th Plan period. Under this scheme, a GBI was offered to wind energy generators @ Rs.0.50 per kWh of electricity fed into the grid for a period not less than 4 years and a maximum period of 10 years with a cap of Rs.100 lakh per Megawatt of the projects.

14. During the course of time, the AP State has seen significant investments in setting up of wind power projects in the State. The installed capacity of wind power projects in the State of AP as on 30.04.2018 is 3965.87 MW.
15. From 2015-16, the year wise capacity addition in the State is as shown below:

Financial year	Capacity addition in MW
2015-16	422.6
2016-17	2348.25

16. As seen from the figures stated above, there is considerable increase in wind power capacity addition witnessed in the State during FY 2016-17. The tariff decided based on the norms stated in regulation, wind power developers have been making more than reasonable return when compared to other states. This highest ever annual wind power capacity addition and the higher tariffs has resulted in unjustified burden on the consumers of the State.
17. Further to submit that the Ministry of New and Renewable Energy (MNRE), Government of India, New Delhi vide letter dated 14.06.2016 accorded sanction to SECI and further issued Guidelines dated:22.10.2016 for implementation of “Scheme for Setting up of 1000 MW ISTS - connected Wind Power Projects” and Solar Energy Corporation of India Limited (SECI) is nominated as the implementing agency for setting up of 1000 MW ISTS - connected Wind Power Projects under competitive bidding process.
18. It is to submit that competitive bidding floated by Solar Energy Corporation of India (SECI) in the month of February 2017 for procurement of 1000 MW power sourced from Wind Projects has received tariff at Rs.3.46 per unit, whereas preferential tariff fixed by Hon’ble APERC for the projects entered PPAs during 01.04.2016 to 31.03.2017 was Rs.4.84 + taxes. Though the site conditions of Tamilnadu State and State of Andhra Pradesh are different, still the tariff decided by Hon’ble APERC is found to be much higher than what has been discovered in the said competitive bidding by SECI.
19. The following developers have participated in the above competitive bidding conducted by SECI and quoted tariff of Rs.3.46 per unit:
- i. M/s. Mytrah Energy.
 - ii. M/s. Green Infra Wind Energy.
 - iii. M/s. Inox Wind Infrastructure Services.
 - iv. M/s. Ostro Wind.

- v. M/s. Adani Green Energy.
20. The petitioners submit that prior to the above bidding conducted by SECI, M/s. Mytrah Energy and M/s. Inox Wind Infrastructure Services have entered PPAs with APSPDCL at preferential tariff @ Rs. 4.84 per unit as per orders of APERC for the FY:2016-17 respectively. The said developers have canvassed earlier before Hon'ble Commission for higher normative values at the time of issuing the Regulation 01 of 2015.
 21. From the above, it is evident that very same developers have offered the wind power at different tariffs, i.e, Higher tariff in AP State which is detrimental to the interest of the consumers of the state of Andhra Pradesh.
 22. Hence, in public interest and in the interest of the end consumers of the State to get green energy at the lowest possible cost, the petitioners earlier has requested the Hon'ble commission by two separate petitions vide O.P.No.01 of 2017 to pass on the GBI benefit to APDISCOMs and O.P.No.05 of 2017 to amend the regulation curtailing its effect up to 31.03.2017 and for future period the competitive bidding process may be adopted in consonance with said guidelines of ministry of power GOI.
 23. The petitioners further submit that in the phase-2 competitive bidding conducted by SECI during October, 2017 for procurement of Wind Power, the tariff of Rs.2.64/unit is discovered and realised. Also in the reverse auction held by the Gujarat Government for procurement of wind power, a tariff of Rs.2.43/Unit was realised which is lower than the tariff received under the competitive bidding held by SECI. During April'2018, Solar Energy Corporation of India (SECI) has successfully auctioned 2 GW of Inter-State Transmission system (ISTS)-connected wind projects under Tranche III received lowest tariff of Rs 2.44/unit. Further, a tender for 500-MW of grid-connected wind power capacity in the Indian state of Maharashtra has attracted bids as low as Rs.2.85/unit. From the above facts, it is evident that the competitive bidding rates are more beneficial to DISCOMs/End consumers than the preferential tariffs determined by the Hon'ble State Commission.
 24. In view of the above and taking into consideration of the market determined parameters and other technological developments viz., reduction in capital cost due to increased hub heights and increased rotor diameter resulting in significant improvement in CUF, it is obvious that the regulation 01 of 2015 needs to be amended, by the Hon'ble Commission exercising its powers.
 25. It is submitted that in addition to the above facts, this Hon'ble commission vide orders dated:13.12.2017 in the matter of 41 PPAs re-submission at para 63 stated as under:

- d) *any modification of the Power Purchase Agreements shall be of force and effect only when it is in writing and signed by the duly authorized representatives of the wind power producers and the distribution companies, subject to the condition that any further modification of the agreements shall be done only with the prior approval of the Andhra Pradesh Electricity Regulatory Commission as envisaged under Article 11.2 of the Power Purchase Agreements. The parties to these Power Purchase Agreements are at liberty to come to an agreement regarding any modification or amendment of any terms and conditions on voluntary negotiations between themselves in this regard and approach the Commission to give effect to such agreements in the manner provided by the Power Purchase Agreements;*
- e) *the distribution companies are at liberty to invoke the enabling Articles in the Power Purchase Agreements for any modification or amendment to the relevant terms and conditions dependent on the Capacity Utilization Factor, capital cost, depreciation, interest, return on equity and the like and to approach the Commission for appropriate reliefs and any such requests will be considered on merits in accordance with law, with notice to and a reasonable opportunity of hearing to the other parties to the respective Power Purchase Agreements;*
- f) *the rights and obligations of the parties under the Power Purchase Agreements shall be subject to change in law i.e., any change in statutes or rules or regulations governing these Power Purchase Agreements;*
- g) *both the distribution companies in the State of Andhra Pradesh are hereby directed not to enter into any fresh Power Purchase Agreements with any power developer using any source or fuel for power generation, without prior intimation to and permission from the Commission until further orders from the Commission depending upon any change of circumstances or exigencies of the power sector in the State.*
26. In view of the aforesaid directions of APERC, a meeting was convened on 20.03.2018 with Wind Power Developers, to discuss on tariff reduction. However, no consensus was arrived at in the meeting.
27. The Wind Independent Power Producers Association (WIPPA) and other developers stated that they are not agreeable to any reduction in the aforesaid tariff, on account of various regulatory, legal, economic and financial reasons.
28. In view of the above, the following is submitted:

- i. As mentioned at para 15 supra it is to submit that the capacity addition from the Wind Power Generation to the grid is to the tune of 2348.25MW in the FY:2016-17.
- ii. Most of the Wind projects were commissioned during the above said period being used with advanced technology machines with increased hub heights and rotor diameter for more efficiency.
- iii. In order to study the performance of Wind power projects, technical parameters were sought from the Wind Power Project developers. However, certain Wind Power Developers reluctant to furnish the information and not revealing the Technical information sought.
- iv. According to the petitioners, the projects could achieve annual average CUF in the range from 23.5% to 28%.
- v. CERC in its RE tariff regulations, 2017 duly observing the dynamic changes in the market conditions, adopted the reduced financial parameter values and also increase in the CUF due to better technology, increased hub heights & rotor diameter.
- vi. As per the relevant tariff orders of concerned year the tariffs determined by Hon'ble Commission is applicable for the entire PPA period of 25 years resulting long term unjustified burden on APDISCOMs vis-à-vis end consumers.
- vii. The tariff applicable to the Wind Power projects for FY:2016-17 was determined based on the parameters specified in the Regulation 01 of 2015. However, as stated above there is a change in several parameters due to dynamic market conditions, and also majority of the projects having entered PPAs at the tariff applicable for FY:2016-17 have commissioned the projects by the end of march, 2017, getting undue advantage from the changes occurred during the period, in addition to the higher tariff. Hence, it is necessary that Hon'ble commission to re-examine the norms specified in the regulation and to reduce the tariffs determined earlier.
- viii. KERC vide orders dated:16.05.2018 determined the Generic tariff for wind power projects as Rs.3.45/Unit (at 29% CUF) reduced from the earlier tariff of Rs.3.74/unit (at 28% CUF) due to changes in the dynamic market conditions and prevailing advanced technologies in WTGs.
- ix. The petitioners vide letter dtd.30.10.2015, requested this Hon'ble commission for certain amendments to the APERC regulations 1 of 2015, besides amendment of tariff order Dated.01.08.2015 in respect of FY:2015-16.

In reply, vide letter dtd.15.02.2016 informed that "the amendments

sought for in regulation 01 of 2015 have been noted in the commission and as the said regulation was notified only on 31st July 2015, its efficacy or otherwise needs to be observed for a reasonably sufficient period of time and thereafter the commission may take necessary action as deemed fit”.

29. APDISCOMs submit that the technical changes taken place in Wind turbines and its associated equipment, resulted in huge capacity addition during FY:2016-17.
30. The petitioners submit the following facts which necessitate them seek the remedies:
 - i. **Capacity Utilization Factor (CUF):**
 - a) It is to submit that, due to advancement in technology, enhancement of capacity rating of individual WTGs and also increased hub height for latest projects, the Capacity Utilisation Factor (CUF) level is being achieved higher than as was considered by Hon’ble Commission in the regulation 01 of 2015 and also in the tariff orders issued thereafter.
 - b) With changing trends in the wind turbine technology, large numbers of turbine models with hub height higher than 80m and with larger rotor diameter are available in the market. The general trend is towards steadily growing hub heights, with major wind turbine manufacturers now offering turbines with hub heights around 100 meters. The National Institute of Wind Energy (NIWE), under the direction of MNRE has assessed India’s wind power potential at 100m hub height as 302 GW.CERC observed that an increase of 6 - 8% in terms of CUF from 80m hub height to 100m hub height.
 - c) It is pertinent to state that one of the Wind Generators M/s. Axis Energy Ventures India Pvt Ltd., vide letter dated: 26.12.2012 admitted that due to better technology with higher rotor diameter there is an increased CUF from 23.5% to 28.5%. That apart earlier while determining tariff for Wind power projects vide this Commission’s order dated 01.05.2009 CUF of 24.5% was considered in determining the tariff for wind power projects during the control period 01.04.2009 to 15.11.2012 (During this period the Wind generators have been using old technologies). Whereas, the Hon’ble Commission has considered CUF 23.5% in the tariff determined vide orders dt:01.08.2015 and 26.03.2016 and ~~30.03.2017~~ (post issue of regulation 01 of 2015 wind generators have been using advanced technology Wind turbines.
 - d) Also it is pertinent to state that most of the Wind Power Developers have achieved more than the CUF considered by this Hon’ble Commission in the said regulation.
 - e) In view of the above and taking into consideration that the CUFs for the Wind Power Projects would differ based on terrain conditions, the petitioners propose to consider average CUF of 26.5 % for determination of revised tariff by which the tariff will be reduced proportionately.

- ii. **Return on Equity:** The Hon'ble Commission has considered RoE of 16% with MAT/Income Tax pass through. Various states have considered RoE as follows:

State	Date of Order	% RoE
Tamil Nadu	31.03.2016	20% (pre-tax) per annum without linking it to MAT and IT
Andhra Pradesh	26.03.2016	16%
Gujarat	30.08.2016	14%
Rajasthan	10.07.2017	Grossing up the base rate of 16% with tax rate equivalent to Minimum Alternate Tax (MAT) for first 10-years and by corporate tax for next 15-years.
Maharashtra	28.04.2017	Grossing up the base rate of 16% with tax rate equivalent to Minimum Alternate Tax (MAT) for first 10-years and by normal tax rate for next 15-years.
CERC	CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 dated 17th April 2017.	Normative Return on Equity shall be 14%, to be grossed up by prevailing Minimum Alternate Tax (MAT) as on 1st April of previous year for the entire useful life of the project.
KERC	04.09.2017 & 16.05.2018	14%. The Income tax on RoE shall be claimed by the generators as per actuals as a pass through and shall be computed on the allowable RoE at the tax rate applicable to the relevant assessment year.

National Tariff Policy, 2016 at Para 5.11(a) specifies that the CERC would notify the RoE for generation and Transmission, keeping in view the overall risk and prevalent capital cost, which shall be followed by the SERCs also. Therefore, the petitioners request this Hon'ble Commission to adopt RoE of 14%. The Income tax on RoE shall be claimed by the generators as per actual as a pass through and shall be computed on the allowable RoE at the tax rate applicable to the relevant assessment year.

iii. **Loan Tenure:**

- a) The financial institutions like PFC, IREDA, REC; the tenure of loans extended by them to RE project developers is in the range of 10-15 years. Same is observed in KERC order dt:04.09.2017 & order dt:16.05.2018.
- b) Since most of the RE technologies have achieved maturity level, it should be possible for the developers to secure loan from lenders /financial institution for longer duration of say 12 years or more.
- c) CERC in its RE regulations, considered the loan tenure as 13 years.

d) Hence, it is requested to consider the loan tenure as 13 years for the entire control period in line with the CERC Renewable Energy Regulations 2017.

iv. Interest on Term Loan:

a. The Hon'ble Commission in its tariff orders dt:01.08.2015 and 26.03.2016 considered interest on term loan as 13% for FY 2015-16 and 12.76% for FY:2016-17.

b. Whereas CERC in its RE regulations 2017, considered interest on term loan as 10.66%.

c. Also, it is to submit that KERC while issuing the tariff order dt:04.09.2017 analyzed in detail regarding interest rates and noted the following:

"The Commission notes that, with effect from 01.04.2017, Indian Renewable Energy Development Agency (IREDA) has revised the interest rates which varies from 9.80% to 11% for wind projects for Grade-1 to Grade-4 projects, with a reduction of 25, 20 and 15 base points for grades 1 to 3 respectively with external grading.

Similarly, PFC has revised the rate of interest from 01.06.2017, which varies from 9.60% to 10.0% for State Sector and 9.75% to 11.00% for private sector with rating IR-1 to IR-5 respectively.

As per the latest data for August, the MCLR of SBI is range between 8% to 8.15% for loan tenure varying from one year to three years. Considering 200 bps as per CERC, the maximum interest rate would be 10.15%.

The above would indicate that the domestic loan would attract interest rate in the range of 9.60 to 11.00%, depending upon the credit ratings of the wind generators, with the average working out to 10.30%.

We note that the loans that the developers may raise include foreign debts also. One of the wind developers has indicated an interest rate of 7 to 8% for foreign debt. Further, the report titled 'RE Sector Funding' by 'resurgent India' (a leading investment bank in the sector), indicates that foreign currency loans would be available with interest rate in the range of 3% to 6% rate, External Commercial borrowings in the range of 3.5% to 5%, Project financing from Developments banks in the range of 4 to 6%, and EXIM banks at the rate of 3% to 5%. Thus as per the report, the foreign funding is available in the range of 3 to 6% rate, with a risk of exchange rate fluctuation. Considering, even the risk of exchange rate fluctuation, the Commission is of the view that, it would be reasonable to assume a rate of 6%, as the interest rate for international funding of the Wind Projects.

Thus, for the purpose of generic tariff determination, the Commission decides to consider 75% of domestic loan component and 25% of foreign component. The average interest rate of domestic loan and foreign loan works out to 9.23%. Therefore, interest rate of 9.23% is considered as reasonable for working out the tariff".

d. Further, in the recent bidding for procurement of power from Wind, the

tariff realised is very low i.e., Rs.3.46/unit (phase-I), Rs.2.64/unit (phase-II) and Rs.2.43/unit (GUVNL bidding) compared to the preferential tariff determined by the State Commissions. This is possible due to the lower interest rates.

e. In view of the above, the DISCOMs request the Hon'ble Commission to consider the interest on loan at 9.23%.

v. Depreciation and loan repayment :

CERC in its RE tariff regulations 2017 considered the tenure of loan for projects at 13 years and the depreciation rate by straight line method considered as 5.28% per annum for first 13 years and remaining depreciation to be spread during remaining useful life of the RE projects considering the salvage value of the project as 10% of project cost.

This change from the existing depreciation rate in the prevailing regulations at 7% per annum for first 10 years can help reduce the tariff and hence burden on APDISCOMs to purchase RE.

Therefore, the petitioners request to adopt depreciation at 5.28% for first 13 years and remaining depreciation to be spread during remaining useful life of the RE projects considering the salvage value of the project as 10% of project cost.

vi. Interest on Working Capital:

The Commission in its Wind Tariff Regulations 2015 specified the interest on Working Capital at interest rate equivalent to the average State Bank of India Base rate prevalent during the first six months of the previous year plus three hundred fifty (350) basis points.

CERC in its RE tariff regulations 2017, is of the view that Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months as interest on working capital is taken to be 1.0% above the loan interest rate.

The DISCOMs request the Hon'ble Commission to consider the interest on working capital as 11.66% in line with the CERC Regulations 2017.

vii. Capital cost: The Hon'ble Commission while determining the tariff for FY 2015-16 and FY 2016-17 as per Regulation 01 of 2015 considered the capital cost as shown below:

Financial Year	Date of order	Capital cost Lakhs/MW
2015-16	01.08.2015	600.00
2016-17	26.03.2016	600.90

Further, in the recent bidding for procurement of power from Wind, the tariff realised is very low i.e., Rs.3.46/unit (phase-I), Rs.2.64/unit (phase-II) and Rs.2.43/unit (GUVNL bidding) compared to the preferential tariff

determined by the State Commissions. This is possible due to the lower capital cost, higher CUF and lower interest rates with advanced technology turbines.

Due to advancement of technology in Wind Turbines capital cost decreases and hence the petitioners request the Hon'ble Commission to consider the same for revision of norms in regulation and in the tariff orders dated 01.08.2015 and 26.03.2016.

viii. The petitioners also submit that, Hon'ble commission is enabled with the following powers as per the clauses 23, 24 and 25 of APERC regulation 01 of 2015.

23. Power to Relax: The Commission may, by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected, relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.

24. Issue of Orders and Practice Directions: Subject to the provisions of the Act, the Andhra Pradesh Electricity Reform Act, 1998 and these Regulations, the Commission may, from time to time, issue orders and practice directions in regard to the implementation of these Regulations, the procedure to be followed and other matters, which the Commission has been empowered by these Regulations to specify or direct.

25. Power to Amend: The Commission may, at any time, vary, alter, modify or amend any provisions of these Regulations.

31. It is prayed that the Hon'ble Commission may be pleased to pass orders as under:

i. To amend the regulation 01 of 2015 by specifying the reduced norms and Parameters as follows:

- a. Capacity Utilization Factor (CUF): 26.5%
- b. Return On Equity (ROE) : 14%
- c. Loan Tenure : 13 Years
- d. Interest on term Loan : 9.23%
- e. Depreciation : 5.28%(13years) (Remaining spread for the balance period considering 10% salvage value)
- f. Interest on Working Capital : 11.66%

ii. To pass orders amending the Wind Power tariff determined vide orders dated: 01.08.2015 & 26.03.2016 respectively considering the amended norms and parameters in the regulation 01 of 2015.

iii. To pass orders effecting the reduced/amended tariff in the PPAs entered by APDISCOMs with the Wind Power generators, post issuance of Regulation 01 of 2015.

Petitioner-1

BEFORE THE HON'BLE A.P.ELECTRICITY REGULATORY COMMISSION
AT IT'S OFFICE AT V FLOOR, SINGARENI BHAVAN, RED HILLS, HYDERABAD

File No. of 2018
Case No..... of 2018

In the matter of:

Petition seeking relief under Section 61(d) & 86(1)(b) of Electricity Act, 2003 read with article 55 (1) & (2) of APERC business regulations 2 of 1999, article 23, 24 and 25 of the Regulation No.01/2015 (Terms and Conditions for Tariff Determination for Wind Power Projects in the State of Andhra Pradesh for the period FY2015-16 to FY2019-20) and provisions under PPAs enabled in the APERC orders dated 13.12.2017 to revise the tariff fixed for Wind power projects pursuant to APERC regulation 01 of 2015 - Reg.

In the matter of:

- 1. Southern Power Distribution Company of Andhra Pradesh Limited,
Rep. by its Chairman & Managing Director,
Beside Srinivasa Kalyana Mandapam, Tiruchanoor Road,
Tirupathi - 517501.*
- 2. Eastern Power Distribution Company of Andhra Pradesh Limited,
Rep. by its Chairman & Managing Director,
P & T Colony, Seetammadhara, Vishakhapatnam - 530020.*

.... *Petitioners*

VERIFICATION AFFIDAVIT

I, K. Santhosha Rao, S/o. K. Yosupu, age:56 years working at Chief General Manager (IPC&P&MM), Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL), Tirupathi, do solemnly affirm and say as follows:

- 1. I am the Chief General Manager (IPC&P&MM) of Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL) having its office at 19-13-65/A, Raghavendra Nagar, Kesavayanagunta, Tiruchanoor Road, Tirupati - 517 501 and am competent and duly authorized by the Petitioners to affirm swear, execute and file this Petition.*
- 2. I have read and understood the contents of the Petition. The contents of the Petition now shown to me are true to my knowledge derived from the official records made available to me and are based on information and advice received which I believe to be true and correct.*

DEPONENT

VERIFICATION:

I, solemnly affirm at Tirupati on this _____ day of September, 2018 that the affidavit has been signed in my presence.

ATTESTED