Annex – 17.0

Agenda Item # 17.0

"Development of 1000MW Ultra Mega Solar Power Park by NTPC in Anantpur/ Cuddapah& Kurnool Districts of Andhra Pradesh"

1	Email dated 8.01.2015	1 Page
2	Additional Agenda_25th TCC	1 Page
3	AP Studies	17 Pages
4	AP connectivity Application	3 Pages
5	AP LTA Application	3 Pages
6	Diagram	1 Page
7	PGCIL studies	11 Pages
8	MoP letter	1 Page
9	PGCIL letter	

Subject:	Draft, The Proposed Transmission Evacuation Scheme for 1000MW Solar Power Park at Ghani/Panyam in Kurnool District Andhra Pradesh & The Proposed Transmission Evacuation Scheme for 1000MW Wind Power at Aspiri Kurnool District in Andhra Pradesh
From:	M Surendra Babu (cepowersystems@rediffmail.com)
To:	jindal_pardeep@yahoo.co.in;
Cc:	shivani0004@gmail.com; cepowersystems@rediffmail.com;
Date:	Thursday, 8 January 2015 4:21 PM

Sir,

The Proposed Transmission Evacuation Scheme for 1000MW Solar Power Park at Ghani/Panyam in Kurnool District Andhra Pradesh

Phase-I Works:
a) 400/220kV Substation at Gani/Panyam – 3x500 MVA.
b) 400kV QMDC Line from Kurnool to the proposed 400kV Gani/Panyam SS – 35 kM.
c) 400kV Bay Extensions at Kurnool SS – 2 Nos.

Phase-II works, will be connected subsequently):
a) 400kV QMDC Line from Jammalamadugu/Kondapuram to the proposed 400kV Gani/Panyam SS – 90 kM.
b) 400kV Bay Extensions at Jammalamadugu/Kondapuram SS – 2 Nos.

The Proposed Transmission Evacuation Scheme for 1000MW Wind Power at Aspiri Kurnool District in Andhra Pradesh

1. 400/220kV Substation with 3x315 MVA
2. 400kV QMDC line from Aspiri to 400kV Uravakonda SS.

The Transmission Evacuation System for Proposed Ultra Mega Solar Park (1000MW) at N.P.Kunta in Ananthapur District in Andhra Pradesh is proposed as additional agenda for 25th TCC and 26th SRPC Meeting at Visakhapatnam held on 19th & 20th December, 2014 by PGCIL and the same is attached to this mail.

The Studies exhibits and .SAV.files attached in this mail.

It is requested to verify the scheme and reply by mail.

Sd/-
Chief Engineer/IPC & Power Systems

(A)

Additional Agenda for 25th TCC and 26th SRPC Meeting
Evacuation system for proposed Ultra Mega solar park (1000MW) in Anantpur Distt. AP

NTPC is developing ultra mega Solar park of 1000 MW capacity in NP Kunta, Anantpur distt, Andhra Pradesh. It is proposed to develop above Ultra mega solar park in two phases. The first phase (250 MW) is scheduled for commissioning in one(1) year while second phase will subsequently follow. Tender for Phase-I generation has been issued. Considering the time line for implementation of Solar Park as well as requirement for matching transmission system to evacuate/transfer of power, transmission scheme is also proposed to be developed in two phases in compressed time schedule. Proposed transmission scheme is as under:

Phase-I

- Establishment of 3x500 MVA, 400/220KV Substation at NP Kunta
- LILO of 400KV Kadapa(Cuddapah) - Kolar S/c line at NP Kunta
- 1x125 MVAR Bus Reactor at NP Kunta along with ±100 MVAR STATCOM

Phase-II

- NP Kunta – Kadapa(Cuddapah) 400kV D/c line
- LILO of 765kV Kurnool –Thiruvalem D/c line at Kadapa(Cuddapah)*
- Upgradaton of Kadapa(Cuddapah) substation(GIS) at 765kV with 2x1500 MVA, 765/400KV transformation capacity*
- 2x240 MVAR Bus Reactor at 765kV Kadapa(Cuddapah) S/s*

**Already approved in the recent SR Standing Committee meeting as System strengthening Scheme XXIV in Southern Region being implemented by POWERGRID.*

Govt. of A.P requested POWERGRID to take up development of evacuation system of the above ultra mega solar park as discussed in the meeting held on 16.09.14 between Hon'ble Chief Minister, AP and Hon'ble MOSP, GOI. The matter was also discussed with Ministry of Power. Accordingly POWERGRID has already taken up implementation of above transmission scheme on priority. Tender for substation package already issued and same for transmission line package is under process.

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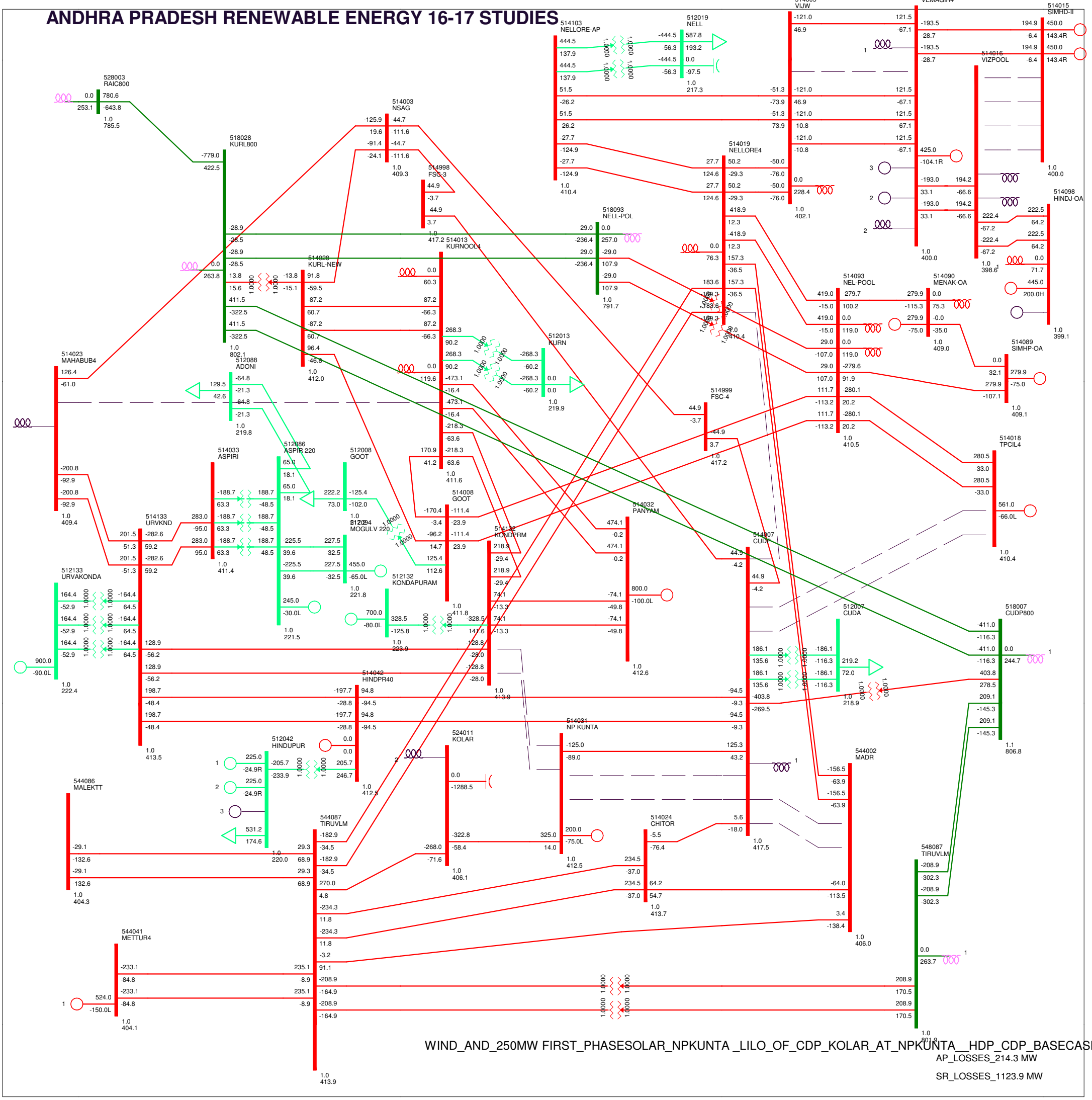
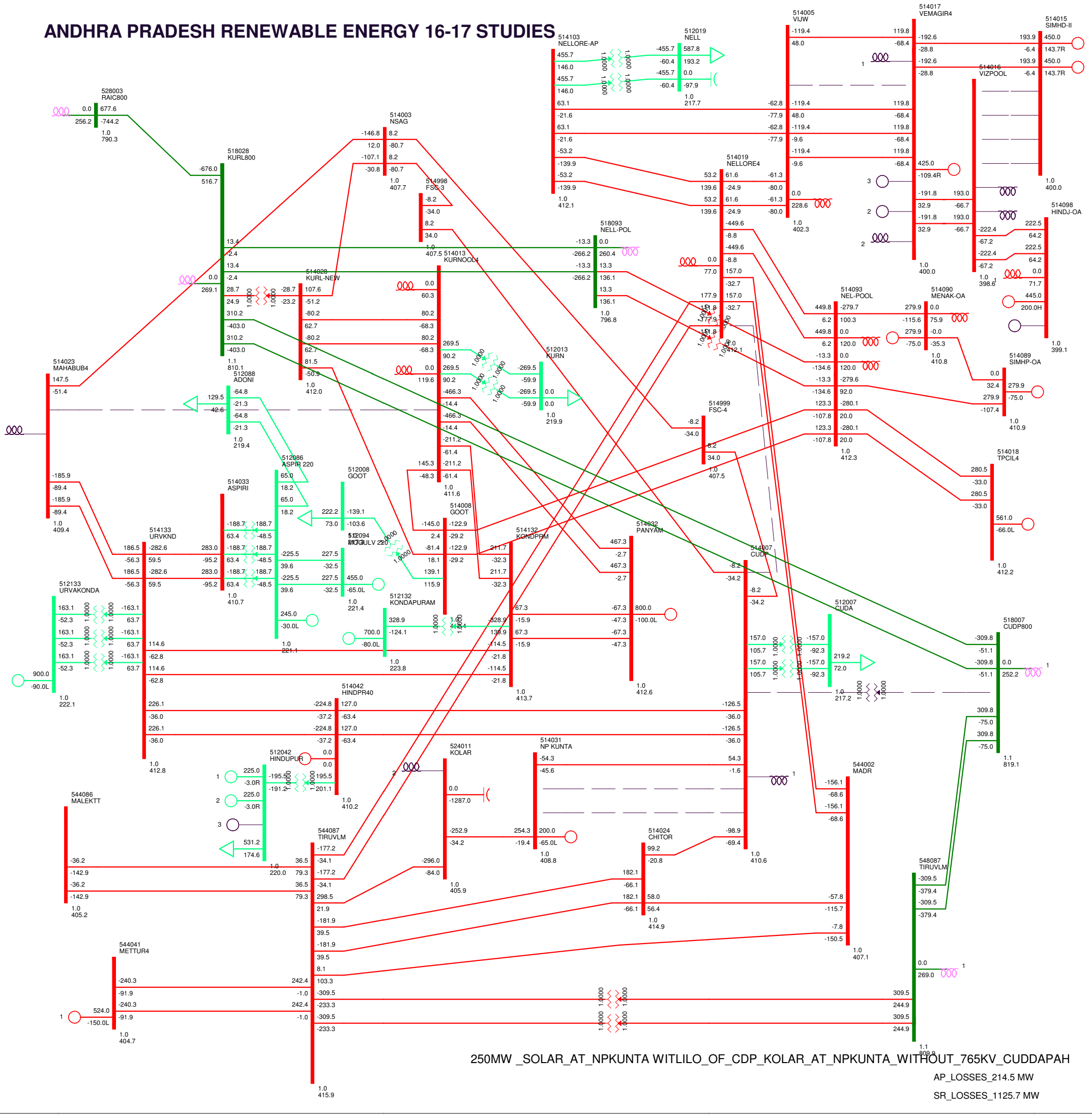
ANDHRA PRADESH RENEWABLE ENERGY 16-17 STUDIES



ANDHRA PRADESH RENEWABLE ENERGY 16-17 STUDIES



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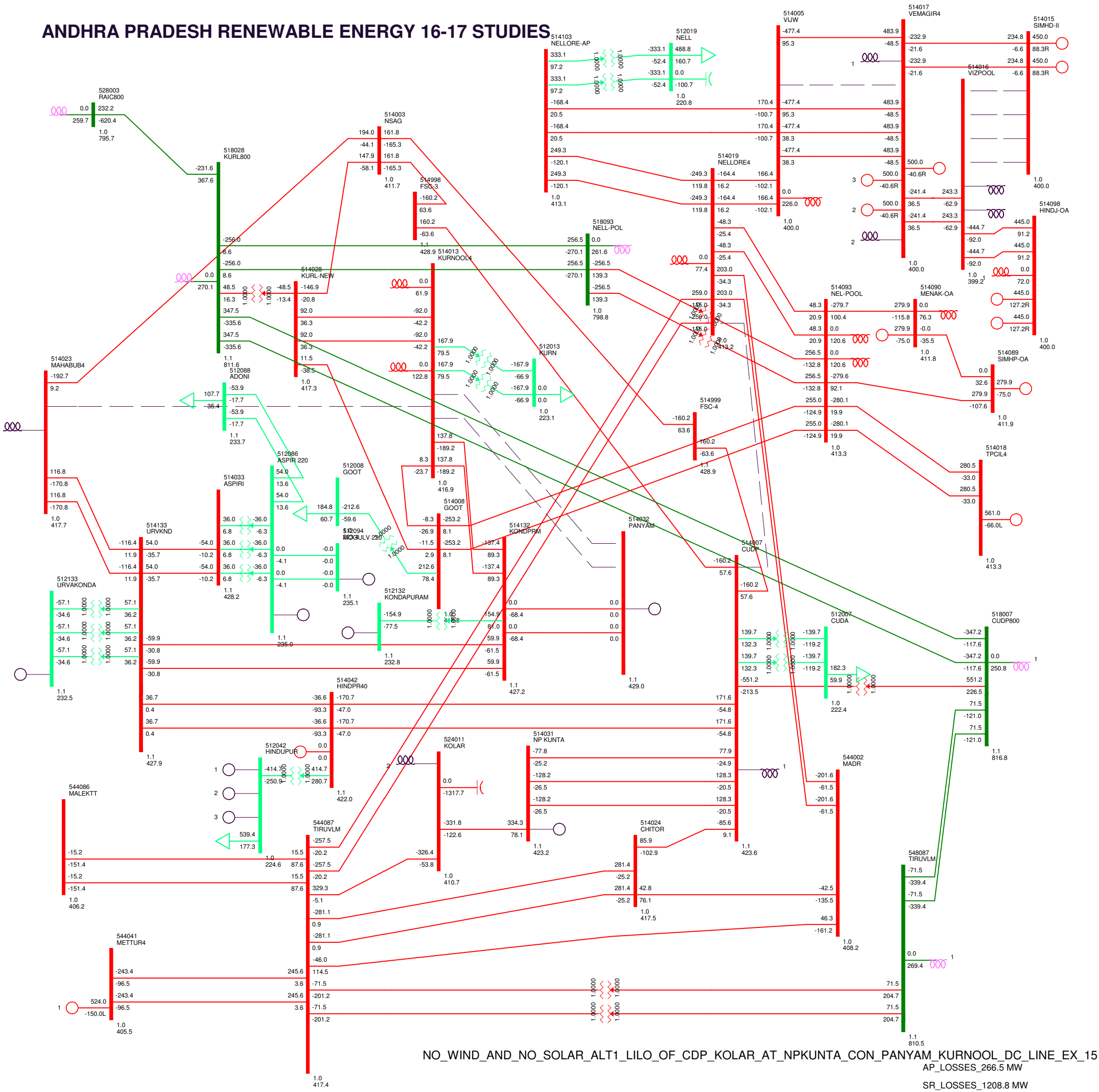
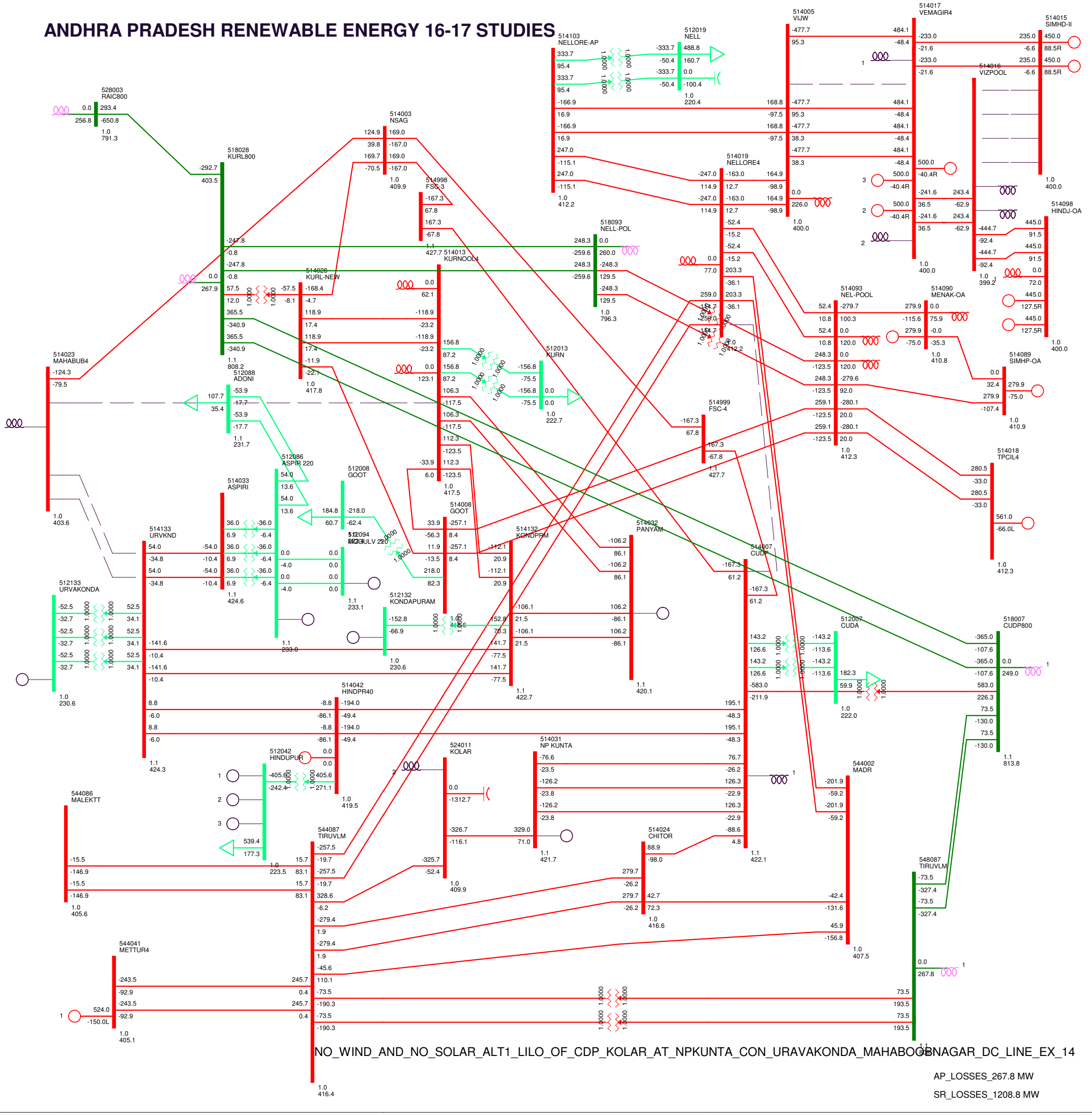


NO_WIND_AND_NO_SOLAR_ALT1_LILO_OF_CDP_KOLAR_AT_NPKUNTA_CON_PANYAM_KURNOOL_DC_LINE_EX_15

AP_LOSSES_266.5 MW

SR_LOSSES_1208.8 MW

ANDHRA PRADESH RENEWABLE ENERGY 16-17 STUDIES



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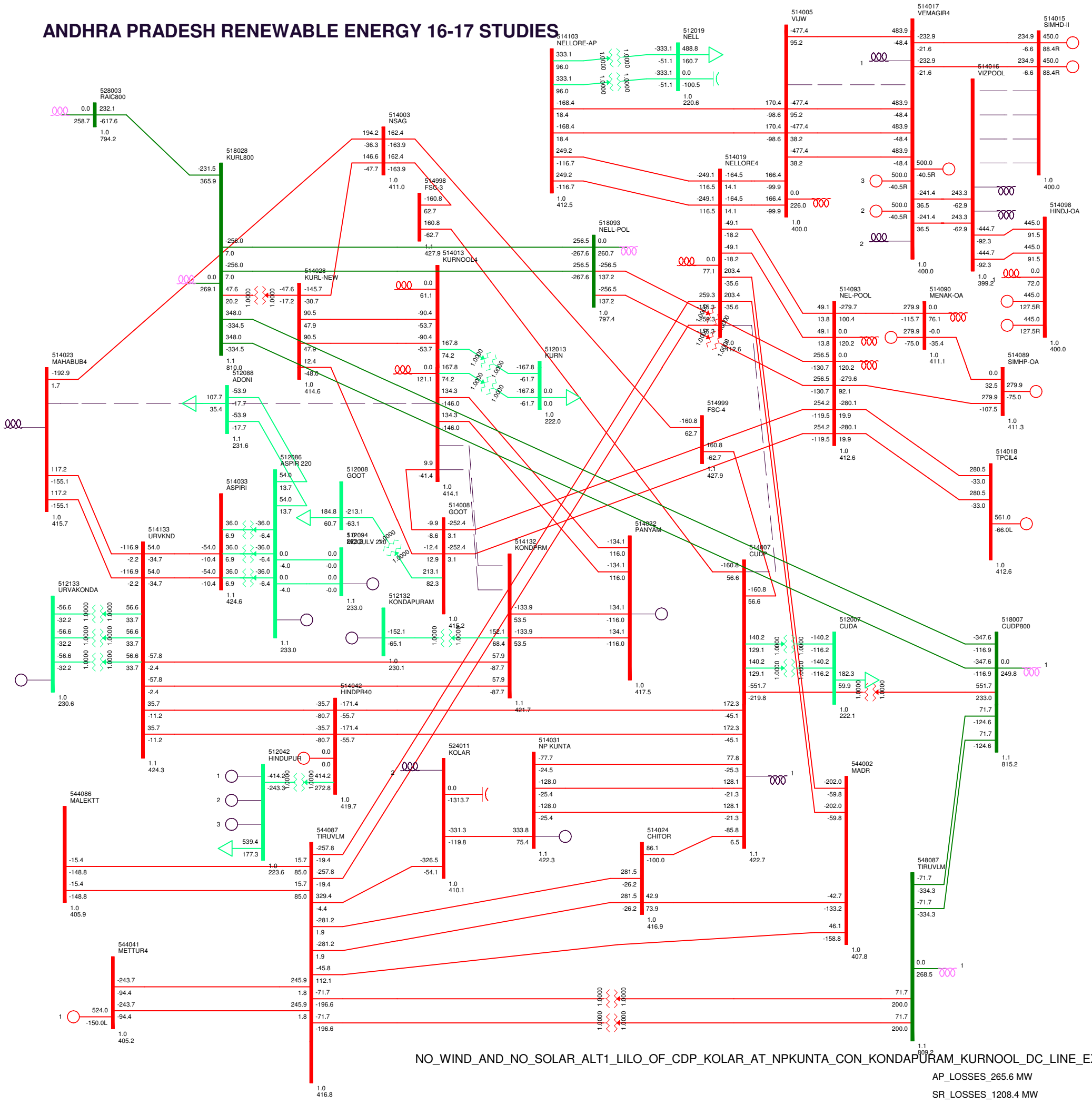
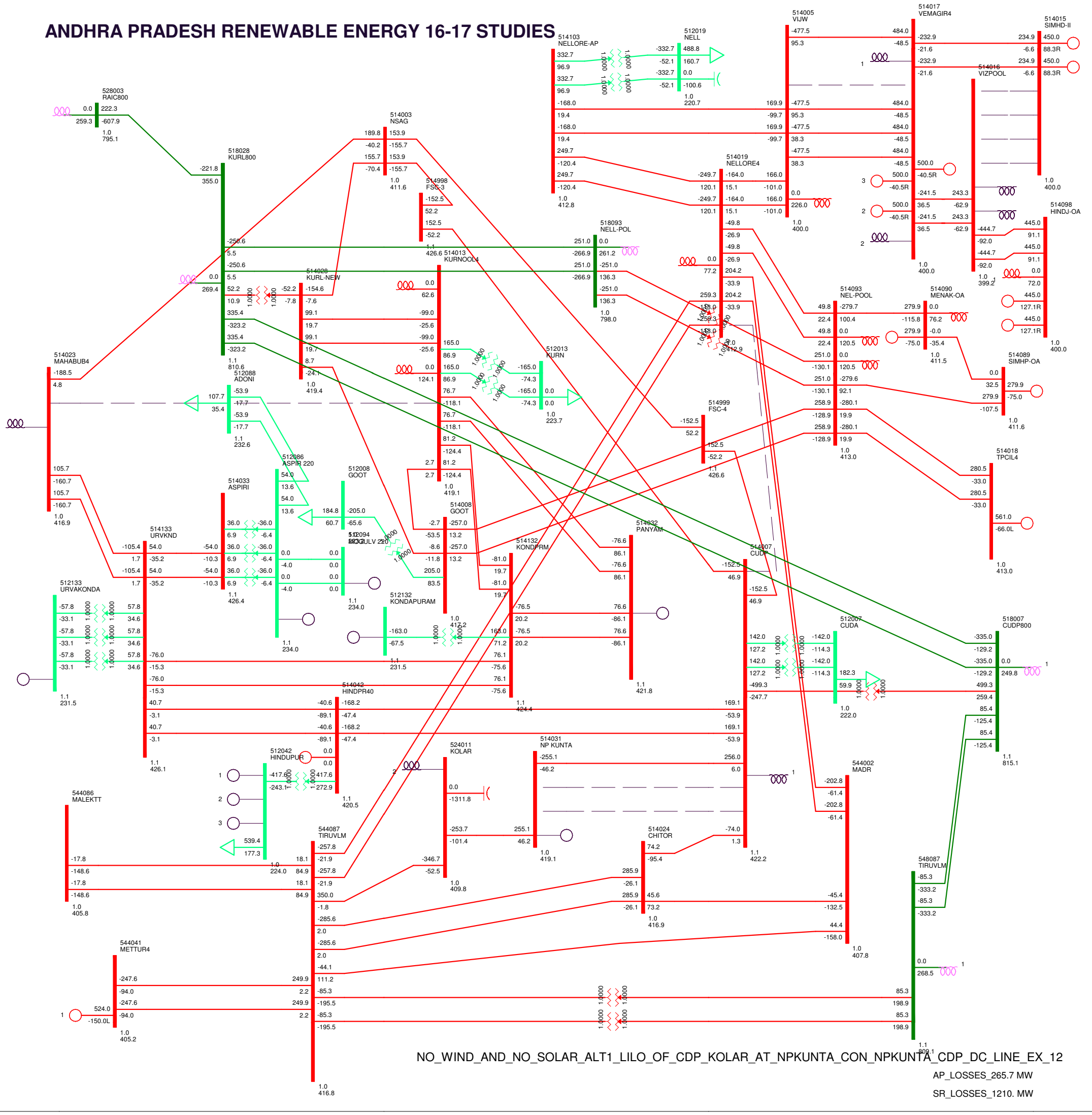


NO_WIND_AND_NO_SOLAR_ALT1_LILO_OF_CDP_KOLAR_AT_NPKUNTA_CON_KONDAPURAM_KURNOOL_DC_LINE_EX_13

AP_LOSSES_265.6 MW

SR_LOSSES_1208.4 MW

ANDHRA PRADESH RENEWABLE ENERGY 16-17 STUDIES



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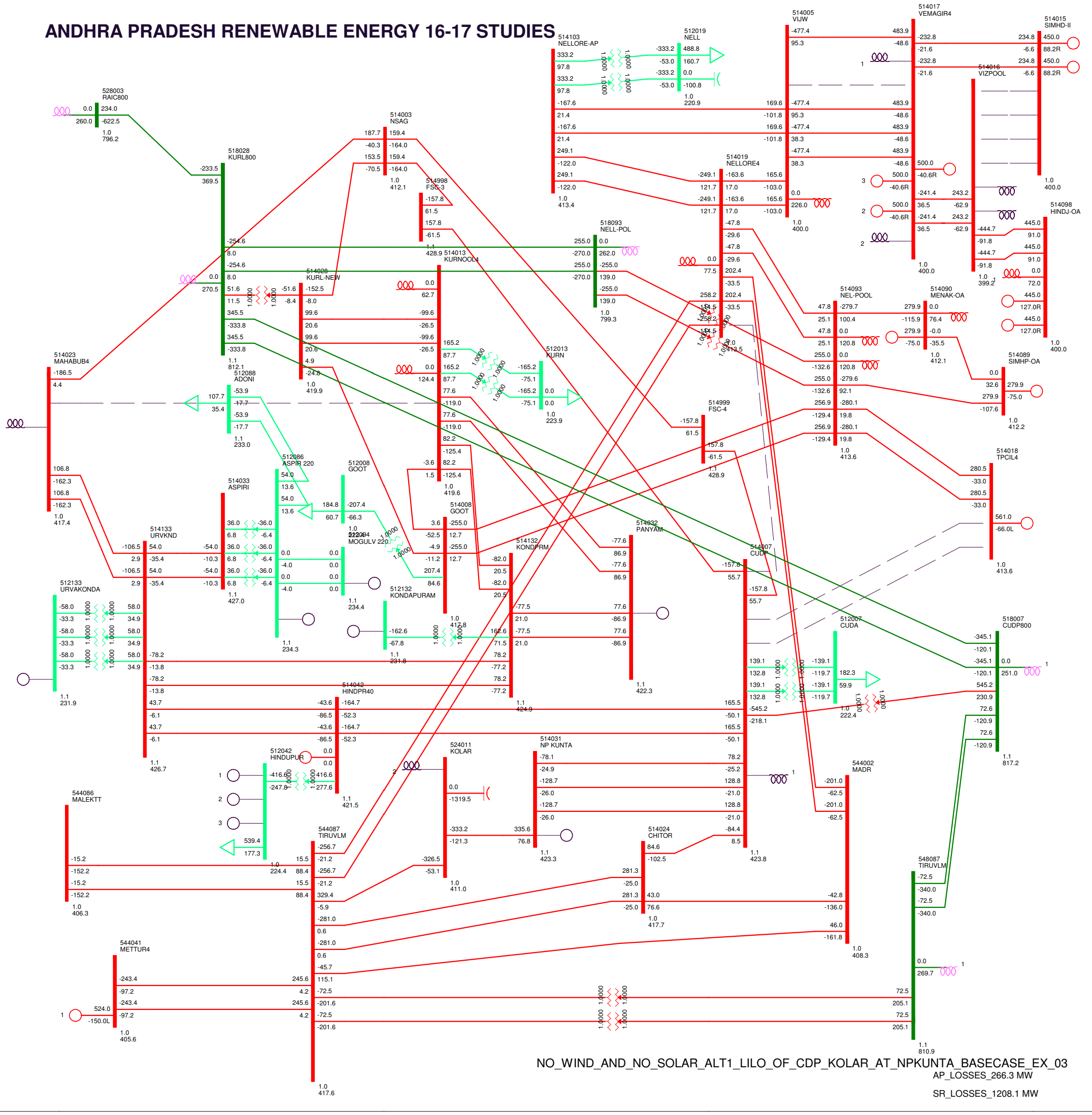

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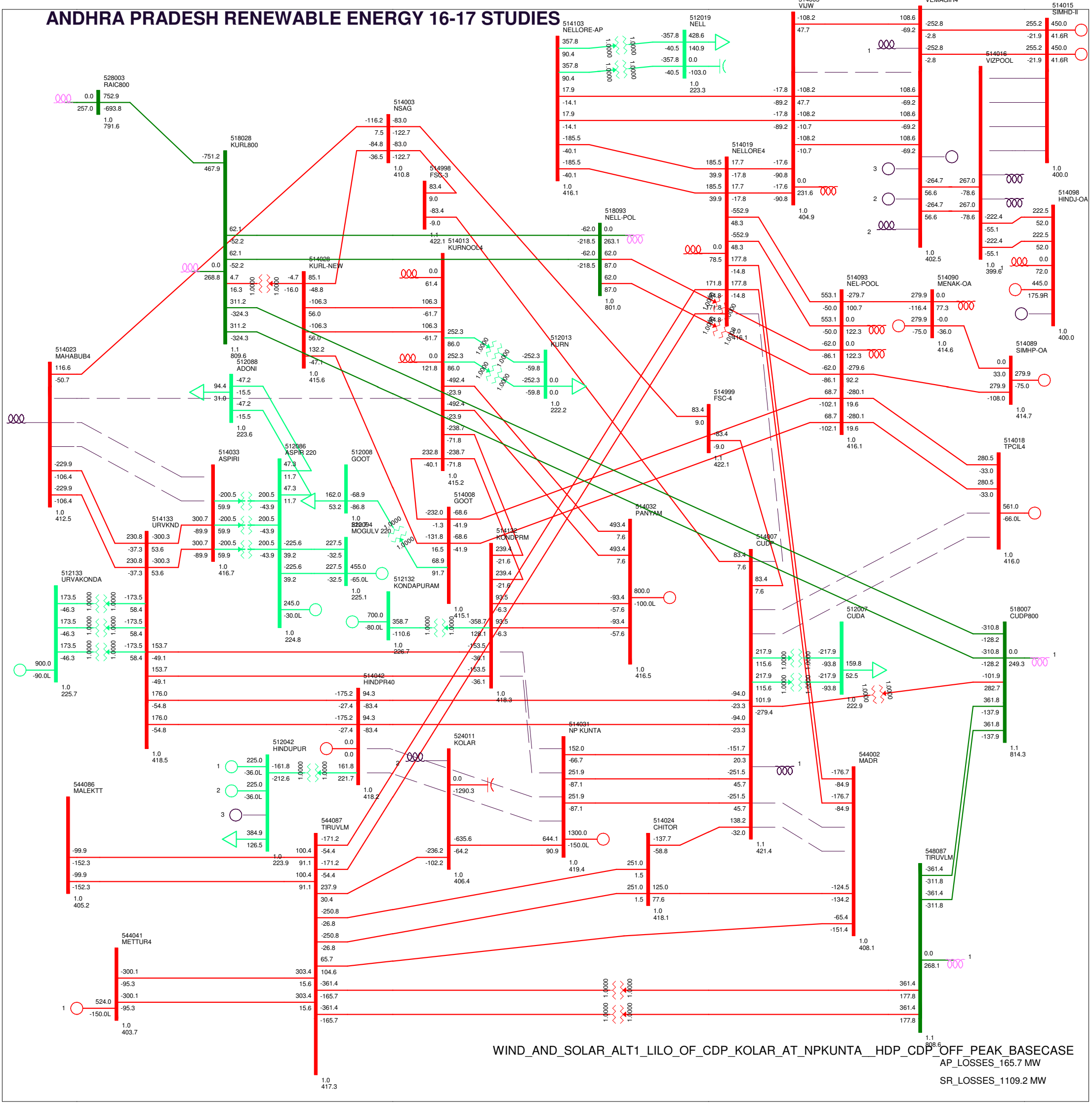

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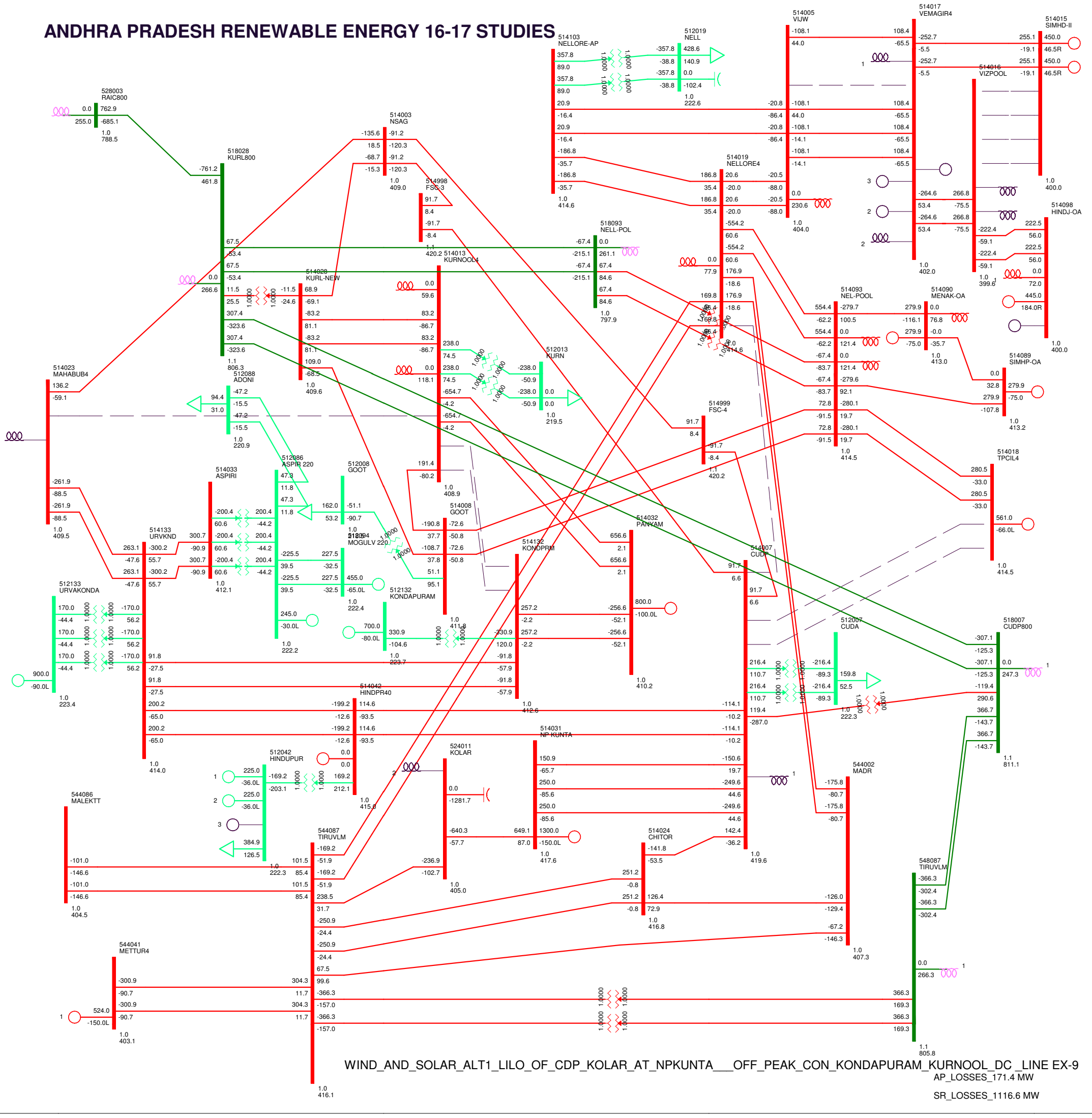

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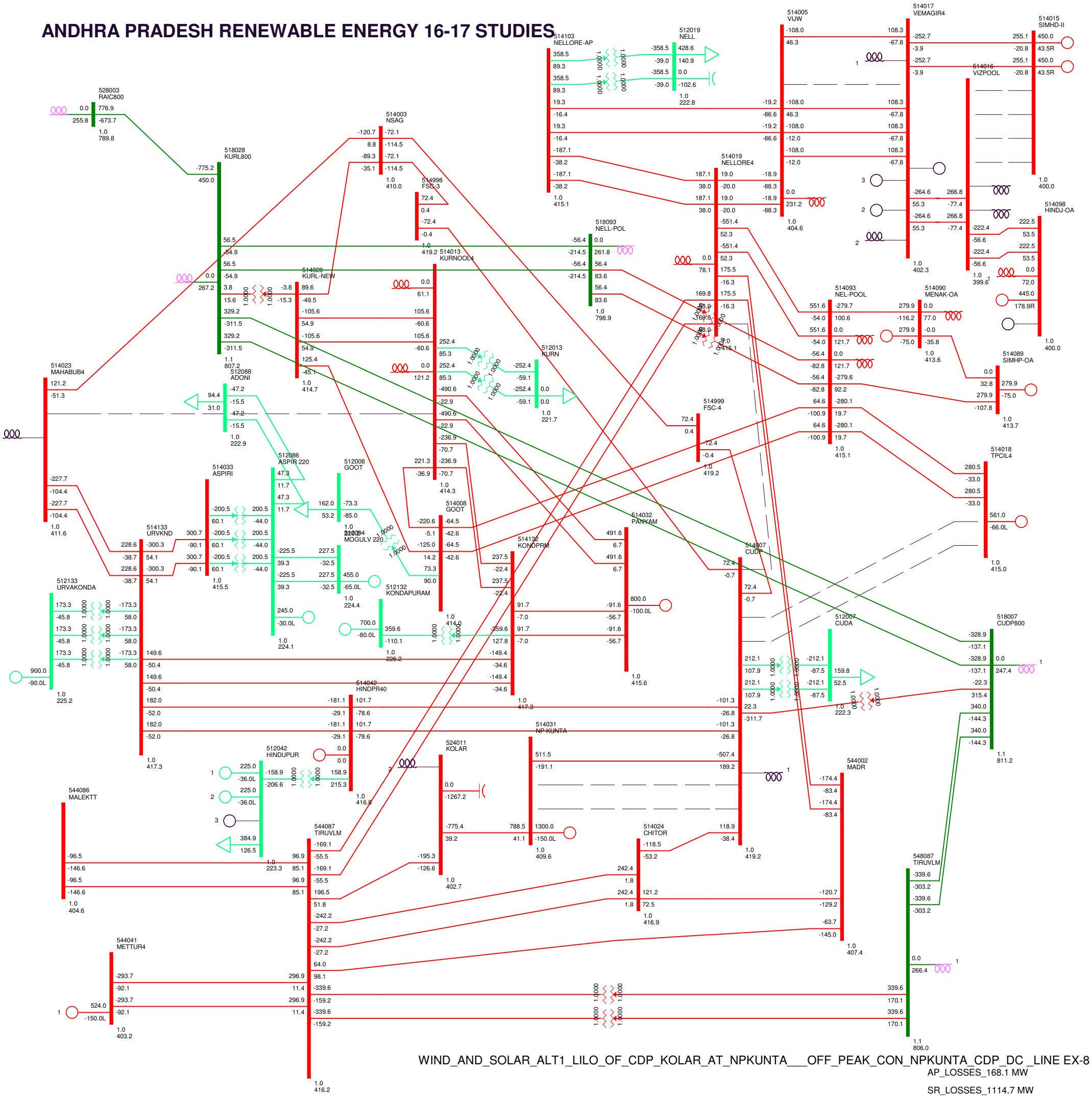

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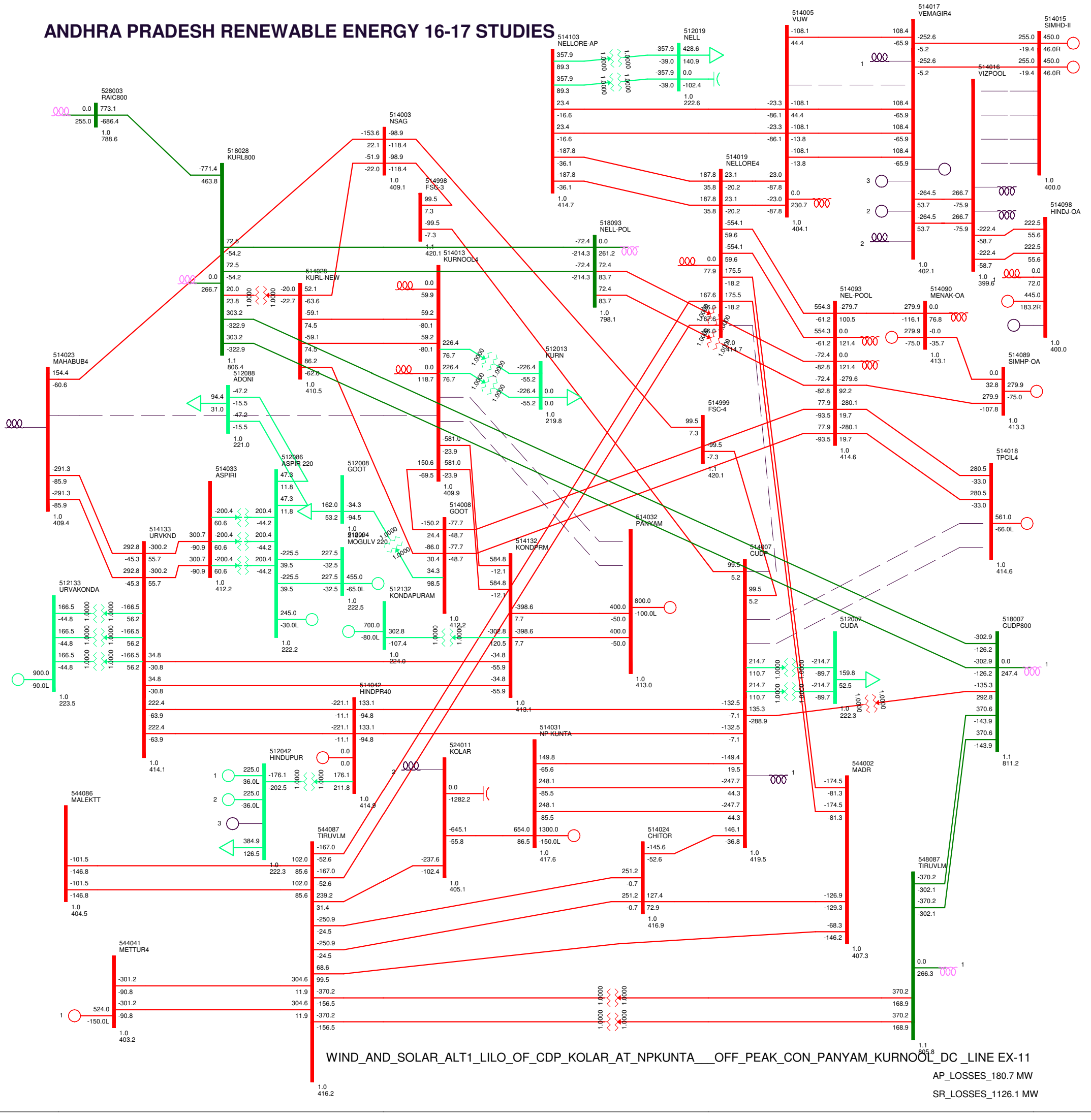

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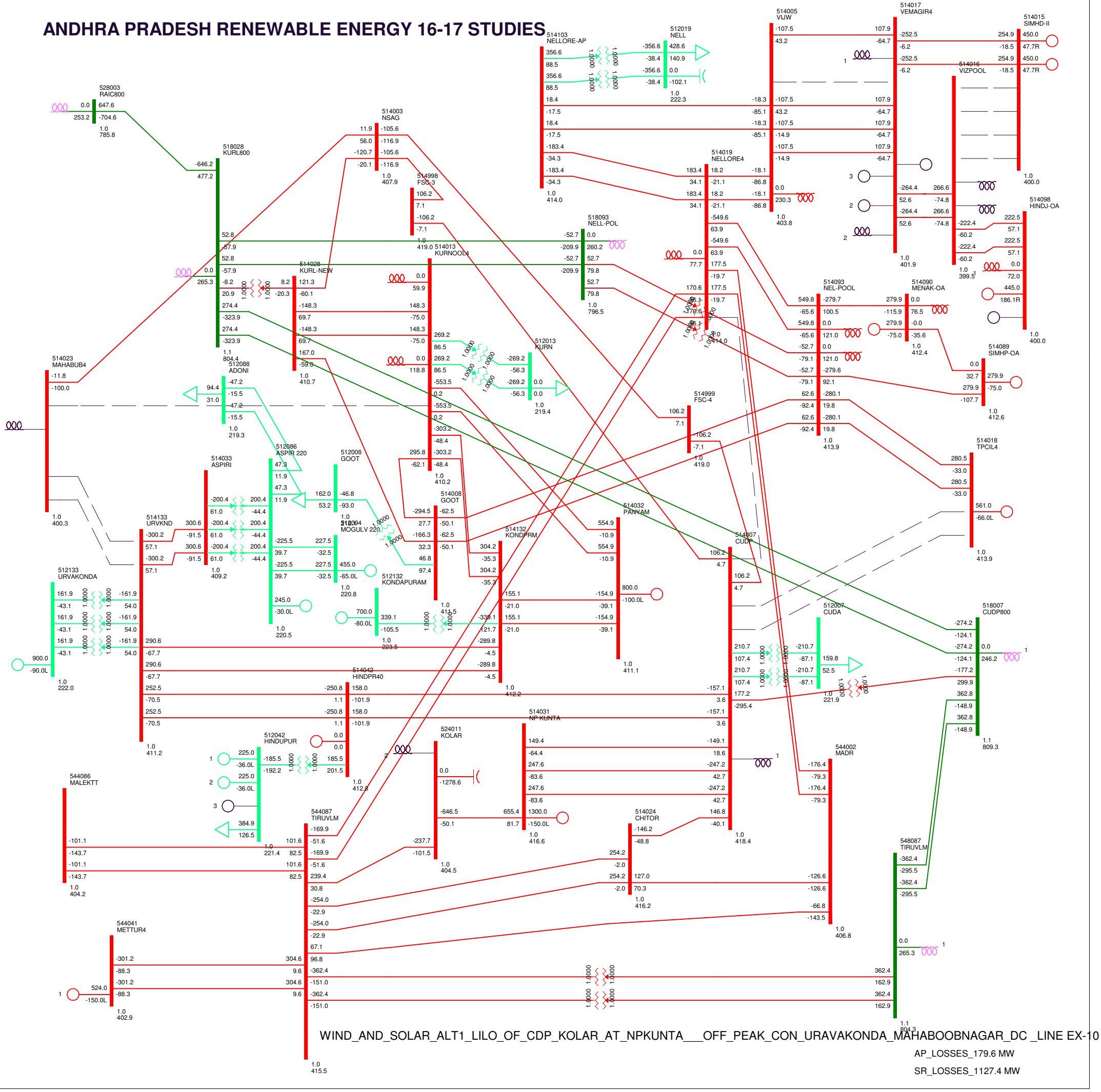

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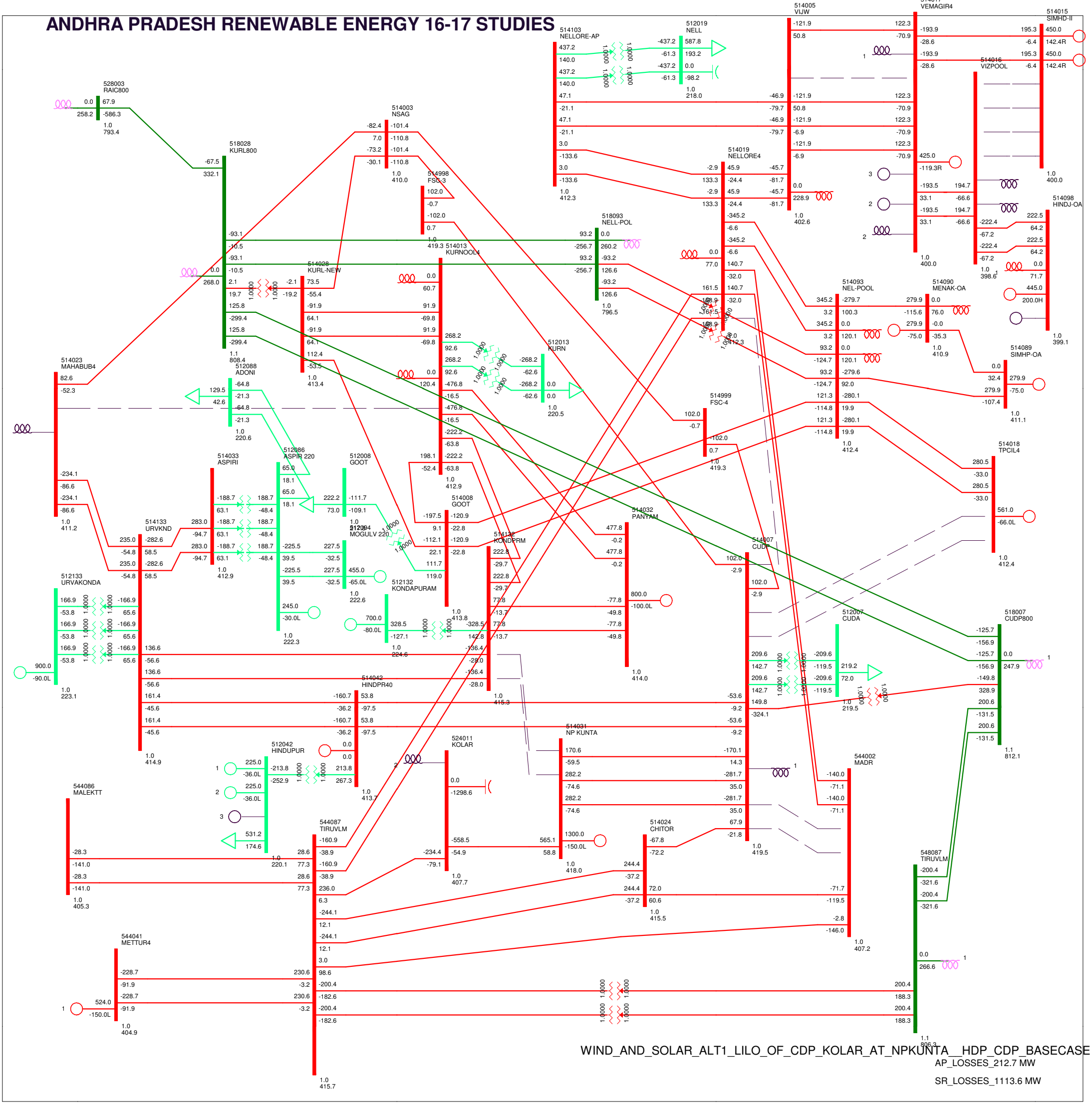

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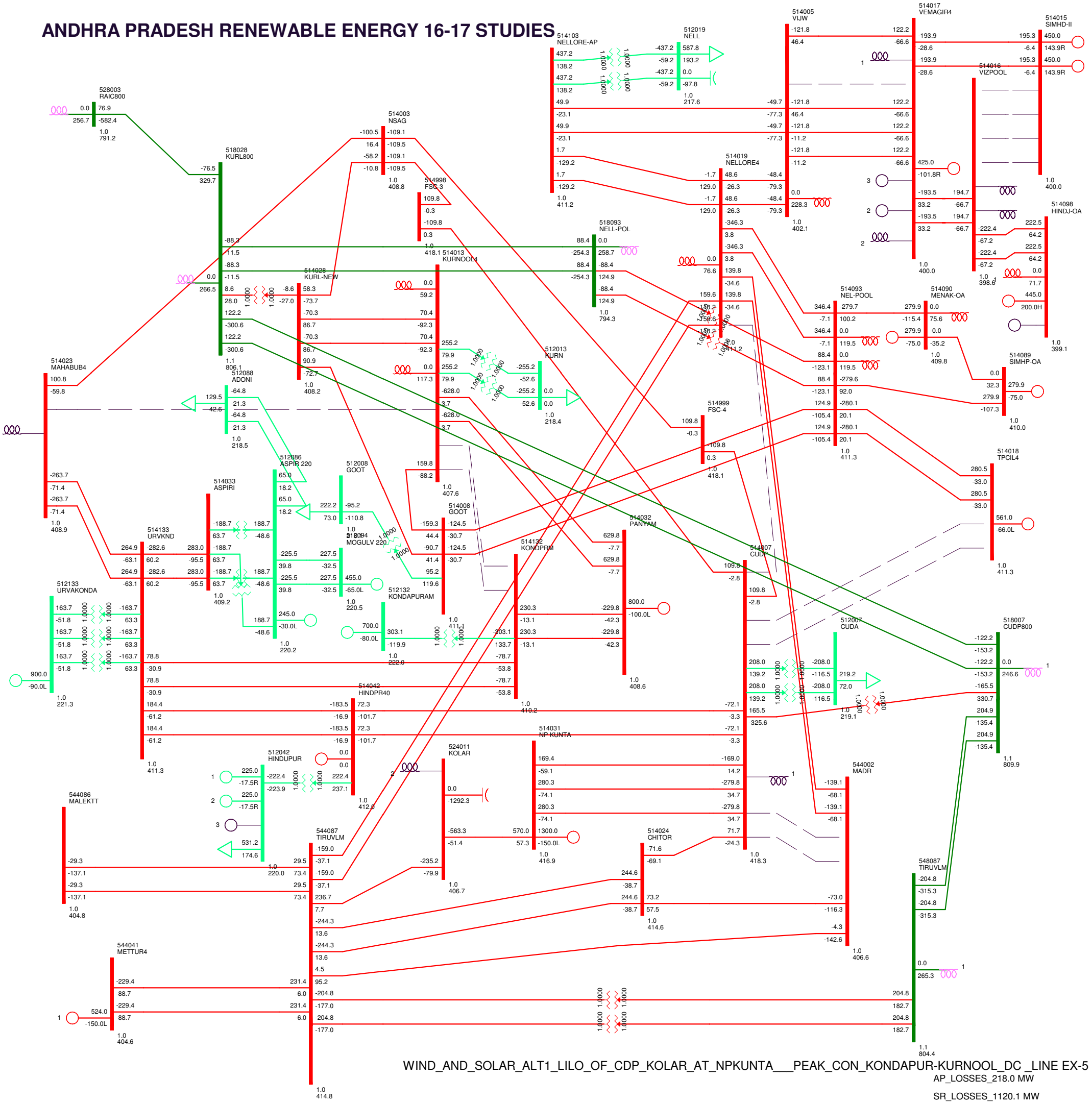

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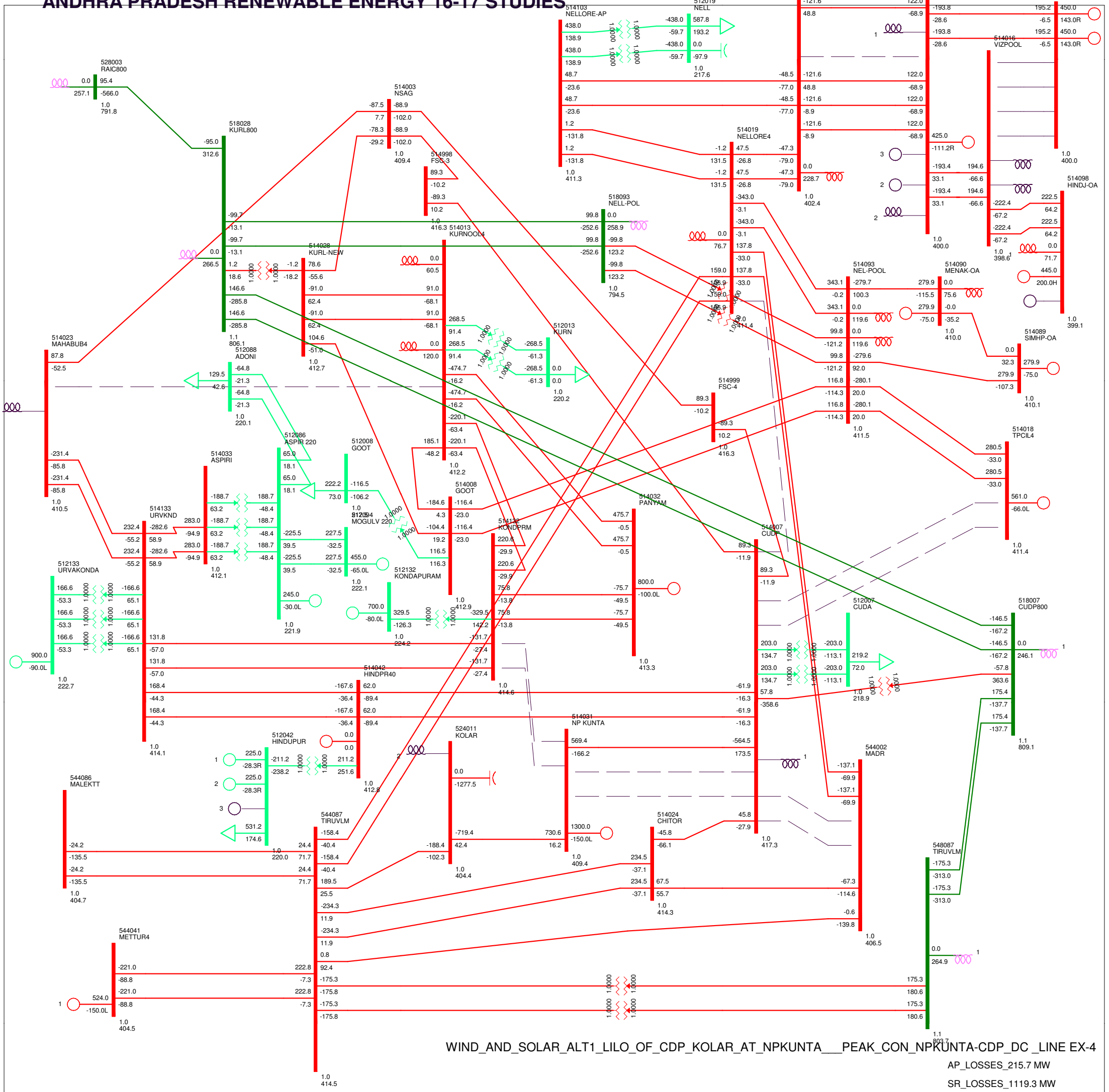

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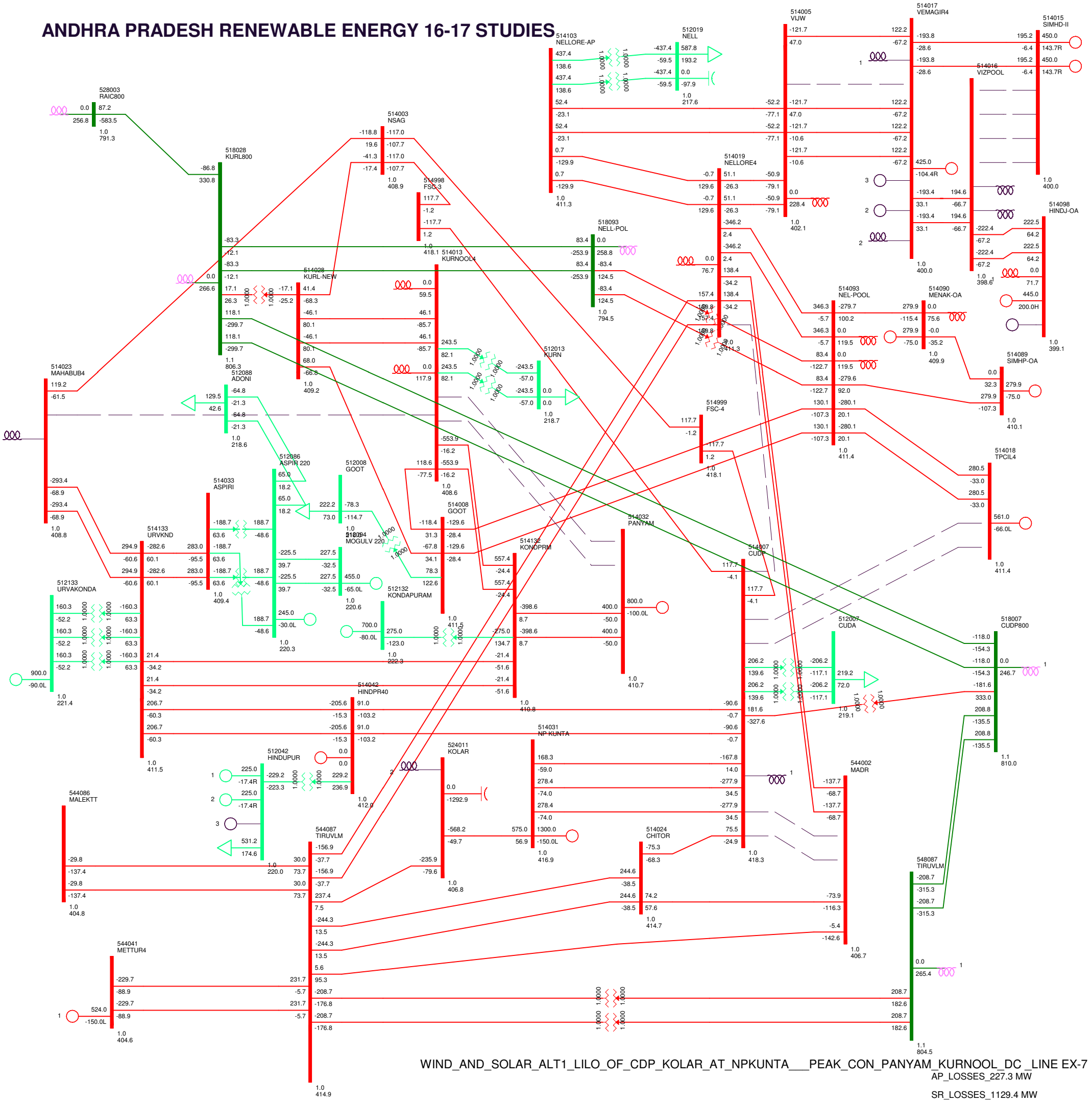
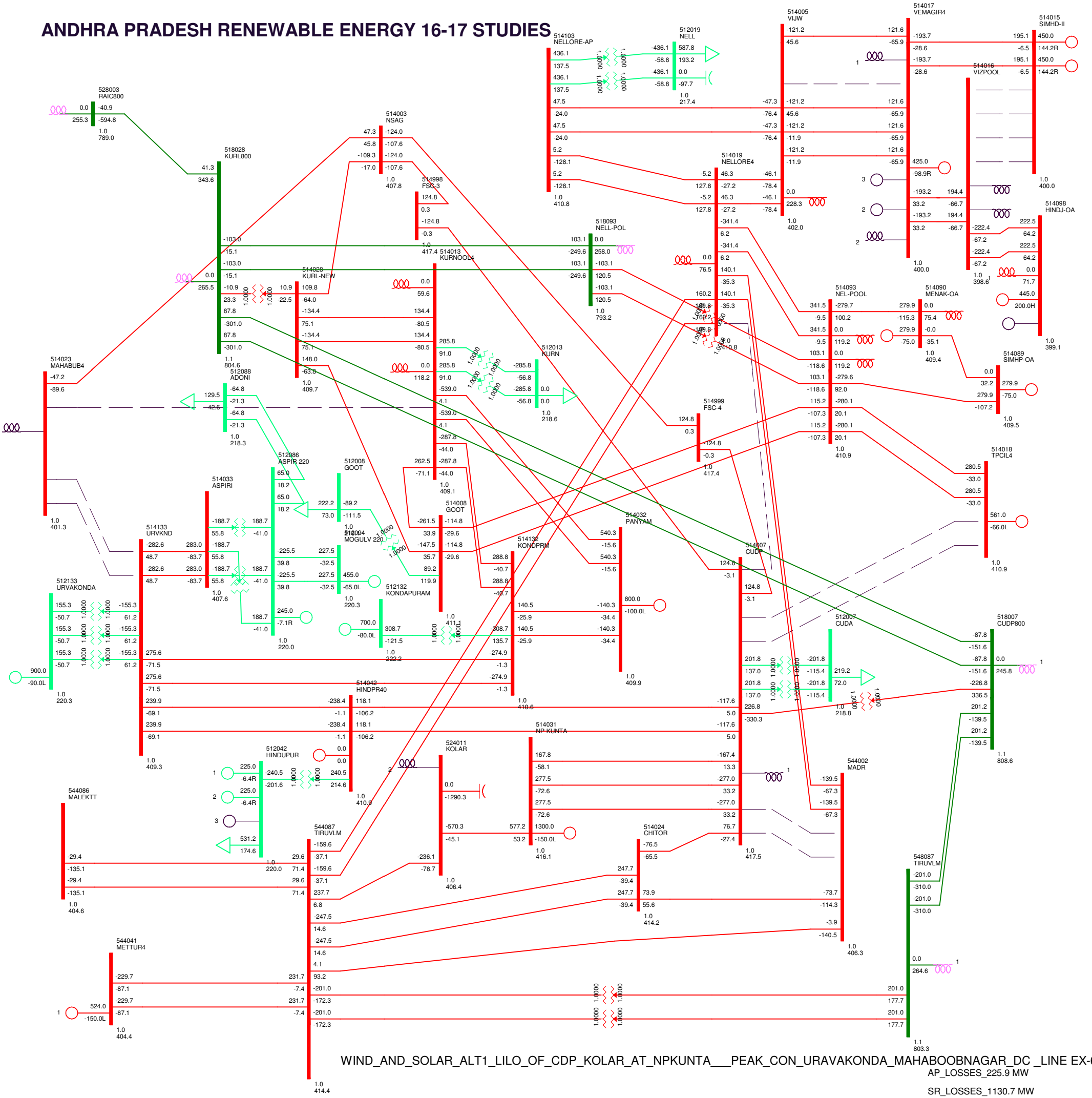


WIND_AND_SOLAR_ALT1_LILO_OF_CDP_KOLAR_AT_NPKUNTA___PEAK_CON_PANYAM_KURNOOL_DC _LINE EX-7

AP_LOSSES_227.3 MW

SR_LOSSES_1129.4 MW

ANDHRA PRADESH RENEWABLE ENERGY 16-17 STUDIES



ANDHRA PRADESH SOLAR POWER CORPORATION Pvt. LIMITED

G. Adiseshu,
Managing Director (FAC)

APSPCL/PGCIL/Grid connectivity/NP Kunta-AP Dated: 29 -01-2015

To
The Executive Director (SEF & CE)
Power Grid Corporation of India Limited,
Saudamini, Plot No-2, Sector-29,
Near IFFCO Chowk,
Gurgaon -122001
Haryana,

Respected Sir,

Sub: *Application for "Grant of Connectivity" for the proposed 1500MW Solar Power Plant at NP KUNTA, Ananthapuram Dt., in Andhra Pradesh.*

We are pleased to introduce ourselves as "Andhra Pradesh Solar Power Corporation Private Limited (APSPCL)" a company registered in India under the Companies act 2013. APSPCL is promoted by highly experienced professionals in the fields of Power sector (M/s Solar Energy Corporation of India, M/s APGENCO and M/s NRECAP) for the last few decades. The team of M/s APSPCL has the experience of developing Thermal, Hydel, Wind and Solar Power projects in various locations across the Andhra Pradesh for more than 4000MWs.

APSPCL is planning to develop a 1500MW Solar Park at "NP Kunta" in Ananthapuram District & "Galiveedu" in Cuddapah District in the state of Andhra Pradesh, in which various Solar Power Developers will establish Solar Power Projects. Accordingly GoAP have entered MOU with NTPC to establish 1000 MW Solar power project. Of the 1000 MW, EPC tender for 250 MW have already been called for by NTPC and is expected to be commissioned by end of Dec, 2015. GoAP will be identifying Solar Power Developer for remaining 500 MW shortly.

The proposed site is about 60 kms from "Cuddapah (Chinakampalli)" the nearest station of Power Grid Corporation of India Limited. This station of PGCIL has the voltage levels of 400kV.

The Solar Power Plant of 1500MW would be consisting of individual Solar Inverter module of 1~2MW with the generation voltage of 360~415 V. This voltage shall be stepped up to 33kV at the Inverter level itself and pooled at the Pooling Station which will be setup within the Solar Project. The voltage will again be stepped up to 220kV at the Solar Project Pooling Station and again stepped up to 400kV at the proposed 400kV Grid Substation by PGCIL at Solar power project to match with the voltage level at PGCIL's Cuddapah (Chinakkampalli) 400kV Grid Sub Station. The 400kV Grid substation at the Solar Project is proposed to be connected to PGCIL's Cuddapah (Chinakampalli) Sub Station 400kV BUS through a 400 kV DC line.

We are here with enclosing the following details for your perusal and further needful action for "Grant of Connectivity".

1) Demand Draft drawn in favour of Power Grid Corporation of India Limited for Rs 9 Lakhs.
2) Affidavit in FORMAT–CON-1,
3) Application for Grant of Connectivity to ISTS as per FORMAT–CON-2,
4) A Survey of India map showing the geographical features of the proposed site.
5) A schematic diagram showing the proposed Grid Connectivity from the Solar Power Project to the Power Grid Corporation India Limited's station at Cuddapah (Chinakkampalli).

We request you to kindly process our "Application for Grant of Connectivity" as requested and do the needful. Should you require any further clarification, we shall provide the same at the earliest possible time.

Thanking You,

Yours faithfully,

MD/APSPCL

MANAGING DIRECTOR,
A.P. Solar Power Corporation Pvt. Ltd.
HYDERABAD.

FORMAT-CON-2

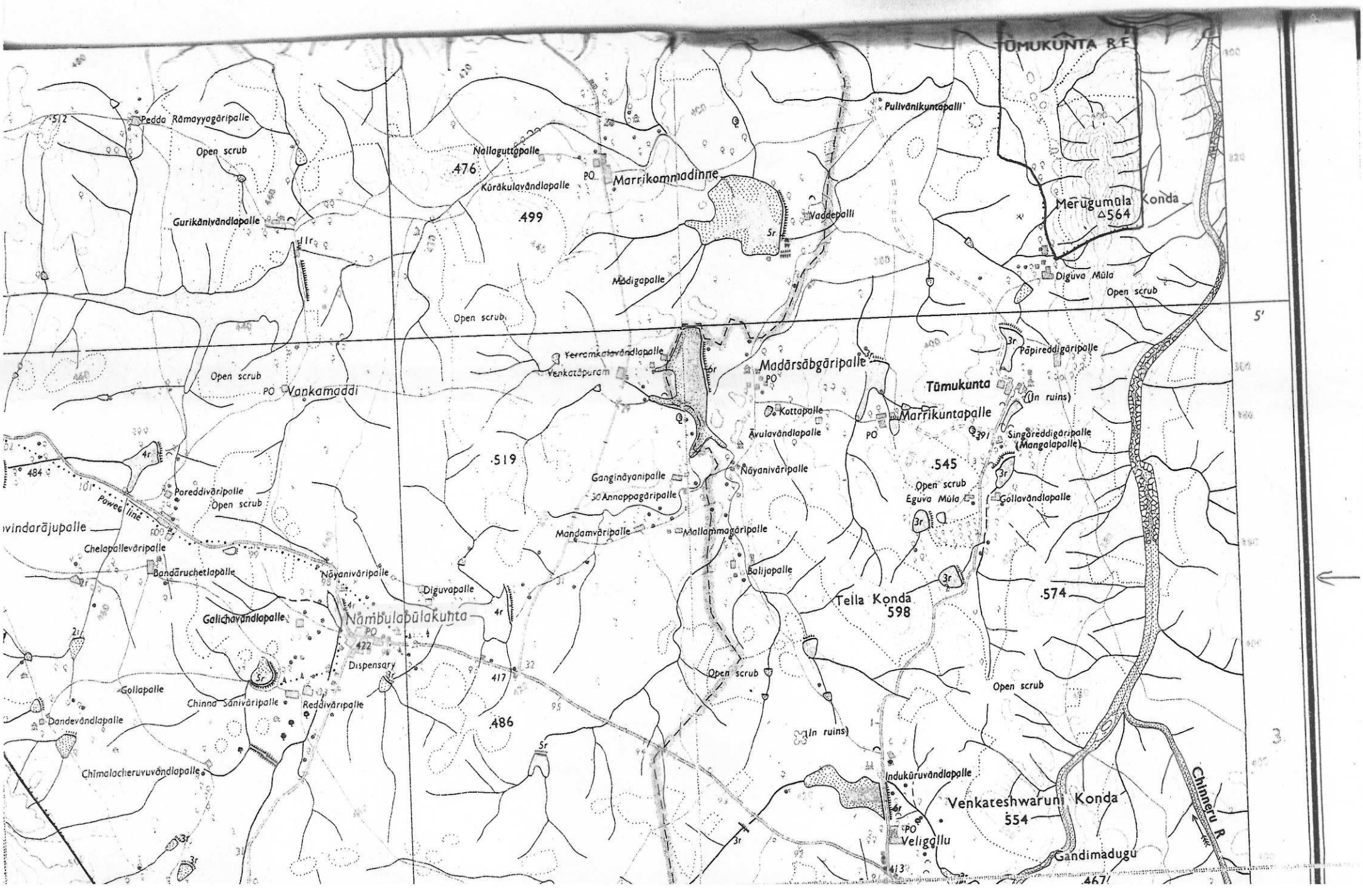
Application for Grant of Connectivity

1	**Name of the Applicant**	M/s Andhra Pradesh Solar Power Corporation Pvt Ltd, (APSPCL)
2	**Address for Correspondence**	Room No:218, 2nd Floor, Vidyut Soudha, Khairatabad, Hyderabad – 500 082
3	**Contact Details** Prime Contact Person Designation Phone Number (Landline) Phone Number(Mobile) Fax: E-Mail Alternate Contact person Designation Phone Number (Landline) Phone Number(Mobile) Fax: E-Mail	 G.Adiseshu Managing Director 040-23499401 +91-9848543434 040-23499398 adviser@apgenco.gov.in A.Venkateswarlu Divisional Engineer(Tech) 040-23499401 +91-9493120075 040-23499398 Ande_venkateswarlu@yahoo.com
4	**Nature of the Applicant** Generator(Other Than Captive) Captive Generator Any other	Solar Park developer /Generator
5	**Details of Connectivity**	
5a	Capacity (MW) for which Connectivity is required	1500 MW
5b	Date from which connectivity is required	Phase-1 December, 2015 Phase-II September, 2016 Phase-II December, 2016
6	**Location of Generating Station** Name of the Village/Town District State Latitude Longitude	 N.P Kunta Anathapuram Andhra Pradesh 14°03'20" 78°24'43"
7	**Installed Capacity of Generating Stations.** Phase-I Phase-II Phase- III	 250 MW 750 MW 500 MW

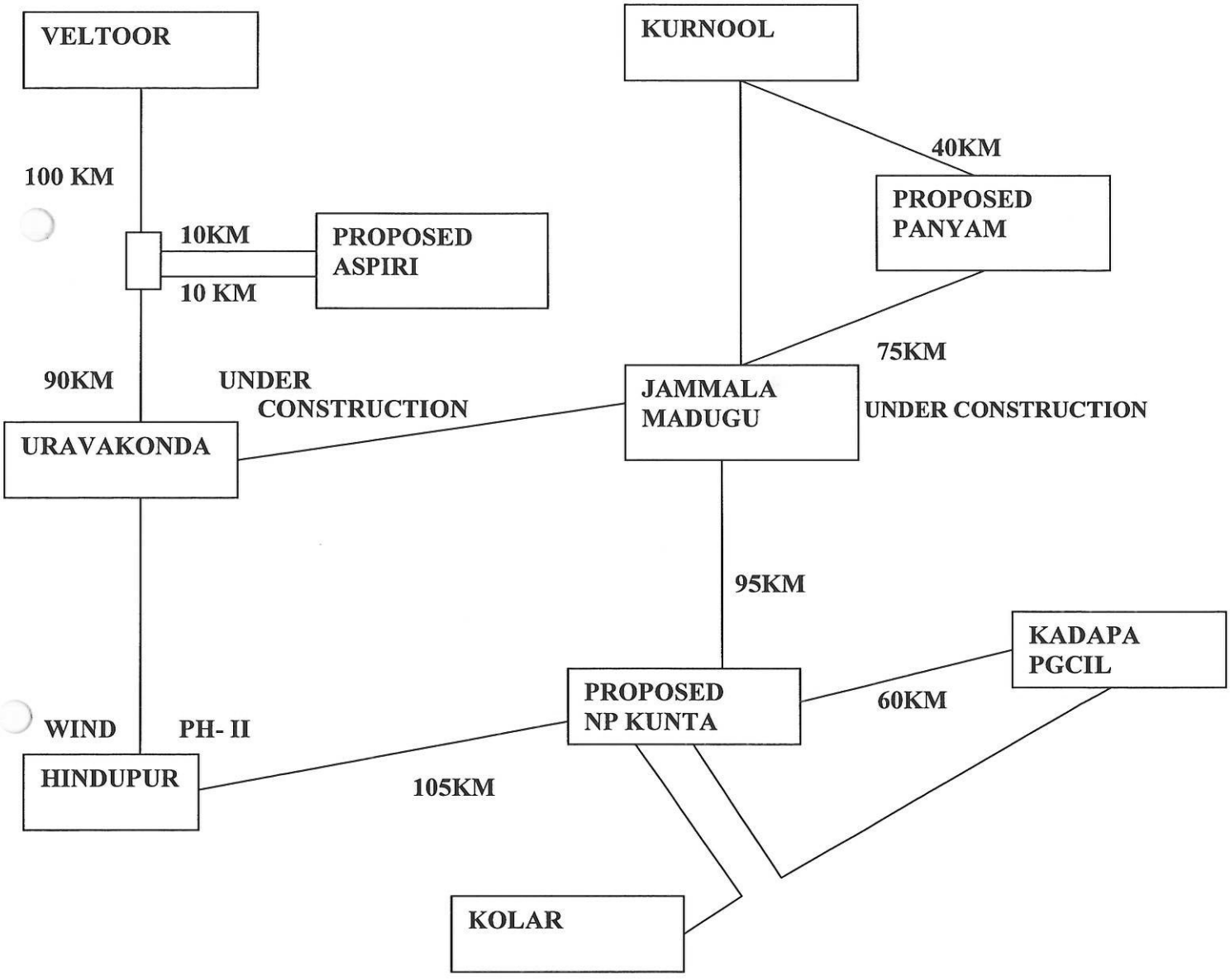
8	**Commissioning Schedule of the Generating Stations (New)**	
	Phase-I	December, 2015
	Phase-II	September,2016
	Phase- III	December, 2016
9	**Details of Generating Station**	
	Name of the Power Plant	Solar Power Plant
	Promotor	APSPCL
	Fuel	N/A
	Source of Fuel	N/A
	Generator Voltage	360~415 V
	Step-up Voltage	33kV/220kV
	Is it identified Project of CEA	N/A
	Base Load/Peak Load	Base Load
10	**Details of Nearest 400/220/132 KV Substations**	
	Substation-1	
	Voltage Level Available	Proposed 400kV Grid substation
	Distance in KM	at NP Kunta(Inside the Solar Park)
	Substation-2	
	Voltage Level Available	CUDDAPAH(Chinakampalli) 400 kV Sub Station
	Distance in KM	60 KM
11	**Details of DD (Application Fee)**	
	Amount in Rs	9 Lakhs
	DD No	529927
	Date	29.01.2015
	Bank Name	State Bank of India
	Branch Name	Khairatabad

(Signature)
Name of the Representative
Designation
With official seal

G. ADISESHU
MANAGING DIRECTOR,
A.P. Solar Power Corporation Pvt. Ltd.
HYDERABAD.


TUMUKUNTA R.F.
Pedda Rāmayyagāripalle
Open scrub
Gurikānivāndlapalle
Nallaguttapalle
476
Kūrākulavāndlapalle
PO
Marrikommadinne
499
Pullvānikuntapalli
Vaddepalli
Merugumula Konda
△564
Digūva Mūla
Open scrub
Mādigapalle
Open scrub
Yerramkatavāndlapalle
Venkatāpuram
Madārsābgāripalle
PO
Vankamaddi
PO
Open scrub
Kottapalle
Āvulavāndlapalle
Tūmukunta
(In ruins)
Pāpireddigāripalle
Marrikuntapalle
PO
Singāreddigāripalle
(Mangalapalle)
519
Nāyanivāripalle
Gangināyanipalle
Annappagāripalle
Mandamvāripalle
Mallammagāripalle
545
Open scrub
Eguva Mūla
Gollavāndlapalle
Balijapalle
Tella Konda
598
574
Open scrub
Open scrub
(In ruins)
Indukūruvāndlapalle
Venkateshwaruni Konda
554
Veligallu
PO
Gandimadugu
Chinneru R.
Powerline
Poreddivāripalle
Open scrub
Chelapallevāripalle
Bandāruchetlapalle
Nāyanivāripalle
Diguvapalle
Galichavāndlapalle
Nāmbulabūlakuntla
PO
422
Dispensary
417
Gollapalle
Chinna Sānivāripalle
Reddivāripalle
Dandevāndlapalle
Chīmalacheruvuvāndlapalle
486

PROPOSED WIND & SOLAR POWER AT ANANTAPUR, KADAPA & KURNOOL DISTRICTS



ANDHRA PRADESH SOLAR POWER CORPORATION Pvt. LIMITED

G. Adiseshu,
Managing Director (FAC)

APSPCL/PGCIL/LTA/NP Kunta-AP

Dated: 02 -02-2015

To
The Executive Director (SEF & CE)
Power Grid Corporation of India Limited,
Saudamini, Plot No-2, Sector-29,
Near IFFCO Chowk,
Gurgaon -122001
Haryana.

पावरग्रिड / POWERGRID
केन्द्रीय कार्यालय / Corporate Centre
09 FEB 2015
प्राप्त किया / RECEIVED
गुड़गाँव / GURGAON

Respected Sir,

Sub: *Application for "Application for LTA " for the proposed 1500MW Solar Power Plant at NP KUNTA, Ananthapuram Dt., in Andhra Pradesh.*

We are pleased to introduce ourselves as "Andhra Pradesh Solar Power Corporation Private Limited (APSPCL)" a company registered in India under the Companies act 2013. APSPCL is promoted by highly experienced professionals in the fields of Power sector (M/s Solar Energy Corporation of India, M/s APGENCO and M/s NRECAP) for the last few decades. The team of M/s APSPCL has the experience of developing Thermal, Hydel, Wind and Solar Power projects in various locations across the Andhra Pradesh for more than 4000MWs.

APSPCL is planning to develop a 1500MW Solar Park at "NP Kunta" in Ananthapuram District & "Galiveedu" in Cuddapah District (NP Kunta Mandalam and Galiveedu mandalam of both the districts are adjacent to each other) in the state of Andhra Pradesh, in which various Solar Power Developers will establish

Solar Power Projects. Accordingly GoAP have entered MOU with NTPC to establish 1000 MW Solar power project. Of the 1000 MW, EPC tender for 250 MW have already been called for by NTPC and is expected to be commissioned by end of Dec, 2015. GoAP will be identifying Solar Power Developer for remaining 500 MW shortly. The proposed site for 400/220kV grid substation to be established by PGCIL falls in NP Kunta, Ananthpuram District which is about 60 kms from "Cuddapah (Chinakampalli)" the nearest station of Power Grid Corporation of India Limited. This station of PGCIL has the voltage levels of 400kV.

The Solar Power Plant of 1500MW would be consisting of individual Solar Inverter module of 1~2MW with the generation voltage of 360~415 V. This voltage shall be stepped up to 33kV at the Inverter level itself and pooled at the Pooling Station which will be setup within the Solar Project. The voltage will again be stepped up to 220kV at the Solar Project Pooling Station and again stepped up to 400kV at the proposed 400kV Grid Substation by PGCIL at Solar power project to match with the voltage level at PGCIL's Cuddapah (Chinakampalli) 400kV Grid Sub Station. APTRANSCO will establish 4 Nos. of 220/33kV pooling stations at NP Kunta site to evacuate 1000MW solar power developed by NTPC and connected to 400/220kV Grid station via 4 Nos. 220kV Doubles circuit lines. Also APTRANSCO establishes two more 220/33kV pooling stations at Galiveedu site to evacuate 500 MW solar powers and connected to the above PGCIL 400/220kV grid substation via 2 Nos. 220kV double circuit lines.

The 400kV Grid substation at the Solar Project is proposed to be connected to PGCIL's Cuddapah (Chinakampalli) Sub Station 400kV BUS through a 400 kV DC line.

We are here with enclosing the following details for your perusal and further needful action for "Grant of Connectivity".

1) Demand Draft drawn in favour of Power Grid Corporation of India Limited for Rs 9 Lakhs.
2) Affidavit in FORMAT–LTA-1,
3) Application for Grant of Connectivity to ISTS as per FORMAT–LTA-2,
4) Bank Guarantee

We request you to kindly process our "Application for LTA" as requested and do the needful. Should you require any further clarification, we shall provide the same at the earliest possible time.

Thanking You,

Yours faithfully,

MD/APSPCL

MANAGING DIRECTOR,
A.P. Solar Power Corporation Pvt. Ltd.
HYDERABAD.

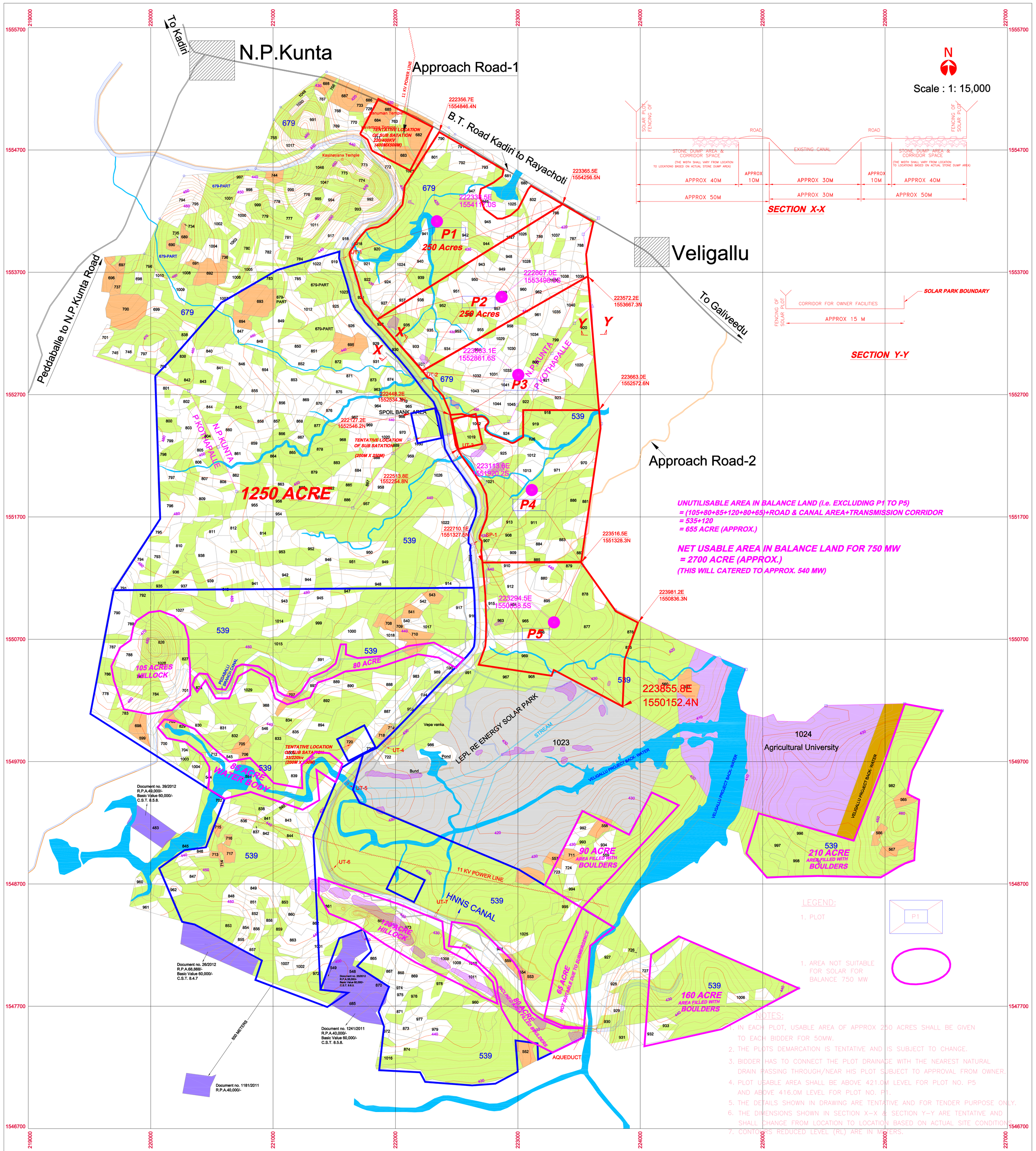
FORMAT-LTA-2

Application for Grant of LTA

1	**Name of the Applicant**	M/s Andhra Pradesh Solar Power Corporation Pvt Ltd, (APSPCL)
2	**Address for Correspondence**	Room No:218, 2nd Floor, Vidyut Soudha, Khairatabad, Hyderabad – 500 082
3	**Contact Details**	
	Prime Contact Person	G.Adiseshu
	Designation	Managing Director
	Phone Number (Landline)	040-23499401
	Phone Number(Mobile)	+91-9848543434
	Fax:	040-23499398
	E-Mail	adviser@apgenco.gov.in
	Alternate Contact person	A.Venkateswarlu
	Designation	Divisional Engineer(Tech)
	Phone Number (Landline)	040-23499401
	Phone Number(Mobile)	+91-9493120075
	Fax:	040-23499398
	E-Mail	Ande_venkateswarlu@yahoo.com
4	**Nature of the Applicant**	
	Normal Generator(Other Than Captive)	Solar park developer /Generator
	Captive Generator	
	Bulk Consumer	
	Electricity Trader	
	Distribution Licensee	
5	**Details for Long Term Access(LTA)**	
5a	Quantum (MW) for which LTA is required	1500 MW
5b	Date from which LTA is required (not earlier than 3 years from the last day of the month in which application has been received)	Phase-1 December, 2015 Phase-II September, 2016 Phase-III December, 2016
5c	Date up to which LTA is required (12 Years to 25 Years from the date from which LTA is required)	25 Years
5d	**Injection of Power (more than one only in case of single Drawl)**	
	Entity-1	APSPCL
	State/Region	Andhra Pradesh/SR
	Quantum-1	1500 MW
	Connectivity with the Grid	Proposed 220/400kV

5e	**Drawal of Power (more than one in only case of single Injection)**	
	Entity-1	APSPDCL
	State/Region	Andhra Pradesh/SR
	Quantum-1	90% of 1500 MW(1350 MW)
	Connectivity with the Grid	ISTS
	Entity-2	
	State/Region	SR
	Quantum-1	10% of 1500 MW (150 MW)
	Connectivity with the Grid	ISTS
11	**Details of DD /Cheque e-transaction (application Fee)**	
	Amount in Rs	Rs.9 Lakhs
	DD No	085761
	Date	02.02.2015
	Bank Name	Andhra Bank
	Branch Name	Prakashamnagar
11	**Details of Bank Guarantee**	
	Amount in Rs	Rs.1,5 Cr.(No. 043515 IGPER)
	Bank Name	Andhra Bank
	Branch Name	Prakashamnagar

(Signature)
G.Adiseshu
MANAGING DIRECTOR,
A.P. Solar Power Corporation Pvt. Ltd.
HYDERABAD.



NOTE :

1. ALL DIMENSIONS ARE IN METERS.
2. GRID LINES ARE DRAWN A 1000m X 1000m INTERVAL.
3. CONTOUR INTERVAL 2.00 MTR.

GENERAL :		LEGEND :		CANAL AS PER REVENUE MAP	SCALE :	1 : 15,000
VILLAGE	P.KOTHAPALLE & N.P.KUNTA	GOVT. LAND		STREAMS	DRN BY : M.R	DATE : 06-12-2014
TALUK	KADIRI	ASSIGNED LAND	986	VILLAGE BOUNDARY	CHK BY : K.D.L	DATE : 08-12-2014
DISTRICT	ANANTHAPUR	PATTA LAND		PLOT BOUNDARY	TYPE OF DWG	AUTO CAD
STATE	ANDHRA PRADESH	LEPL RE ENERGY SOLAR PARK		B.T. ROADS, ROADS	DRAWING NO.	REV-01/08-12-14
LEGEND :		AGRICULTURAL UNIVERSITY		STONES	CAD FILE NAME	REVISED TOPO MAP
10 M CONTOUR		SALES OCCURRED LANDS		TEMPLE, UT & SP	SPOIL BANK AREA	
2 M CONTOUR		EXCAVATED CANAL		AQUEDUCT	BOULDERS	

PROJECT : 1000 MW SOLAR POWER PROJECT AT N.P.KUNTA SITE, ANANTHAPUR DISTRICT,

SUB. DATE : 08-12-2014

TITLE : REV TOPO MAP OF P. KOTHAPALLE & N.P.KUNTA VILLAGES

CLIENT :

NREDCAP LTD.
REGD. OFF. 5-8-207/2,
PISGAH COMPLEX,
NAMPALLY,
HYDERABAD.

SURVEYED BY :

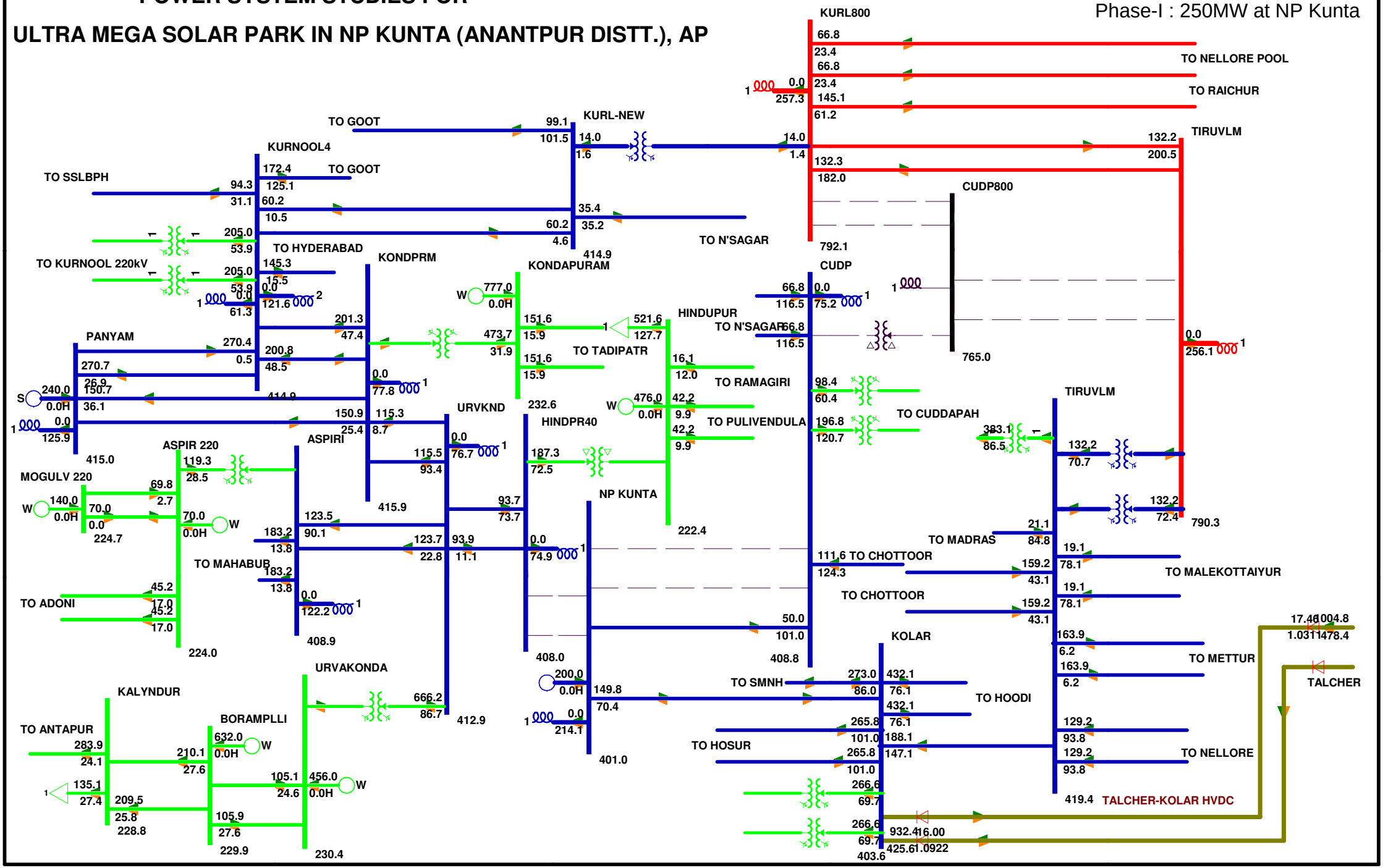
TOP VIEW INFRATECH INDIA PVT.LTD

F-204,Viswa Central,
Nizamia Observatory Road,
Near Lalbunglow, Ameerpet,
Hyderabad-500016.
Ph:040-65451076, Mobile: 9440151076
E-mail - info@topviewtech.com
www.topviewtech.com

POWER SYSTEM STUDIES FOR

ULTRA MEGA SOLAR PARK IN NP KUNTA (ANANTPUR DISTT.), AP

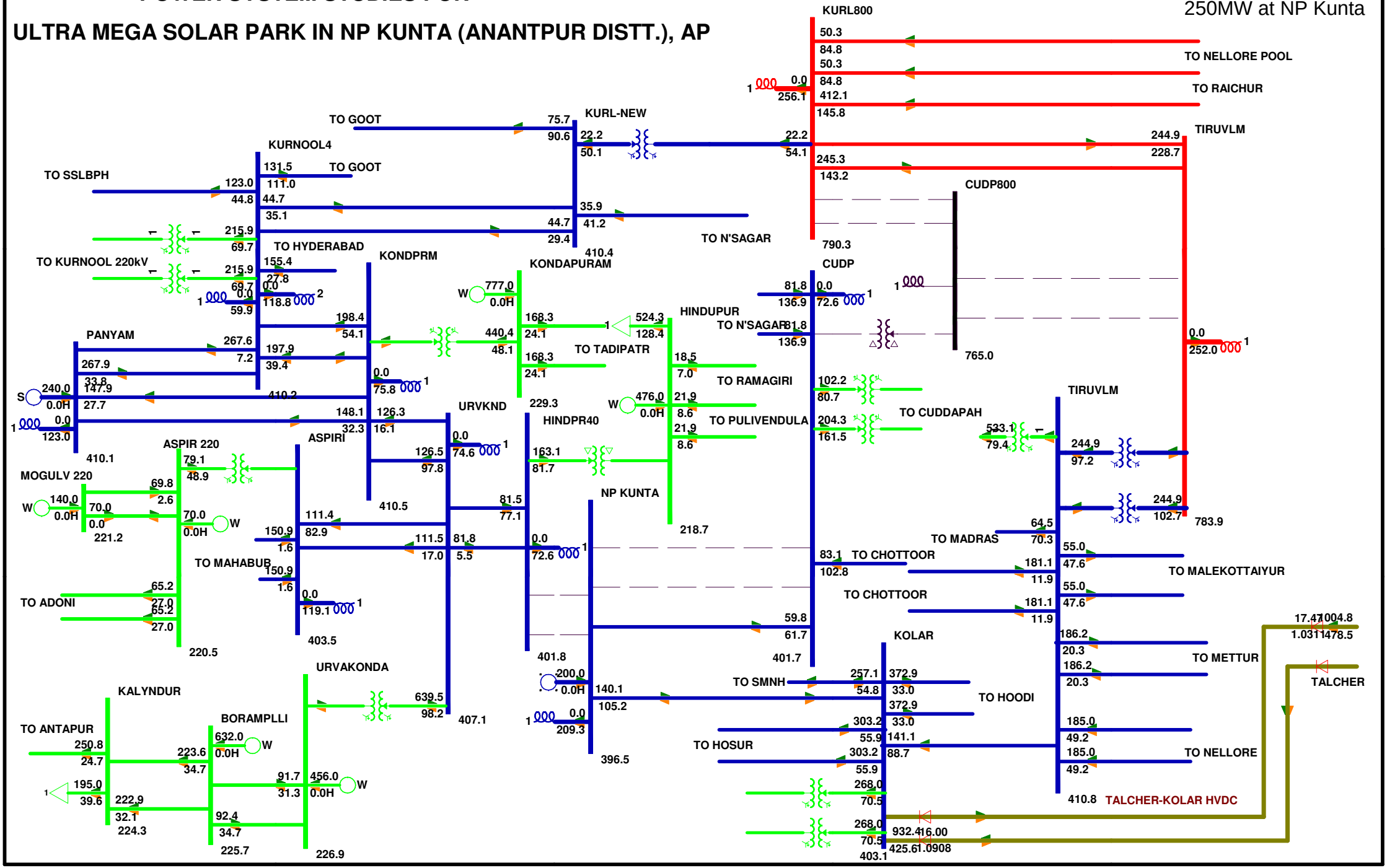
Off Peak Scenario
Phase-I : 250MW at NP Kunta



POWER SYSTEM STUDIES FOR

ULTRA MEGA SOLAR PARK IN NP KUNTA (ANANTPUR DISTT.), AP

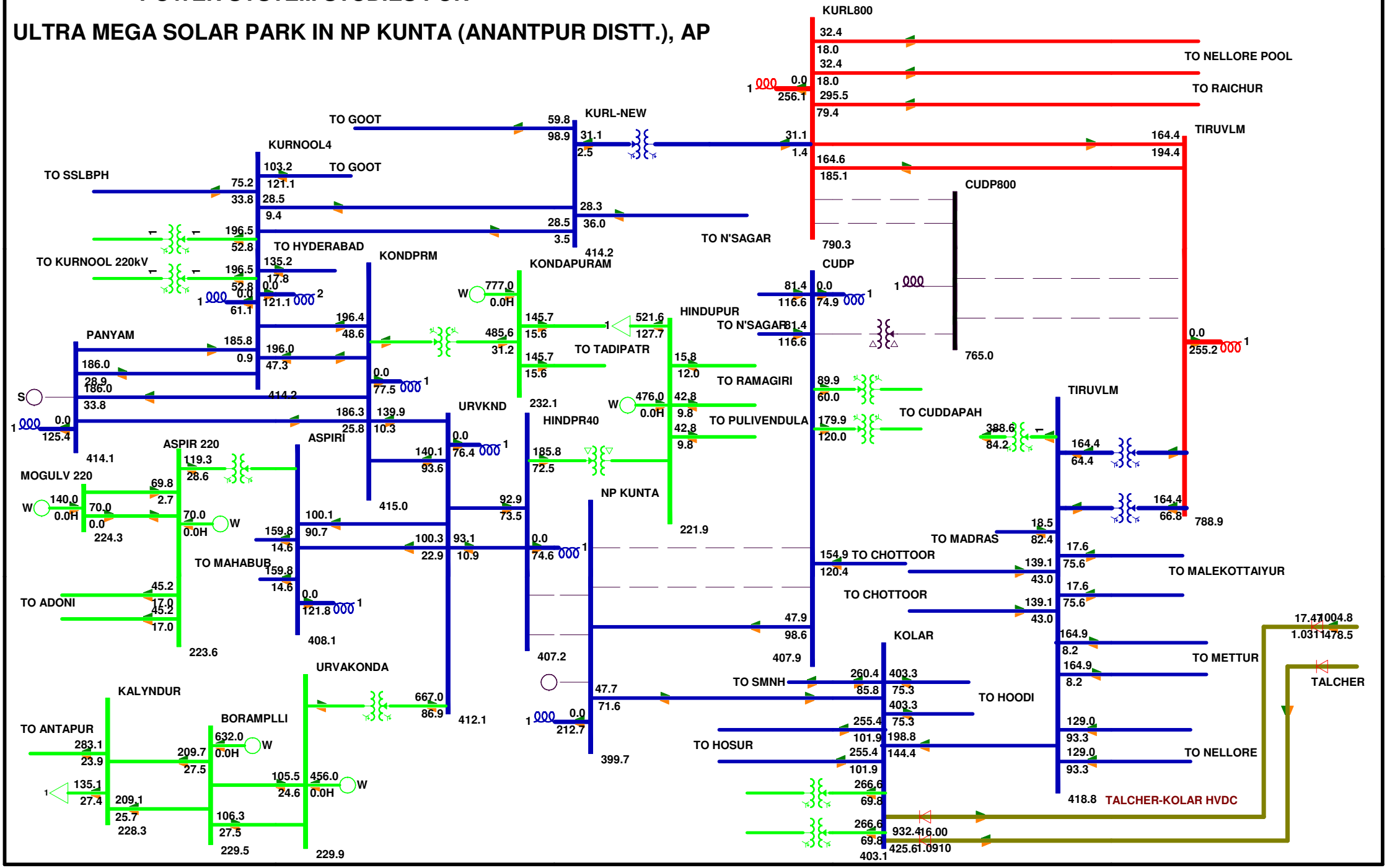
Peak Scenario
250MW at NP Kunta



POWER SYSTEM STUDIES FOR

ULTRA MEGA SOLAR PARK IN NP KUNTA (ANANTPUR DISTT.), AP

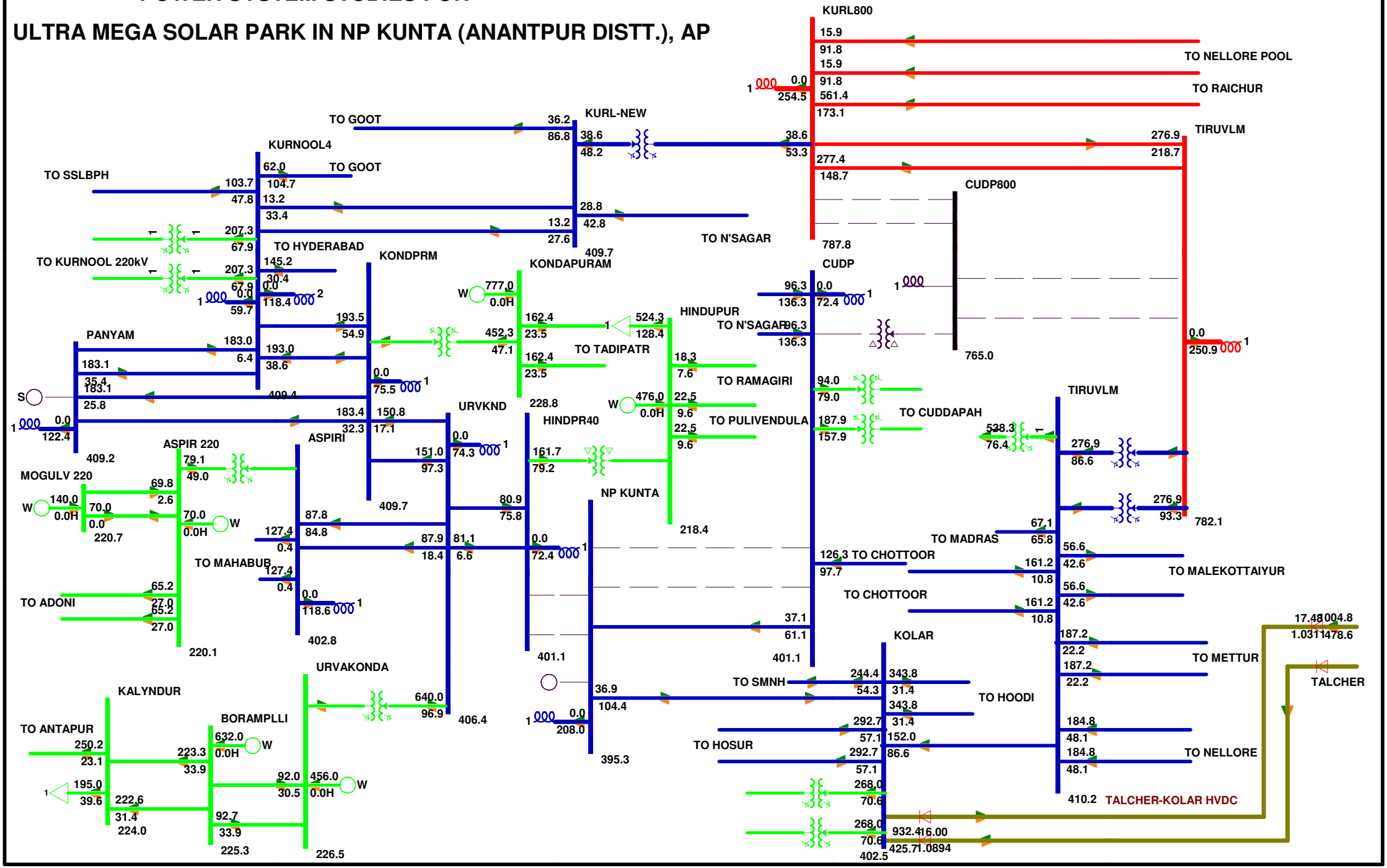
Off peak scenario : No Solar



POWER SYSTEM STUDIES FOR

ULTRA MEGA SOLAR PARK IN NP KUNTA (ANANTPUR DISTT.), AP

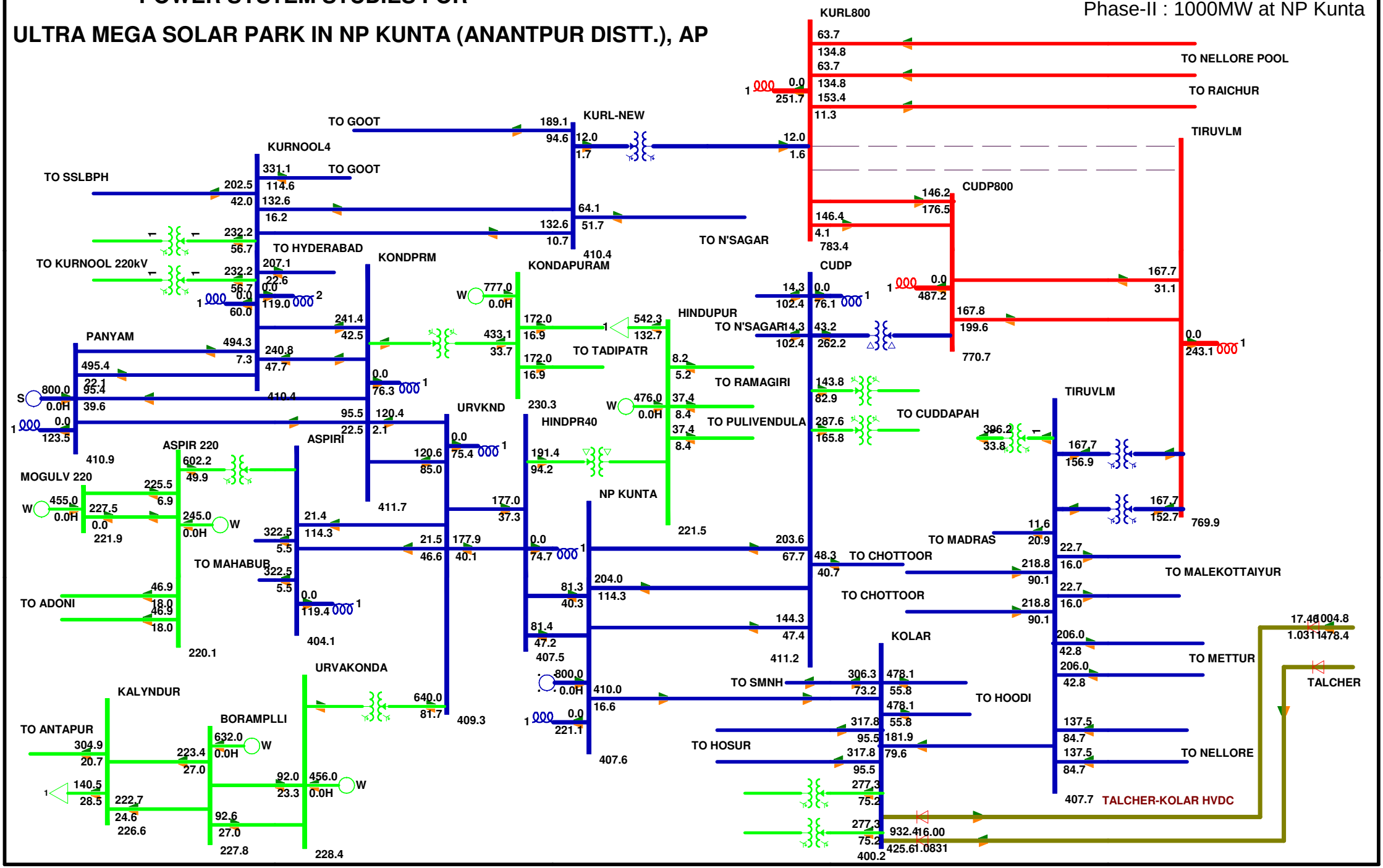
Peak Scenerio : No solar



POWER SYSTEM STUDIES FOR

ULTRA MEGA SOLAR PARK IN NP KUNTA (ANANTPUR DISTT.), AP

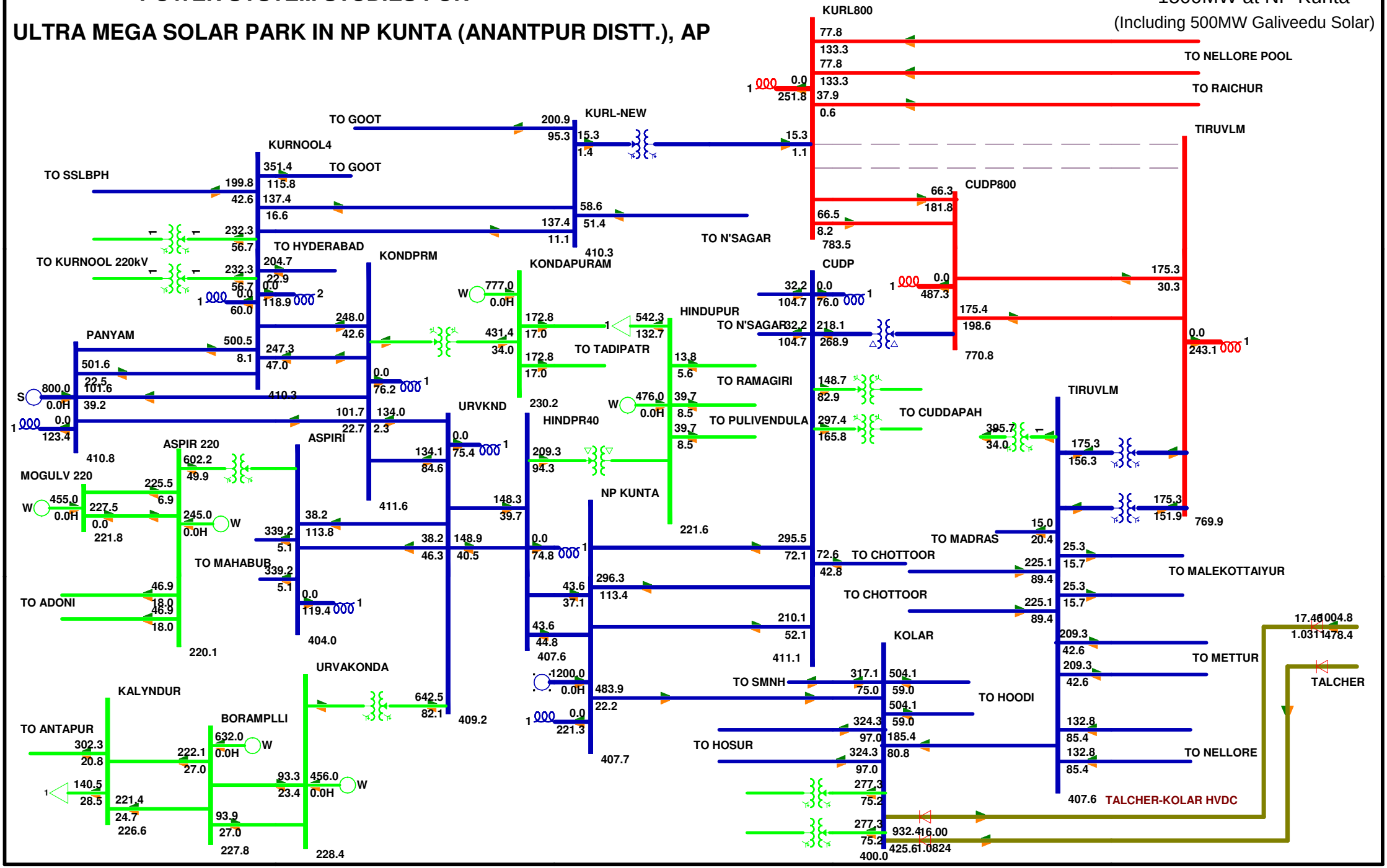
Off Peak Scenario
Phase-II : 1000MW at NP Kunta



POWER SYSTEM STUDIES FOR

ULTRA MEGA SOLAR PARK IN NP KUNTA (ANANTPUR DISTT.), AP

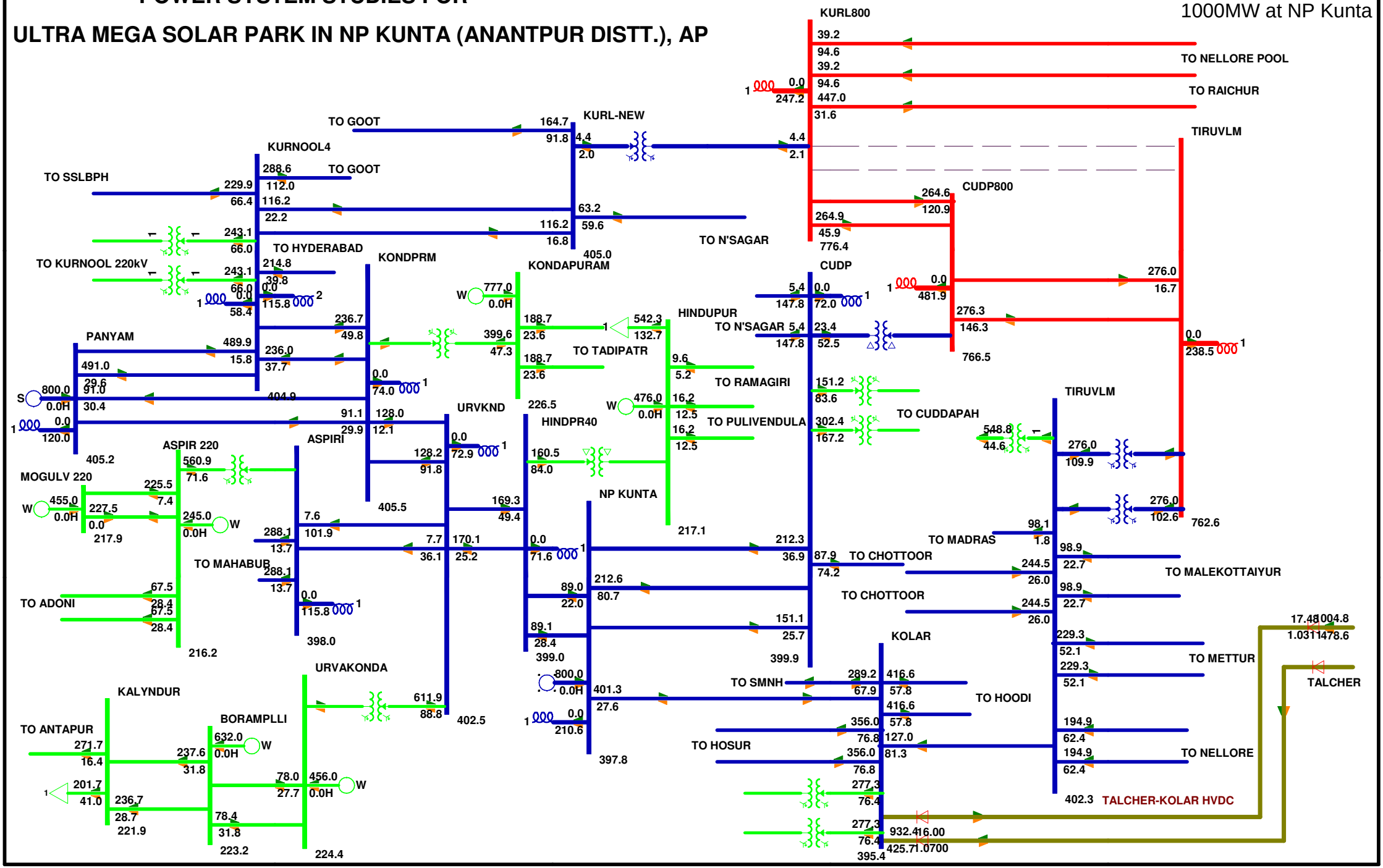
Off Peak Scenario
1500MW at NP Kunta
(Including 500MW Galiveedu Solar)



POWER SYSTEM STUDIES FOR

ULTRA MEGA SOLAR PARK IN NP KUNTA (ANANTPUR DISTT.), AP

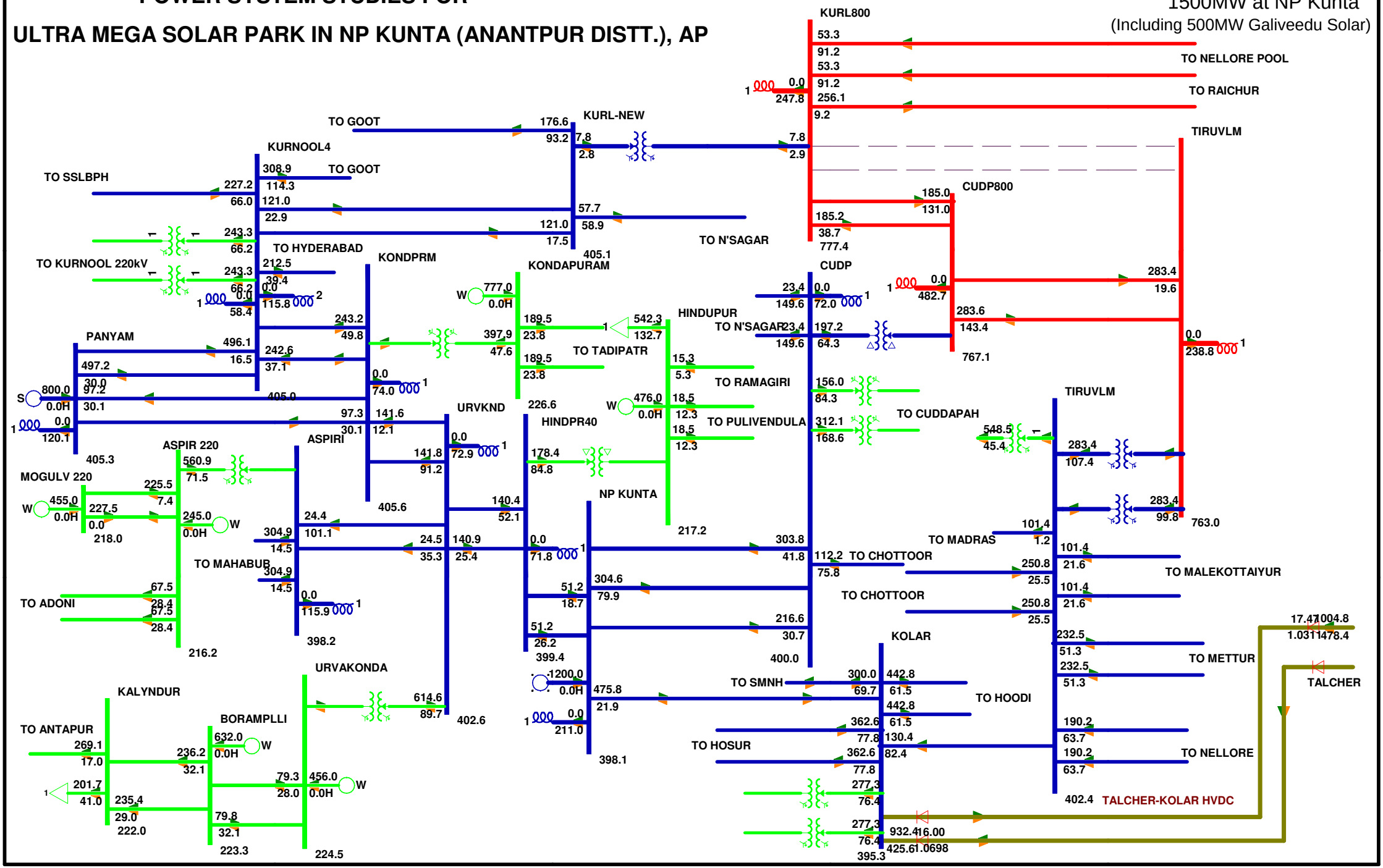
Peak Scenario
1000MW at NP Kunta



POWER SYSTEM STUDIES FOR

ULTRA MEGA SOLAR PARK IN NP KUNTA (ANANTPUR DISTT.), AP

Peak Scenario
1500MW at NP Kunta
(Including 500MW Galiveedu Solar)



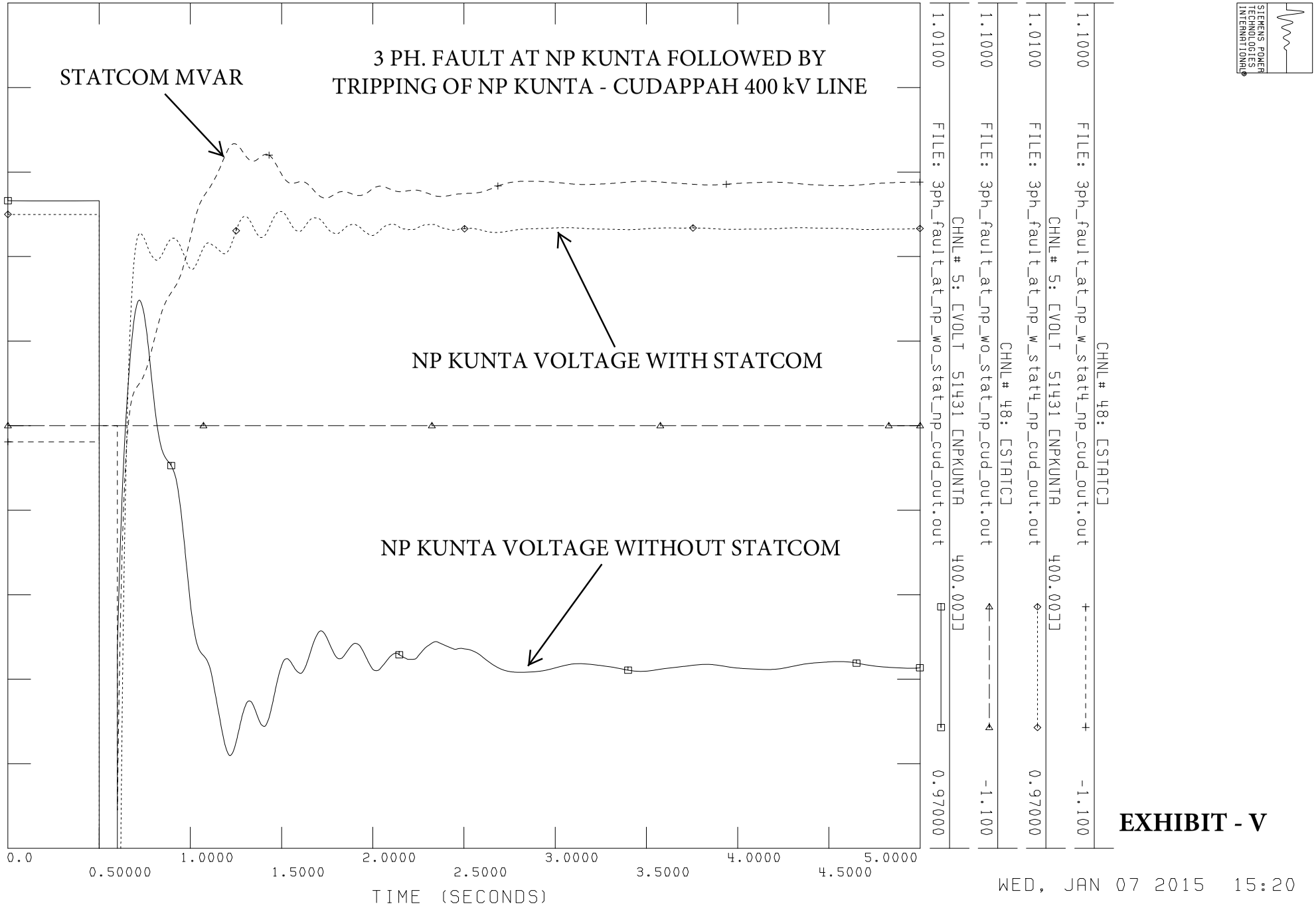


EXHIBIT - V

WED, JAN 07 2015 15:20

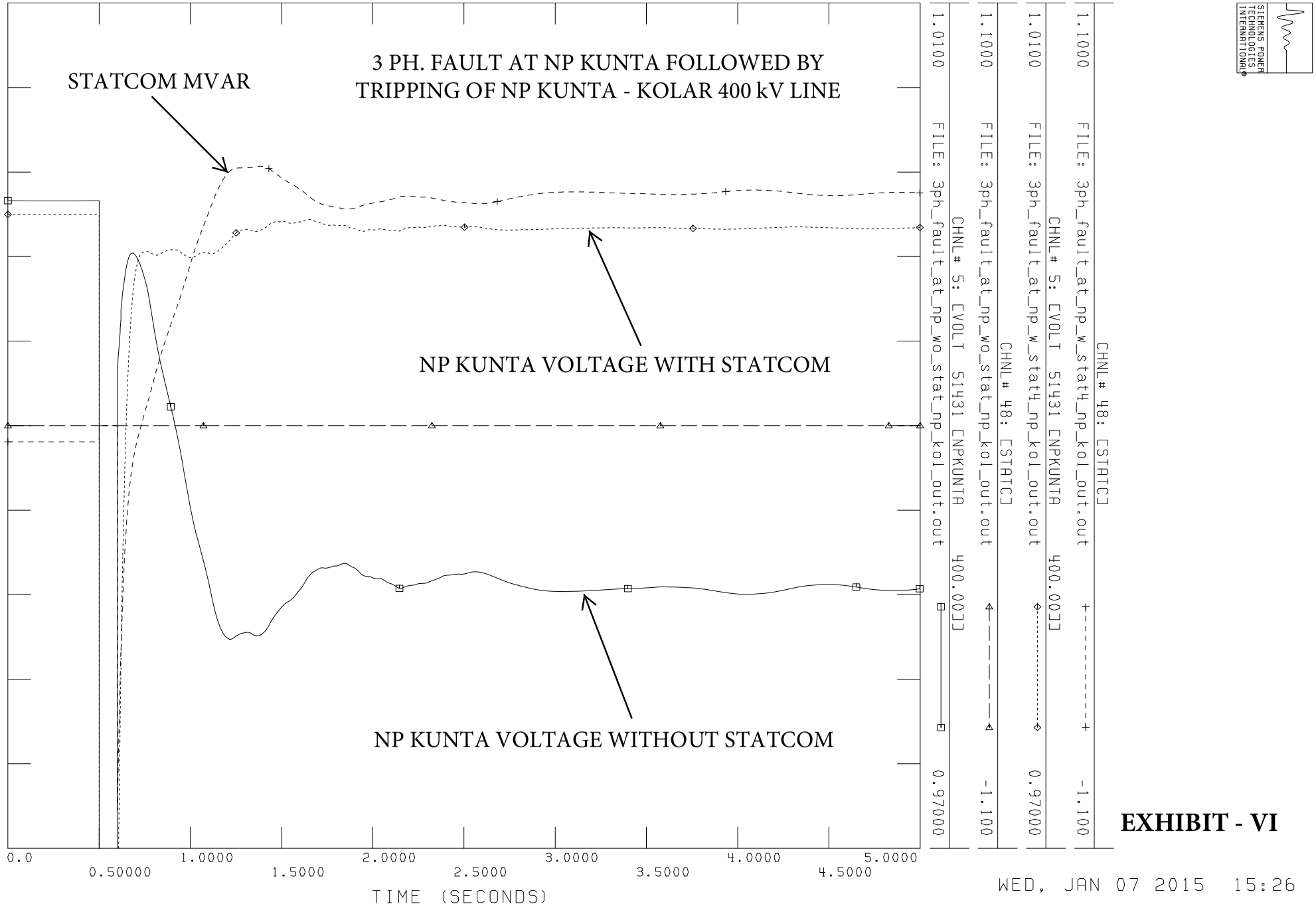
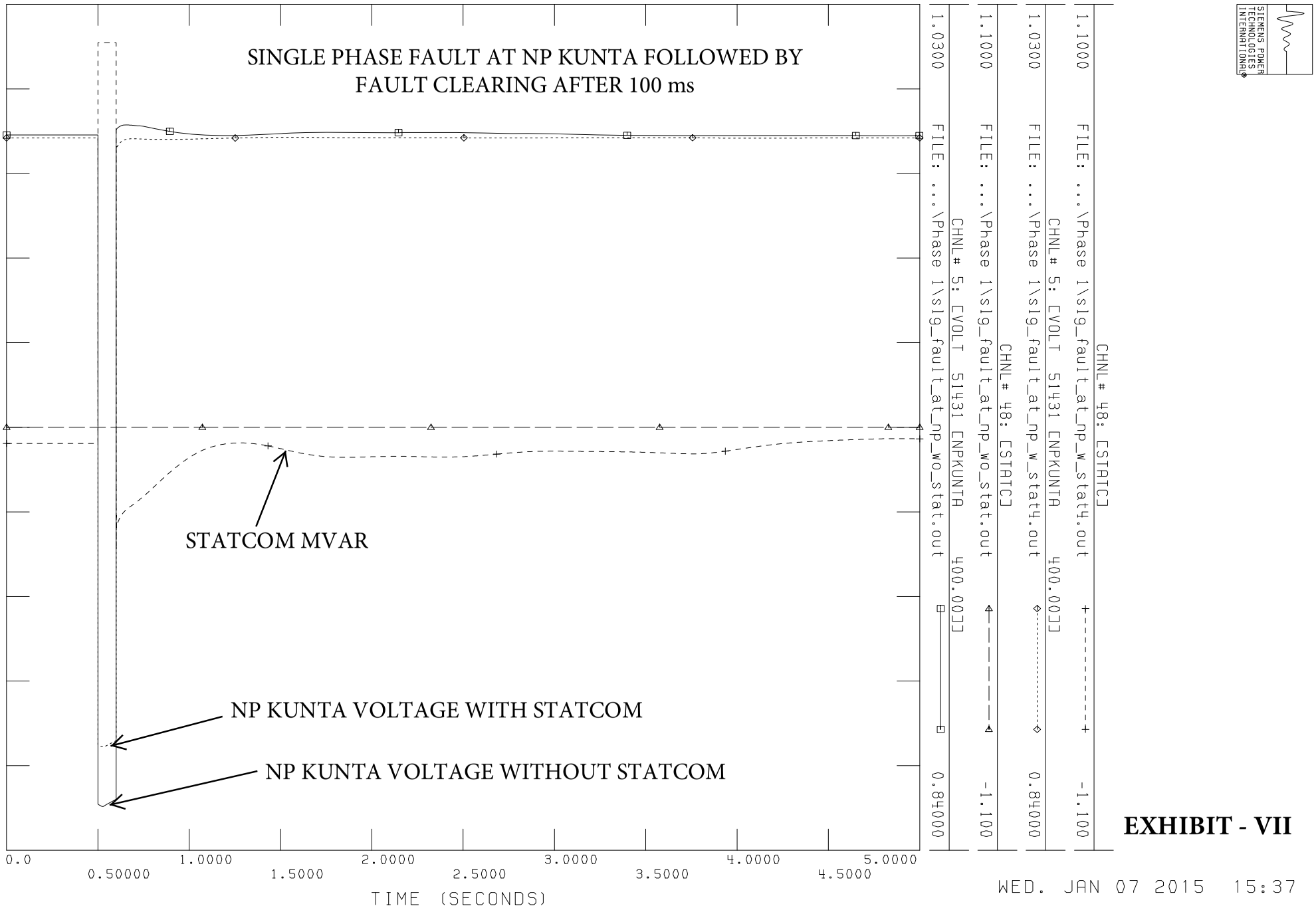


EXHIBIT - VI

WED, JAN 07 2015 15:26


SINGLE PHASE FAULT AT NP KUNTA FOLLOWED BY
FAULT CLEARING AFTER 100 ms
STATCOM MVAR
NP KUNTA VOLTAGE WITH STATCOM
NP KUNTA VOLTAGE WITHOUT STATCOM
0.0
0.50000
1.0000
1.5000
2.0000
2.5000
3.0000
3.5000
4.0000
4.5000
5.0000
TIME (SECONDS)
1.0300 FILE: ...\Phase 1\slg_fault_at_np_wo_stat.out CHNL# 5: CVOLT 51431 CNPKUNTA 400.000 0.84000
1.1000 FILE: ...\Phase 1\slg_fault_at_np_wo_stat.out CHNL# 48: CSTATC -1.100
1.0300 FILE: ...\Phase 1\slg_fault_at_np_w_stat4.out CHNL# 5: CVOLT 51431 CNPKUNTA 400.000 0.84000
1.1000 FILE: ...\Phase 1\slg_fault_at_np_w_stat4.out CHNL# 48: CSTATC -1.100
SIEMENS POWER TECHNOLOGIES INTERNATIONAL
EXHIBIT - VII
WED. JAN 07 2015 15:37

No.11/26/2014-PG
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi–1, Dt. 22nd January, 2015

To

Chairperson, CEA,
New Delhi.

Sub:Modified Transmission scheme for evacuation of power from upcoming Ultra Mega Solar Power Park (1000 MW) at NP Kunta in AnantpurDistrict, A.P-Reg.

Madam,

Please refer to this Ministry's letters of even number dated 16.10.2014, 18.11.2014 and 25.11.2014 requesting CEA to carry out necessary studies for evacuation schemeon the evacuation of power generation from Ultra Mega Solar Power Project (UMSPP) at Anantpur District in Andhra Pradesh.

2. Following transmission elements are considered as part of system strengthening-XXIV in Southern Region (SRSS-XXIV)vide MOP letter No. 15/9/2013-Trans. dated 10.12.2014:

a. LILO of Kurnool –Thiruvalem 765kV D/c line at Cuddapah
b. Establishment of 765/400kV substation at Cuddapah with 2x1500MVA transformers and 2x240MVAR bus reactors each and requisite line bays and line reactors at Cuddapah for transmission schemes.
c. Cddapah-Hindupur 400kV(quad) D/C line with 80MVAR switchable line reactor at Hindupur end.

3. Elements (a) & (b) above, were earlier proposed by PGCIL as part of phase-II transmission scheme of "Transmission System for ultra mega solar park in Anantpur distt, AP". Considering inclusion of elements (a) and (b) as a part of SRSS-XXIV, revised scope of works for transmission scheme of Ultra mega solar power park in Anantpur District, has been intimated by PGCIL vide letter dated 14th January, 2015 (copy enclosed).

In view of above, it is requested to forward the proposal accordingly for the evacuation schemes to be implemented. Since other Solar generation projects in A.P. are also being developed in tight time schedule, it is requested that the transmission evacuation schemes proposal for these projects be also taken up and necessary information as sought may kindly be provided at the earliest.

Yours faithfully

Encl: As above

(Sanjeev Jain)
Under Secretary to the Govt. of India
Telefax No. 23730264

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)
पावरग्रिड

केन्द्रीय कार्यालय : ''सौदामिनी'' प्लॉट सं० 2, सैक्टर--29, गुडगॉव-122 001, हरियाणा
फोन : 0124-2571700-719 फैक्स : 0124-2571760, 2571761 तार 'नेटग्रिड'
Corporate Office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001. Haryana
Tel.: 0124-2571700-719 Fax: 0124-2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या/Ref No C/SG/RE/00/AP

14th January 2015

Shri Ghanshyam Prasad
Director
Ministry of Power
Shram Shakti Bhawan
Rafi Marg, New Delhi 110 001

Sub: Modified Transmission scheme for evacuation of power from upcoming Ultra Mega Solar Power Park (1000 MW) at NP Kunta in Anantpur distt, A.P

Dear Sir,

We write with reference to our earlier letter dated 01.12.2014 regarding proposed transmission scheme for evacuation of power from upcoming Ultra Mega Solar Power Park (1000 MW) at N P Kunta in Anantpur distt, A.P. Keeping in view the phase wise commissioning schedule of solar park, transmission scheme was proposed for development in two phases. Subsequently, Ministry of Power vide letter dated 10.12.2014 informed that following transmission elements is considered as part of system strengthening XXIV in Southern Region (SRSS-XXIV):

a) LILO of 765kV Kurnool –Thiruvalem D/c line at Kadapa(Cuddapah)
b) Establishment of 765/400kV S/s at Kadapa(Cuddapah) with 2x1500 MVA transformers & bus reactors including line bays/reactors
c) Cuddapah-Hindupur 400kV D/c (Quad)

Out of above elements, elements (a) & (b) were earlier proposed as part of phase-II transmission scheme of "Transmission System for ultra mega solar park in Anantpur distt, AP". Considering inclusion of elements (a) and (b) now as a part of SRSS-XXIV, revised scope of works for transmission scheme of Ultra mega solar power park (1000 MW) in Anantpur distt, A.P is as under:

Phase-I
- Establishment of 3x500 MVA, 400/220KV Substation at NP Kunta
- LILO of 400KV Kadapa(Cuddapah) - Kolar S/c line at NP Kunta
- 1x125 MVAR Bus Reactor at NP Kunta along with ±100 MVAR STATCOM
- 4 nos. 220kV line bays at NP Kunta

Phase-II
- LILO of Cuddapah-Hindupur 400kV D/c (Quad) line at 400kV NP Kunta
- 4 nos.220kV line bays at NP Kunta

As decided in the meeting in MOP on 26.11.14, POWERGRID has already issued Tender for Phase-I transmission scheme and also filed petition for obtaining regulatory approval from CERC for execution of the scheme as ISTS. It is requested to expedite issuance of Ministry of Power order for assigning the implementation works of above transmission scheme to POWERGRID.

Thanking you,

Yours faithfully,

(Subir Sen)
GM (Smart Grid)