

**SCHEDULE-I- AC Transmission Line / ICT / Static Var Compensator / Series Compensator/HVDC (Back to Back Stations and Bi-Pole Links)/ Line Reactors/ Bus Reactors Outage Details for the Year 2021-2022 \_ April-2021- March-2022**

Element Name	Outage		Restoration		Duration of Outage Attributable to				Reason of Outage	Availability (%)
	Date Time	Time	Date Time	Time	Inter-State Transmission Licensee	Others	System Constraint/Natural Calamity/ Militancy	Deemed Available		
					Hrs:Min	Hrs:Min	Hrs:Min	Hrs:Min		
<b>Apr-21</b>										
400Kv PIRANA-PIRANA(PG) I	01/04/2021	10:40	01/04/2021	12:27	0	01:47	0	0	ABT meter replacement by TPL	100%
400Kv PIRANA-PIRANA(PG) II	01/04/2021	13:13	01/04/2021	14:58	0	01:45	0	0	ABT meter replacement by TPL	100%
400KV SUGEN - PIRANA II	02/04/2021	10:57	02/04/2021	12:06	0	01:09	0	0	ABT meter replacement by TPL	100%
400Kv SUGEN-JHANOR	04/04/2021	10:18	04/04/2021	11:10:00	0	00:52	0	0	400KV sugen-jhanor line, sugen end breaker opened on DTT as Jahnor end main breaker open for maintenance job, line remain charged from Jhanor end.	100%
400Kv SUGEN-JHANOR	04/04/2021	10:15	04/04/2021	19:18:00	0	09:03	0	0	NTPC end main breaker overhauling & testing job.	100%
400Kv SUGEN-JHANOR	04/04/2021	10:44	04/04/2021	22:02:00	0	11:18	0	0	NTPC end main breaker overhauling & testing job.	100%
400Kv SUGEN-VAPI	04/04/2021	08:23	04/04/2021	17:47:00	0	09:24	0	0	NTPC end main breaker overhauling & testing job.	100%
400Kv PIRANA-PIRANA(PG) I	11/04/2021	10:51	11/04/2021	14:47	0	03:56	0	0	89T R-ph pento iso connector pad bolt red hot attending work by TPL.	100%
<b>May-21</b>										
400Kv SUGEN-VAPI	04/05/2021	08:52	04/05/2021	16:51	0	07:59	0	0	Sugen-vapi line outage for offline washing job by sugen.	100%
400KV SUGEN - PIRANA II	05/05/2021	08:02	05/05/2021	18:55	0	10:53	0	0	Hot line washing line outage by sugen end	100%
400Kv SUGEN-JHANOR	13/05/2021	13:23	13/05/2021	21:19	0	07:56	0	0	Line tripped on dtt received from ntpc gandhar end as ntpc end bus 2 tripped with line breaker. Line remained charged with tie breaker from ntpc end, however, due to dtt signal as sent by ntpc, line breaker at sugen end opened	100%
400KV SUGEN - PIRANA II	16/05/2021	21:03	17/05/2021	07:56	0	0	0	10:53	Line made off by sldc for high voltage control	100%
400KV SUGEN - PIRANA II	18/05/2021	02:10	20/05/2021	10:20	0	0	0	56:10	Line made off by sldc for high voltage control	100%
400KV SUGEN - PIRANA II	22/05/2021	03:36	22/05/2021	07:56	0	0	0	04:20	Line made off by sldc for high voltage control	100%
400KV SUGEN - PIRANA II	23/05/2021	23:30	24/05/2021	10:46	0	0	0	11:16	Line made off by sldc for high voltage control	100%
400KV SUGEN - PIRANA II	26/05/2021	02:07	26/05/2021	08:31	0	0	0	06:24	Line made off by sldc for high voltage control	100%
400KV SUGEN - PIRANA II	27/05/2021	03:11	27/05/2021	09:08	0	0	0	05:57	Line made off by sldc for high voltage control	100%
400KV SUGEN - PIRANA II	29/05/2021	01:08	29/05/2021	07:08	0	0	0	06:00	Line made off by sldc for high voltage control	100%
<b>Jun-21</b>										
400Kv SUGEN-JHANOR	01/06/2021	09:29	02/06/2021	18:10	0	32:42	0	0	Sugen-Gandhar line taken out for Gandhar end job on 01.06.2021.	100%
400KV SUGEN - PIRANA II	18/Jun/21	04:25	18/Jun/21	08:35	0	0	0	04:10	Line made off by sldc for high voltage control	100%
400KV SUGEN - PIRANA II	19/Jun/21	20:57	21/Jun/21	09:44	0	0	0	36:47	Line made off by sldc for high voltage control	100%
400KV SUGEN - PIRANA II	21/Jun/21	22:39	22/Jun/21	09:26	0	0	0	10:47	Line made off by sldc for high voltage control	100%

Element Name	Outage		Restoration		Duration of Outage Attributable to				Reason of Outage	Availability (%)
	Date Time	Time	Date Time	Time	Inter-State Transmission Licensee	Others	System Constraint/Natural Calamity/ Militancy	Deemed Available		
					Hrs:Min	Hrs:Min	Hrs:Min	Hrs:Min		
400kV SUGEN - PIRANA II	28/Jun/21	01:20	28/Jun/21	09:28	0	0	0	08:08	Line made off by sldc for high voltage control	100%
<b>Jul-21</b>										
400kV PIRANA-PIRANA(PG) II	04/Jul/21	10:03	04/Jul/21	13:48	0	03:45	0	0	Hotspot attending work at TPL pirana.	100%
400kV SUGEN - PIRANA II	12/Jul/21	02:03	12/Jul/21	08:24	0	0	0	06:21	Line made off by sldc for high voltage control	100%
400kV SUGEN - PIRANA II	20/Jul/21	03:19	20/Jul/21	06:27	0	0	0	03:08	Line made off by sldc for high voltage control	100%
400kV SUGEN - PIRANA I	20/Jul/21	11:08	20/Jul/21	17:10	0	06:02	0	0	Hotspot attending work at TPL pirana.	100%
400kV SUGEN - PIRANA II	21/Jul/21	02:29	21/Jul/21	06:47	0	0	0	04:18	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	26/Jul/21	00:23	26/Jul/21	09:09	0	0	0	08:46	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	27/Jul/21	00:17	27/Jul/21	07:22	0	0	0	07:05	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	28/Jul/21	00:01	28/Jul/21	07:33	0	0	0	07:32	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	31/Jul/21	01:47	31/Jul/21	07:46	0	0	0	05:59	Line made off by SLDC for high voltage control	100%
<b>Aug-21</b>										
400kV SUGEN - PIRANA II	01/Aug/21	22:00	02/Aug/21	08:00	0	0	0	10:00	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	04/Aug/21	00:03	04/Aug/21	07:37	0	0	0	07:34	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	05/Aug/21	00:20	05/Aug/21	07:23	0	0	0	07:03	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	22/Aug/21	16:16	23/Aug/21	07:33	0	0	0	15:17	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	30/Aug/21	22:03	31/Aug/21	07:31	0	0	0	09:27	Line made off by SLDC for high voltage control	100%
400kV SUGEN - PIRANA II	31/Aug/21	22:56	01/Sep/21	09:01	0	0	0	01:04	Line made off by SLDC for high voltage control	100%
<b>Sep-21</b>										
400kV SUGEN - PIRANA II	01/Sep/21	00:00	01/Sep/21	09:01	0	0	0	09:01	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	01/Sep/21	21:47	02/Sep/21	08:11	0	0	0	10:24	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	04/Sep/21	00:07	04/Sep/21	06:43	0	0	0	06:36	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	09/Sep/21	20:37	10/Sep/21	07:53	0	0	0	11:16	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	10/Sep/21	23:40	11/Sep/21	07:47	0	0	0	08:07	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	12/Sep/21	01:06	13/Sep/21	07:44	0	0	0	06:38	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	13/Sep/21	20:28	14/Sep/21	08:00	0	0	0	11:32	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	14/Sep/21	20:36	16/Sep/21	08:07	0	0	0	11:31	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	18/Sep/21	02:59	20/Sep/21	09:49	0	0	0	06:50	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	20/Sep/21	21:56	21/Sep/21	10:24	0	0	0	12:28	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	21/Sep/21	22:21	22/Sep/21	10:15	0	0	0	11:54	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	29/Sep/21	00:59	29/Sep/21	15:29	0	0	0	14:30	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	30/Sep/21	00:42	30/Sep/21	08:30	0	0	0	07:48	Line taken out for voltage control.by ALDC/SLDC	100%
<b>Oct-21</b>										
NIL										

Element Name	Outage		Restoration		Duration of Outage Attributable to				Reason of Outage	Availability (%)
	Date Time	Time	Date Time	Time	Inter-State Transmission Licensee	Others	System Constraint/Natural Calamity/ Militancy	Deemed Available		
					Hrs:Min	Hrs:Min	Hrs:Min	Hrs:Min		
<b>Nov-21</b>										
400kV SUGEN - PIRANA II	01/Nov/21	00:28	01/Nov/21	08:55	0	0	0	08:27	Line taken out for voltage control.by ALDC	100%
400kV PIRANA-PIRANA(PG) I	01/Nov/21	11:29	01/Nov/21	19:32	0	08:03	0	0	Hotspot work by TPL	100%
400kV SUGEN - PIRANA II	04/Nov/21	08:48	08/Nov/21	08:15	0	0	0	95:27	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA II	08/Nov/21	20:02	09/Nov/21	08:41	0	0	0	12:39	Line taken out for voltage control.by ALDC	100%
400kV SUGEN - PIRANA I	09/Nov/21	11:36	16/Nov/21	16:39	0	173:03	0	0	GIS bus outage for maintenance job.	100%
400kV SUGEN - PIRANA I	09/Nov/21	11:41	16/Nov/21	16:12	0	172:31	0	0	GIS bus outage for maintenance job.	100%
400kV SUGEN-JHANOR	11/Nov/21	12:53	11/Nov/21	16:21	0	03:28	0	0	Line tripped on distance protection-PGCIL segment Sugen end data: MAIN-01: 47.9 KM, 73.7%, B-PHASE, 4.7 KA MAIN-02: 48.1 KM,74.0 %, B-PHASE ,4.7 KA	100%
400kV SUGEN - PIRANA II	18/Nov/21	00:23	19/Nov/21	08:13	0	0	0	31:50	Line taken out for voltage control.by ALDC	100%
400kV SUGEN-JHANOR	18/Nov/21	00:27	18/Nov/21	01:39	0	01:12	0	0	Sugen-Jhan or line A/R operated, Jhan or end breaker got opened.	100%
400kV SUGEN-JHANOR	22/Nov/21	08:55	22/Nov/21	18:06	0	09:11	0	0	For isolator & line bay equipment PM job by Sugem.	100%
400kV SUGEN-VAPI	23/Nov/21	09:03	23/Nov/21	18:41	0	09:38	0	0	For isolator & line bay equipment PM job by Sugem.	100%
<b>Dec-21</b>										
400kV SUGEN - PIRANA II	01/12/2021	00:15	01/12/2021	07:40	0	0	0	07:25	Line taken out for voltage control.by ALDC/SLDC	100%
400kV SUGEN - PIRANA II	01/12/2021	20:16	02-12-2021	08:56	0	0	0	12:40	Line taken out for voltage control.by ALDC/SLDC	100%
400kV SUGEN - PIRANA II	03/12/2021	21:52	04/12/2021	10:36	0	0	0	12:44	Line taken out for voltage control.by ALDC/SLDC	100%
400kV SUGEN - PIRANA II	04/12/2021	23:55	05/12/2021	08:25	0	0	0	08:30	Line taken out for voltage control.by ALDC/SLDC	100%
400kV SUGEN - PIRANA II	05/12/2021	21:46	06/12/2021	08:12	0	0	0	10:26	Line taken out for voltage control.by ALDC/SLDC	100%
400kV PIRANA-PIRANA(PG) I	10/12/2021	09:00	10/12/2021	17:27	0	08:27	0	0	M&R work and CT- PT tan delta by TPL	100%
400kV PIRANA-PIRANA(PG) I	12/12/2021	08:55	12/12/2021	17:34	0	08:39	0	0	M&R work and CT-PT tan delta by TPL	100%
400kV SUGEN - PIRANA II	13/12/2021	00:53	13/12/2021	08:40	0	0	0	07:47	Line taken out for voltage control.by ALDC/SLDC	100%
400kV SUGEN - PIRANA II	15/12/2021	01:43	15/12/2021	07:34	0	0	0	05:50	Line taken out for voltage control.by ALDC/SLDC	100%
400kV SUGEN - PIRANA II	19/12/2021	02:31	19/12/2021	08:21	0	0	0	05:50	Line taken out for voltage control.by ALDC/SLDC	100%
400kV SUGEN - PIRANA II	19/12/2021	22:16	20/12/2021	07:58	0	0	0	09:42	Line taken out for voltage control.by ALDC/SLDC	100%
400kV SUGEN - PIRANA I	20/12/2021	11:38	20/12/2021	22:56	0	11:18	0	0	Oil leakage attend of rea -1, ct-pt tan delta work & DCRM / line M&R by TPL	100%
400kV SUGEN - PIRANA I	21/12/2021	00:23	21-12-2021	03:08	0	02:45	0	0	Line reactor Buchholz alarm checking by TPL	100%
400kV SUGEN - PIRANA I	21/12/2021	08:31	21-12-2021	19:32	0	11:01	0	0	Oil leakage attend of rea -1, CT-PT ten delta work & DCRM by TPL	100%
400kV SUGEN - PIRANA II	22/12/2021	08:27	22/12/2021	18:41	0	10:14	0	0	CT-PT ten delta work & DCRM, reactor painting / line M&R by TPL	100%
400kV SUGEN - PIRANA II	23/12/2021	09:22	23/12/2021	18:16	0	08:53	0	0	CT-PT ten delta work & DCRM, reactor painting / line M&R by TPL	100%
400kV SUGEN - PIRANA II	27/12/2021	23:11	28/12/2021	07:02	0	0	0	07:51	Line taken out for voltage control.by ALDC/SLDC	100%

Element Name	Outage		Restoration		Duration of Outage Attributable to				Reason of Outage	Availability (%)
	Date Time	Time	Date Time	Time	Inter-State Transmission Licensee	Others	System Constraint/Natural Calamity/ Militancy	Deemed Available		
					Hrs:Min	Hrs:Min	Hrs:Min	Hrs:Min		
<b>Jan-22</b>										
400Kv SUGEN-VAPI	01/01/2022	15:43	02/01/2022	01:14	0	09:31	0	0	Line tripped due to la failure at Vapi ss end in PGCIL section.	100%
400KV SUGEN-PIRANA	09/01/2022	23:33	10/01/2022	07:55	0	0	0	08:22	Line taken out for voltage control.by ALDC/SLDC	100%
400KV SUGEN-PIRANA	11/01/2022	00:38	11/01/2022	08:31	0	0	0	07:53	Line taken out for voltage control.by ALDC/SLDC	100%
400KV SUGEN-PIRANA	12/01/2022	00:56	12/01/2022	07:34	0	0	0	06:38	Line taken out for voltage control.by ALDC/SLDC	100%
400KV SUGEN-PIRANA	12/01/2022	22:19	13/01/2022	06:40	0	0	0	08:21	Line taken out for voltage control.by ALDC/SLDC	100%
400KV SUGEN-PIRANA	13/01/2022	06:40	16/01/2022	15:57	0	0	0	09:17	Diversion of line due to construction of Vadodara Mumbai express way by NHAI	100%
400KV UNOSUGEN-PIRANA	13/01/2022	06:40	16/01/2022	16:02	0	0	0	09:22	Diversion of line due to construction of Vadodara Mumbai express way by NHAI	100%
400KV SUGEN-PIRANA	16/01/2022	22:29	17/01/2022	07:37	0	0	0	09:08	Line taken out for voltage control.by ALDC/SLDC	100%
400Kv PIRANA-PIRANA(PG) I	22/01/2022	07:55	22/01/2022	13:24	0	05:29	0	0	Bus panto Iso alignment work by TPL	100%
400Kv PIRANA-PIRANA(PG) I	22/01/2022	14:28	22/01/2022	19:03	0	04:35	0	0	Bus panto Iso alignment work by TPL	100%
400Kv SUGEN-JHANOR	18/01/2022	08:07	27/01/2022	15:41	0	07:34	0	0	Line taken out for far end job (Tower shifting job by PGCIL)	100%
400Kv PIRANA-PIRANA(PG) II	23/01/2022	07:43	23/01/2022	12:38	0	04:55	0	0	Bus panto iso alignment work by TPL	100%
400KV SUGEN-PIRANA	23/01/2022	12:48	23/01/2022	18:46	0	05:58	0	0	Bus panto iso alignment work by TPL	100%
400Kv PIRANA-PIRANA(PG) I	24/01/2022	08:55	24/01/2022	15:54	0	06:59	0	0	Bus panto iso alignment work by TPL	100%
400KV UNOSUGEN-PIRANA	24/01/2022	16:27	24/01/2022	21:12	0	04:45	0	0	Bus panto iso alignment work by TPL	100%
400Kv PIRANA-PIRANA(PG) I	25/01/2022	07:53	25/01/2022	15:03	0	07:10	0	0	Bus panto iso alignment work by TPL	100%
400KV SUGEN-PIRANA	25/01/2022	15:15	25/01/2022	22:17	0	07:02	0	0	Bus panto iso alignment work by TPL	100%
400KV SUGEN-PIRANA	26/01/2022	00:21	26/01/2022	08:15	0	0	0	07:54	Line taken out for voltage control.by ALDC/SLDC	100%
400Kv SUGEN-VAPI	28/01/2022	15:59	28/01/2022	20:31	0	04:32	0	0	Line was taken out for Vapi ss end la R-phase works by PGCIL.	100%
<b>Feb-22</b>										
400Kv SUGEN-JHANOR	01/02/2022	10:44	04/02/2022	19:55	0	81:11	0	0	Line was taken out for NTPC Gandhar ss end works	100%
400KV SUGEN-PIRANA	06/02/2022	23:55	07/02/2022	07:20	0	0	0	07:25	Line taken out for voltage control.by ALDC/SLDC	100%
400Kv SUGEN-JHANOR	16/02/2022	16:18	16/02/2022	17:22	0	01:04	0	0	NTPC Gandhar end breaker opened during reactor job	100%
400Kv SUGEN-JHANOR	17/02/2022	09:56	18/02/2022	19:48	0	33:52	0	0	Line was taken out for NTPC Gandhar ss end works.	100%

Element Name	Outage		Restoration		Duration of Outage Attributable to				Reason of Outage	Availability (%)
	Date Time	Time	Date Time	Time	Inter-State Transmission Licensee	Others	System Constraint/Natural Calamity/ Militancy	Deemed Available		
					Hrs:Min	Hrs:Min	Hrs:Min	Hrs:Min		
<b>Mar-22</b>										
400KV UNOSUGEN-PIRANA	07/03/2022	08:37	07/Mar/22	18:22	0	09:45	0	0	Line taken out by TPL for pantograph isolator alignment job.	100%
400KV SUGEN-PIRANA	18/03/2022	08:15	19/Mar/22	08:53	0	00:00	0	24:38	Line taken out for voltage control.by ALDC/SLDC	100%
400Kv SUGEN-JHANOR	23/03/2022	15:48	23/03/2022	18:17	0	02:29	0	0	Breaker opened at Sugen end at 15:48 hrs on channel 2 DTT received from NTPC Jhanor, line remains charged from NTPC end. As per NTPC spurious command triggered during cable shifting work at NTPC Jhanor, Sugen-Gandhar line NTPC end main breaker remain closed and tie breaker upgradation job was in progress. After NTPC end job complete, at 18:17 hrs line synchronised at Sugen end.	100%
400Kv SUGEN-VAPI	31/03/2022	07:50	31/03/2022	19:05	0	11:15	0	0	Line outage availed by RTMC Vadodara for 400 kV Sugen Vapi line pre-summer preventive maintenance activity at Vapi end under grid code WR/3944. Opportunity based outage code WR/3968 taken by Sugen for insulator cloth cleaning job by TPL-D. Sugen availed opportunity code cancellation code received WR/4033, and RTMC Vadodara outage cancellation code received was WR/4037.	100%

**SCHEDULE-II- Elements where restoration time has exceeded the standards specified in Regulation 5(b)**

<b>Element Name</b>	<b>Restoration time as specified in Regulation 5 (b) (in days)</b>	<b>Actual restoration time (in days)</b>
NIL	NIL	NIL

**SCHEDULE-III- Details of compesation paid by the inter-state Transmission Licensee**

Element Name	Violation of Regulation 5(a)		Violation of Regulation 5(b)		Compensation paid (in Rs.)
	% Availability prescribed	Actual % Availability	Restoration time prescribed (in days)	Actual restoration time (in days)	
			NIL		
<b>Total</b>					

**SCHEDULE-V Data to be compiled by the Inter-State Transmission Licensees**

Sl. No.	Types of Failures	Restoration Time (Days)		
<b>A. Elements of the Transmission Line for Single Circuit (S/C), Double Circuit (D/C) and Multi-Circuit (M/C) towers for each kV class seperately</b>				
1	<b>Insulator failure</b>	<b>Terrain Type</b>		
		<b>Plain</b>	<b>River Bed</b>	<b>Hilly</b>
	(i) Insulator failure in Single Phase	NIL	NA	NA
	(ii) Insulator failure in two Phases	NIL	NA	NA
	(iii) Insulator failure in three Phases	NIL	NA	NA
2	Tower after collapse by Emergency Restoration System (ERS) for S/C, D/C and M/C separately	NIL	NA	NA
3	Tower after collapse without Emergency Restoration System (ERS) for S/C, D/C and M/C separately	NIL	NA	NA
4	<b>Tower damage (not collapse)</b>			
	One arm damage	NIL	NA	NA
	Two arms damage	NIL	NA	NA
5	<b>Snapping of phase conductor</b>			
	Conductor snapping in Single phase	NIL	NA	NA
	Conductor snapping in two phase	NIL	NA	NA
	Conductor Snapping in three phases	NIL	NA	NA
6	<b>Failure of earth wire</b>	NIL	NA	NA
7	<b>Insulator failure with conductor snapping</b>	NIL	NA	NA
8	<b>Any other combination of failures</b>	NIL	NA	NA
<b>B. Elements of the sub-station for each kV class separately</b>				
1	<b>Failure of Inter Connecting Transformers (ICTs)</b>			
	Restoration of the failed ICT			
	<b>Other major failures in ICTs</b>	<b>Single Phase unit</b>	<b>Three Phase unit</b>	
	(i) Replacement of faulty bushings	NA	NA	NA
	(ii) Replacement of failed /blasted bushings	NA	NA	NA
	(iii) Replacement of faulty tap chargers	NA	NA	NA
2	<b>Failure of Reactors</b>			
	Restoration of the failed reactor	NA	NA	NA