

Appendix I - List of 102 RE Projects as per IRPSM												
S.No	RE Project	RKM	Implementing Agency	Year of Sanction	Last sanctioned cost	Progress for Month recorded in IRPSM	Expenditure upto date	Throughflow and 2017-2018	Latest Anticipated TDC	Estimate Status	Physical Progress	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M
1	Bokaro Steel City - Muri - Hatia - Bondamunda - Bimlagarh - Kiburu / Barsuan ind. Purulia-Kotshila (434 km)	434	CORE	1991-1992	2823911	OCT' 2016	2666069	157742	31/03/2013	RE under prep.	99	Work completed. CR under preparation.
2	Ambala-Moradabad incl Laksar-Dehradun (353 km)	353	CORE	1992-1993	2739241	OCT' 2016	3299181	37339	31/03/2015	RE under prep.		Electrification work on Ambala - Moradabad completed. <sup>II</sup> Electrification on Laksar - Haridwar-Dehradun is sanctioned by Board as MM. Work is being executed by Northern Railway Construction.
3	Chandli-Muri-Barakana (119 km)	119	CORE	1992-1993	547609	OCT' 2016	547609	0	31/05/2013	RE under prep.	100	Main electrification work of the section i.e. Group-99 is complete. CR drawn.
4	Renigunta-Guntakal (308 km)	308	CORE	1992-1993	5001275	OCT' 2016	4440400	153318	31/07/2010	RE under prep.	98	Renigunta- Nandlur only by CORE. Completed. <sup>III</sup> Nandlur - Guntakal is with RVNL. Completed, residual work in progress <sup>II</sup> Work completed.
5	Kharagpur/Nimpura-Bhubaneswar incl. branch line of Talcher-Cuttack-Paradip (540 km)	540	CORE	1995-1996	4458371	OCT' 2016	4301699	157089	31/03/2013	RE under prep.	99	Work completed. Revised estimate along with Completion Estimate sanctioned by Railway Board.
6	Khurja-Hapur-Meerut City-Saharanpur incl Ghaziabad-Meerut (254 km)	254	CORE	1996-1997	2364447	OCT' 2016	2534545	57878	31/10/2010	RE under prep.	96	Work Completed - Residual work
7	Bhubaneswar-Kotavalasa incl Khurda Road-Puri (457 km)	457	CORE	1997-1998	3264825	OCT' 2016	2781945	470655	31/03/2013	RE under prep.	98	Electrification work completed.
8	Udhna-Jalgaon (306 km)	306	CORE	1997-1998	1444333	OCT' 2016	1055856	388377	31/03/2013	RE under prep.	99	Section commissioned. Regular train operation on electric traction has been introduced. All works are completed. Completion Report submitted to CORE.
9	Patna-Gaya (92 km)	92	CORE	1999-2000	503867	OCT' 2016	503781	86	31/07/2010	RE under prep.	100	Completion report sanctioned by competent authority.
10	Enakulam-Tirvandrum incl. Tirvandrum-Kanyakumari (427 km)	427	CORE	1999-2000	2578754	OCT' 2016	2469103	114174	31/03/2016	RE under prep.	95	work in progress
11	Sitarampur-Danapur-Mughalsarai via main line of Eastern Railway incl. Rampur-Dumra-Garhara-Barauni (562 km)	562	CORE	2003-2004	3861781	OCT' 2016	3861781	0	31/08/2010	Not Required	100	Completion report sanctioned by competent authority.
12	Moradabad- Lucknow-Utratia (338 km)	338	CORE	2005-2006	2587356	OCT' 2016	4427865	55063	31/10/2012	RE under prep.	90	Section commissioned.
13	Karepalli-Bhadrachalam Road-Manuguru (88 km)	88	CORE	2005-2006	660704	OCT' 2016	768047	187699	30/09/2013	RE under prep.	98	Electrification work of KRA-BDR-MUGR Section has been completed. Conversion of existing tramway OHE to conventional OHE in between Dornakal - Karepalli and feeder wire from Bhadrachalam Road TSS to Panduragapuram SSP was sanctioned by Board on 12.05.2010, as material modification to the original estimate, being executed by South Central Railway. The work of conversion of tramway to conventional OHE completed. Feeder erection works under progress and will be completed during 2013-14.
14	Andai-Ukhra-Pandaveswar (23 km)	23	CORE	2006-2007	425536	OCT' 2016	716554	28468	31/03/2013	RE under prep.	95	Electrification works on Andai - Pandaveswar completed. Material modification for provision of new running lines & its electrification at Ukhra yard was sanctioned by Board on 08.12.2009 and work is in progress by ER.
15	Utratia-Sultanpur-Mughalsarai (288 km)	288	CORE	2006-2007	2399832	OCT' 2016	4280993	7855	31/03/2016	RE under prep.	90	Mughalsarai to Utratia section commissioned. Electrification work of patch doubling tender fibrated.
16	Ungampalli-Wadi (161 km)	161	CORE	2006-2007	1158529	OCT' 2016	2010587	7107	31/03/2013	RE under prep.	100	1. Energised at 25 KV upto excluding Wadi yard. 2. Material modification for electrification of (a) M/s Vasavadatta cement siding & 2nd bay at VKB TSS and provision for 8 wheeler tower wagon with shed at VKB was sanctioned by Board on 07-09-09 for Rs. 1057.04 lakhs and (b) M/s. Rajshree Cement Siding & M/s.SAIL Siding was sanctioned by Railway Board on 09.03.10 for Rs.905 Lakhs. Work in M/s. SAIL, M/s. Rajshree Cement Sidings completed. CRS authorization has been obtained on 17.02.2014.
17	Bina-Kota (303 km)	303	CORE	2006-2007	2325097	OCT' 2016	2375256	3282	31/10/2013	RE under prep.	99	All commissioned. Regular train operation on electric traction started after CRS authorisation.
18	Ujjain-Indore & Dewas-Maksi (115 km)	115	CORE	2006-2007	716027	OCT' 2016	722654	19764	31/03/2013	RE under prep.	95	Section commissioned <sup>II</sup> Civil works i.e.Railway quarters etc. are under construction. <sup>III</sup> Augmentation of Mangalgaoon TSS by WR is yet to be completed.
19	Tiruchirappalli-Madurai (154 rkm)	154	CORE	2007-2008	1057954	OCT' 2016	1561285	52553	31/03/2016	RE under prep.	95	ERG papers under process. TNEB supply - Tower erection/Overhead Line work in progress.

Appendix I - List of 102 RE Projects as per IRPSM												
S.no	RE Project	RKM	Implementing Agency	Year of Sanction	Last sanctioned cost	Progress for Month recorded in IRPSM	Expenditure upto date	Throwforward 2018	Latest Anticipated TDC	Estimate Status	Physical Progress	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M
20	Barabanki-Gorakhpur-Barauni; incl Siwan-Thawe (757 km)	757	CORE	2007-2008	7137900	OCT' 2016	9688071	576636	31/12/2014	RE under prep.	75	Barabanki - Baruaachak charged on 25 KV. CRS authorisation of Barabanki Gonda section received on 21/7/2014. Bruaachak - Basti charged on 25 KV. Basti - Domingari (excl) charged on 2.2 KV. Domingari (excl) to Gorakhpur Cantt (incl) charged on 25 kv. CRS authorisation received on 04/08/2015. Gorakhpur Cantt (excl) - Bhatri(excl) charged on 25 KV. CRS authorisation received on 04/08/2015. Bhatri (incl)-Siwan(excl) charged on 25 kv and CRS inspection done on 03.12.2014. Chupra - Siwan-Thawe ch
21	Shakurbasti-Rohtak (60 km)	60	CORE	2007-2008	698282	OCT' 2016	781771	11663	31/03/2015	RE under prep.	99	Section commissioned.
22	Jalandhar-Jammu Tawi incl Jammu Tawi-Udhampur (275 km)	275	CORE	2007-2008	2279548	OCT' 2016	3350768	50398	31/03/2015	RE under prep.	95	CRS authorisation issued for SCPD-CHK. CRS authorisation issued for PTK - JAT. JAT - Bajajta & Udhampur - Manual charged on 2.2 KV. 95% wiring complete. OHE adjustment & SED between Ram Nagar - Udhampur & Manwal & Bajajta station. Bajajta SP Control room casted. Sanger SP work in progress
23	Barauni-Kathar-Guwahati incl Kathar-Barsol (836 km)	836	CORE	2008-2009	8215325	NOV' 2016	7558774	1081571	31/03/2016	RE under prep.	65	TNEB supply - Foundation, Power erection & stringing under progress by TNEB.
24	Madurai-Tuticorin-Nagercoil (262 km)	262	CORE	2008-2009	2792807	OCT' 2016	2503187	762650	31/03/2017	RE under prep.	98	ME/TSS - Electrical work is in progress. Harbour siding - OHE works tender under finalisation.
25	Varanasi-Lohita-Janghais-Uncuhar incl. Phaphamu-Prayag-Alahabad (207 km)	207	CORE	2008-2009	1516922	OCT' 2016	2014113	403989	31/03/2015	RE under prep.	95	Section charged on 25 KV. CRS sanction received on 04/12/2015 and commercial operation on Electric traction is introduced on 16/12/2015 the section.
26	Jhansi-Kampur incl Ait-Konch & Kampur Anwarganj-Kalyanpur (240 km)	240	CORE	2008-2009	1557269	OCT' 2016	1519149	78915	31/03/2013	RE under prep.	70	CRS inspection done on date:- 12.03.2015. Left over works under progress.
27	Ghaziabad-Moradabad (140 km)	140	CORE	2009-2010	1519085	OCT' 2016	1564831	82159	31/03/2015	RE under prep.	85	Foundation complete. Mast Erection complete, 99.5% wiring done. 25 KV energisation fitness work 70% complete.
28	Rohtak-Bhatinda-Lehra Muhabat (252 km)	252	CORE	2010-2011	3082347	OCT' 2016	1436041	1176558		RE under prep.	2	General works under progress.
29	Vizianagaram - Rayagada - Titlagarh - Raipur (465 km)	465	CORE	2010-2011	6363193	OCT' 2016	4077867	3666660		RE under prep.	84	All position for Vizianagaram-Rayagada-Titlagarh section only updated which is under execution by RE/BBS. Section from Titlagarh to Raipur is under execution by RVNL. OHE foundation, Mast & Bracket erection, wiring, Bracket Adjustment, SED & T/W checking etc. are in progress. Wiring completed for 139 RKM in Vizianagaram - Singapur Road section & 124 RKM in Singapur Road-Titlagarh, Vizianagaram - Garudabilli-Parvatipuram section commissioned for commercial services.
30	Pandabeswar- Sainthia Pakur incl. Khana-Sainthia (205 km)	205	CORE	2010-2011	3342017	OCT' 2016	3084536	62545	31/08/2014	RE under prep.	98	Pandabeswar - Kachujor-Mahishadhar commissioned after inspection of CRS. Khana - Sainthia & Rampurhat - Pakur charged on 2.2 KV. Mahishadhar-Sainthia(Ex.)-Rampurhat(In) charged on 25KV. Balance work under progress for 25kv charging and commissioning.
31	Mathura-Alwar (121 km)	121	CORE	2010-2011	1198263	OCT' 2016	820795	43184		RE under prep.	99	CRS inspection done on date 23.03.2015.
32	Rosa-Stapur-Burhwal (181 km)	181	CORE	2010-2011	1319835	OCT' 2016	1590551	114105	31/05/2015	RE under prep.	70	Bhurwal to Stapur section charged on 25.KV. For Stapur to Rosa section OHE wiring in advance stage SED checkin & Tower wagon checkin in progress.
33	Gondia-Balharshah (250 km)	250	CORE	2010-2011	2046117	OCT' 2016	1656162	414914		RE under prep.	80	The contract for s&t works awarded. The contract for Electrical works (OHE, TSS & SCADA) awarded to M/S.MCPH-ECI(V) on 10.10.12. OHE foundation commenced on 2.11.12. 140 RKM energised at 2.2KV till Dec, 2015. * Fig showed in capital includes the sanctioned amount of DF4 as there is no separate row for DF4

Appendix I - List of 102 RE Projects as per IRPSM												
S.no	RE Project	RKM	Implementing Agency	Year of Sanction	Last sanctioned cost	Progress for Month recorded in IRPSM	Expenditure upto date	Throflow and 2017-2018	Latest Anticipated TDC	Estimate Status	Physical Progress	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M
34	Shoranur-Mangalore-Penambur (328 rkm)	328	CORE	2010-2011	3858791	OCT 2016	4449635	876505	31/03/2017	RE under prep.	85	Gr.157/158/SRR-MAQ-PNMB) CRS/SBC inspection was completed on 22.3.16 in KUL-CAN-CHV section. Authorisation was received on 24.3.2016. CHV-MAQ. Section was test charged with 25 KV on 31.3.2016. CS/TSS was commissioned on 22.3.16 with KSEB supply availed. ETR/TSS - Electrical foundation work is in progress.KSEB supply - Tender awarded by RE for HT cabling work. TRY/TSS - Tender opening on 11.4.16 for electrical works. KSEB Supply - Tender under finalisation by KSEB. CHV/TSS - LOA issued for
35	Daund-Mainmad incl. Puntamba - Shirdi (255 rkm)	255	CORE	2010-2011	2161800	DEC 2016	3515400	89400	31/03/2016	RE under prep.	96	CRS sanction for Mainmad-Puntamba-Shirdi section (81RKM) granted in Aug '14. CRS inspection for Puntamba-Daund section (174 kms) CRS sanction granted in 15.10.15(88 RKM)and in 23.02.16(76 RKM) full section commissioned.
36	Yelahanka - Dharmavaram - Gooty incl Penukonda-Dharmavaram via Sri Satya Sai Prashanthi Nilayam (306 rkm)	306	CORE	2010-2011	2285700	DEC 2016	3232300	231500	31/03/2016	RE under prep.	90	Section completed. CRS for 90 RKM obtained on 15.07.15. balance 216 CRS sanction obtained on 13.07.16. Complete section commissioned.
37	Alwar - Rewari (87 rkm)	82	CORE	2011-2012	1184823	OCT 2016	1262319	133051		RE under prep.	95	CRS inspection of complete section on 25/26.03.2015 completed. Authorization received on 30.03.2016.
38	Jharsuguda - Sambalpur - Titlagarh & Jharsuguda - lb bypass (238 rkm)	238	CORE	2012-2013	3045183	OCT 2016	954046	1371607		Det. Est. Sanc.	50	Work in progress.
39	Garwa Road - Chopan - Singrauli (257 rkm)	257	CORE	2012-2013	2843424	OCT 2016	1781756	470200		RE under prep.	95	CRS authorization has been obtained between the section Garhwa Road - Meralgram RKM: 22 & train operation started from 05th February, 2016. 82 km energize on 22 kv between Meralgram - Chopan - Singrauli section up to the month of February, 2016 & balance work is in progress.
40	Itarsi - Katni - Manikpur ind Sarma - Rewa and Manikpur - Chheoki (653 rkm)	653	CORE	2012-2013	8661152	OCT 2016	6460397	140124		RE under prep.	45	All OHE contracts awarded
41	Guntakal - Bellary - Hospet incl. Tornagallu - Ranjipura Branch Line (138 rkm)	138	CORE	2012-2013	2266800	DEC 2016	74900	2341800		RE under prep.	12	Contract awarded to M/s ISOLUX-BRAPU(JV) on 19.08.15
42	Coimbatore North - Mettupalayam (33 rkm)	33	CORE	2012-2013	260805	OCT 2016	224907	17059	31/03/2015	Det. Est. Sanc.	95	work is in progress.
43	Andal - Sitarampur via Jamunia - Ikra & Sripur with Kajoragram - Sonachara bypass line with 6 collery sidings (57 rkm)	57	CORE	2012-2013	789771	OCT 2016	678692	31616		RE under prep.	23	works are in progress.
44	Kumedpur - Malda - Singhabad (79 rkm) & Pakur - Malda (74 rkm)	153	CORE	2012-2013	2081255	NOV 2016	951173	609970		Det. Est. Sanc.	68	Gr.171 = Foundation 0.51%, Mast Erection = 0.90% & Wiring = 7.77% Gr. 172 = 33 RKM from MLDT(Excl.) - NFK (Excl.) charged as anti theft with 2.2 KV on 31.03.2016
45	Nallepadu - Guntakal incl. Gooty - Pendekallu (426 rkm)	426	CORE	2012-2013	3633208	OCT 2016	3033514	523780		RE under prep.	70	Work in progress
46	Amla - Chhindwara - Kalluma (257 rkm)	257	CORE	2012-2013	2678500	DEC 2016	967600	1710800	31/03/2016	RE under prep.	35	Work is in progress in Amla-Chhindwara section(115 RKM). Progress of work in Chindwada Kalluma GC (142 RKM) in pace with CIVIL work.Tender for Chindwara-Kalluma LOA issued on 11.08.16 to M/s KEC.
47	Manheru - Hissar (74 rkm)	74	CORE	2012-2013	921300	DEC 2016	486000	190000		RE under prep.	55	Work in progress.
48	Sambalpur - Angul (156 rkm)	156	CORE	2012-2013	1986500	OCT 2016	1098236	297164		RE under prep.		Work under execution by CEE/C/BBS under CAO/C/BBS of ECoR. OHE Tender between ANGL-BAMUR (Part-I)(71 TKM) awarded on 26.11.2013. 30 RKM LOP approved. 670 Nos (Main-560 +Anchor-110) foundations casted. 244 Nos. mast erected. Balance work under progress. OHE Tender between BAMUR-SBP (Part-II) (219 TKM) has been awarded on 21.01.2015. PSI Tender schedule under preparation and GS tender upto Bamur has been floated.

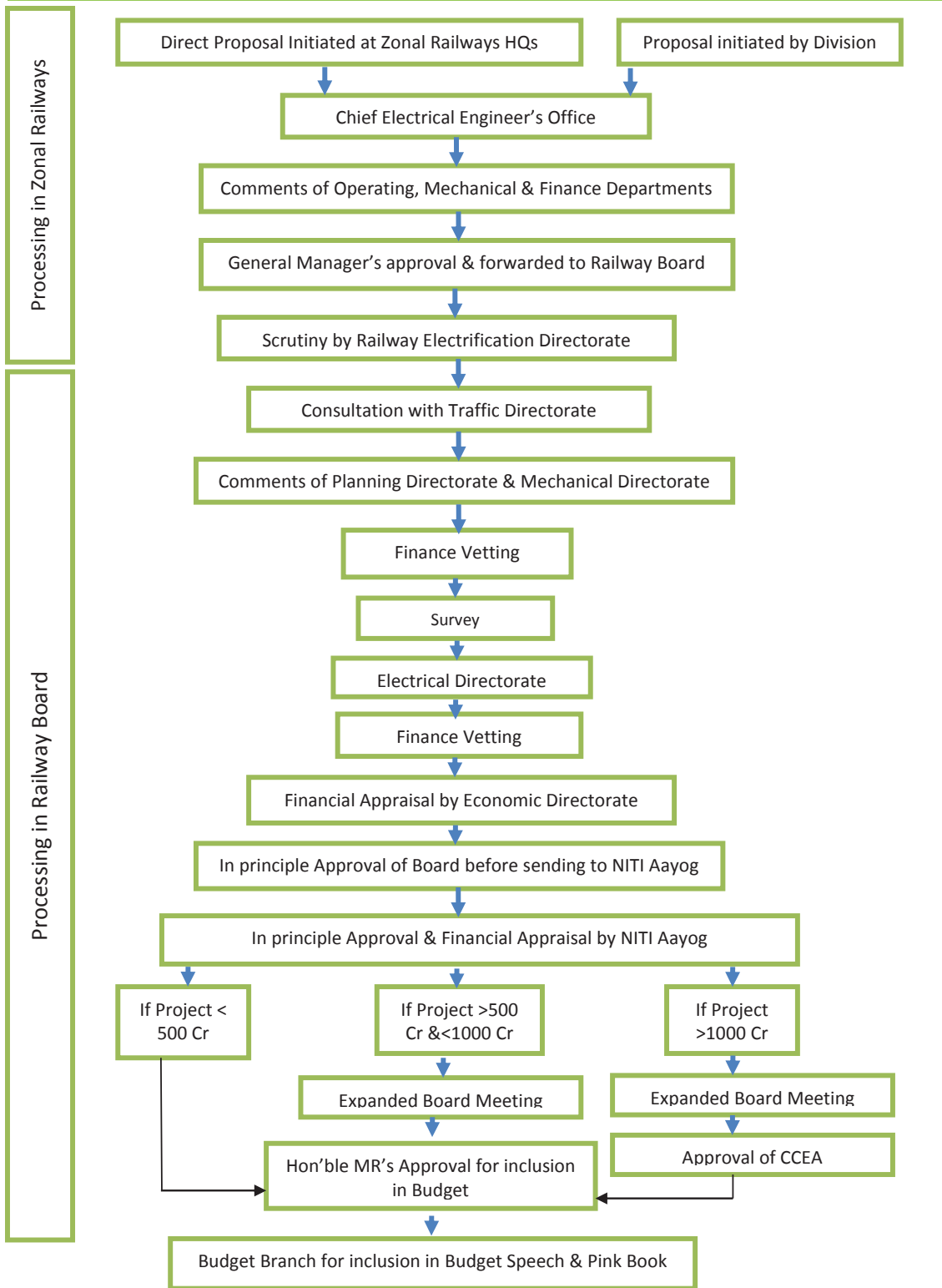
## Report No. 22 of 2017 (Railways)

Appendix I - List of 102 RE Projects as per IRPSM												
S.no	RE Project	RKM	Implementing Agency	Year of Sanction	Last sanctioned cost	Progress for Month recorded in IRPSM	Expenditure upto date	Throughput and 2017-2018	Latest Anticipated TDC	Estimate Status	Physical Progress	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M
49	Singapur Road - Damanjodi (152 km)	152	CORE	2013-2014	1554990	OCT' 2016	385771	796494		RE under prep.	24	works in progress.
50	Kawa-Azimganj-Nalhati & Azimganj-Tidanga/New Farakka Incl. Nalhati & Azimganj Bypass line		CORE	2013-2014	2829194	OCT' 2016	148029	1173515		Det. Est. Sanc.	7	Work in progress
51	Delhi Sara Rohila - Rewari - Palanpur - Ahmedabad, incl. Kalol - Gandhinagar - Khodiyar and Alwar - Bandikui - Jaipur - Phulera (1087 km)	1087	CORE	2013-2014	10675000	OCT' 2016	1778894	5306186		Det. Est. Sanc.	5	Work for Gr. 183 & 187 under progress. For Gr 186 tender under finalization. For Gr 182, 184 & 185 (EPC) RFP under finalization.
52	Jakkal - Dhuri - Ludhiana (123 km)	123	CORE	2013-2014	1495300	DEC' 2016	359000	787500	31/03/2018	Det. Est. Sanc.	10	Contract awarded to M/s: Bright Power Projects(India) Pvt. Ltd Mumbai on 26.09.15. work in progress.
53	Jakkal - Hisar (79 km)	79	CORE	2013-2014	780248	DEC' 2016	66100	114048	31/03/2018	Det. Est. Sanc.	10	Tender awarded to M/s: Bright Vijaywargi [JV] Mumbai on 26.09.15
54	Rajpura - Dhuri - Lehra Mohabat (151 km)	151	CORE	2013-2014	1875146	DEC' 2016	1900	1273146	31/03/2018	Det. Est. Sanc.	10	Tender Awarded to M/s: Bright Vijaywargis [JV] on 10.12.15. work in progress,
55	Chhapra-Bailla-Ghaziapur-Varanasi-Allahabad (330 rkm)	330	CORE	2014-2015	4151500	DEC' 2016	2184900	1853500	17/06/2018	Det. Est. Sanc.	10	Tender Opened, contract awarded to M/s STS-KPTL (JV). LOA issued on 18.06.15 55 RKM has been charged upto Sept'16.
56	Manipur-Tilaya-Bakhtapur (132 km)	132	CORE	2014-2015	1400018	OCT' 2016	337259	768439		Det. Est. Sanc.	24	work is in progress.
57	Jaisal - Jawahar Lal Nehru Port Trust (9 rkm) (33 tkm)	33	CORE	2015-2016		0 OCT' 2016	0	62550		DE under prep.		in process
58	Panvel - Pen - Thal (75 km)	75	CORE	2015-2016		0 OCT' 2016	0	924600		DE under prep.		Estimate in process. work being executed by Central Ry.
59	Rohtak - Bhiwani (48 rkm)	48	CORE	2015-2016	546011	OCT' 2016	0	459311		Det. Est. Sanc.		Contract awarded for OHE works. Works in progress.
60	Vainikli Nagar - Narkataganj - Sugauli - Muzaffarpur incl Sugauli - <sup>2</sup>	240	CORE	2015-2016	3029926	OCT' 2016	0	2864826		Det. Est. Sanc.		Detailed Estimate sanctioned. Tenders invited for OHE works.
61	Buxaul (240 rkm)	40	CORE	2015-2016		0 OCT' 2016	0	240000		DE under prep.		in process
62	Guntakal-Kalluru (40 rkm)	260	CORE	2015-2016	2821750	OCT' 2016	0	1987650		Det. Est. Sanc.		Tender work in progress
63	Indore - Mhow (21 rkm) (33 tkm)	21	CORE	2015-2016		0 OCT' 2016	0	97700		DE under prep.		Tender due on 26.10.2015
64	Una Himachal-Amb Andaura (25 rkm)	25	CORE	2015-2016	206134	OCT' 2016	182	106034		Det. Est. Sanc.		Work in progress
65	Erode-Karur-Truchirappalli & Salem-Karur-Dindigul (300 rkm)	300	CORE	2015-2016	3622291	OCT' 2016	2986	3455089		Det. Est. Sanc.		Detailed estimate approved.
66	Truchirappalli - Nagapattinam - Karalkal Port (153 rkm)	153	CORE	2015-2016	2272600	OCT' 2016	100	2072400		Det. Est. Sanc.		Detailed estimate under preparation.
67	Koderma - Hazaribagh - Barikana - Ranchi (203 rkm)	203	CORE	2015-2016	2276359	OCT' 2016	0	1936259		Det. Est. Sanc.		Survey .
68	Kul - Tilaya (87 rkm)	87	CORE	2015-2016	1006193	OCT' 2016	0	806093		Det. Est. Sanc.		work in progress
69	Bondanga Link Cabin / Bondanga - Barharwa - Sahibganj - Kiul incl <sup>2</sup>	247	CORE	2015-2016	3841466	OCT' 2016	0	3591366		Det. Est. Sanc.		Sanctioned
70	Tinpahar - Rajmahal (247 rkm)	87	CORE	2015-2016	912333	OCT' 2016	5983	795329		Det. Est. Sanc.		work in Progress
71	Hissar - Bhatinda - Suratgarh - Phalodi - Jodhpur - Bhildi incl Phalodi - <sup>2</sup>	1230	CORE	2015-2016		0 OCT' 2016	0	9855000		DE under prep.		Detailed estimate prepared by RE projects and forwarded to CORE/AJD for sanction by GM. Niti Aayog approval pending.
72	Ajmer - Berach - Mavli - Udaipur (294 rkm)	294	CORE	2015-2016	3202825	OCT' 2016	146109	3014125		Det. Est. Sanc.		OHE works contract awarded. Works in progress.
73	Jhansi - Manikpur incl Khairar - Bhimsen (409 rkm)	409	CORE	2015-2016	4412783	OCT' 2016	45374	3950689		Det. Est. Sanc.		Detailed estimate Sanctioned. OHE contract awarded. Works in progress.
74	Zafarabad - Akbarpur - Tanda (101 rkm)	101	CORE	2015-2016	922436	OCT' 2016	64797	622336		Not Required		Contract awarded. works in progress.
75	Leitpur - Udaipura (32 rkm)	32	CORE	2015-2016	477006	OCT' 2016	214	376906		Det. Est. Sanc.		Contract awarded for ohe works. work in progress
76	Paddapalli - Lingampet - Jagtial (83 rkm)	83	CORE	2015-2016	845425	OCT' 2016	0	680325		Det. Est. Sanc.		Work in progress
77	Pagidipalli - Nallapadu (285 rkm)	285	CORE	2015-2016	3742415	OCT' 2016	0	3576315		Det. Est. Sanc.		Work in progress
78	Manmad - Mukhed - Dhone (868 rkm)	868	CORE	2015-2016		0 OCT' 2016	0	8537000		DE under prep.		Det Estimate prepared. Niti Aayog approval pending.
79	Ghaziipur - Aunthar - Manduath (78 rkm)	78	CORE	2015-2016		0 DEC' 2016	0	23200		DE under prep.		DE in process
80	Utricta - Rae Bareilly - Anethi - Janghat (214 rkm)	214	CORE	2015-2016		0 DEC' 2016	0	1665600		DE under prep.		In progress
81	Hospet - Hubli - Vasco da Gama (346 rkm)	346	CORE	2015-2016		0 DEC' 2016	0	4153300		DE under prep.		Est under preparation
82	Ahmedabad-Rajkot (233 rkm)	233	CORE	2015-2016		0 OCT' 2016	0	2898300		DE under prep.		in process
83	Meksaana-Virangam-Samakhyalil (292 rkm)	292	CORE	2015-2016		0 OCT' 2016	0	2809300		DE under prep.		in process
84	Rattlam - Nimach - Chanderia - Kota (348 rkm)	348	CORE	2015-2016		0 OCT' 2016	0	2867400		DE under prep.		in process

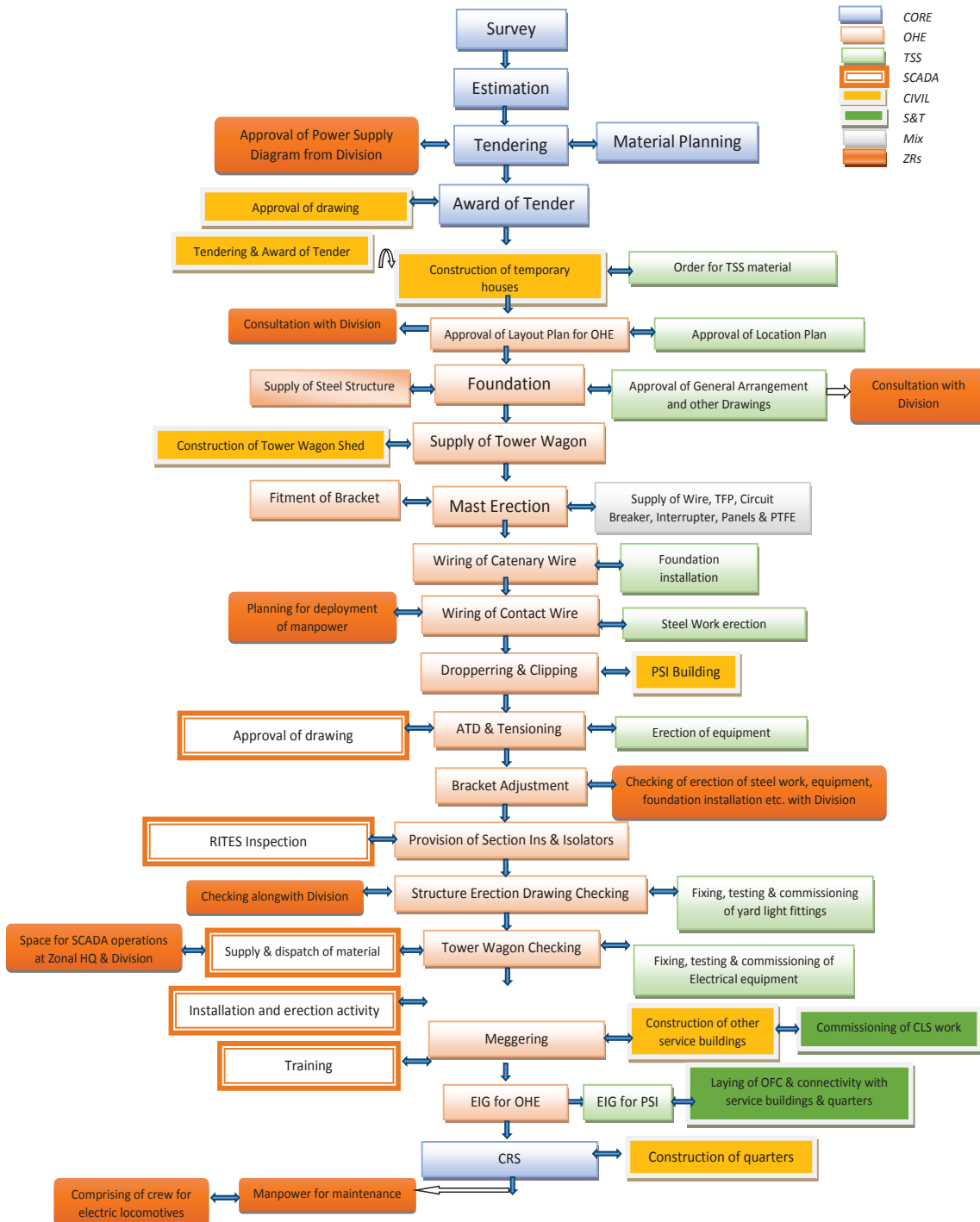
Appendix I - List of 102 RE Projects as per IRPSM												
S.No	RE Project	RKM	Implementing Agency	Year of Sanction	Last sanctioned cost	Progress for Month recorded in IRPSM	Expenditure upto date	Thru/forward 2018	Latest Anticipated TDC	Estimate Status	Physical Progress	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M
85	Beas - Gowindwal Sahib - Taran Taran - Amritsar (72 km)	72	CORE	2016-2017	0	OCT' 2016	0	452000		DE under prep.		Under Progress
86	Chalisgaon-Dhule (56 km)	56	CORE	2016-2017	0	OCT' 2016	0	537900		DE under prep.		Work In progress
87	Mathura - Kasganj (338 km)	338	CORE	2016-2017	0	OCT' 2016	0	3058900		DE under prep.		In process
88	Gorakhpur Cantt - Kaptanganj - Valmikinagar (96 km)	96	CORE	2016-2017	1146708	OCT' 2016	0	1146708		Det. Est. Sanc.	0	Tender work in Progress
89	Aunrthar - Jaunpur (60 km)	60	CORE	2016-2017	0	DEC' 2016	0	423200		DE under prep.		Project transferred CORE
90	Pen-Hola (40 km)	40	CORE	2016-2017	1284000	OCT' 2016	0	1283900		Det. Est. Sanc.		Detailed Estimate sanctioned by Competent Authority
91	Chunar-Chopra (100 km)	100	CORE	2016-2017	0	OCT' 2016	0	1293584		DE under prep.		Approval from NITI Ayog awaited
92	Jasai-Uran (10 km)	10	CORE	2016-2017	0	DEC' 2016	0	192049		DE under prep.		Not pertain to RVNLR
93	Mansoi - Saharsa - Dauram Madhepura - Purnea - Katihar (172 km)	172	CORE	2016-2017	0	OCT' 2016	0	2271400		DE under prep.	0	Detailed Estimate under preparation
94	Ranchi-Lohardaga - Tori (116 km)	116	CORE	2016-2017	0	OCT' 2016	0	1026588		DE und. vetting		Detailed Estimate prepared. Under finance vetting
95	Pune-Miraj-Kolhapur (326 km)	326	CORE	2016-2017	0	DEC' 2016	0	6150056		DE under prep.		Project transferred to PGCL
96	Noli-Tapri (143 km)	143	CORE	2016-2017	1592480	OCT' 2016	0	1592380		Det. Est. Sanc.		Tenders for OHE/TSS works invited.
97	Gondia-Nainpur-Jabalpur (229 km)	229	CORE	2016-2017	0	OCT' 2016	0	1942800		DE under prep.		Detailed Estimate under preparation
98	Vijapur-Maksi (188 km)	188	CORE	2016-2017	0	OCT' 2016	0	2824800		DE under prep.		Executive agency changed to RITES
99	Chhindwara-Nainpur-Mendlafor (183 km)	183	CORE	2016-2017	0	DEC' 2016	0	907000		DE under prep.		Transferred to PGCL
100	Jaipur - Sawai Madhopur - Ringas (188 km)	188	CORE	2016-2017	0	DEC' 2016	0	1637200		DE under prep.		Project transferred to RITES
101	Miraj-Londa (189 km)	189	CORE	2016-2017	0	DEC' 2016	0	2081400		DE under prep.		Project transferred to PGCL
102	Samakhiali - Gandhidham - Kandla Port - Mundra Port (63 km)	63	CORE	2016-2017	0	OCT' 2016	0	755900		DE under prep.		NIT Ayog approval pending

Reference to the para: 2.1.4

**Appendix II - Process of sanction of Railway Electrification Projects**



Appendix III - Sequencing of Critical Activities Involved in Railway Electrification Projects



Appendix IV - List of missing links identified by Indian Railways					
S. no.	Section	RKM	Approx. Cost (₹ in crore)	ROR (%)	Remarks
1.	Miraj-Khurdwadi-Latur	377	339.30	20.21	Miraj-Kurudwadi is a missing link between the section undergoing electrification. Complete section will provide network approach on electric traction as Latur-Parbhani section SCR also indentified for electrification.
2.	Wani-Pimpalkhutti	66	59.40	15.28	Wani-Pimpalkhutti of CR & Pimpalkhutti-Mudkhed section of SCR are missing link between electrified & undergoing electrification territory.
3.	Samastipur-Khagaria	86	79.50	36.42	Missing link between two electrified section i.e. Hajipur-Barauni-Khagaria-Mansi and Muzaffarpur-Samastripur-Bachhwara sections.
4.	Shikohabad-Farrukhabad	106	95.40	0.64	Missing link between electrified Tundla-Shikohabad-Kanpur & Mathura-Farrukhabad-Kalyanpur saction for electrification of the section will provide an alternate route to Kanpur-Shikohabad-Tundla. it will also help in deconsting of Kanpur-Tundla section as few freight trains can be diverted through the proposed route.
5.	Akbarpur-Faizabad-Barabanki incl. Faizabad-Sultanpur	218	196.20	50.73	Missing link between electrified Lucknow-Barabanki-Basti section & Zafrabad-Akbarpur-Tanda undergoing for electrification.
6.	Amritsar-Batala-Bharaoli	104	93.60	25.97	Missing link between electrified Jalandhar-Mukerian-Bharoli (Pathankot). it will connect Jammu Tawi to Amritsar on electric traction seamlessly.
7.	Bathinda-Kotakapur-Firozpur City-Jalandhar City incl. Lohiankhas-Nakodar-Philaur and Nakodar-Jallandhar	301	270.90	21.02	Missing link between Ludhiana-Philaur-Jalandhar electrified section & Rohtak-Bhatinda-Lehra Muhabbat section undergoing for electrification.
8.	Phaphamau-Pratapgarh	46	41.40	22.06	Missing link between Varanasi-Phaphamau-Unchahar electrified section, & Utratia-Raebareli-Pratapgarh-Janghai section undergoin for electrification.
9.	Rewari-Sadulpur	141	127.08	18.50	Rewari-Sadulpur-Ratangarh-Bikaner is a
10.	Sadulpur-Ratangarh-Bianer and Ratangarh-Dengana	389	350.66	15.93	missing link between Delhi Sarai Rohilla Rewari-Ahmedabad section under electrification & Hisar-Bhatinda-Bikaner-Bhildi section included in budget 2015-16 for electrification. Ratangarh-Degana is also a link for Merta-Phulera which is also proposed for electrification.



Appendix IV - List of missing links identified by Indian Railways					
S. no.	Section	RKM	Approx. Cost (₹ in crore)	ROR (%)	Remarks
11.	Bikaner-Merta-Jodhpur and Merta-Phulera	428	385.53	32.84	Bikaner & Jodhpur ends of Bikaner-Merta-Jodhpur falls on Hisar- Bhatinda-Bikaner-Jodhpur-Bhildi section included.
12.	Pimpalkuti-Mudkhed	183	165.00	14.32	Wani-Pimpalhutti of CR & Pimpalkhutti-Mudkhed section of SCR is missing link between electrified & undergoing electrification territory
13.	Parbhani-Parli Vajjnath-Vikarabad	332	298.80	15.89	Missing link between Wadi-Vikarabad-Secunderabad electrified section, & Manmad-Parbhani-Mudkhed section included in Budget 2015-16 for electrification.
14.	Thanjavur-Villupuram via Mayiladuthurai	229	206.10	18.76	Missing link between Chennai-Villupuram-Vriddhachalam electrified section & Tiruchirappalli-Thanjavur-Karaikkal Port, undergoing for electrification. It will also provide port connectivity to Cuddalore port.
15.	Dindigul-Pallakkad	179	161.10	0	Missing link between two electrified sections i.e. Kanniyakumari-Dingdigul-Chennai & Shoranur- Pallakkad- Chennai. Electrification of the section will provide an alternate route to Chennai-Salem-Shoranur via Chennai-Tiruchchirappalli-Dindigul-Pallakkad.
16.	Mysore-Hasan-Mangalore incl. Hasan-Arsikere	349	314.10	16.19	It will connect Bangalore to Mangalore seamlessly on electric tractions as Bangalore to Mysore is going to be completed shortly.
17.	Bangalore-Tumkur-Hubli incl Birur-Talguppa	623	560.70	21.30	It will connect Bangalore to Vasco-da-gama on electric traction seamlessly. As Guntakal-Bellary-Hubli-Hospet-Vasco-Dagama is under electrification.
18.	Gadag-Hotgi	300	270.00	15.03	It is a missing link between two corridors under electrification i.e. Guntakal-Bellary-Hubli-Hospet-Casco-Da-gama & Pune-Hotgi-Wadi-Guntakal.
19.	Chikjajur-Bellary	184	165.60	19.14	Chikjajur-Bellary lies between Guntakal-Bellary-Huble-Casco-Da Gama under electrification and Bangalore-Tumkur-Hubli proposed for electrification.
20.	Ratlam-Fatehabad-Khandwa	257	231.30	11.77	Missing link between two electrified sections i.e. Mumbai-Ratlam-Delhi and Mumbai-Khandwa-Delhi. Presently this section is undergoing to gauge conversion. This will provide an alternate route to Rarlam-Udhna-Mumbai. it will be alternative route for Mumbai-Delhi via Khandwa-Indore-Maksi-Viajipur

Reference to the para: 5.3