



# CLEAN GREEN ENERGY MISSION

PROJECT REPORT

## ROUND-THE-CLOCK(RTC) / FIRM RE HYBRID PLANT

Project Name	Rajasthan
Project Reference	P-001
Site	Gudha Malani Tehsil, बाड़मेर, Rajasthan, 344031, India
Client Name	AESPL
Client Reference	C-001
Generated On	29-Apr-2026 23:42
Prepared By	ASHWINKUMAR/ARAVINTHRAAJAN ENERGY SYSTEM





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### SITE LOCATION

Location	Gudha Malani Tehsil, बाड़मेर, Rajasthan, 344031, India
Latitude	25.319822
Longitude	71.653347

#### Site Map Snapshot





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Key Inputs

Details	Unit	Data
<b>PROJECT DATA</b>		
Project Name		Rajasthan
Project Reference		P-001
Client Name		AESPL
Client Reference		C-001
Revision No.		A
Revision Date		26/11/2025
<b>PROJECT CURRENCY</b>		
Project Currency		INR
<b>SITE LOCATION</b>		
Location		Gudha Malani Tehsil, बाड़मेर, Rajasthan, 344031, India
Latitude		25.319822
Longitude		71.653347
<b>YEAR FOR SOLAR AND WIND DATA</b>		
Year for Solar and Wind Data		2024
<b>RE POWER GENERATION</b>		
<b>RTC / FIRM RE POWER GENERATION</b>		
RTC / Firm RE Contract Power	MW	200
Time Block Duration (hours)	hours	0.25
Demand Fulfillment Ratio (DFR) Threshold	%	90
Grid Import Capacity Limit	MW	50
Grid Import Energy Cap	%	5
Solar Power Share	%	65
Solar Power Generation	MW (0 means auto calculation)	0
Wind Power Share	%	35
Wind Power Generation	MW (0 means auto calculation)	0
Purpose of BESS		Renewable Firming
<b>SOLAR PV PLANT</b>		
PV Module Type		Monocrystalline



Details	Unit	Data
PV Module Technology		Bifacial, PERC
PV Module Make & Model		Adani Solar 650W
PV Module STC Power	Wp	650
PV Module STC Efficiency	%	20.87
NOCT	°C	44
Temperature Coefficient Pmax	%/°C	-0.34
Bifacial Power Gain	%	10
Albedo		0.2
PV Module Height	mm	2390
PV Module Width	mm	1303
PV Module Cost	INR/Wp	14
Product Warranty	Years	12
Power Warranty	Years	
PV Module Yearly Replacement	%	
Tilt Angle	Degrees	35
Tracking		2-axis (tilt & azimuth)
Inverter Efficiency	%	97
Ground Coverage Ratio		0.4
Infra / non-module area margin	%	25
Soiling	%	2
Shading	%	1
Incidence Angle Modifier(IAM)	%	2
AC Wiring	%	1.5
DC Wiring	%	1.5
Light Induced Degradation(LID)	%	1.5
DC Mismatch	%	2
Availability	%	1
<b>WIND ENERGY GENERATOR PLANT</b>		
WEG Make & Model		Suzlon S133/3000
WEG Rated Power		3000
Rotor Diameter	Meter	133
Hub Height	Meter	160
WEG System Loss	%	0
Average Power Coefficient (Cp)	(0 means OEM power curve is applied)	0



Details	Unit	Data
Rated Speed	m/s	10
Cut-in-Speed	m/s	3
Cut-out-Speed	m/s	20
Cost of Wind Energy Generator	INR/KW	50000
<b>BATTERY ENERGY STORAGE SYSTEM (BESS PLANT)</b>		
BESS Plant Provided		Yes
Type of Battery		LFP Lithium-Ion
BESS Plant Load Percentage	%	100
Depth of Discharge*		0.90
Autonomy	Hours	6
BESS Round Trip Efficiency	%	90
BESS Safety & Reserve Margin	%	10
End-of-life SOH thershold	%	80
Battery Cycle Degradation	%	0.003
Cost of Battery System	INR/KWH	3500
Cell Replacement (% of CAPEX)	% of CAPEX COD	30
<b>AUXILIARY POWER</b>		
Auxiliary Power - Wind Turbine	%	0.5
Auxiliary Power - Solar PV Plant	%	1
Auxiliary Power - BESS	%	2
<b>PLANT OPERATING DETAILS</b>		
Life of the Plant	YEARS	25
Construction Period	MONTHS	12
O&M Expenses - Solar PV Plant	INR/KW	600
O&M Expenses - Wind Turbine	INR/KW	1200
O&M Expenses - BESS	INR/KWH	150
Working Capital for Spares	% of CAPEX	1
Working Capital for O&M	Months	1
Working Capital for Receivables	Months	1
Cost of Treated Water	INR/CUM	50
<b>CAPEX OF THE PLANT</b>		
CAPEX for Solar PV Plant	INR/KW	30545
CAPEX of Wind Turbine	INR/KW	83333



Details	Unit	Data
CAPEX of BESS Plant	INR/KWH	7778
Land Price	INR/ACRES	125000
Country Factor for Labour Work		1
<b>PROJECT FINANCIALS</b>		
Equity	%	30
Return on Equity	%	0
Loan Repayment Period	YEARS	10
Loan Moratorium Period	YEARS	2
Interest Rate on Term Loan	%	7
Interest Rate on Working Capital	%	7
Working Capital Margine Money	%	25
TAX Depreciation Rate	%	10
Discount Rate	%	8
Income Tax	%	22
Tax Holiday	YEARS	2
Salvage Value	%	10
Exchange Rate Variation	%	2
<b>SUBSIDIES AND INCENTIVES</b>		
Capital Subsidy (% of CAPEX)	%	0
Subsidy Receptit Year (1=Year1)	Year	1
RE Generation-Based Incentive	INR/KWH	0
GBI Eligibility Period	Years from COD	5
<b>GRID IMPORT POWER PURCHASE PRICE</b>		
Grid Power Purchase	INR/KWH	3.2
<b>TARGETTED SALE PRICE</b>		
<b>GREEN RE POWER SALE PRICE</b>		
Green RE Power Sale Price	INR/KWH	5.06
<b>MERCHANT POWER SALE PRICE</b>		
Merchant Power Sale Price	INR/KWH	0
<b>PLANT DEGRADATION</b>		
Solar PV 1stYear Degradation	%	1
Solar PV Annual Degradation	%	0.40
Wind Turbine Annual Degradation	%	0.50



Details	Unit	Data
BESS Annual Degradation	%	1
Curtailement / Losses	%	0
RE Transmission Losses	%	1
GRID Transmission Losses	%	2
<b>PRICE ESCALATION</b>		
Green RE Power Sale Price Escalation	%	2
Whole Sale Price Index (WPI)	%	4
Consumer Price Index (CPI)	%	6
Annual Battery Price Escalation	%	0
Annual PV Module Price Escalation	%	0
<b>CARBON FOOTPRINT - GHG EMISSION REDUCTION</b>		
Baseline Emissions Factor for Grid Power	kg CO <sub>2</sub> e/kWh	0.9
Life Cycle CO <sub>2</sub> e Intensity-Solar	kg CO <sub>2</sub> e/kWh	0.05
Life Cycle CO <sub>2</sub> e Intensity-Wind	kg CO <sub>2</sub> e/kWh	0.015
Life Cycle CO <sub>2</sub> e Intensity-DM/RO Water	kg CO <sub>2</sub> e/cum	0.5
Carbon Credit Market/Standard		ICM (India)
Market Price for Carbon Credit for avoidance Project	USD/tons of CO <sub>2</sub> e	10
Annual Carbon Credit Price Escalation	%	2



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ROUND-THE-CLOCK(RTC) / FIRM RE HYBRID PLANT

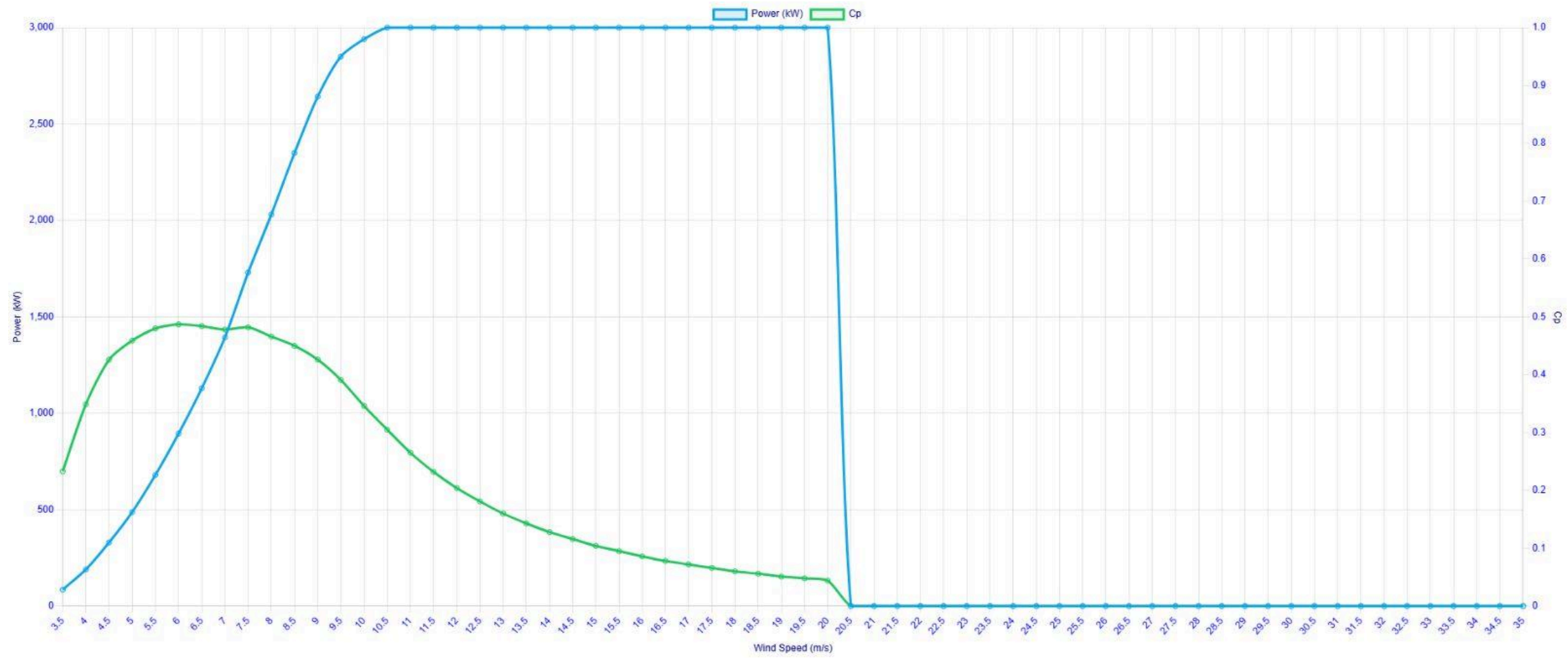
OEM APPENDIX

OEM POWER CURVE GRAPH

OEM POWER CURVE

WEG Model	Suzlon S133/3000	Rotor Diameter (m)	133.00	Hub Height (m)	160.0
Rated Power (kW)	3000	Cut-in Speed (m/s)	3.00	Cut-out Speed (m/s)	20.00

Visual table omitted in PDF appendix due to width (65 columns).





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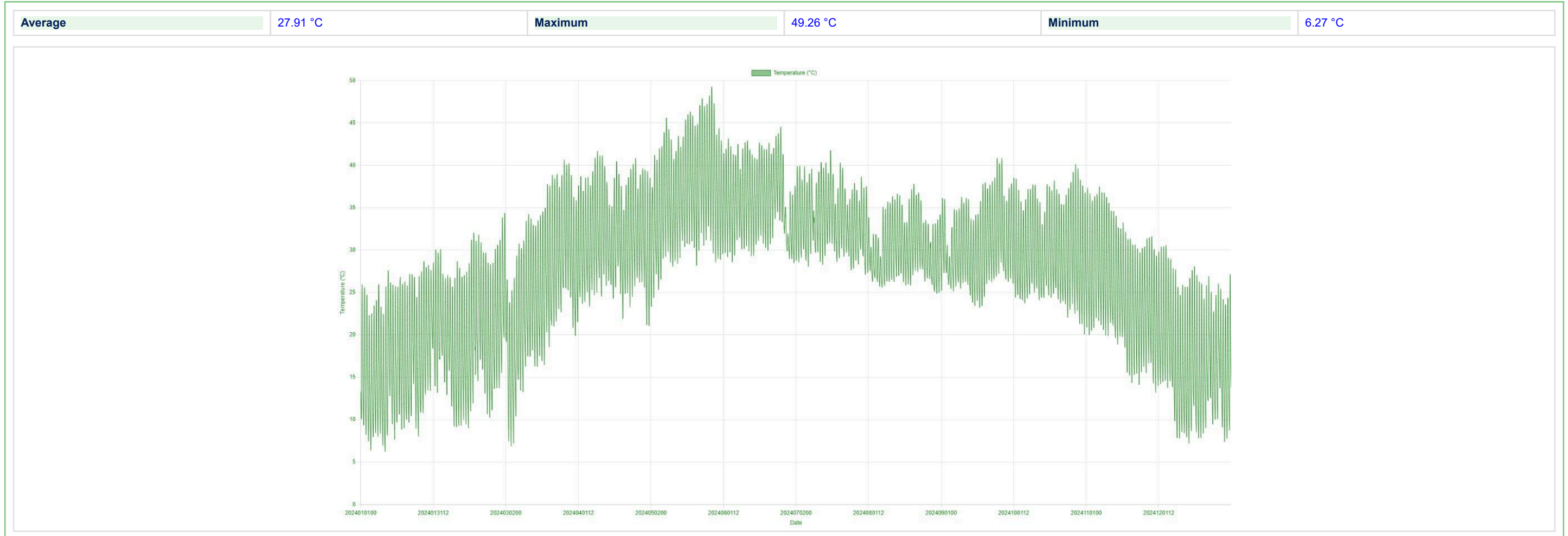
PD Plant Description		
Details	Unit	Data
<b>DESIRED ANNUAL ELECTRICITY REQUIREMENT</b>		
Desired Annual Electricity requirement	KWH / MKWH	1809855360 / 1809.86
<b>SOLAR PV PLANT</b>		
Capacity Utilization Factor	%	23.38
Required Solar PV Plant Capacity	KW	596023.40
Selected Plant AC Capacity	KW	596020
Selected Plant DC Capacity	KW	715224
PV Module Total Quantity	nos	1100345
Annual Gross Solar Electricity generation	KWH / MKWH	1224214179 / 1224.21
Annual Auxiliary Power Consumption	KWH / MKWH	12242142 / 12.24
Annual Net Solar Electricity generation	KWH / MKWH	1199852317 / 1199.85
<b>WIND ENERGY GENERATOR PLANT</b>		
Site Terrain		Rough/Urban
Site IEC Wind Classification	Low Wind Site	III
Site IEC Turbulance Classification	Low turbulence	C
Capacity Utilization Factor	%	48.18
Wind Turbine Plant Capacity	KW	154967.42
No of Wind Turbine Generators	Nos	52
Selected Plant Capacity	KW	156000
Annual Gross Wind Electricity generation	KWH / MKWH	660230271 / 660.23
Annual Auxiliary Power Consumption	KWHH	3301151 / 3.30
Annual Net Wind Electricity generation	KWH / MKWH	650359828 / 650.36
<b>BATTERY ENERGY STORAGE SYSTEM (BESS PLANT)</b>		
Annual Battery Cycles	Nos of charging cycles	0
Battery Replacement Life	Years	11
BESS Load	KW	200000
BESS Plant Capacity	KWH	1613333
Annual Net Power Consumed in BESS	KWH / MKWH	340120371 / 340.12
Annual BESS Auxiliary Power & Other Losses	KWH / MKWH	40814445 / 40.81



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VISUAL APPENDIX

AMBIENT TEMPERATURE GRAPH

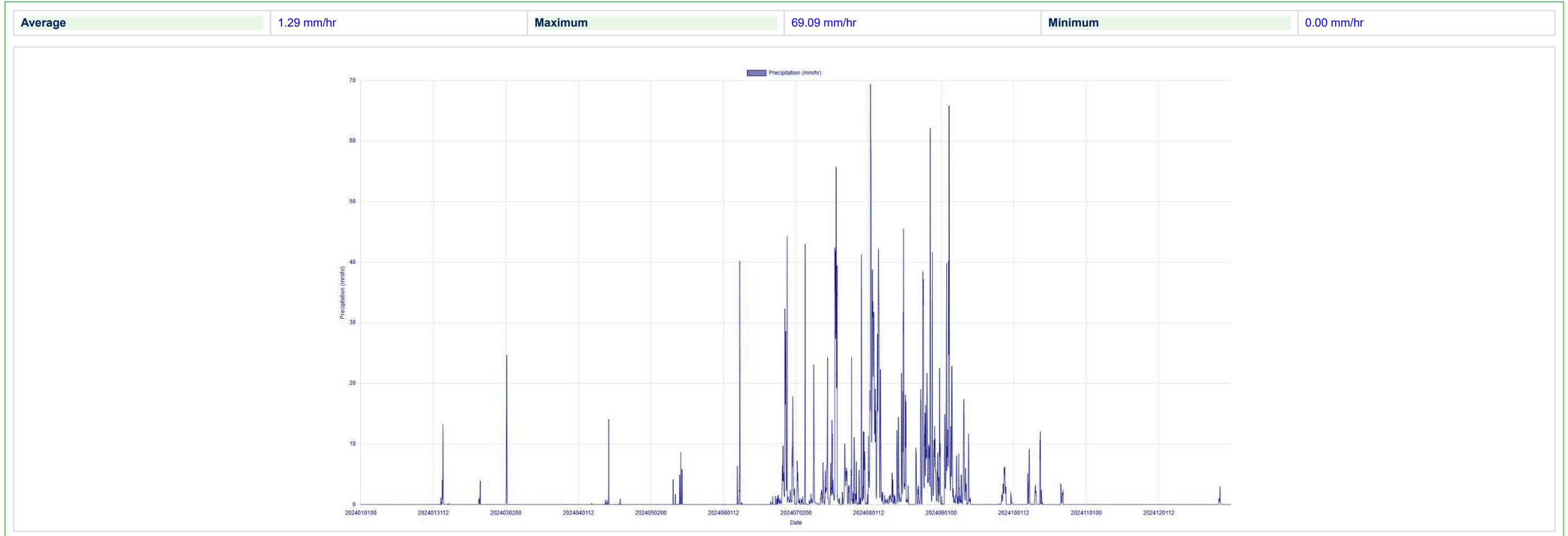




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PRECIPITATION GRAPH

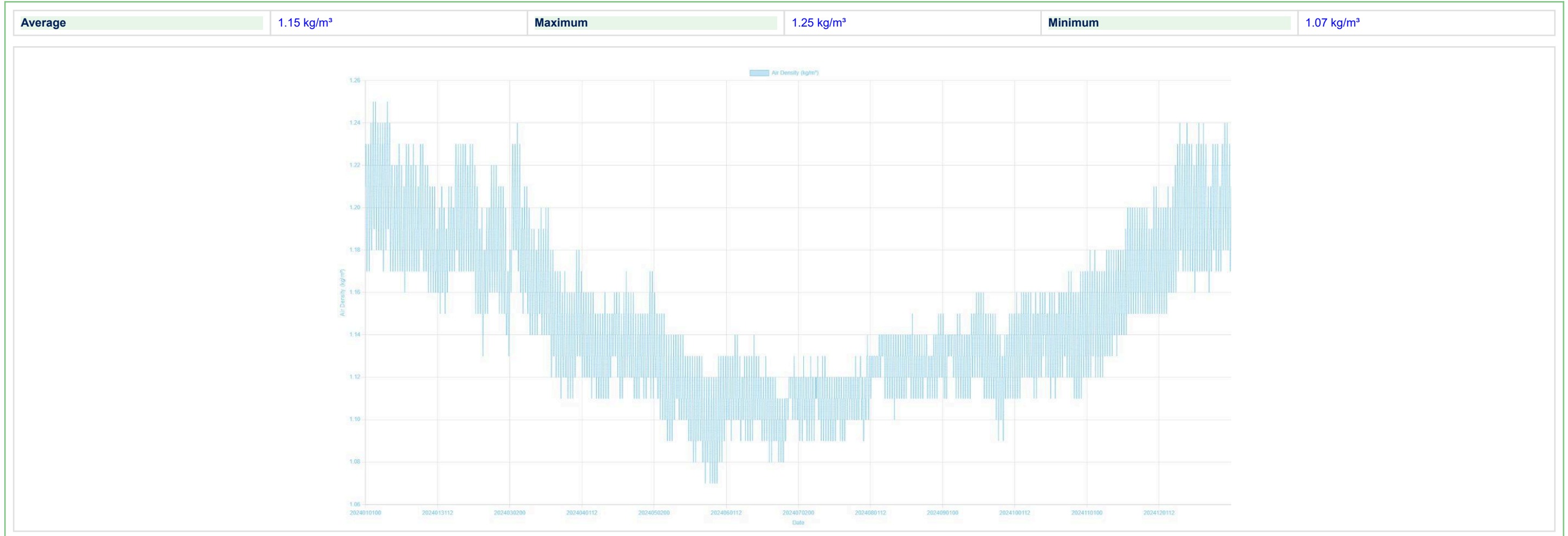




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AIR DENSITY GRAPH

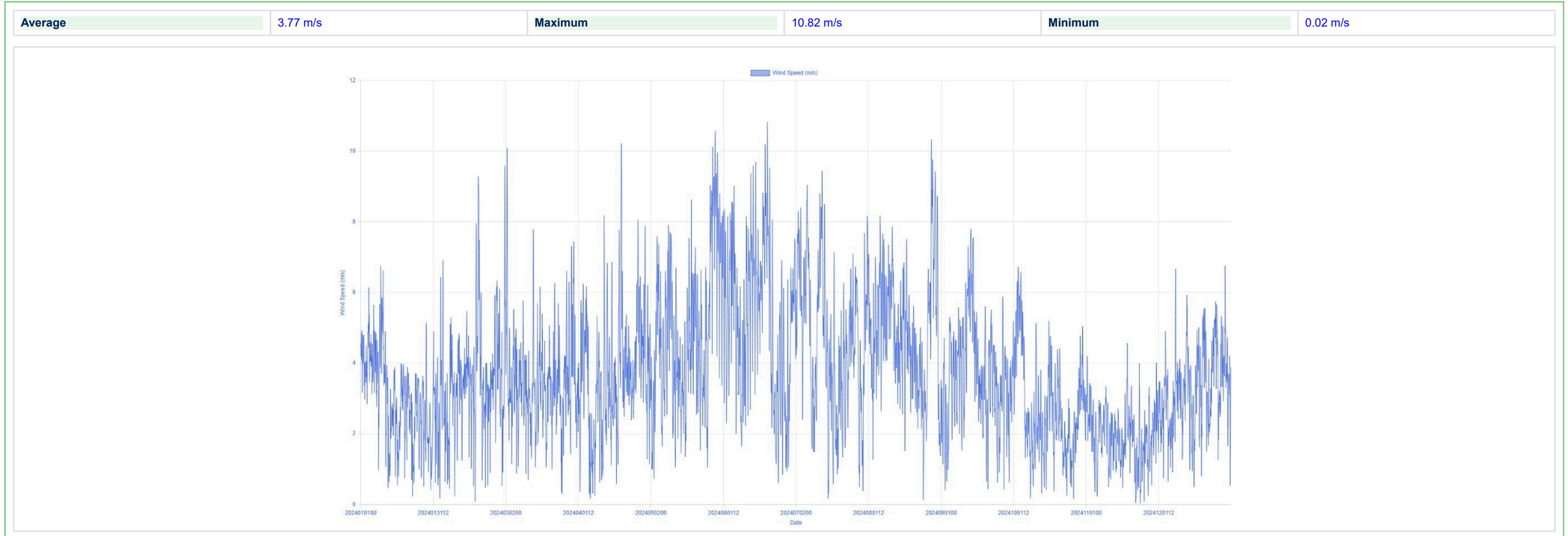




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WIND SPEED 10M GRAPH

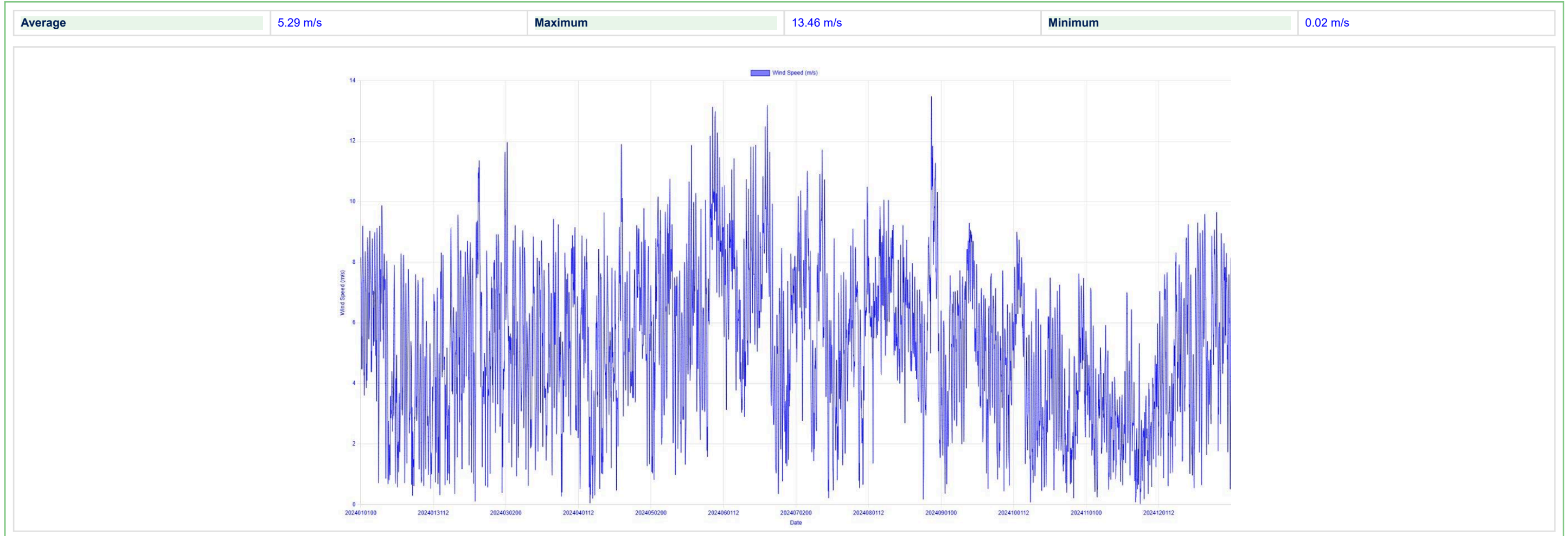




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WIND SPEED 50M GRAPH

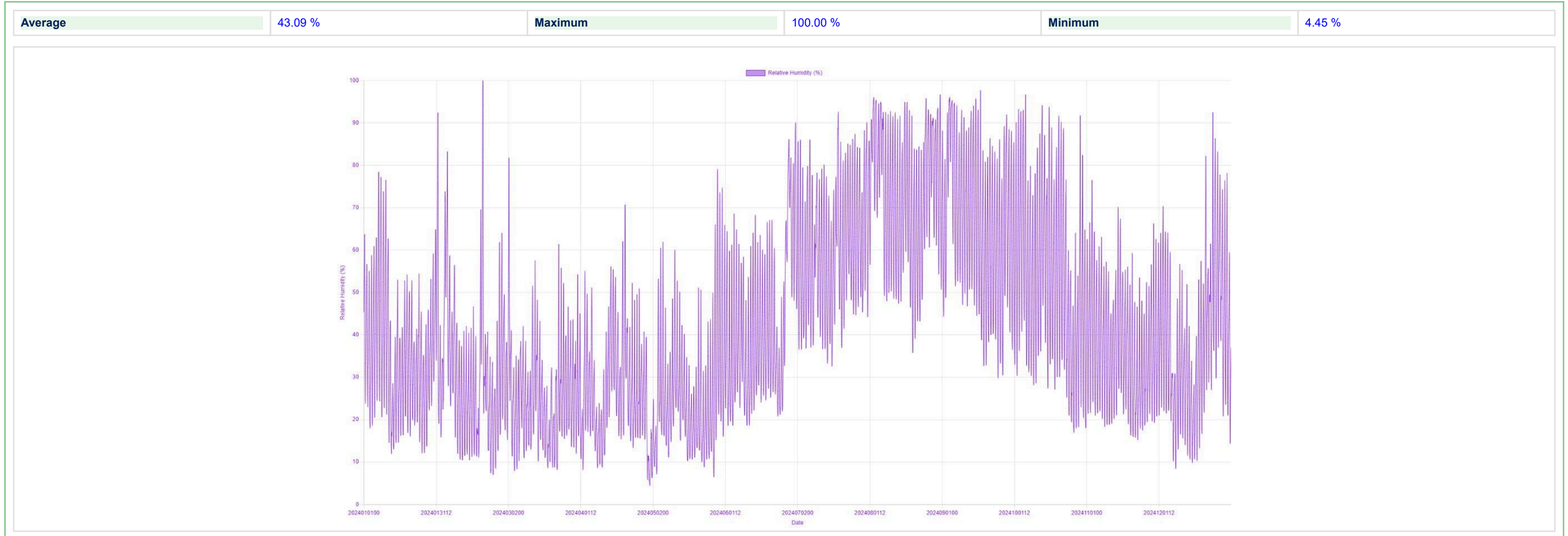




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RELATIVE HUMIDITY GRAPH

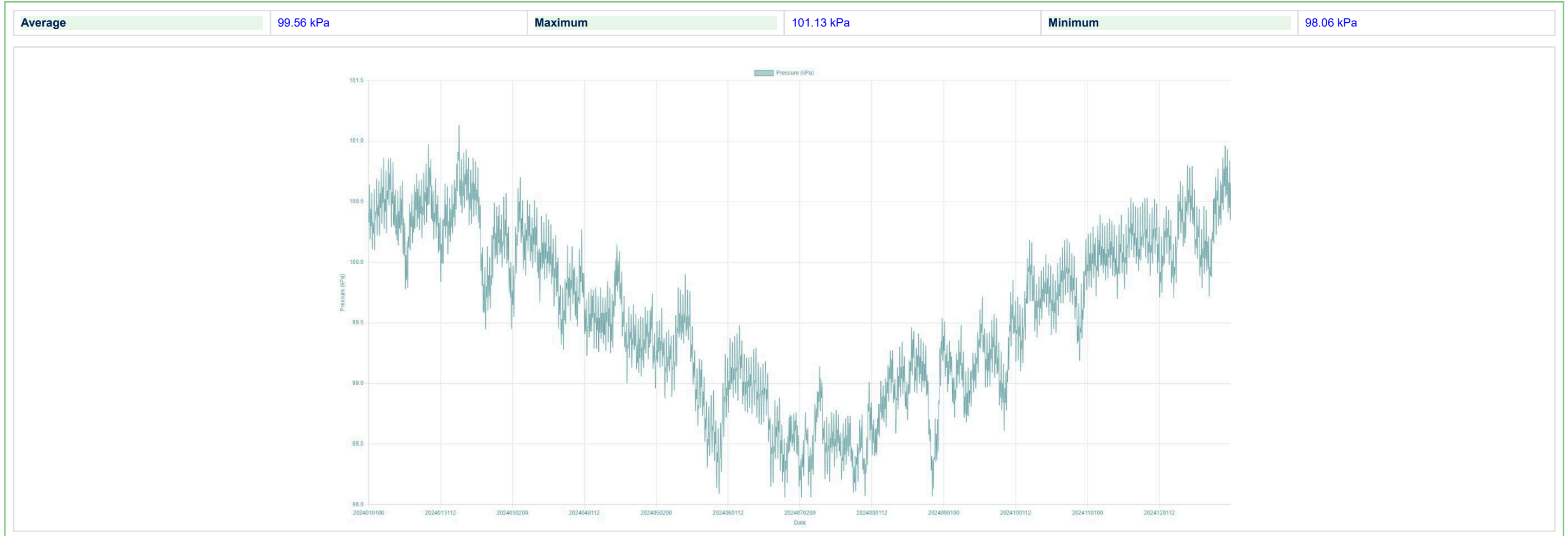




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AMBIENT PRESSURE GRAPH

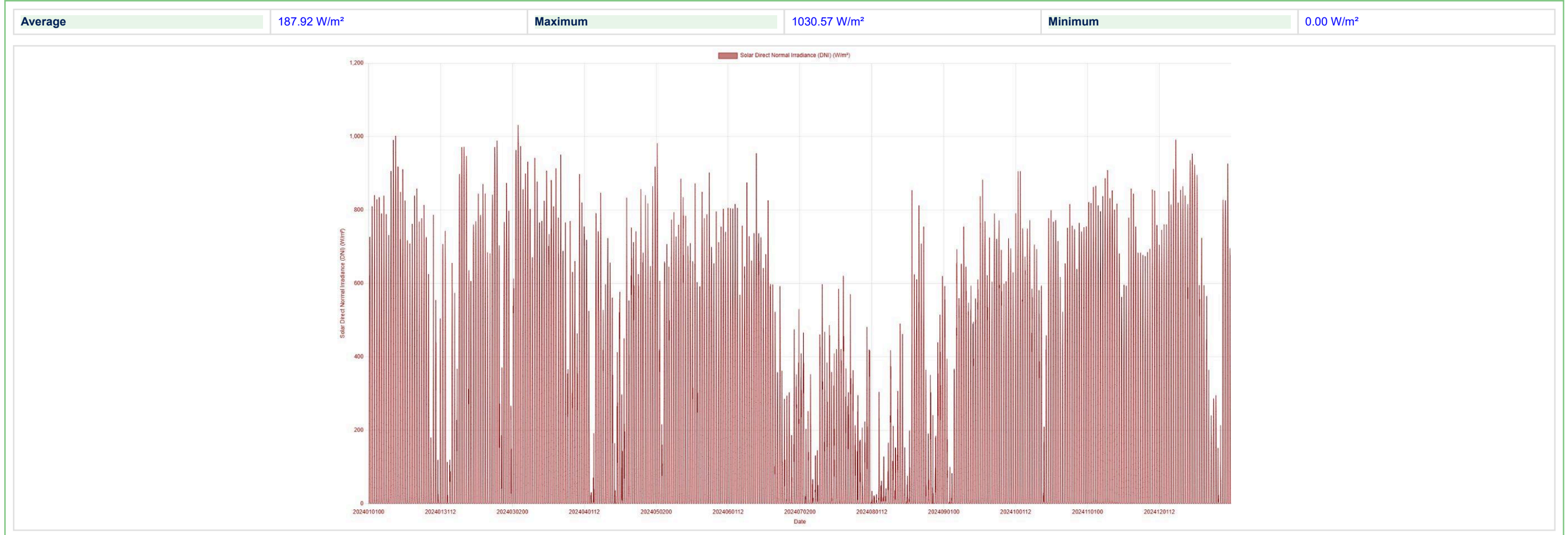




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SOLAR DIRECT NORMAL IRRADIANCE (DNI) GRAPH

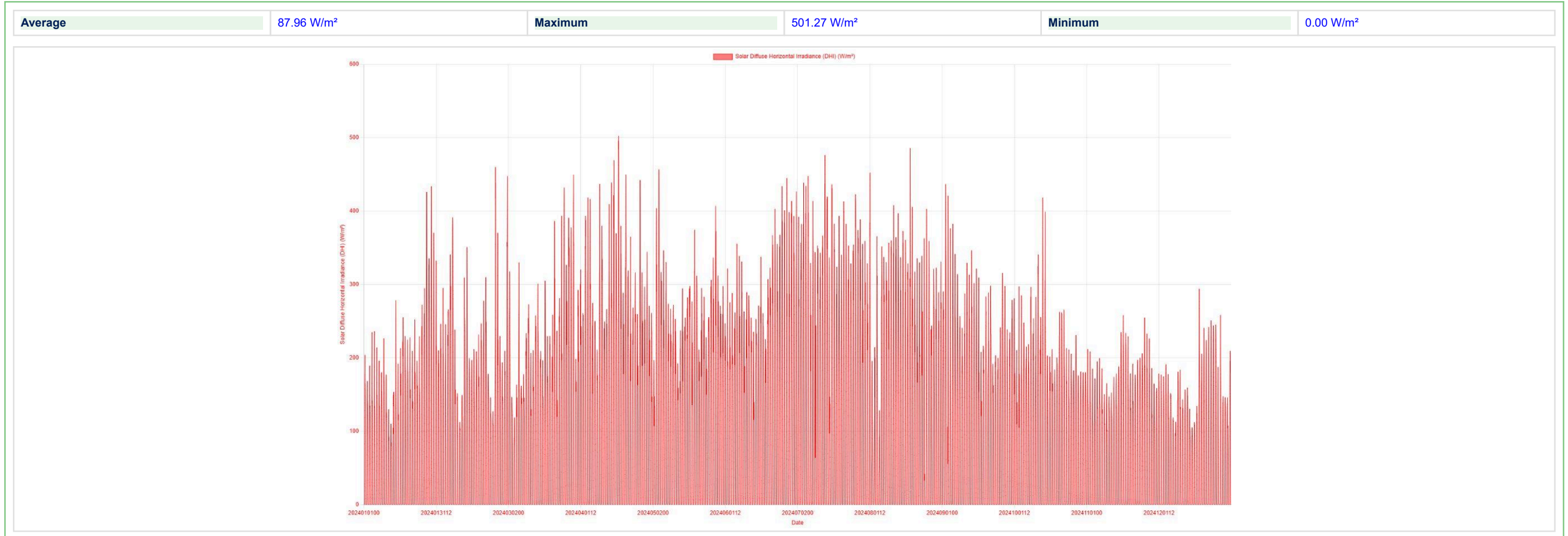




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SOLAR DIFFUSE HORIZONTAL IRRADIANCE (DHI) GRAPH





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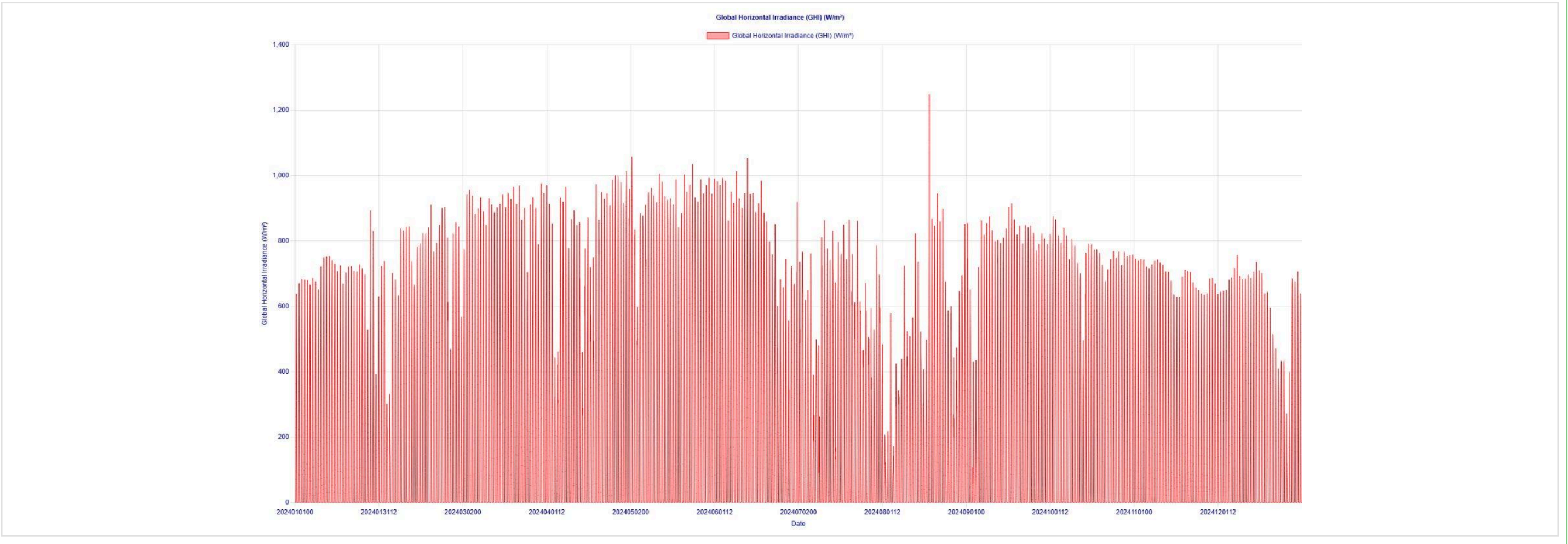
VISUAL APPENDIX

HOURLY GENERATION DATA

Time Zone :	India Standard Time
BESS Purpose :	Renewable Firming

GLOBAL HORIZONTAL IRRADIANCE (GHI) GRAPH

Maximum Global Horizontal Irradiance (GHI) W/m <sup>2</sup> :	1243.18	Average Global Horizontal Irradiance (GHI) W/m <sup>2</sup> :	211.73	Minimum Global Horizontal Irradiance (GHI) W/m <sup>2</sup> :	0.00
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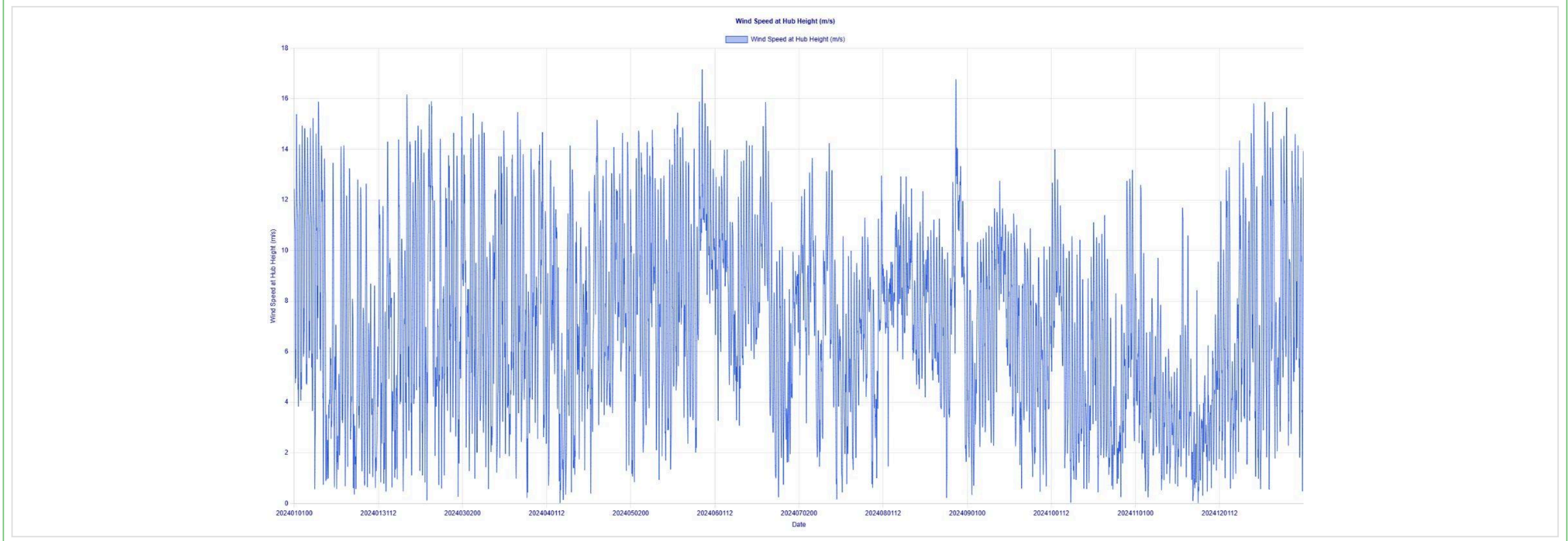


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WIND SPEED AT HUB HEIGHT GRAPH

Average Alpha :	0.205	Site Terrain :	Rough/Urban	Average Coefficient of Performance:	0.296	Turbulence Intensity at 15m/s wind speed:	0.034
Refernce extreme wind speed at hub height m/s:	35.596	50years steady extreme wind speed at hub height m/s:	14.238	1year steady extreme wind speed at hub height m/s:	11.391	50years largest gust magnitude wind speed at hub height m/s:	49.835
IEC Wind Class:	III	IEC Wind Classification:	Low Wind Site	IEC Turbulance Class:	C	IEC Turbulance Classification:	Low turbulence
Maximum Wind Speed at Hub Height m/s :	17.13	Average Wind Speed at Hub Height m/s :	7.12	Minimum Wind Speed at Hub Height m/s :	0.02		





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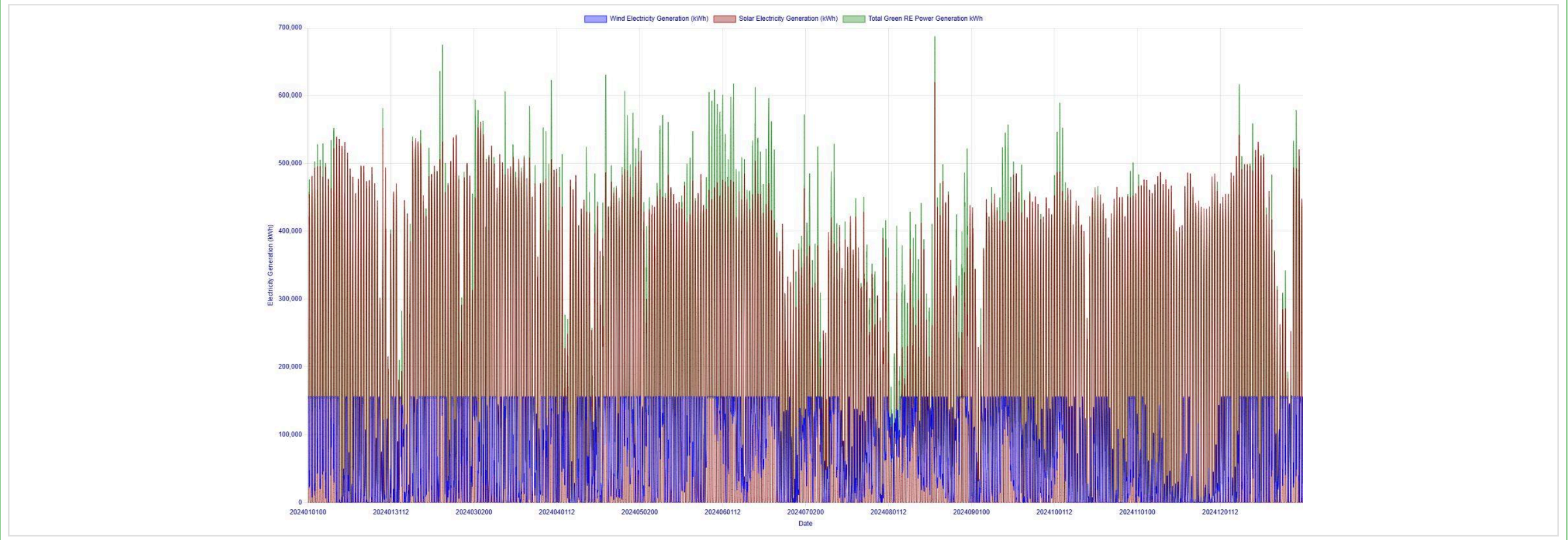
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GENERATION SUMMARY

Annual Wind Energy Generation kWh:	660230271.05	Wind Energy Capacity Utilization Factor %:	48.18	Annual Net Green RE Power Generation kWh:	1850212145.32	Direct Power Export kWh:	1269326246.17	Battery Discharging Power kWh:	340120370.54	BESS Capacity Utilization Factor %:	19.36	Annual RTC / Firm RE Contract Power Generation kWh:	1537874672.05	Annual Grid Imported Power kWh:	87853026.33	Annual RTC / Firm RE Contract Power Despatch kWh:	1625727704.84
Annual Solar Energy Generation kWh:	1224214178.91	Solar Energy Capacity Utilization Factor %:	23.38	BESS Power Supply kWh:	580885899.15	Battery Charging Power kWh:	340590295.37	Annal Balance Merchant Power for sale kWh:	235583925.22	Demand Fulfillment Ratio (DFR) without BESS %:	72.25	Demand Fulfillment Ratio (DFR) with BESS %:	87.54	Grid Import Load Factor %:	5.00	Demand Fulfillment Ratio (DFR) with Grid Import %:	92.54

GREEN RE POWER GENERATION GRAPH

Maximum Net Green RE Power Generation kWh :	685419.12	Average Net Green RE Power Generation kWh :	210634.35	Minimum Net Green RE Power Generation kWh :	0.00
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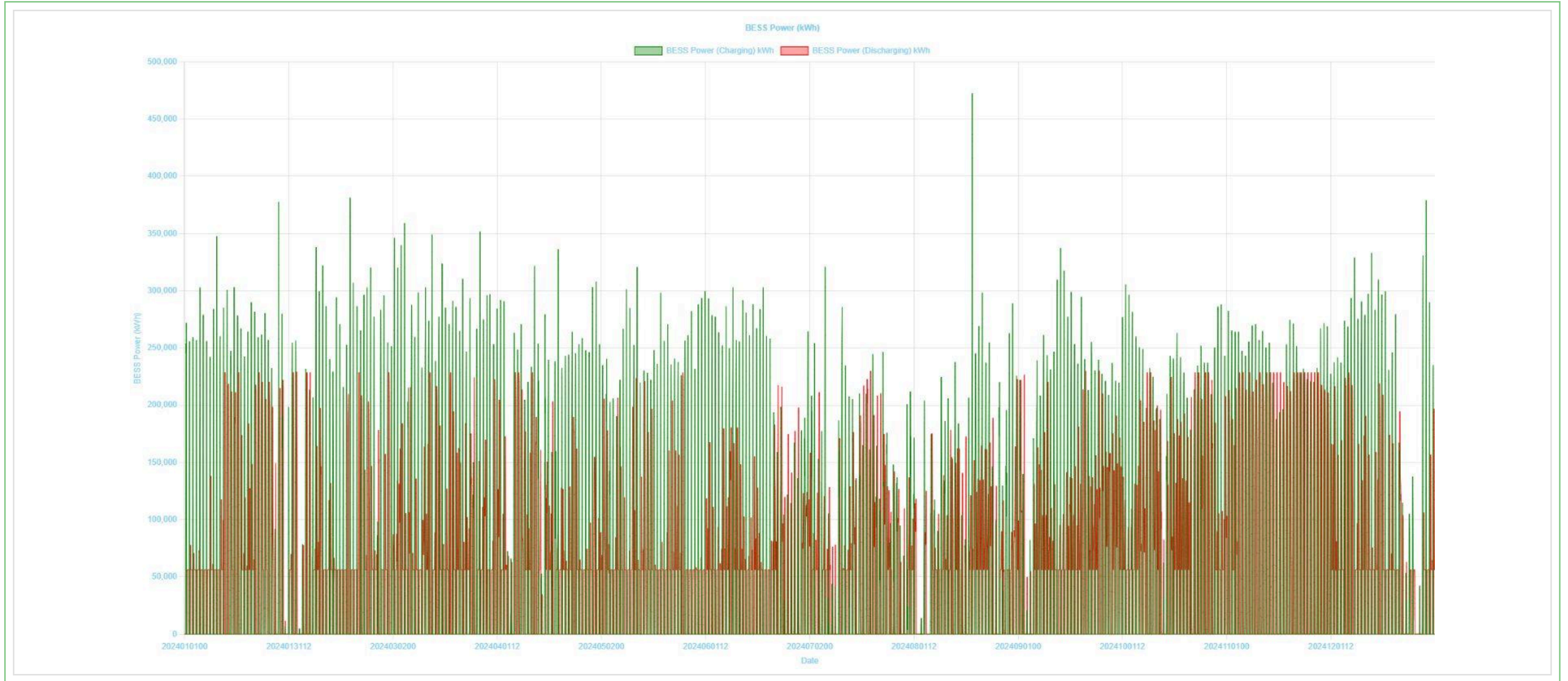




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BESS POWER GRAPH



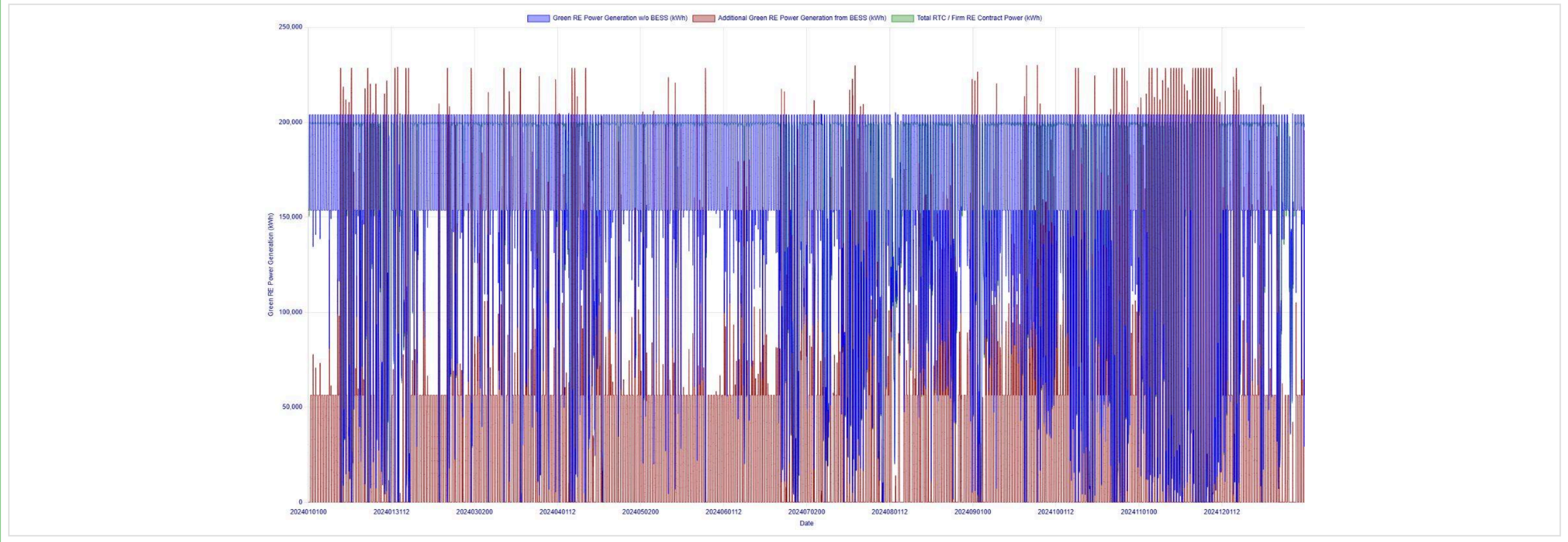


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RTC / FIRM RE CONTRACT POWER GENERATION GRAPH

Maximum Green RE Power Generation w/o BESS kWh :	204000.00	Average Green RE Power Generation w/o BESS kWh :	144504.35	Minimum Green RE Power Generation w/o BESS kWh :	0.00
Maximum Green RE Power Generation from BESS kWh :	228480.00	Average Green RE Power Generation from BESS kWh :	38720.44	Minimum Green RE Power Generation from BESS kWh :	0.00
Maximum Total RTC / Firm RE Contract Power Generation kWh :	200000.00	Average Total RTC / Firm RE Contract Power Generation kWh :	175076.81	Minimum Total RTC / Firm RE Contract Power Generation kWh :	0.00

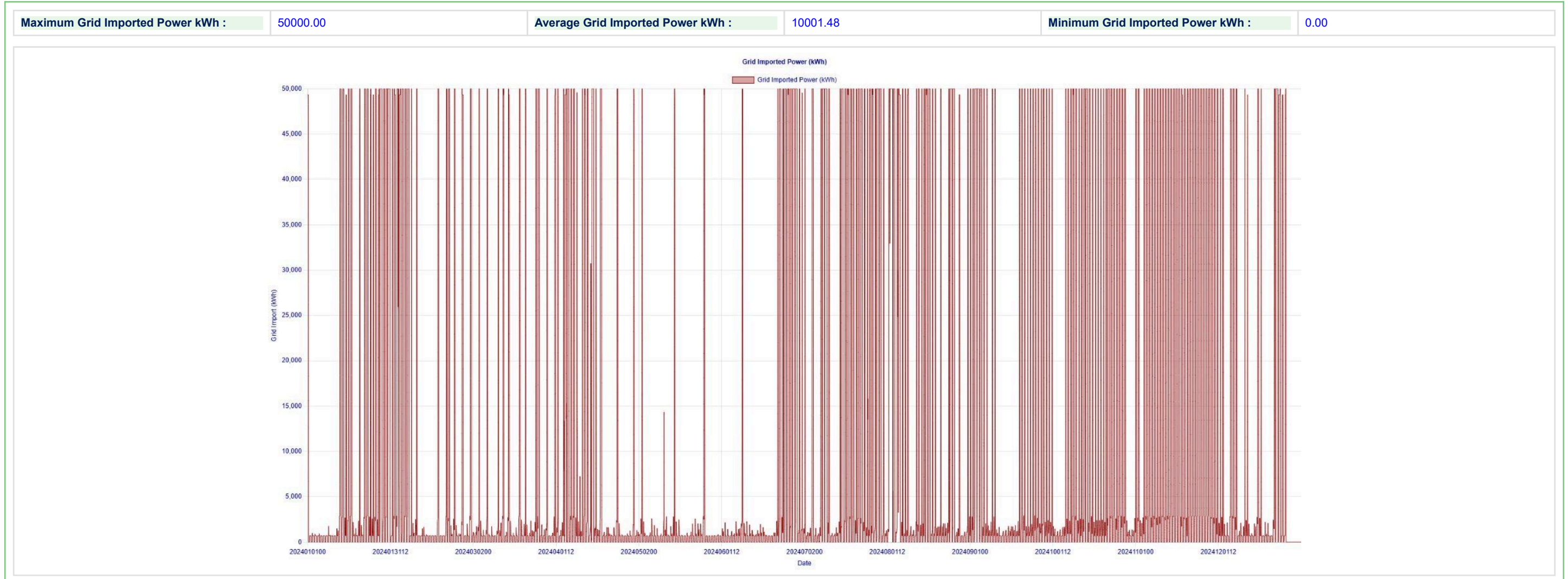




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GRID IMPORTED POWER GRAPH



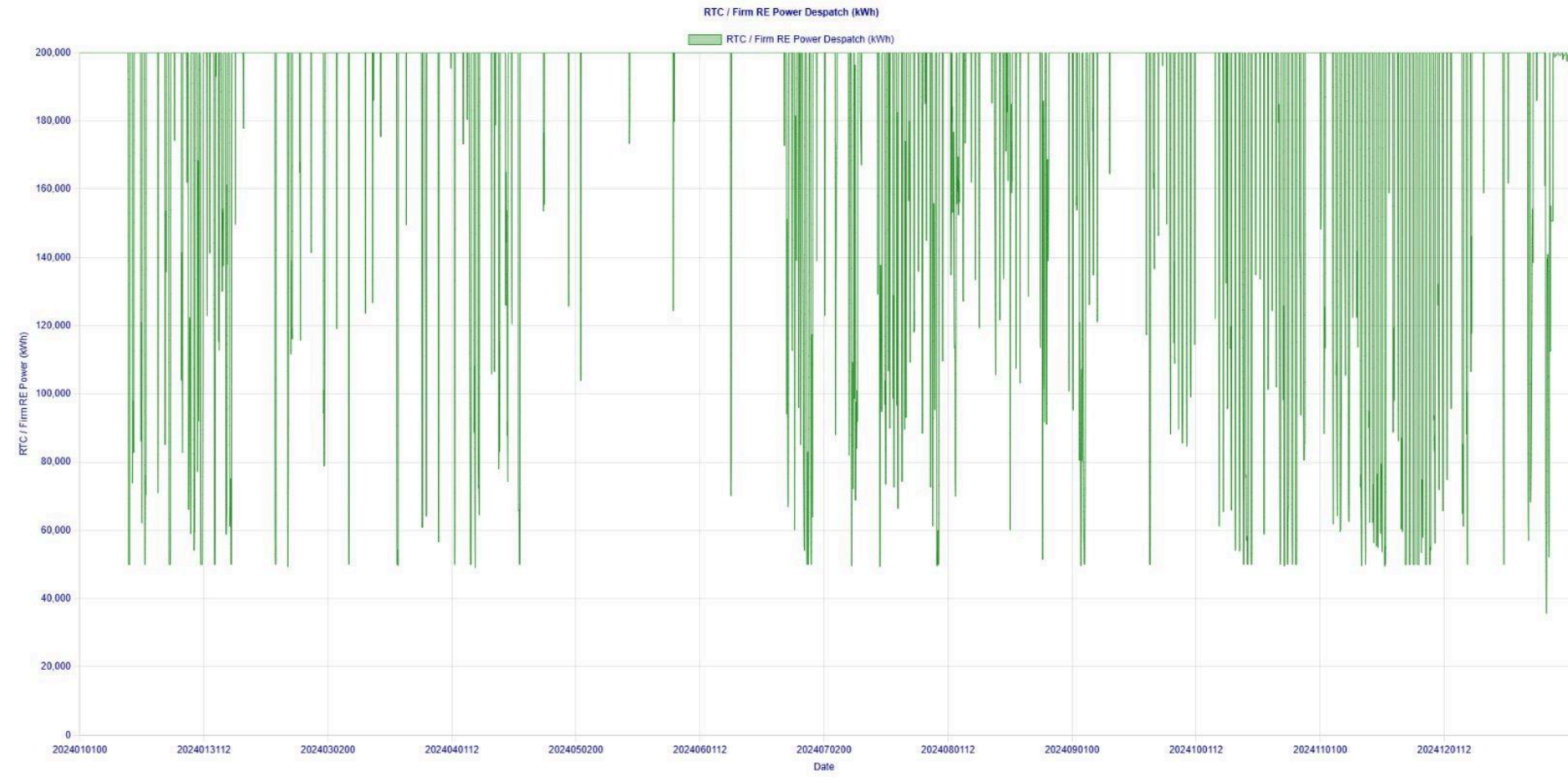


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RTC / FIRM RE CONTRACT POWER DESPATCH GRAPH

Maximum RTC / Firm RE Power Despatch kWh :	200000.00	Average RTC / Firm RE Power Despatch kWh :	185078.29	Minimum RTC / Firm RE Power Despatch kWh :	10.00
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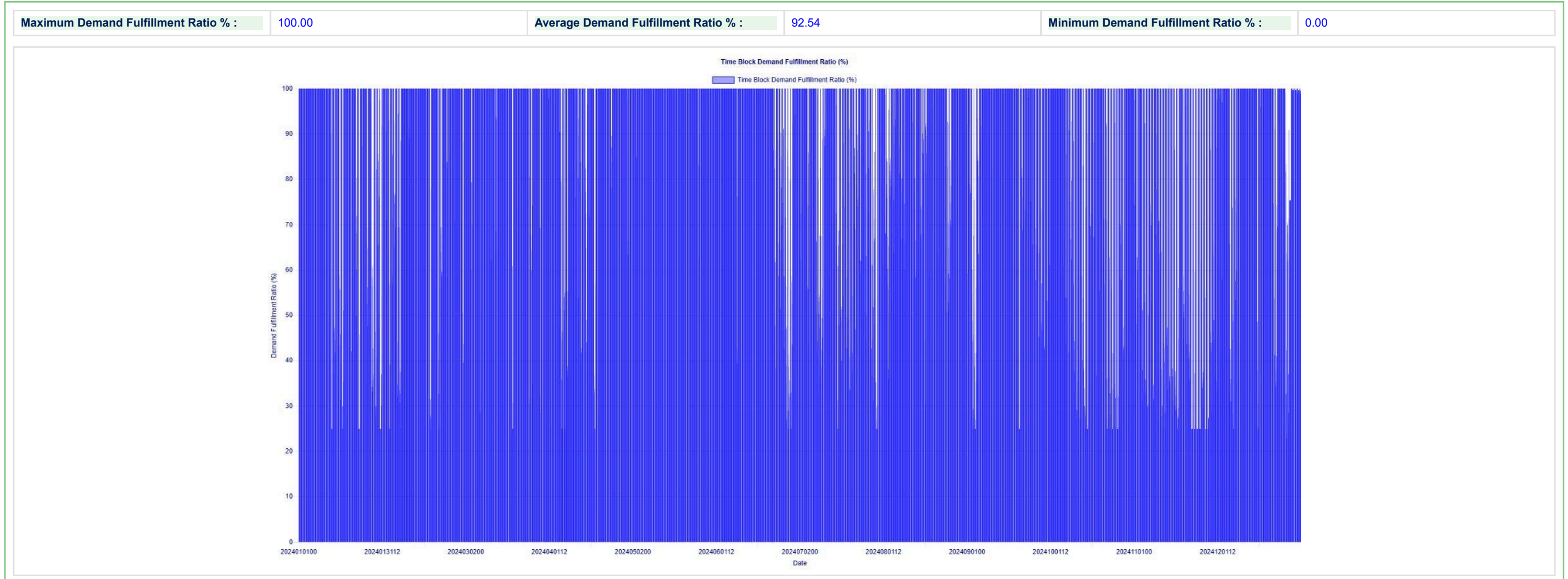




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TIME BLOCK DEMAND FULFILLMENT RATIO (DFR) GRAPH



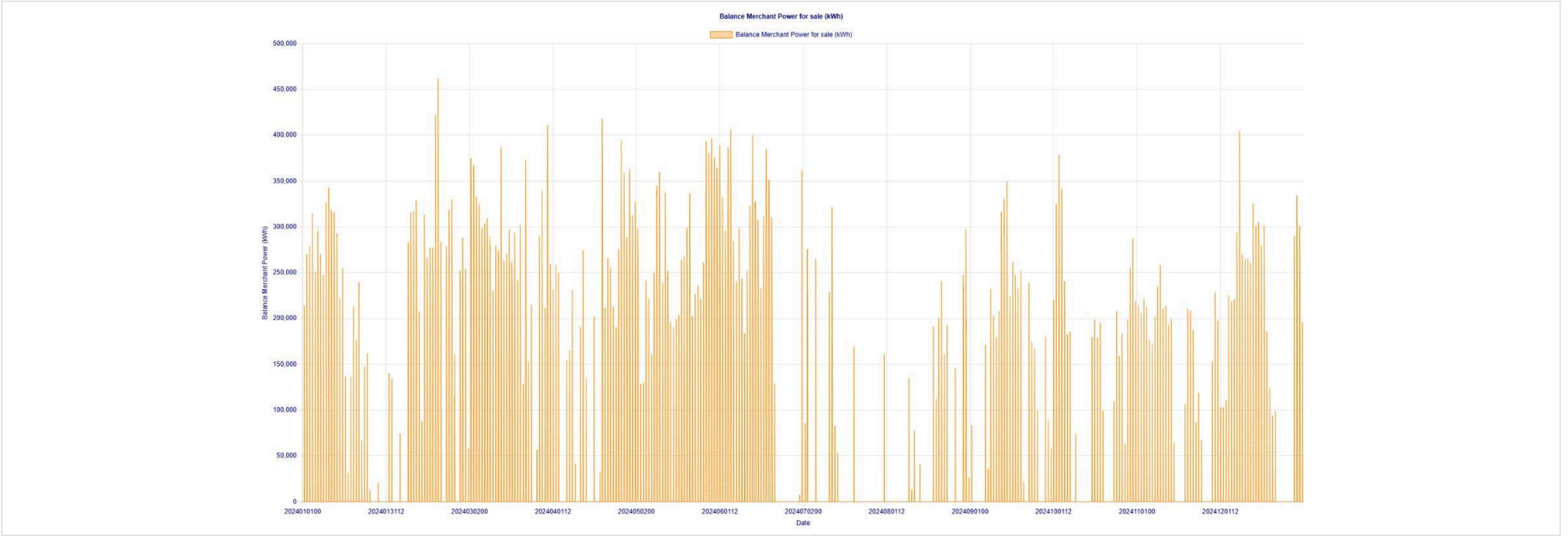


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BALANCE MERCHANT POWER AVAILABLE FOR SALE GRAPH

Maximum Balance Merchant Power kWh :	512353.33	Average Balance Merchant Power kWh :	26819.66	Minimum Balance Merchant Power kWh :	0.00
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LE Land Estimate		
Details	Unit	Data
<b>Land Requirement for Solar Power Generation</b>		
TOTAL PV MODULE AREA	SQ.M	3426661.39
LAND AREA UNDER ROWS	SQ.M	8566653.47
GROSS LAND AREA INCL INFRASTRUCTURE	SQ.M	10708316.84
TOTAL AREA FOR SOLAR POWER GENERATION	SQ.M / HECTARES / ACRES	10708316.84 / 1070.83 / 2646.08
<b>Land Requirement for Wind Power Generation</b>		
WEG LAYOUT / SPACING AREA	SQ.M	36793120
ELECTRICAL SUBSTATION & SWITCHYARD	SQ.M	15600
SCADA / CONTROL BUILDING	SQ.M	7800
INTERNAL ACCESS ROADS	SQ.M	70200
CRANE PADS & LAYDOWN AREA	SQ.M	31200
CONSTRUCTION AREA	SQ.M	23400
TOTAL AREA FOR WIND POWER GENERATION	SQ.M / HECTARES / ACRES	36941320 / 3694.13 / 9128.39
<b>Land Requirement for BESS Plant</b>		
BATTERY BLOCK AREA	SQ.M	201666.62
INVERTER SKIDS & TRANSFORMERS AREA	SQ.M	16133.33
POWER CONVERSION SYSTEM AREA	SQ.M	24200
AREA FOR ROADS AND OTHER INFRASTRUCTURE	SQ.M	96799.98
TOTAL AREA FOR BESS PLANT	SQ.M / HECTARES / ACRES	338799.93 / 33.88 / 83.72
<b>Total Land Requirement for the Project</b>		
TOTAL LAND REQUIREMENT FOR THE PROJECT	SQ.M / HECTARES / ACRES	47988436.77 / 4798.84 / 11858.19
<b>TOTAL PROJECT LAND COST</b>		
SOLAR POWER PLANT LAND COST	Million INR	330.76
WIND POWER PLANT LAND COST	Million INR	1141.0489
BESS PLANT LAND COST	Million INR	10.4649
TOTAL PROJECT LAND COST	Million INR	1482.2738



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**CX Capex Estimate**

Details	Unit	Data
<b>SOLAR PV PLANT CAPEX ESTIMATION BREAK-UP</b>		
PV Module Rated Power	Wp	650
PV Module Cost	INR/Wp	14
PV Module Total Quantity	nos	1100345
Cost of Solar PV Modules	Million INR	10013.1395
Cost of Mounting Structures/Trackers	Million INR	910.2854
Cost of Inverters	Million INR	1092.3425
Cost of DC+AC BOS & Electrical System	Million INR	1274.3996
Cost of Civil & Site Works	Million INR	728.2283
Cost of Grid Interconnection & Substation	Million INR	1092.3425
Cost of Construction & Installation	Million INR	910.2854
Cost of Project Management	Million INR	546.1712
Cost of Engineering, Permitting & Studies	Million INR	364.1142
Cost of EPC Management, HSE & QA/QC	Million INR	364.1142
Cost of Testing, Commissioning & COD activities	Million INR	182.0571
Cost of Insurance, Contingency & Spares	Million INR	728.2283
<b>SOLAR PV PLANT CAPEX</b>	Million INR	18205.7082
<b>SOLAR PV PLANT CAPEX PER KW</b>	INR/kW	30545
<b>SOLAR PV PLANT CAPEX PER KW IN USD</b>	USD/kW	323.78
<b>WIND ENERGY GENERATOR PLANT CAPEX ESTIMATION BREAK-UP</b>		
<b>WEG Rated Power</b>		3000
<b>No of Wind Turbine Generators</b>	Nos	52
<b>Cost of Wind Energy Generator per kW</b>	INR/kW	50000
<b>Cost of Wind Energy Generator</b>	Million INR	7800
<b>Cost of WEG Electrical System</b>	Million INR	1040
<b>Cost of Civil &amp; Site Works</b>	Million INR	1300
<b>Cost of Grid Interconnection &amp; Substation</b>	Million INR	780
<b>Cost of Construction &amp; Installation</b>	Million INR	650
<b>Cost of Project Management</b>	Million INR	260
<b>Cost of Engineering, Permitting &amp; Studies</b>	Million INR	260



Details	Unit	Data
Cost of EPC Management, HSE & QA/QC	Million INR	130
Cost of Testing, Commissioning & COD activities	Million INR	130
Cost of Insurance, Contingency & Spares	Million INR	650
WEG PLANT CAPEX	Million INR	13000
WEG PLANT CAPEX PER KW	INR/kW	83333
WEG PLANT CAPEX PER KW IN USD	USD/kW	883.33
<b>BESS PLANT CAPEX ESTIMATION BREAK-UP</b>		
BESS Load	KW	200000
BESS Plant Capacity	KWH	1613333
Cost of Cost of Battery System per kWH	INR/kWH	3500
Cost of Battery system (containers + cells + racks)	Million INR	5646.6655
Cost of PCS/Electrical System	Million INR	2509.6291
Cost of Balance of Plant	Million INR	1882.2218
Cost of Civil & Site Works	Million INR	376.4444
Cost of Construction & Installation	Million INR	501.9258
Cost of Project Management	Million INR	376.4444
Cost of Engineering, Permitting & Studies	Million INR	250.9629
Cost of EPC Management, HSE & QA/QC	Million INR	250.9629
Cost of Testing, Commissioning & COD activities	Million INR	125.4815
Cost of Insurance, Contingency & Spares	Million INR	627.4073
BESS PLANT CAPEX	Million INR	12548.1456
BESS PLANT CAPEX PER KWH	INR/kWH	7778
BESS PLANT CAPEX PER KW IN USD	USD/kWH	82.44
<b>TOTAL INVESTMENT (CAPEX)</b>		
Solar PV Plant	Million INR / %	18205.43 / 38.858
Wind Energy Generator Plant	Million INR / %	12999.95 / 27.748
BESS PLANT	Million INR / %	12548.50 / 26.784
PV OF Battery Replacement Cost	Million INR / %	1614.55 / 3.446
PROJECT LAND COST	Million INR / %	1482.27 / 3.164
Total Investment (CAPEX)	Million INR / %	46850.70 / 100
Total Investment (CAPEX) IN USD	Million USD	496.62
<b>PROJECT FINANCIALS</b>		
Gross Project Cost excluding IDC	Million INR	46850.70



Details	Unit	Data
Capital Subsidy	Million INR	0.00
Net Project Cost excluding IDC	Million INR	46850.70
Equity	%	30
Debt	%	70
Equity Capital Cost	Million INR	14564.99
Borrowed Capital Cost	Million INR	33984.97
Project Schedule for the Plant	Months	12
Interest During Construction(IDC)	Million INR	1699.25
Total Borrowing	Million INR	35684.22
Net Project Cost including IDC	Million INR	48549.95
Total Project Cost	Million INR	48549.95
Total Project Cost IN USD	Million USD	514.63
Installed Cost of Green Power Generation Plant	INR/kW	242750
Installed Cost of Green Power Generation Plant	USD/kW	2573.15



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**CF Carbon Footprint**

Details	Unit	Data
<b>CARBON FOOTPRINT - GHG EMISSION REDUCTION</b>		
Baseline Emissions Factor for Grid Power	kg CO <sub>2</sub> e/kWh	0.9
Project Lifecycle Intensity Emissions	kg CO <sub>2</sub> e/kg kWh	0.042
Net Emission Reduction per kWh of RE Power	kg CO <sub>2</sub> e/kg kWh	0.858
Annual Total Emission Reduction from the Project	kg CO <sub>2</sub> e/year	1616026979.77
Annual Total Emission Reduction from the Project	tons of CO <sub>2</sub> e/year	1616026.98
Carbon Credit Market/Standard		ICM (India)
Market Price for Carbon Credit for avoidance	USD/tons of CO <sub>2</sub> e	10
Annual additional revenue from Carbon Credit	INR	1524553754.5
<b>GREENHOUSE GAS EQUIVALENCIES</b>		
Petrol consumption for passenger cars for one year	No of Petrol Cars	376534
Electricity for passenger electric cars for one year	No of Electric Cars	1426952
Equivalent to Coal burning	kgs	814477598
Equivalent to Oil consumption	barrels	3716862
Equivalent to Petrol consumption	litres	691659547
Equivalent to Diesel consumption	litres	601162036
Equivalent to carbon sequestered by tree seedlings grown for 10 years	No of trees	26664445



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KR Key Results

Details	Unit	Data
<b>SITE AMBIENT,SOLAR AND WIND DATA</b>		
PROJECT NAME		Rajasthan
SITE LOCATION		Gudha Malani Tehsil, बाड़मेर, Rajasthan, 344031, India
SITE LATITUDE	(+ = North & - = South hemisphere)	25.319822
SITE LONGITUDE	(+ = East & - = West of Greenwich meridian)	71.653347
SITE ELEVATION	meters above Mean Sea Level	60
GRID ELEVATION	meters above Mean Sea Level	107.98
MEAN AMBIENT TEMPERATURE	°C	27.91
MAXIMUM AMBIENT TEMPERATURE	°C	49.26
MINIMUM AMBIENT TEMPERATURE	°C	6.27
MEAN PRECIPITATION	mm/hr	1.29
MAXIMUM PRECIPITATION	mm/hr	69.09
MINIMUM PRECIPITATION	mm/hr	0
MEAN AIR DENSITY	kg/m <sup>3</sup>	1.146
MAXIMUM AIR DENSITY	kg/m <sup>3</sup>	1.25
MINIMUM AIR DENSITY	kg/m <sup>3</sup>	1.07
MEAN WIND SPEED @ 10M	m/s	3.77
MAXIMUM WIND SPEED @ 10M	m/s	10.82
MINIMUM WIND SPEED @ 10M	m/s	0.02
MEAN WIND SPEED @ 50M	m/s	5.29
MAXIMUM WIND SPEED @ 50M	m/s	13.46
MINIMUM WIND SPEED @ 50M	m/s	0.02
MEAN RELATIVE HUMIDITY	%	43.09
MAXIMUM RELATIVE HUMIDITY	%	100
MINIMUM RELATIVE HUMIDITY	%	4.45
MEAN AMBIENT PRESSURE	kPa	99.56
MAXIMUM AMBIENT PRESSURE	kPa	101.13
MINIMUM AMBIENT PRESSURE	kPa	98.06
MEAN DIRECT NORMAL IRRADIANCE (DNI)	W/m <sup>2</sup>	187.92
MAXIMUM DIRECT NORMAL IRRADIANCE (DNI)	W/m <sup>2</sup>	1030.57
MINIMUM DIRECT NORMAL IRRADIANCE (DNI)	W/m <sup>2</sup>	0



Details	Unit	Data
MEAN DIRECT HORIZONTAL IRRADIANCE (DHI)	W/m <sup>2</sup>	87.96
MAXIMUM HORIZONTAL IRRADIANCE (DHI)	W/m <sup>2</sup>	501.27
MINIMUM HORIZONTAL IRRADIANCE (DHI)	W/m <sup>2</sup>	0
<b>DATA ANALYSIS RESULTS</b>		
TIME ZONE		India Standard Time
MAXIMUM GLOBAL HORIZONTAL IRRADIANCE (GHI)	W/m <sup>2</sup>	1243.18
AVERAGE GLOBAL HORIZONTAL IRRADIANCE (GHI)	W/m <sup>2</sup>	211.73
MINIMUM GLOBAL HORIZONTAL IRRADIANCE (GHI)	W/m <sup>2</sup>	0
AVERAGE ALPHA		0.205
SITE TERRAIN		Rough/Urban
AVERAGE COEFFICIENT OF PERFORMANCE		0.296
TURBULANCE INTENSITY @ 15m/s WIND SPEED		0.034
REFEREMCE EXTREME WIND SPEED @ HUB HEIGHT	m/s	35.6
50 YEARS STEADY EXTREME WIND SPEED @ HUB HEIGHT	m/s	14.24
1 YEAR STEADY EXTREME WIND SPEED @ HUB HEIGHT	m/s	11.39
50 YEARS LARGEST GUST MAGNITUDE WIND SPEED @ HUB HEIGHT	m/s	49.83
IEC WIND CLASS		III
IEC WIND SITE CLASSIFICATION		Low Wind Site
IEC TURBULANCE CLASS		C
IEC TURBULANCE CLASSIFICATION		Low turbulence
MAXIMUM WIND SPEED @ HUB HEIGHT	m/s	17.13
AVERAGE WIND SPEED @ HUB HEIGHT	m/s	7.12
MINIMUM WIND SPEED @ HUB HEIGHT	m/s	0.02
System Loss	%	0.882
DC/AC Ratio		1.2
MEAN PV Module Cell Temperature	°C	36.19
MAXIMUM PV Module Cell Temperature	°C	78.61
MINIMUM PV Module Cell Temperature	°C	6.27
<b>PLANT CAPACITIES AND OUTPUT GENERATION</b>		
SOLAR PV PLANT CAPACITY	KW	596020
WIND TURBINE PLANT CAPACITY	KW	156000
BESS PLANT CAPACITY	KWH	1613333
<b>ANNUAL RTC / FIRM RE POWER GENERATION AND MERCHANT POWER GENERATION</b>		



Details	Unit	Data
Annual Solar Energy Generation	KWH / MKWH	1224214179 / 1224.21
Annual Wind Energy Generation	KWH / MKWH	660230271 / 660.23
Annual Gross Green RE Power Generation	KWH / MKWH	1884444450 / 1884.44
Annual Net Green RE Power Generation	KWH / MKWH	1850212145 / 1850.21
Annual RTC / Firm RE Contract Power Generation	KWH / MKWH	1537874672 / 1537.87
Annual Grid Imported Power	KWH / MKWH	87853026 / 87.85
Annual RTC / Firm RE Contract Power Despatch	KWH / MKWH	1625727705 / 1625.73
Annual Balance Merchant Power for Sale	KWH / MKWH	235583925 / 235.58
<b>CAPACITY UTILIZATION FACTOR ACHIVED</b>		
SOLAR PV PLANT	%	23.38
WIND ENERGY GENERATOR	%	48.18
BESS	%	19.36
<b>ACHIVED DEMAND FULFILLMENT RATIO (DFR)</b>		
Demand Fulfillment Ratio without BESS	%	72.25
Demand Fulfillment Ratio with BESS	%	87.54
Grid Import Load Factor	%	5.00
Achived Demand Fulfillment Ratio (DFR)	%	92.54
<b>ANNUAL AUXILIARY POWER CONSUMPTION &amp; OTHER LOSSES</b>		
Annual Auxiliary Power Consumption - Solar	KWH / MKWH / %	12242142 / 12.24 / 10.82
Annual Auxiliary Power Consumption - Wind	KWH / MKWH / %	3301151 / 3.30 / 2.92
Annual BESS Auxiliary Power & Other Losses	KWH / MKWH / %	40814445 / 40.81 / 36.07
Annual RE Transmission Losses	KWH / MKWH / %	19567542 / 19.57 / 17.29
Annual Grid Transmission Losses	KWH / MKWH / %	37226233 / 37.23 / 32.9
Total Plant Auxiliary Power & Other Losses	KWH / MKWH / %	113151513 / 113.15 / 100
ANNUAL WATER REQUIRED FOR SOLAR PLANT	CUM	163906
<b>CARBON FOOTPRINT - GHG EMISSION REDUCTION</b>		
Annual Total Emission Reduction from the Project	tons of CO <sub>2</sub> e/year	1616026.98
Annual additional revenue from Carbon Credit	INR	1524553754.5
<b>PROJECT INVESTMENT</b>		
TOTAL PROJECT COST	Million INR	48549.95
TOTAL PROJECT COST IN USD	Million USD	514.63
PROJECT COST PER KW	INR/KW	242750
<b>LEVELAISED COST OF GENERATION</b>		



Details	Unit	Data
RTC / FIRM RE GREEN POWER	INR/KWH	4.03
RTC / FIRM RE GREEN POWER IN USD	USD/KWH	0.04
<b>GRID POWER PURCHASE PRICE WITHOUT ESCALATION</b>		
GRID POWER PURCHASE PRICE	INR/KWH	3.2
<b>SALE PRICE WITHOUT ESCALATION</b>		
RTC / FIRM RE GREEN POWER	INR/KWH	5.06
BALANCE MERCHANT POWER	INR/KWH	4.03
<b>PROJECT ECONOMICS</b>		
AVERAGE DSCR		2.22
MINIMUM DSCR		1.51
PROJECT IRR	%	22.26
PROJECT NPV	Million INR	59065.60
PROJECT PAY BACK PERIOD	YEARS	4.49
EQUITY IRR	%	52.77
EQUITY NPV	Million INR	61598.16
EQUITY PAY BACK PERIOD	YEARS	1.90



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**GP ESTIMATED GENERATION AND POWER BALANCE**

PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25
<b>SOLAR PV PLANT POWER GENERATION</b>																										
CAPACITY	MW	596.02	590.06	587.70	585.35	583.01	580.68	578.36	576.05	573.75	571.46	569.17	566.89	564.62	562.36	560.11	557.87	555.64	553.42	551.21	549.01	546.81	544.62	542.44	540.27	538.11
OPERATING HOURS	HR	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054
GROSS GENERATION	Million KWHR	1224.21	1211.97	1207.12	1202.29	1197.48	1192.69	1187.92	1183.17	1178.44	1173.73	1169.04	1164.36	1159.70	1155.06	1150.44	1145.84	1141.26	1136.69	1132.14	1127.61	1123.10	1118.61	1114.14	1109.68	1105.24
AUXILIARY CONSUMPTION	Million KWHR	12.24	12.12	12.07	12.02	11.97	11.93	11.88	11.83	11.78	11.74	11.69	11.64	11.60	11.55	11.50	11.46	11.41	11.37	11.32	11.28	11.23	11.19	11.14	11.10	11.05
RE TRANSMISSION LOSS	Million KWHR	12.12	12.00	11.95	11.90	11.86	11.81	11.76	11.71	11.67	11.62	11.57	11.53	11.48	11.44	11.39	11.34	11.30	11.25	11.21	11.16	11.12	11.07	11.03	10.99	10.94
NET GENERATION	Million KWHR	1199.85	1187.85	1183.10	1178.37	1173.65	1168.95	1164.28	1159.63	1154.99	1150.37	1145.78	1141.19	1136.62	1132.07	1127.55	1123.04	1118.55	1114.07	1109.61	1105.17	1100.75	1096.35	1091.97	1087.59	1083.25
<b>WIND TURBINE POWER GENERATION</b>																										
CAPACITY	MW	156.00	155.22	154.44	153.67	152.90	152.14	151.38	150.62	149.87	149.12	148.37	147.63	146.89	146.16	145.43	144.70	143.98	143.26	142.54	141.83	141.12	140.41	139.71	139.01	138.31
OPERATING HOURS	HR	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232	4232
GROSS GENERATION	Million KWHR	660.23	656.93	653.65	650.38	647.13	643.89	640.67	637.47	634.28	631.11	627.95	624.81	621.69	618.58	615.49	612.41	609.35	606.30	603.27	600.25	597.25	594.26	591.29	588.33	585.39
AUXILIARY CONSUMPTION	Million KWHR	3.30	3.28	3.27	3.25	3.24	3.22	3.20	3.19	3.17	3.16	3.14	3.12	3.11	3.09	3.08	3.06	3.05	3.03	3.02	3.00	2.99	2.97	2.96	2.94	2.93
RE TRANSMISSION LOSS	Million KWHR	6.57	6.54	6.50	6.47	6.44	6.41	6.37	6.34	6.31	6.28	6.25	6.22	6.19	6.15	6.12	6.09	6.06	6.03	6.00	5.97	5.94	5.91	5.88	5.85	5.82
NET GENERATION	Million KWHR	650.36	647.11	643.88	640.66	637.45	634.26	631.10	627.94	624.80	621.67	618.56	615.47	612.39	609.34	606.29	603.26	600.24	597.24	594.25	591.28	588.32	585.38	582.45	579.54	576.64
<b>TOTAL NET GREEN RE POWER GENERATION</b>																										
TOTAL NET GREEN RE POWER GENERATION	Million KWHR	1850.21	1834.96	1826.98	1819.03	1811.10	1803.21	1795.38	1787.57	1779.79	1772.04	1764.34	1756.66	1749.01	1741.41	1733.84	1726.30	1718.79	1711.31	1703.86	1696.45	1689.07	1681.73	1674.42	1667.13	1659.89
<b>DIRECT POWER EXPORT</b>																										
DIRECT POWER EXPORT	Million KWHR	1269.33	1256.64	1251.61	1246.61	1241.62	1236.65	1231.71	1226.79	1221.88	1216.99	1212.13	1207.27	1202.44	1197.63	1192.85	1188.08	1183.33	1178.59	1173.87	1169.17	1164.49	1159.84	1155.21	1150.58	1145.99
<b>BESS POWER SUPPLY</b>																										
BESS POWER SUPPLY	Million KWHR	580.89	575.08	572.78	570.49	568.20	565.92	563.66	561.41	559.16	556.92	554.70	552.48	550.27	548.07	545.88	543.70	541.53	539.36	537.20	535.05	532.91	530.78	528.66	526.54	524.44
<b>BATTERY ENERGY STORAGE SYSTEM (BESS) PLANT</b>																										
CAPACITY	MWH	1613.33	1597.20	1581.06	1564.93	1548.80	1532.66	1516.53	1500.40	1484.26	1468.13	1452.00	1613.33	1597.20	1581.06	1564.93	1548.80	1532.66	1516.53	1500.40	1484.26	1468.13	1452.00	1613.33	1597.20	1581.06
OPERATING LOAD	MW	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
OPERATING HOURS	HR	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701	1701
BESS CHARGING POWER	Million KWHR	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59	340.59
BESS DISCHARGING POWER	Million KWHR	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12	340.12
AUXILIARY POWER & OTHER LOSSES	Million KWHR	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81



PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25	
<b>RTC /FIRM RE CONTRACT POWER GENERATION</b>																											
RTC / FIRM RE CONTRACT POWER GENERATION	Million KWHR	1537.88	1525.44	1520.51	1515.61	1510.72	1505.84	1501.00	1496.18	1491.36	1486.57	1481.80	1477.04	1472.30	1467.59	1462.90	1458.23	1453.57	1448.92	1444.29	1439.69	1435.10	1430.54	1426.00	1421.46	1416.96	
<b>GRID IMPORTED POWER</b>																											
GRID IMPORTED POWER	Million KWHR	87.85	86.97	86.62	86.27	85.92	85.58	85.24	84.90	84.56	84.22	83.88	83.54	83.21	82.88	82.55	82.22	81.89	81.56	81.23	80.90	80.58	80.26	79.94	79.62	79.30	
<b>RTC /FIRM RE CONTRACT POWER DESPATCH</b>																											
RTC / FIRM RE CONTRACT POWER DESPATCH	Million KWHR	1625.73	1612.41	1607.13	1601.88	1596.64	1591.42	1586.24	1581.08	1575.92	1570.79	1565.68	1560.58	1555.51	1550.47	1545.45	1540.45	1535.46	1530.48	1525.52	1520.59	1515.68	1510.80	1505.94	1501.08	1496.26	
DEMAND FULFILLMENT RATIO(DFR)	%	92.54	91.78	91.48	91.18	90.88	90.59	90.29	90.00	89.70	89.41	89.12	88.83	88.54	88.26	87.97	87.68	87.40	87.12	86.84	86.55	86.28	86.00	85.72	85.44	85.17	
<b>BALANCE MERCHANT POWER FOR SALE</b>																											
BALANCE MERCHANT POWER FOR SALE	Million KWHR	235.59	229.89	227.64	225.39	223.15	220.91	218.70	216.49	214.28	212.09	209.91	207.74	205.57	203.41	201.26	199.13	197.00	194.87	192.75	190.65	188.55	186.46	184.38	182.30	180.25	
<b>AUXILIARY POWER &amp; OTHER LOSSES</b>																											
SOLAR AUX POWER	Million KWHR	12.24	12.12	12.07	12.02	11.97	11.93	11.88	11.83	11.78	11.74	11.69	11.64	11.60	11.55	11.50	11.46	11.41	11.37	11.32	11.28	11.23	11.19	11.14	11.10	11.05	
WIND AUX POWER	Million KWHR	3.30	3.28	3.27	3.25	3.24	3.22	3.20	3.19	3.17	3.16	3.14	3.12	3.11	3.09	3.08	3.06	3.05	3.03	3.02	3.00	2.99	2.97	2.96	2.94	2.93	
BESS AUXILIARY POWER & OTHER LOSSES	Million KWHR	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81
RE TRANSMISSION LOSSES	Million KWHR	19.57	19.41	19.32	19.23	19.16	19.08	18.98	18.90	18.83	18.74	18.66	18.59	18.50	18.42	18.34	18.25	18.18	18.10	18.02	17.94	17.87	17.78	17.71	17.64	17.55	
GRID TRANSMISSION LOSSES	Million KWHR	37.23	36.85	36.70	36.55	36.40	36.25	36.10	35.95	35.80	35.66	35.51	35.37	35.22	35.08	34.93	34.79	34.65	34.51	34.37	34.22	34.08	33.95	33.81	33.67	33.53	
TOTAL AUXILIARY POWER & OTHER LOSSES	Million KWHR	113.15	112.47	112.17	111.86	111.58	111.29	110.97	110.68	110.39	110.11	109.81	109.53	109.24	108.95	108.66	108.37	108.10	107.82	107.54	107.25	106.98	106.70	106.43	106.16	105.87	



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ROUND-THE-CLOCK(RTC) / FIRM RE HYBRID PLANT

**FA** **FIXED ASSETS, WORKING CAPITAL AND DEBT**

PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25			
<b>NET FIXED ASSETS</b>																													
GROSS FIXED ASSETS OPENING	Million INR	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	56079.05	56079.05	56079.05	
NOT USED	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ADD:BATTERY REPLACEMENT	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3764.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3764.55	0.00	0.00	0.00	0.00	
GROSS FIXED ASSETS CLOSING	Million INR	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	48549.95	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	52314.50	56079.05	56079.05	56079.05	
DEPRECIATION:INITIAL	Million INR	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80
NOT USED	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DEPRECIATION:BATTERY	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	376.46	418.28	470.57	537.79	627.43	752.91	941.14	1254.85	1882.28	3764.55	0.00	376.46	418.28	470.57	0.00	0.00	
TOTAL DEPRECIATION	Million INR	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	2124.26	2166.08	2218.37	2285.59	2375.23	2500.71	2688.94	3002.65	3630.08	5512.35	1747.80	2124.26	2166.08	2218.37	0.00	0.00	
CUMULATIVE DEPRECIATION	Million INR	1747.80	3495.60	5243.40	6991.20	8739.00	10486.80	12234.60	13982.40	15730.20	17478.00	19225.80	21350.06	23516.14	25734.51	28020.10	30395.33	32896.04	35584.98	38587.63	42217.71	47730.06	49477.86	51602.12	53768.20	55986.57	0.00	0.00	
NET FIXED ASSETS	Million INR	46802.15	45054.35	43306.55	41558.75	39810.95	38063.15	36315.35	34567.55	32819.75	31071.95	33088.70	30964.44	28798.36	26579.99	24294.40	21919.17	19418.46	16729.52	13726.87	10096.79	4584.44	6601.19	4476.93	2310.85	92.48	0.00	0.00	
<b>WORKING CAPITAL</b>																													
TOTAL REVENUE	Million INR	10532.91	10646.23	10850.65	11051.45	11244.14	11431.19	11617.33	11798.03	11995.51	12187.75	12381.07	12577.47	12786.28	12998.10	13208.72	13420.18	13645.69	13873.65	14100.27	14329.48	14578.05	14812.03	15046.58	15296.42	15546.92	0.00	0.00	
RECEIVABLES	Million INR	877.74	887.19	904.22	920.95	937.01	952.60	968.11	983.17	999.63	1015.65	1031.76	1048.12	1065.52	1083.18	1100.73	1118.35	1137.14	1156.14	1175.02	1194.12	1214.84	1234.34	1253.88	1274.70	1295.58	0.00	0.00	
SPARES	Million INR	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50
O&M TIED UP	Million INR	65.57	68.72	72.02	75.49	79.13	82.96	86.98	91.21	95.64	100.30	105.20	110.35	115.76	121.45	127.42	133.71	140.31	147.26	154.56	162.24	170.31	178.81	187.74	197.14	207.03	0.00	0.00	
WORKING CAPITAL REQUIREMENT	Million INR	1428.81	1441.41	1461.74	1481.94	1501.64	1521.06	1540.59	1559.88	1580.77	1601.45	1622.46	1643.97	1666.78	1690.13	1713.65	1737.56	1762.95	1788.90	1815.08	1841.86	1870.65	1898.65	1927.12	1957.34	1988.11	0.00	0.00	
WORKING CAPITAL LOAN LESS MARGIN	Million INR	1071.61	1081.06	1096.31	1111.46	1126.23	1140.80	1155.44	1169.91	1185.58	1201.09	1216.85	1232.98	1250.09	1267.60	1285.24	1303.17	1322.21	1341.68	1361.31	1381.40	1402.99	1423.99	1445.34	1468.01	1491.08	0.00	0.00	
Δ WORKING CAPITAL REQUIREMENT	Million INR	1428.81	12.60	20.33	20.20	19.70	19.42	19.53	19.29	20.89	20.68	21.01	21.51	22.81	23.35	23.52	23.91	25.39	25.95	26.18	26.78	28.79	28.00	28.47	30.22	30.77	0.00	0.00	
Δ WORKING CAPITAL LOAN	Million INR	1071.61	9.45	15.25	15.15	14.77	14.57	14.64	14.47	15.67	15.51	15.76	16.13	17.11	17.51	17.64	17.93	19.04	19.47	19.63	20.09	21.59	21.00	21.35	22.67	23.07	0.00	0.00	
<b>DEBT</b>																													
TERM LOAN OPENING	Million INR	35684.22	35684.22	35684.22	32115.80	28547.38	24978.96	21410.54	17842.12	14273.70	10705.28	7136.86	3568.44	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
TERM LOAN REPAYMENT	Million INR	0.00	0.00	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TERM LOAN CLOSING	Million INR	35684.22	35684.22	32115.80	28547.38	24978.96	21410.54	17842.12	14273.70	10705.28	7136.86	3568.44	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	



PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25
INTEREST ON TERM LOAN	Million INR	2497.90	2497.90	2497.90	2248.11	1998.32	1748.53	1498.74	1248.95	999.16	749.37	499.58	249.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WORKING CAPITAL LOAN	Million INR	1071.61	1081.06	1096.31	1111.46	1126.23	1140.80	1155.44	1169.91	1185.58	1201.09	1216.85	1232.98	1250.09	1267.60	1285.24	1303.17	1322.21	1341.68	1361.31	1381.40	1402.99	1423.99	1445.34	1468.01	1491.08
INTEREST ON WORKING CAPITAL LOAN	Million INR	75.01	75.67	76.74	77.80	78.84	79.86	80.88	81.89	82.99	84.08	85.18	86.31	87.51	88.73	89.97	91.22	92.55	93.92	95.29	96.70	98.21	99.68	101.17	102.76	104.38



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LC		ESTIMATION OF LEVELISED COST OF GENERATION																									
PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25	
<b>INTEREST ON TERM LOAN</b>																											
INTEREST ON TERM LOAN	Million INR	2497.90	2497.90	2497.90	2248.11	1998.32	1748.53	1498.74	1248.95	999.16	749.37	499.58	249.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>BOOK DEPRECIATION</b>																											
OPENING VALUE	Million INR	48549.95	46802.15	45054.35	43306.55	41558.75	39810.95	38063.15	36315.35	34567.55	32819.75	31071.95	29324.15	27199.89	25033.81	22815.44	20529.85	18154.62	15653.91	12964.97	9962.32	6332.24	819.89	-927.91	-3052.17	-5218.25	
BOOK DEPRECIATION	Million INR	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	2124.26	2166.08	2218.37	2285.59	2375.23	2500.71	2688.94	3002.65	3630.08	5512.35	1747.80	2124.26	2166.08	2218.37	
CLOSING VALUE	Million INR	46802.15	45054.35	43306.55	41558.75	39810.95	38063.15	36315.35	34567.55	32819.75	31071.95	29324.15	27199.89	25033.81	22815.44	20529.85	18154.62	15653.91	12964.97	9962.32	6332.24	819.89	-927.91	-3052.17	-5218.25	-7436.62	
CUMULATIVE DEPRECIATION	Million INR	1747.80	3495.60	5243.40	6991.20	8739.00	10486.80	12234.60	13982.40	15730.20	17478.00	19225.80	21350.06	23516.14	25734.51	28020.10	30395.33	32896.04	35584.98	38587.63	42217.71	47730.06	49477.86	51602.12	53768.20	55986.57	
<b>O &amp; M EXPENSES</b>																											
NOT USED	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SOLAR PV POWER PLANT O & M	Million INR	357.61	374.78	392.80	411.73	431.60	452.48	474.41	497.44	521.64	547.07	573.78	601.86	631.36	662.37	694.97	729.24	765.26	803.14	842.97	884.86	928.91	975.24	1023.97	1075.24	1129.18	
WIND TURBINE POWER PLANT O & M	Million INR	187.20	196.19	205.62	215.53	225.93	236.86	248.34	260.40	273.07	286.37	300.36	315.06	330.50	346.73	363.80	381.74	400.59	420.42	441.27	463.20	486.26	510.51	536.02	562.86	591.09	
BESS PLANT O & M	Million INR	242.00	253.62	265.81	278.62	292.07	306.20	321.04	336.62	353.00	370.21	388.29	407.28	427.25	448.24	470.29	493.48	517.86	543.50	570.45	598.79	628.60	659.95	692.93	727.63	764.13	
TOTAL O & M EXPENSES	Million INR	786.81	824.59	864.23	905.88	949.60	995.54	1043.79	1094.46	1147.71	1203.65	1262.43	1324.20	1389.11	1457.34	1529.06	1604.46	1683.71	1767.06	1854.69	1946.85	2043.77	2145.70	2252.92	2365.73	2484.40	
<b>WATER COST</b>																											
WATER COST	Million INR	8.20	8.59	9.00	9.44	9.89	10.37	10.87	11.40	11.95	12.54	13.15	13.79	14.47	15.18	15.93	16.71	17.54	18.41	19.32	20.28	21.29	22.35	23.47	24.64	25.88	
<b>SOLAR PV MODULE REPLACEMENT COST</b>																											
NO OF PV MODULES FOR REPLACEMENT	NOS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PV MODULE UNIT COST	INR	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	9100.00	
SOLAR PV MODULE REPLACEMENT COST	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>RETURN ON EQUITY</b>																											
RETURN ON EQUITY	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>INTEREST ON WORKING CAPITAL</b>																											
WORKING CAPITAL	Million INR	1428.81	1441.41	1461.74	1481.94	1501.64	1521.06	1540.59	1559.88	1580.77	1601.45	1622.46	1643.97	1666.78	1690.13	1713.65	1737.56	1762.95	1788.90	1815.08	1841.86	1870.65	1898.65	1927.12	1957.34	1988.11	
INTEREST ON WORKING CAPITAL	Million INR	75.01	75.67	76.74	77.80	78.84	79.86	80.88	81.89	82.99	84.08	85.18	86.31	87.51	88.73	89.97	91.22	92.55	93.92	95.29	96.70	98.21	99.68	101.17	102.76	104.38	
<b>INCOME TAX</b>																											
INCOME TAX	Million	0.00	0.00	763.45	939.60	1104.87	1260.61	1408.64	1548.62	1686.03	1816.58	1859.32	1989.02	2116.20	2184.23	2247.54	2306.90	2365.48	2421.00	2472.85	2522.07	2572.52	2534.07	2584.07	2633.92	2680.58	



PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25
	INR																									
<b>GRID IMPORTED POWER PURCHASE</b>																										
GRID IMPORTED POWER PURCHASE	Million INR	281.12	283.87	288.38	292.96	297.61	302.36	307.18	312.07	317.04	322.08	327.20	332.39	337.70	343.09	348.55	354.10	359.74	365.45	371.25	377.14	383.16	389.27	395.47	401.77	408.16
<b>TOTAL COST OF GENERATION</b>																										
TOTAL COST OF GENERATION	Million INR	5396.84	5438.42	6247.50	6221.59	6186.93	6145.07	6097.90	6045.19	5992.68	5936.10	5794.66	6119.76	6111.07	6306.94	6516.64	6748.62	7019.73	7354.78	7816.05	8593.12	10631.30	6938.87	7481.36	7694.90	7921.77
<b>LEVELIZED COST OF GENERATION (LCOG)</b>																										
DISCOUNTING FACTOR		1.00	0.93	0.86	0.79	0.74	0.68	0.63	0.58	0.54	0.50	0.46	0.43	0.40	0.37	0.34	0.32	0.29	0.27	0.25	0.23	0.21	0.20	0.18	0.17	0.16
<b>LCOG - RTC / FIRM RE GREEN POWER</b>																										
COST OF GENERATION	INR/ KWH	3.32	3.37	3.89	3.88	3.87	3.86	3.84	3.82	3.80	3.78	3.70	3.92	3.93	4.07	4.22	4.38	4.57	4.81	5.12	5.65	7.01	4.59	4.97	5.13	5.29
DISCOUNTED COST OF GENERATION	INR/ KWH	3.32	3.13	3.35	3.07	2.86	2.62	2.42	2.22	2.05	1.89	1.70	1.69	1.57	1.51	1.43	1.40	1.33	1.30	1.28	1.30	1.47	0.92	0.89	0.87	0.85
LEVELIZED COST OF GENERATION (LCOG)	INR/ KWH	4.03																								



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RV ESTIMATION OF REVENUE GENERATION		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25
<b>PROJECTED REVENUE</b>																										
<b>REVENUE FROM SALE OF RTC / FIRM RE GREEN POWER</b>																										
RTC / FIRM RE GREEN POWER DE SPATCH	Million KWHR	1625.73	1612.41	1607.13	1601.88	1596.64	1591.42	1586.24	1581.08	1575.92	1570.79	1565.68	1560.58	1555.51	1550.47	1545.45	1540.45	1535.46	1530.48	1525.52	1520.59	1515.68	1510.80	1505.94	1501.08	1496.26
RTC / FIRM RE GREEN POWER SALE PRICE	INR/ KWH	5.06	5.16	5.26	5.37	5.48	5.59	5.70	5.81	5.93	6.05	6.17	6.29	6.42	6.55	6.68	6.81	6.95	7.09	7.23	7.37	7.52	7.67	7.82	7.98	8.14
REVENUE FROM SALE OF RTC / FIRM RE GREEN POWER	Million INR	8226.19	8320.04	8453.50	8602.10	8749.59	8896.04	9041.57	9186.07	9345.21	9503.28	9660.25	9816.05	9986.37	10155.58	10323.61	10490.46	10671.45	10851.10	11029.51	11206.75	11397.91	11587.84	11776.45	11978.62	12179.56
<b>REVENUE FROM SALE OF BALANCE MERCHANT POWER</b>																										
BALANCE MERCHANT POWER AVAILABLE FOR SALE	Million KWHR	235.59	229.89	227.64	225.39	223.15	220.91	218.70	216.49	214.28	212.09	209.91	207.74	205.57	203.41	201.26	199.13	197.00	194.87	192.75	190.65	188.55	186.46	184.38	182.30	180.25
MERCHANT POWER SALE PRICE	INR/ KWH	4.03	4.11	4.19	4.28	4.36	4.45	4.54	4.63	4.72	4.82	4.91	5.01	5.11	5.21	5.32	5.42	5.53	5.64	5.76	5.87	5.99	6.11	6.23	6.35	6.48
REVENUE FROM SALE OF MERCHANT POWER	Million INR	782.16	783.92	830.89	858.74	879.21	894.69	909.79	920.08	932.12	939.56	948.79	961.84	972.35	986.54	1000.26	1015.56	1030.31	1048.40	1065.91	1086.71	1112.45	1124.35	1137.62	1152.14	1168.02
<b>REVENUE FROM SALE OF CARBON CREDIT</b>																										
ANNUAL TOTAL EMISSION REDUCTION FROM THE PROJECT	tCO <sub>2</sub> e/year	1616023	1602762	1595768	1588800	1581867	1574959	1568086	1561248	1554435	1547657	1540905	1534178	1527486	1520820	1514189	1507583	1501012	1494458	1487938	1481445	1474985	1468552	1462153	1455771	1449424
CARBON CREDIT SALE PRICE	INR/ tCO <sub>2</sub> e	943.40	962.26	981.51	1001.14	1021.16	1041.59	1062.42	1083.67	1105.34	1127.45	1149.99	1172.99	1196.45	1220.38	1244.79	1269.69	1295.08	1320.98	1347.40	1374.35	1401.84	1429.87	1458.47	1487.64	1517.39
REVENUE FROM SALE OF CARBON CREDIT	Million INR	1524.56	1542.27	1566.26	1590.61	1615.34	1640.46	1665.97	1691.88	1718.18	1744.91	1772.03	1799.58	1827.56	1855.98	1884.85	1914.16	1943.93	1974.15	2004.85	2036.02	2067.69	2099.84	2132.51	2165.66	2199.34
<b>RE GENERATION BASED INCENTIVE (GBI)</b>																										
RE GBI RATE	INR/ KWH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REVENUE FROM RE GENERATION BASED INCENTIVE (GBI)	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>REVENUE LOSS DUE TO CURTAILMENT / LOSSES FROM SALE OF RE GREEN POWER</b>																										
CURTAILMENT / LOSSES	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REVENUE LOSS DUE TO CURTAILMENT / LOSSES	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL REVENUE GENERATION</b>																										
TOTAL REVENUE GENERATION	Million INR	10532.91	10646.23	10850.65	11051.45	11244.14	11431.19	11617.33	11798.03	11995.51	12187.75	12381.07	12577.47	12786.28	12998.10	13208.72	13420.18	13645.69	13873.65	14100.27	14329.48	14578.05	14812.03	15046.58	15296.42	15546.92



Clean Green Energy Mission - Report  
ROUND-THE-CLOCK(RTC) / FIRM RE HYBRID PLANT

**PS PROJECTED PROFITABILITY STATEMENT**

PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25	
<b>EARNINGS BEFORE INTEREST TAX DEPRECIATION AMORTIZATION (EBITDA)</b>																											
TOTAL REVENUE	Million INR	10532.91	10646.23	10850.65	11051.45	11244.14	11431.19	11617.33	11798.03	11995.51	12187.75	12381.07	12577.47	12786.28	12998.10	13208.72	13420.18	13645.69	13873.65	14100.27	14329.48	14578.05	14812.03	15046.58	15296.42	15546.92	
WATER COST	Million INR	8.20	8.59	9.00	9.44	9.89	10.37	10.87	11.40	11.95	12.54	13.15	13.79	14.47	15.18	15.93	16.71	17.54	18.41	19.32	20.28	21.29	22.35	23.47	24.64	25.88	
NOT USED	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
O&M EXPENSES	Million INR	786.81	824.59	864.23	905.88	949.60	995.54	1043.79	1094.46	1147.71	1203.65	1262.43	1324.20	1389.11	1457.34	1529.06	1604.46	1683.71	1767.06	1854.69	1946.85	2043.77	2145.70	2252.92	2365.73	2484.40	
PV MODULE REPLACEMENT COST	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
EBITDA	Million INR	9737.90	9813.05	9977.42	10136.13	10284.65	10425.28	10562.67	10692.17	10835.85	10971.56	11105.49	11239.48	11382.70	11525.58	11663.73	11799.01	11944.44	12088.18	12226.26	12362.35	12512.99	12643.98	12770.19	12906.05	13036.64	
<b>EARNINGS BEFORE INTEREST TAXES (EBIT)</b>																											
BOOK DEPRECIATION	Million INR	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	2124.26	2166.08	2218.37	2285.59	2375.23	2500.71	2688.94	3002.65	3630.08	5512.35	1747.80	2124.26	2166.08	2218.37	
EBIT	Million INR	7990.10	8065.25	8229.62	8388.33	8536.85	8677.48	8814.87	8944.37	9088.05	9223.76	9357.69	9115.22	9216.62	9307.21	9378.14	9423.78	9443.73	9399.24	9223.61	8732.27	7000.64	10896.18	10645.93	10739.97	10818.27	
<b>PROFIT BEFORE TAX (PBT)</b>																											
INTEREST ON TERM LOAN	Million INR	2497.90	2497.90	2497.90	2248.11	1998.32	1748.53	1498.74	1248.95	999.16	749.37	499.58	249.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON WORKING CAPITAL	Million INR	75.01	75.67	76.74	77.80	78.84	79.86	80.88	81.89	82.99	84.08	85.18	86.31	87.51	88.73	89.97	91.22	92.55	93.92	95.29	96.70	98.21	99.68	101.17	102.76	104.38	
PBT	Million INR	5417.19	5491.68	5654.98	6062.42	6459.69	6849.09	7235.25	7613.53	8005.90	8390.31	8772.93	8779.12	9129.11	9218.48	9288.17	9332.56	9351.18	9305.32	9128.32	8635.57	6902.43	10796.50	10544.76	10637.21	10713.89	
<b>PROFIT AFTER TAX (PAT)</b>																											
OPENING VALUE	Million INR	48549.95	43694.95	39325.45	35392.90	31853.61	28668.25	25801.42	23221.28	20899.15	18809.23	20692.86	18623.57	16761.21	15085.09	13576.58	12218.92	10997.03	9897.33	8907.60	8016.84	7215.16	10258.19	9232.37	8309.13	7478.22	
TAX DEPRECIATION	Million INR	4855.00	4369.50	3932.55	3539.29	3185.36	2866.83	2580.14	2322.13	2089.92	1880.92	2069.29	1862.36	1676.12	1508.51	1357.66	1221.89	1099.70	989.73	890.76	801.68	721.52	1025.82	923.24	830.91	747.82	
CLOSING VALUE	Million INR	43694.95	39325.45	35392.90	31853.61	28668.25	25801.42	23221.28	20899.15	18809.23	16928.31	18623.57	16761.21	15085.09	13576.58	12218.92	10997.03	9897.33	8907.60	8016.84	7215.16	6493.64	9232.37	8309.13	7478.22	6730.40	
CUMULATIVE DEPRECIATION	Million INR	43694.95	48064.45	51997.00	55536.29	58721.65	61588.48	64168.62	66490.75	68580.67	70461.59	72530.88	74393.24	76069.36	77577.87	78935.53	80157.42	81257.12	82246.85	83137.61	83939.29	84660.81	85686.63	86609.87	87440.78	88188.60	
TAXABLE INCOME (AFTER LOSS (CF))	Million INR	2309.99	2869.98	3470.23	4270.93	5022.13	5730.06	6402.91	7039.20	7663.78	8257.19	8451.44	9041.02	9619.07	9928.34	10216.10	10485.90	10752.19	11004.53	11240.21	11463.97	11693.26	11518.48	11745.78	11972.38	12184.44	
LOSS CARRIED FORWARD (CF)	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TAX	Million INR	0.00	0.00	763.45	939.60	1104.87	1260.61	1408.64	1548.62	1686.03	1816.58	1859.32	1989.02	2116.20	2184.23	2247.54	2306.90	2365.48	2421.00	2472.85	2522.07	2572.52	2534.07	2584.07	2633.92	2680.58	
PAT	Million INR	5417.19	5491.68	4891.53	5122.82	5354.82	5588.48	5826.61	6064.91	6319.87	6573.73	6913.61	6790.10	7012.91	7034.25	7040.63	7025.66	6985.70	6884.32	6655.47	6113.50	4329.91	8262.43	7960.69	8003.29	8033.31	
<b>NET CASH ACCRUAL</b>																											
NET CASH ACCRUAL	Million	7164.99	7239.48	6639.33	6870.62	7102.62	7336.28	7574.41	7812.71	8067.67	8321.53	8661.41	8914.36	9178.99	9252.62	9326.22	9400.89	9486.41	9573.26	9658.12	9743.58	9842.26	10010.2	10084.9	10169.3	10251.6	



PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25
	INR																						3	5	7	8
CUMULATIVE CASH ACCRUAL	Million INR	7164.99	14404.47	21043.80	27914.42	35017.04	42353.32	49927.73	57740.44	65808.11	74129.64	82791.05	91705.41	100884.40	110137.02	119463.24	128864.13	138350.54	147923.80	157581.92	167325.50	177167.76	187177.99	197262.94	207432.31	217683.99



Clean Green Energy Mission - Report  
ROUND-THE-CLOCK(RTC) / FIRM RE HYBRID PLANT

CF		PROJECTED CASH FLOW STATEMENT																								
PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25
<b>OPERATING CASH FLOW</b>																										
PAT	Million INR	5417.19	5491.68	4891.53	5122.82	5354.82	5588.48	5826.61	6064.91	6319.87	6573.73	6913.61	6790.10	7012.91	7034.25	7040.63	7025.66	6985.70	6884.32	6655.47	6113.50	4329.91	8262.43	7960.69	8003.29	8033.31
ADD:BOOK DEPRECIATION	Million INR	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	2124.26	2166.08	2218.37	2285.59	2375.23	2500.71	2688.94	3002.65	3630.08	5512.35	1747.80	2124.26	2166.08	2218.37
LESS:W <sup>OR</sup> ING CAPITAL REQUIREMENT	Million INR	-1428.81	-12.60	-20.33	-20.20	-19.70	-19.42	-19.53	-19.29	-20.89	-20.68	-21.01	-21.51	-22.81	-23.35	-23.52	-23.91	-25.39	-25.95	-26.18	-26.78	-28.79	-28.00	-28.47	-30.22	-30.77
OPERATING CASH FLOW	Million INR	5736.18	7226.88	6619.00	6850.42	7082.92	7316.86	7554.88	7793.42	8046.78	8300.85	8640.40	8892.85	9156.18	9229.27	9302.70	9376.98	9461.02	9547.31	9631.94	9716.80	9813.47	9982.23	10056.48	10139.15	10220.91
<b>INVESTING CASH FLOW</b>																										
SUBSIDY RECEIPT	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CASH RESERVE FOR FUTURE INVESTMENT	Million INR	1614.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOT USED	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAPEX BATTERY REPLACEMENT	Million INR	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-3764.55	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-3764.55	-0.00	-0.00	-0.00
INVESTING CASH FLOW	Million INR	1614.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-3764.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-3764.55	0.00	0.00	0.00
<b>FINANCING CASH FLOW</b>																										
INTEREST DURING CONSTRUCTION	Million INR	1699.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W <sup>OR</sup> ING CAPITAL LOAN	Million INR	1071.61	9.45	15.25	15.15	14.77	14.57	14.64	14.47	15.67	15.51	15.76	16.13	17.11	17.51	17.64	17.93	19.04	19.47	19.63	20.09	21.59	21.00	21.35	22.67	23.07
TERM LOAN REPAYMENT	Million INR	-0.00	-0.00	-3568.42	-3568.42	-3568.42	-3568.42	-3568.42	-3568.42	-3568.42	-3568.42	-3568.42	-3568.42	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
FINANCING CASH FLOW	Million INR	2770.86	9.45	-3553.17	-3553.27	-3553.65	-3553.85	-3553.78	-3553.95	-3552.75	-3552.91	-3552.66	-3552.29	17.11	17.51	17.64	17.93	19.04	19.47	19.63	20.09	21.59	21.00	21.35	22.67	23.07
<b>NET CASH MOVEMENT</b>																										
NET CASH MOVEMENT	Million INR	10121.59	7236.33	3065.83	3297.15	3529.27	3763.01	4001.10	4239.47	4494.03	4747.94	1323.19	5340.56	9173.29	9246.78	9320.34	9394.91	9480.06	9566.78	9651.57	9736.89	9835.06	6238.68	10077.83	10161.82	10243.98
<b>CASH BALANCE</b>																										
OPENING CASH BALANCE	Million INR	0.00	10121.59	17357.92	20423.75	23720.90	27250.17	31013.18	35014.28	39253.75	43747.78	48495.72	49818.91	55159.47	64332.76	73579.54	82899.88	92294.79	101774.85	111341.63	120993.20	130730.09	140565.15	146803.83	156881.66	167043.48
CLOSING CASH BALANCE	Million INR	10121.59	17357.92	20423.75	23720.90	27250.17	31013.18	35014.28	39253.75	43747.78	48495.72	49818.91	55159.47	64332.76	73579.54	82899.88	92294.79	101774.85	111341.63	120993.20	130730.09	140565.15	146803.83	156881.66	167043.48	177287.46



Clean Green Energy Mission - Report  
ROUND-THE-CLOCK(RTC) / FIRM RE HYBRID PLANT

**BS PROJECTED BALANCE SHEET**

PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25	
<b>LIABILITY &amp; EQUITY</b>																											
SHARE CAPITAL - EQUITY	Million INR	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99	14564.99
RETAINED EARNINGS	Million INR	5417.19	10908.87	15800.40	20923.22	26278.04	31866.52	37693.13	43758.04	50077.91	56651.64	63565.25	70355.35	77368.26	84402.51	91443.14	98468.80	105454.50	112338.82	118994.29	125107.79	129437.70	137700.13	145660.82	153664.11	161697.42	
CASH RESERVE FOR FUTURE INVESTMENT	Million INR	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55	1614.55
CAPITAL SUBSIDY RESERVE	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TERM LOAN	Million INR	35684.22	35684.22	32115.80	28547.38	24978.96	21410.54	17842.12	14273.70	10705.28	7136.86	3568.44	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
WORKING CAPITAL LOAN	Million INR	1071.61	1081.06	1096.31	1111.46	1126.23	1140.80	1155.44	1169.91	1185.58	1201.09	1216.85	1232.98	1250.09	1267.60	1285.24	1303.17	1322.21	1341.68	1361.31	1381.40	1402.99	1423.99	1445.34	1468.01	1491.08	
TOTAL LIABILITY & EQUITY	Million INR	58352.56	63853.69	65192.05	66761.60	68562.77	70597.40	72870.23	75381.19	78148.31	81169.13	84530.08	87767.89	94797.91	101849.67	108907.94	115951.53	122956.27	129860.06	136535.16	142668.75	147020.25	155303.68	163285.72	171311.68	179368.06	
<b>ASSETS</b>																											
NET FIXED ASSETS	Million INR	46802.15	45054.35	43306.55	41558.75	39810.95	38063.15	36315.35	34567.55	32819.75	31071.95	30088.70	30964.44	28798.36	26579.99	24294.40	21919.17	19418.46	16729.52	13726.87	10096.79	4584.44	6601.19	4476.93	2310.85	92.48	
RECEIVABLES	Million INR	877.74	887.19	904.22	920.95	937.01	952.60	968.11	983.17	999.63	1015.65	1031.76	1048.12	1065.52	1083.18	1100.73	1118.35	1137.14	1156.14	1175.02	1194.12	1214.84	1234.34	1253.88	1274.70	1295.58	
SPARES	Million INR	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	485.50	
O&M TIED UP	Million INR	65.57	68.72	72.02	75.49	79.13	82.96	86.98	91.21	95.64	100.30	105.20	110.35	115.76	121.45	127.42	133.71	140.31	147.26	154.56	162.24	170.31	178.81	187.74	197.14	207.03	
CASH BALANCE	Million INR	10121.59	17357.92	20423.75	23720.90	27250.17	31013.18	35014.28	39253.75	43747.78	48495.72	53119.97	58159.47	63332.76	68759.54	74899.88	81774.99	89177.85	97134.63	105993.20	115730.09	126565.15	138803.83	152881.66	168043.48	177287.46	
TOTAL ASSETS	Million INR	58352.55	63853.68	65192.04	66761.59	68562.76	70597.39	72870.22	75381.18	78148.30	81169.12	84530.07	87767.88	94797.90	101849.66	108907.93	115951.52	122956.26	129860.05	136535.15	142668.74	147020.24	155303.67	163285.71	171311.67	179368.05	
<b>CHECK</b>																											
CHECK	Million INR	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	



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DS DEBT SERVICE COVERAGE RATIO

PARTICULARS/YEARS		YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25
<b>DEBT SERVICE COVERAGE RATIO ( DSCR )</b>																										
PROFIT AFTER TAX (PAT)	Million INR	5417.19	5491.68	4891.53	5122.82	5354.82	5588.48	5826.61	6064.91	6319.87	6573.73	6913.61	6790.10	7012.91	7034.25	7040.63	7025.66	6985.70	6884.32	6655.47	6113.50	4329.91	8262.43	7960.69	8003.29	8033.31
DEPRECIATION	Million INR	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	1747.80	2124.26	2166.08	2218.37	2285.59	2375.23	2500.71	2688.94	3002.65	3630.08	5512.35	1747.80	2124.26	2166.08	2218.37
INTEREST ON LOAN	Million INR	2497.90	2497.90	2497.90	2248.11	1998.32	1748.53	1498.74	1248.95	999.16	749.37	499.58	249.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAYMENT OF PRINCIPAL	Million INR	0.00	0.00	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	3568.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DEBT SERVICE	Million INR	2497.90	2497.90	6066.32	5816.53	5566.74	5316.95	5067.16	4817.37	4567.58	4317.79	4068.00	3818.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DEBT SERVICE COVERAGE RATIO ( DSCR )		3.87	3.90	1.51	1.57	1.63	1.71	1.79	1.88	1.99	2.10	2.25	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVERAGE DSCR		2.22																								
MINIMUM DSCR		1.51																								



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**IR INTERNAL RATE OF RETURN (IRR) AND NET PRESENT VALUE (NPV)**

PARTICULARS/YEARS		YEAR0	YEAR1	YEAR2	YEAR3	YEAR4	YEAR5	YEAR6	YEAR7	YEAR8	YEAR9	YEAR10	YEAR11	YEAR12	YEAR13	YEAR14	YEAR15	YEAR16	YEAR17	YEAR18	YEAR19	YEAR20	YEAR21	YEAR22	YEAR23	YEAR24	YEAR25	
<b>OVERALL PROJECT</b>																												
CASH OUTFLOW	Million INR	46935.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CASH INFLOW	Million INR	0.00	11352.45	9813.05	9977.42	10136.13	10284.65	10425.28	10562.67	10692.17	10835.85	10971.56	7340.94	11239.48	11382.70	11525.58	11663.73	11799.01	11944.44	12088.18	12226.26	12362.35	12512.99	8879.43	12770.19	12906.05	13036.64	
SALVAGE VALUE	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4855.00	
NET CASH INFLOW	Million INR	-46935.40	11352.45	9813.05	9977.42	10136.13	10284.65	10425.28	10562.67	10692.17	10835.85	10971.56	7340.94	11239.48	11382.70	11525.58	11663.73	11799.01	11944.44	12088.18	12226.26	12362.35	12512.99	8879.43	12770.19	12906.05	17891.64	
IRR (PROJECT)	%	22.26																										
NPV (PROJECT)	Million INR	59065.60																										
PROJECT PAY BACK PERIOD	YEARS	4.49																										
<b>EQUITY</b>																												
CASH OUTFLOW	Million INR	14564.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
CASH INFLOW	Million INR	0.00	8779.54	7239.48	6639.33	6870.62	7102.62	7336.28	7574.41	7812.71	8067.67	8321.53	4896.86	8914.36	9178.99	9252.62	9326.22	9400.89	9486.41	9573.26	9658.12	9743.58	9842.26	6245.68	10084.95	10169.37	10251.68	
SALVAGE VALUE	Million INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4855.00	
NET CASH INFLOW	Million INR	-14564.99	8779.54	7239.48	6639.33	6870.62	7102.62	7336.28	7574.41	7812.71	8067.67	8321.53	4896.86	8914.36	9178.99	9252.62	9326.22	9400.89	9486.41	9573.26	9658.12	9743.58	9842.26	6245.68	10084.95	10169.37	15106.68	
IRR (EQUITY)	%	52.77																										
NPV (EQUITY)	Million INR	61598.16																										
EQUITY PAY BACK PERIOD	YEARS	1.90																										