

TOT3 SUMMER SEASON 2005 OPERATING PROCEDURE

Effective Date: 6/1/05

DEFINITION

TOT3, WECC Transfer Path # 36, is a group of six transmission lines representing the total capability of all transmission between southeast Wyoming and northeast Colorado. Western Area Power Administration's Rocky Mountain Region, hereby called WACM, is the TOT3 Path Operator. The transmission lines that form TOT3 are listed below:

Laramie River*-Ault 345 kV
Laramie River*-Story 345 kV
Archer*-Ault 230 kV
Sidney*-N. Yuma 230 kV
Cheyenne*-Rockport 115 kV
Sidney*-Sterling 115 kV

*- denotes metered end of line

TOT3 transmission path providers and their percent allocation of TOT3 are as follows:

Missouri Basin Power Project (MBPP)	70.50 % of TOT3 TTC
Public Service Company of Colorado (Xcel/PSCO)	3.74 % of TOT3 TTC
Tri-State Generation & Transmission (TSGT)	0.83 % of TOT3 TTC
Western Area Power Administration (WAPA)	24.93 % of TOT3 TTC

Missouri Basin Power Project (MBPP) is a group of companies consisting of:

Basin Electric Power Cooperative (BEPC)	61.7 % of MBPP TTC
Tri-State Generation & Transmission (TSGT)	36.2 % of MBPP TTC
Wyoming Municipal Power Agency (WMPA)	2.1 % of MBPP TCC

TOT3 PATH RATING

The accepted TOT3 path rating is 1605MW. TOT3 is a thermally limited path. If an overload condition on TOT3 occurs, WACM, as Path Operator, has 30 minutes to adjust the system to reduce power flow within the real-time Operating Transfer Capability (OTC).

OPERATING TRANSFER CAPABILITY - OTC

WACM dispatchers have an EMS display that calculates real-time Total Transfer Capability (TTC). Under changing system conditions, this tool interpolates new values for TTC and displays them real-time so that current system conditions are always available to dispatchers. For summer 2005 season the TTC limits range from a high of 1594MW to a low of 770MW.

GENERAL SCHEDULING PROCEDURES

TOT3 transmission path providers shall schedule their TOT3 allocation according to established TOT3 ownership percentages. WACM uses SCADA algorithms to determine unscheduled flow on TOT3 as well as each transmission path provider's TOT3 scheduling limit.

SANCTION – REDISPATCH COSTS

Monetary costs associated with any sanction or redispatch penalties will be passed on to the entity or entities responsible for incurring such penalties.

ABNORMAL LOADING OR SCHEDULING CONDITIONS

A. Over schedule of one or more transmission owners (TOT is not over)

- If an entity's schedule exceeds its scheduling limit and the total path is not overscheduled nor overloaded, the path operator will contact the entity or entities responsible for the over schedule and ask them to bring their schedule under their limit by the next scheduling hour. They can either, acquire transmission capacity from other transmission owners, curtail any schedule that contributes to the over schedule condition, or redispatch their own generation

B. Path is Over scheduled

If an entity's schedule exceeds its scheduling limit and the path is not overloaded, the path operator will request that entity to take immediate action(s) to mitigate its over schedule condition within **15** minutes. Those entities can do any or all of the following options:

- Curtail any schedule that contributes to the over schedule condition
- Redispatch their own generation

If after 15 minutes the over schedule condition exists, the path operator will:

- Direct the entity(ies) responsible for the over schedule to curtail any schedule that contributes to the over schedule condition
- Direct a reduction of applicable north generation followed by an increase of applicable south generation (i.e. Redispatch of applicable generation)

C. Path is approaching an overloaded condition

The path operator will:

1. Implement USF procedure (if applicable)

(Note: as part of the USF procedure, all entities' scheduling limits will be reduced by accommodating the USF applicable unscheduled flow percentage)

D. Path is Overloaded

The path operator will:

1. Implement USF procedure (if applicable) (note: as part of the USF procedure, all entities' scheduling limits will be reduced by accommodating the USF applicable unscheduled flow percentage)
2. Request the entity or entities responsible for the over schedule/overload to take immediate actions to mitigate their over schedule condition within **15** minutes. Those entities can do any or all of the following options:
 - Curtail any schedule that contributes to the over schedule condition
 - Redispatch their own generation
3. Contact the Reliability Coordinator to request a RMRG Hotline call be made to alert the RMRG members of a TOT3 overload condition and to request that a Golf matrix activation may be necessary if the overload persists. The Reliability Coordinator will verify that a Golf matrix activation is necessary, and they will coordinate available generation with all participants and request that they notify the path operator.
4. If after 15 minutes the overload condition exists, the Path Operator will take the following actions to reduce the actual flow within the next 15 minutes.

The path operator will:

 - Call for RMRG assistance implementing the "G" Golf matrix and reduce LRS generation according to the Golf matrix value. (Note: a 100MW reduction in LRS generation reduces flow on TOT3 by

approximately 80MW while the TOT3 limit drops approximately 50MW. This action results in a net 30 MW reduction in TOT3 overload condition)

- Direct any overscheduled transmission path provider/receiver to shed load South of TOT3.

The Reliability Coordinator shall direct all further actions.

OUTAGE OF AN ELEMENT AFFECTING TOT3

If one of the TOT3 transmission lines or an element outside the path (which affects the total transfer capability) becomes unavailable, Western dispatch will adjust the actual and schedule limits for the correct configuration. Western dispatch will notify the owners of the path and advise them of the new limit and ask them to adjust their schedule to match the new limits.

APPENDIX A

TOT3 SUMMER SEASON 2005 OPERATING PROCEDURE

FOR TOT 3

Rocky Mountain Reserve Group
Response Matrix

G

off - TOT 3

Date: 07/05/05
Effective Date: 07/08/05

PATH RELIEF REQUEST - TO RAISE GENERATION SOUTH OF TOT3

NO BHPL, BHG, MEAN, WMPA Participation

TRIS, CSU, WACM, WALC, PRPA, WPEC, PSCO, and BEPC Respond

For computing CONTINGENCY ASSISTANCE fto unload overloaded path --TOT3. NO Station Service Load!

Path Overload Level		G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16	G17
		360	350	340	330	320	310	300	290	280	270	260	250	240	230	220	210	200
Amount LRS is Reduced		504	490	476	462	448	434	420	406	392	378	364	350	336	322	308	294	280
Amount LRS Replaced In WACM		143	140	136	132	129	125	121	116	112	108	103	100	96	92	89	85	80
Amount LRS Replaced In PSCO		338	328	318	309	299	289	280	271	262	253	244	234	225	215	205	196	187
Amount LRS Replaced In WALC		23	22	22	21	20	20	19	19	18	17	17	16	15	15	14	13	13
Total		504	490	476	462	448	434	420	406	392	378	364	350	336	322	308	294	280
RRR		Member response requirement --- RAISE GENERATION SOUTH OF TOT 3																
MEAN																		
WMPA																		
TRIS	0.1219	61	60	58	56	55	53	51	49	48	46	44	43	41	39	38	36	34
BHPL																		
CSU	0.0775	39	38	37	36	35	34	33	31	30	29	28	27	26	25	24	23	22
FRPC	0.0067	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2
BHG																		
WACM	0.0802	40	39	38	37	36	35	34	33	31	30	29	28	27	26	25	24	22
WALC	0.0457	23	22	22	21	20	20	19	19	18	17	17	16	15	15	14	13	13
PRPA	0.0583	29	29	28	27	26	25	24	24	23	22	21	20	20	19	18	17	16
WPEC	0.0124	6	6	6	6	6	5	5	5	5	5	5	4	4	4	4	4	3
PSCO	0.5419	275	266	258	250	242	235	228	219	212	205	198	191	182	174	166	159	152
BEPC	0.0554	28	27	26	26	25	24	23	23	22	21	20	19	19	18	17	16	16
GROUP	1.0000	504	490	476	462	448	434	420	406	392	378	364	350	336	322	308	294	280
WACM AGC offsets		361	350	340	330	319	309	299	290	280	270	261	250	240	230	219	209	200
PSCO AGC offsets		338	328	318	309	299	289	280	271	262	253	244	234	225	215	205	196	187
WALC AGC offsets		-23	-22	-22	-21	-20	-20	-19	-19	-18	-17	-17	-16	-15	-15	-14	-13	-13

APPENDIX A (CONT.)

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FOR TOT 3

Rocky Mountain Reserve Group
Response Matrix

G_{off} - TOT 3

(continued)

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		G18	G19	G20	G21	G22	G23	G24	G25	G26	G27	G28	G29	G30	G31	G32	G33	G34	G35	G36
Path Overload Level		190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
Amount LRS is Reduced		266	252	238	224	210	196	182	168	154	140	126	112	98	84	70	56	42	28	14
Amount LRS Replaced In WACM		76	73	68	63	60	56	52	47	44	40	36	33	29	25	20	15	11	7	4
Amount LRS Replaced In PSCO		178	167	159	151	140	131	122	113	103	94	84	74	65	55	47	38	29	20	9
Amount LRS Replaced In WALC		12	12	11	10	10	9	8	8	7	6	6	5	4	4	3	3	2	1	1
Total		266	252	238	224	210	196	182	168	154	140	126	112	98	84	70	56	42	28	14
	RRR	Member response requirement-- RAISE GENERATION SOUTH OF TOT 3																		
MEAN																				
WMPA																				
TRIS	0.1219	32	31	29	27	26	24	22	20	19	17	15	14	12	10	9	7	5	3	2
BHPL	0.0000																			
CSU	0.0775	21	20	18	17	16	15	14	13	12	11	10	9	8	7	5	4	3	2	1
FRPC	0.0067	2	2	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
BHG																				
WACM	0.0802	21	20	19	18	17	16	15	13	12	11	10	9	8	7	6	4	3	2	1
WALC	0.0457	12	12	11	10	10	9	8	8	7	6	6	5	4	4	3	3	2	1	1
PRPA	0.0583	16	15	14	13	12	11	11	10	9	8	7	7	6	5	4	3	2	2	1
WPEC	0.0124	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	0	0
PSCO	0.5419	144	135	129	123	113	107	99	92	83	76	68	60	53	44	38	31	24	16	8
BEPC	0.0554	15	14	13	12	12	11	10	9	9	8	7	6	5	5	4	3	2	2	0
												0				0				
GROUP	1.0000	266	252	238	224	210	196	182	168	154	140	126	112	98	84	70	56	42	28	14
<u>WACM AGC offsets</u>		190	179	170	161	150	140	130	121	110	100	90	79	69	59	50	41	31	21	10
<u>PSCO AGC offsets</u>		178	167	159	151	140	131	122	113	103	94	84	74	65	55	47	38	29	20	9
<u>WALC AGC offsets</u>		-12	-12	-11	-10	-10	-9	-8	-8	-7	-6	-6	-5	-4	-4	-3	-3	-2	-1	-1