

Rocky Mountain Operational Study Group



SOL STUDIES



Summer 2011 Paths Studied



- **TOT 1A – NW Colorado to Utah**
 - ✦ **632 MW limit proposed (increase from 624 last summer)**
 - ✦ **New 250 MVA 230/138-kV Hayden Transformer**

- **TOT 2B/2C – Southern Utah to NM, AZ, NV**
 - ✦ **Transfer increase due to Red Butte SVC, Harry Allen 345/230-kV transformer, Pinto and Three Peak Series Capacitor Banks, and Huntington Gen Trip**
 - ✦ **Awaiting Final Approval from PRG – NV Energy and SWIP**
 - ✦ **Interaction with IPPDC identified**
 - ✦ **North to South 2B1 – 600 MW, 2B2 – 255 MW, 2C – 400 MW**
 - ✦ **South to North 2B1 - 600 MW, 2B2 – 300 MW, 2C – 580 MW**

Summer 2011 Paths Studied



- **TOT 3 – 1647 MW limit proposed (increase from 1638 MW)**
 - ✦ **Story-Henry Lake-Erie 230-kV transmission line energized (south of TOT 3)**

- **TOT 4A/4B – 840/829 MW limit**
 - ✦ **Decrease in TOT 4A is due to the decreased summer rating of the Platte-Miners 230-kV transmission line which is the limiting element for TOT 4A**

Rocky Mountain Sub-region Summer 2011

Path	WECC Path Number	Rating (MW)	Limit Thermal VAR Stability	2011 Summer SOL (MW)	2011 Spring SOL (MW)	2010-11 Winter SOL (MW)	2010 Summer SOL (MW)
TOT1A	30	650	Thermal	632	624	624	624
TOT2A	31	690	Thermal	680*	669*	669*	680*
TOT2B1	78	530 (600 N-S) ¹ 600 S-N	Thermal	575 ^{1,2} N-S 600 S-N	530	530	530
TOT2B2	79	265 N-S 300 S-N	Thermal	255 N-S 300 S-N	256	256	256
TOT2C	35	300 (400 N-S) ¹ (580 S-N) ¹	Voltage / Thermal	354 ^{1,2} N-S 580 S-N	300	300	300**
TOT3	36	1680	Thermal	1647	1653	1653	1638
TOT4A	37	937	Thermal	0-840***	90-917***	92-912***	912
TOT4B	38	829	Voltage	170-829***	193-824***	194-824***	824
TOT5	39	1680	Thermal	1680	1680	1680	1680
IPPDC	27	2400	Thermal	2400 ²	2400	2400	1920

* WITH NUCLA AT 80 MW AND SW COLO LOAD 120 MW

** Approval for a 420 MW South to North Rating for Special Operating Condition (Sigurd-Red Butte 345-kV Outage – Summer Operating Season Only)

*** Limits on TOT 4A and 4B are governed by a nomogram

Red numbers indicate studies were preformed.

¹ Ratings for TOTs 2B1 and 2C in parentheses are subject to completion of WECC Three Phase Rating Process.

² Interim approval of these SOLs are for the 2011 summer operating season based on LADWP agreement to limit IPP imports to 600 MW

Paths to be Studied For Winter 2011-12



- **TOT 1A – New Hayden 230/138-kV 250 MVA transformer will replace existing 100 MVA unit**
 - Moderate increase to TOT 1A capability expected. Still less than accepted rating of 650 MW.

- **TOT 2A – Last studied winter 2009-2010**
 - No significant transmission additions planned for this season.
 - Good baseline desired for future additions
 - ✦ Nucla-Telluride 115-kV transmission line (possible impact to Montrose-Hesperus transfer trip)
 - ✦ Star Nelson and Dough Spoon 115-kV additions

Other RMOSG Topics



- Appears that this group will move from reporting to the WECC board to the RCs.
- Next RMOSG meeting September 1st
 - Approve winter limits (TOTs 1A and 2A – possibly 2B/2C also)
 - Determine which paths to study in 2012