

NEW MEXICO TRANSMISSION OPERATING PROCEDURES

Section 1 Introduction

- 1.1 This Operating Procedure (“Procedure”) is entered into between El Paso Electric Company (“EPE”), Public Service Company of New Mexico (“PNM”), Texas-New Mexico Power Company (“TNMP”) and Tri-State Generation and Transmission Association, Inc. (“Tri-State”) (individually “Party” and collectively “Parties”) as of January 1, 2005, shall inure to the benefit of their respective successors and shall supercede and replace the document with the same title dated June 18, 1999.
- 1.2 The purpose of this Procedure is to provide a basis for operation of the present Southern New Mexico (“SNM”) Transmission System (“SNMTS”) and the present Northern New Mexico (“NNM”) Transmission System (“NNMTS”) synchronously connected to the Western Interconnection under normal and outage conditions.
- 1.3 PNM and EPE have entered into various agreements among and/or between EPE, PNM, TNMP and Tri-State, which effectuate an allocation of the firm Southern New Mexico Import Capability (“SNMIC”). SNMIC and Northern New Mexico Import Capability (“NNMIC”) are determined from power system studies that are used to develop nomograms (“Nomograms”) which are mathematical representations of the safe and reliable operating limits of the SNMTS and NNMTS respectively while maintaining applicable Western Electricity Coordinating Council (“WECC”) criteria. This SNMIC is currently defined by the First Revised Restated Letter of Understanding between the Parties dated December __, 2004 with an effective date of January 1, 2005 as 932 MW¹ associated with a PST Base Setting of 193 MW². Prior to loss schedules, the PST Base Setting consists of the following components:
 - 1.3.1 EPE firm rights equal to:
 - 1.3.1.1 126 MW (nominal 104 MW pursuant to Service Schedule A between EPE and PNM (“SS-A”), 20 MW pursuant to Service Schedule I between EPE

1. The 932 MW Firm SNMIC referenced in this Section 1.3 will change by 1 MW for each 1 MW change in the Annual Schedule under the 1994 *Long Term Firm Transmission Service Agreement between El Paso Electric Company and Plains Electric Generation and Transmission Cooperative, Inc.* (“EPE/Tri State Agreement”), up to an Annual Schedule of 50 MW. The stated 932 MW Firm SNMIC is determined from an Annual Schedule under the EPE-Tri State Agreement of 42 MW (e.g., an increase in the Annual Schedule under the EPE-Tri State Agreement from 42 MW to 44 MW will increase the SNMIC from 932 MW to 934 MW).
2. The 193 MW PST Base Setting referenced in this Section 1.3 will change by 1 MW for each 1 MW change in the Annual Schedule under the *EPE/Tri State Agreement*, up to an Annual Schedule of 50 MW. The stated PST Base Setting is determined from an Annual Schedule under the EPE/Tri State Agreement of 42 MW.

and PNM (“SS-I”) and 2 MW for Holloman Air Force Base); and,

1.3.2 PNM firm rights equal to:

1.3.2.1 25 MW (pursuant to SS-A), and;

1.3.3 Tri-State firm rights equal to:

1.3.3.1 42 MW (the “Annual Schedule” as of January 1, 2005, as that term is defined in the EPE/Tri-State Agreement). Tri-State’s maximum Annual Schedule under the EPE Tri-State Agreement is 50 MW.

1.4 Pursuant to SS-A of the EPE/PNM Interconnection Agreement, EPE has firm transmission rights through the NNMTS for delivery at the West Mesa 345 kV bus equal to 7.0 % of the output of Four Corners Power Plant Units #4 and #5, with the right of substitution. The output of these units vary according to Plant conditions, therefore, EPE’s firm rights in the NNMTS and firm schedule through the PST will vary accordingly. However, for the purposes of the PST Base Setting and curtailment calculations in this Procedure, a nominal 104 MW value is used.

1.5 Pursuant to the EPE/Tri-State Agreement, Tri-State has the ability to change its firm contract capacity through EPE’s PST (Annual Schedule) by specified amounts. The maximum Annual Schedule under the EPE/Tri-State Agreement is 50 MW, and the minimum is 42 MW. Tri-State also has the obligation under Section 7.3 of the EPE/Tri-State Agreement to mitigate any impacts an increase in the Annual Schedule will have on the NNMTS. In the event Tri-State increases its Annual Schedule, and Tri-State has fulfilled its mitigation obligation under Section 7.3 of the EPE/Tri-State Agreement³, and notified EPE in writing, the PST Base Setting as stated in Section 1.3, SNMIC, and Tri-State share of SNMIC as stated in Sections 1.6 and 1.7 will increase 1 MW for each 1 MW of increase in the Annual Schedule above the then-existing Annual Schedule, up to the 50 MW maximum Annual Schedule. In the event Tri-State reduces its Annual Schedule pursuant to the EPE/Tri-State Agreement, the PST Base Setting, SNMIC, and Tri-State’s share of SNMIC will decrease 1 MW for each 1 MW of decrease in Tri-State’s Annual Schedule below the then-existing Annual Schedule, down to the 42 MW minimum.

1.6 The Parties acknowledge that, under normal operating conditions, with all lines and equipment (including EPE’s PST) in service (“ALIS”), the SNMIC delineated in Section 1.3 is allocated as follows:

1.6.1 PNM’s share of SNMIC is 75 MW;

³ Pursuant to Exhibit D of the Third Revised Service Agreement for Network Integration Transmission Service between PNM and Tri-State, dated October 1, 2004, PNM and Tri-State have agreed upon Tri-State’s obligations to PNM pursuant to such Section 7.3 of the EPE/Tri-State Agreement.

- 1.6.2 TNMP's share of SNMIC is 110 MW;
 - 1.6.3 Tri-State's share of SNMIC is the sum of 60 MW pursuant to its ownership of the Belen-Elephant Butte 115 kV line and its Annual Schedule; and,
 - 1.6.4 EPE's share of SNMIC is 645 MW.
- 1.7 The Parties acknowledge that with ALIS, but with the PST either by-passed or unavailable, the corresponding firm SNMIC as determined in Section 1.6 is reduced by 140 MW, allocated as follows:
- 1.7.1 PNM's share of SNMIC is 75 MW;
 - 1.7.2 TNMP's share of SNMIC is 110 MW;
 - 1.7.3 Tri-State's share of SNMIC is the sum of 60 MW pursuant to its ownership of the Belen-Elephant Butte 115 kV line and its Annual Schedule; and,
 - 1.7.4 EPE's share of SNMIC is 505 MW.
- 1.8 In the event that EPE's PST is either unavailable or by-passed, PNM shall provide, if available at PNM's sole discretion and upon request by any Party, interruptible transmission service to be delivered at West Mesa, in accordance with PNM's Open Access Transmission Tariff ("OATT").

Section 2 Background

- 2.1 This Procedure divides the responsibility between EPE and PNM for monitoring and control of SNM power imports and NNMTS and NNM power imports, respectively.
- 2.2 This Procedure shall coordinate operating responsibility and ensure that NNM and SNM power imports remain within operating limits defined by the applicable operating real-time Nomograms and contractual arrangements in effect. Such operating limits defined by applicable Nomograms protect the New Mexico Transmission System ("NMTS") against violations of WECC criteria following bulk transmission system contingencies.
- 2.3 The NNMTS and SNM power imports will be operated based on the Nomogram limits developed by the respective path operators. These Nomograms may be updated from time to time.
- 2.4 Nomogram limits are developed for (i) ALIS, (ii) one line or piece of equipment initially out of service ("IOS") and (iii) IOS with the PST either unavailable or bypassed.

- 2.5 The SNM Nomogram limits take into account system dynamics in the SNM system due to various reactor, load power factor, VAR flows and resource configurations (“Dynamic Adjustments”).
- 2.6 At the request of any Party, additional Dynamic Adjustments may be incorporated by EPE in the SNM Nomograms as long as those Dynamic Adjustments do not decrease or increase the firm SNMIC as defined in Section 1.6 or Section 1.7, as applicable, unless mutually agreed to in writing by the Parties. Such Dynamic Adjustments must be incorporated on a real-time basis in the path operators’ Nomograms. Any additional Dynamic Adjustments incorporated on behalf of a Party will be benchmarked at the SNMIC operating level. If those Dynamic Adjustments cause an increase in SNM Import (“SNMI”) capability, the Party that owns and controls those Dynamic Adjustments will obtain the benefit of that increase on a non-firm basis. If, however, those Dynamic Adjustments cause a decrease in SNMI capability, the Party that owns and controls those Dynamic Adjustments will curtail its use of firm SNMIC up to and including curtailing its firm SNMIC as defined in Sections 1.6 and 1.7 by a corresponding amount.
- 2.7 Any Party can install permanent additions to the SNMITS which increase their SNMIC on a firm basis up to their latent capability related to their respective ownership interest in the SNMITS. The other Parties shall be afforded the opportunity to participate in such additions up to the latent capability related to their respective ownership interest in the SNMITS. Such additions must conform to all applicable WECC criteria.
- 2.8 Upon the occurrence of a system status change such as (i) the inability to achieve a desired reactor or capacitor configuration in NNM or SNM, (ii) a line trip in NNM or SNM, or (iii) a generator trip in SNM or NNM, NNM imports (“NNMI”) and/or SNMI limits may change. Such change may require adjustment to actual NNMI and/or SNMI. The magnitude and method of implementation of such adjustments shall be determined in accordance with this Procedure.

Section 3 Defining SNM and NNM Imports

- 3.1 NNMI is defined as the net of the total measured real power flows at the following locations:
- 3.1.1 San Juan to BA 345 kV (WW) line at San Juan;
 - 3.1.2 Plus Four Corners to West Mesa 345 kV (FW) line at Four Corners;
 - 3.1.3 Plus Bisti to Ambrosia 230 kV (BI) line at Bisti;
 - 3.1.4 Plus San Juan to Ojo 345 kV (OJ) line at San Juan;

- 3.1.5 Plus McKinley to Ya-Ta-Hey 345/115 kV transformer at the 345 kV bus;
 - 3.1.6 Less West Mesa to Arroyo 345 kV (EP) line at West Mesa;
 - 3.1.7 Less Belen to Bernardo 115 kV line metered at Belen.
- 3.2 SNMI is defined as the net of the total of measured real power flows at the following locations:
- 3.2.1 West Mesa to Arroyo 345 kV (EP) line at West Mesa;
 - 3.2.2 Plus Belen to Bernardo 115 kV line net metered at Belen;
 - 3.2.3 Plus Springerville to Luna 345 kV (VL) line at Springerville;
 - 3.2.4 Plus Greenlee to Hidalgo 345 kV (GH) line at Greenlee.

Section 4 Coordination of Operations

- 4.1 PNM shall have the responsibility for operating the NNMTS in accordance with all applicable North American Electric Reliability Council (NERC) and WECC operating criteria and:
- 4.1.1 Providing EPE operators with PNM's hourly schedules over the West Mesa-Arroyo 345 kV line at West Mesa 345 kV bus.
 - 4.1.2 Providing EPE operators with PNM's hourly schedules into New Mexico at Greenlee and, if applicable, at Springerville.
 - 4.1.3 Providing EPE operators with PNM's hourly schedules into Afton 345 kV Substation for the Afton Generator.
 - 4.1.4 Accepting EPE schedules at Four Corners and San Juan, as applicable.
 - 4.1.5 Accepting Parties' and third party schedules to EPE at the West Mesa 345 kV bus, as applicable.
 - 4.1.6 Monitoring actual NNMI.
 - 4.1.7 Comparing the actual NNMI to allowable NNMI limits from the Nomogram.
 - 4.1.8 Determining if actual or projected NNMI must be reduced to fall within allowable

NNMI limits, and determining allocations of NNMI reductions or curtailments.

- 4.1.9 Notifying the SNM Parties with NNM transmission rights of any required NNM curtailments.
 - 4.1.10 Allocating transmission losses in NNM to the Parties and third parties in accordance with existing contractual arrangements or PNM's Open Access Transmission Tariff, as may be applicable.
 - 4.1.11 Notifying EPE when the status of PNM's series capacitors on the FW and WW lines change.
 - 4.1.12 Coordinate with EPE NNMTS equipment maintenance which effects NNMIC when EPE's PST is out of service.
- 4.2 EPE shall have the responsibility for operating the SNMTS in accordance with applicable NERC and WECC operating criteria, and:
- 4.2.1 Providing PNM with EPE's hourly schedules at Four Corners.
 - 4.2.2 Accepting PNM's, TNMP's and Tri-State's schedules with Tucson Electric Power Company ("TEP") at Springerville and Greenlee, as applicable.
 - 4.2.3 Accepting the Parties' and third parties' schedules to EPE, as applicable, at the West Mesa 345 kV bus.
 - 4.2.4 Accepting PNM's hourly schedules into Afton 345 kV Substation for the Afton Generator, as applicable.
 - 4.2.5 Operating the PST such that actual flows do not exceed the PST Base Setting within a PST bandwidth as agreed to between EPE and PNM operations groups and in accordance with Sections 1.4, 9.2, 9.3, 9.4 and 9.5.
 - 4.2.6 Monitoring actual SNMI.
 - 4.2.7 Comparing the actual SNMI to allowable SNMI limits from the real-time Nomogram.
 - 4.2.8 Determining if actual or projected SNMI must be reduced to fall within allowable SNMI limits, and determining allocations of SNMI reductions or curtailments.
 - 4.2.9 Notifying the Parties and third parties of any required SNM curtailments.

- 4.2.10 Monitoring, providing current schedules upon request and coordinating the use and curtailments of Usable SNMIC as this term is defined in Section 8.
- 4.2.11 Allocating transmission losses in SNM to the Parties and third parties in accordance with existing contractual arrangements or EPE's OATT, as may be applicable.
- 4.2.12 Notifying PNM of SNMTS equipment maintenance which effects the line flow on the EP line with EPE's PST out of service.

Section 5 Notification of Parties Regarding Required SNMI and NNMI Curtailments

- 5.1 EPE, as operating agent for the SNMTS, shall notify each Party in the event that Party's SNMI exceeds that Party's rights to SNMIC. Such notice shall state the amount of curtailment required of that Party to reduce its SNMI to its curtailed amount.
- 5.2 PNM, as operating agent for NNMTS, shall notify each Party with NNM rights in the event that Party's NNMI exceeds that Party's rights to NNMIC. Such notice shall state the amount of curtailment required of that Party to reduce its NNMI to its curtailed amount.

Section 6 Data Exchange

PNM and EPE will exchange real-time system data as necessary to allow EPE and PNM to calculate SNMI, SNMI limits, NNMI, NNMI limits and to allow PNM and EPE to calculate the Dynamic Adjustments to the NNM and the SNM limits. This exchange of data will be used to monitor New Mexico transmission operations. Data required for safely operating the NMTS may change from time to time; therefore, the data exchange list will be modified and implemented, as needed, to allow responsible operation by PNM and EPE. All Parties will cooperate and provide information in a timely manner. To the extent that real time data is not available, PNM and EPE operators shall exchange required data and Nomogram information to allow for the safe operation of the NMTS. TNMP and Tri-State may have access to such data used to operate under this procedure, at TNMP's and Tri-State's expense.

Section 7 Normal ALIS Operations in SNM

- 7.1 EPE will operate the SNMTS during ALIS conditions so as to allow on a firm basis schedules by PNM, EPE, TNMP and Tri-State of SNMI to reach, on an hourly basis, the lesser of:
 - 7.1.1 The scheduled level of SNMI, or
 - 7.1.2 SNMIC as delineated in Section 1.6 (with the PST In-Service) or Section 1.7 (with the PST unavailable or by-passed), or

- 7.1.3 The maximum level of SNMI attainable under the Nomogram limit (“SNMI Limit”).
- 7.2 Under ALIS conditions, the Dynamic Adjustments in the SNMTS may result in a SNMI Limit under the Nomogram greater than the SNMIC as stated in Section 1.6 with the PST In-Service. EPE, as the owner and operator of the existing Dynamic Adjustment components (i.e., reactors, EPE local system power factor, and generators in the EPE system), can increase EPE schedules above the SNMIC on a non-firm basis under the following conditions:
- (a) SNM flows do not exceed the allowable SNMI Limit of the Nomogram;
 - (b) Flows on the Belen-Elephant Butte 115 kV line as metered at Belen does not exceed 60 MW; and,
 - (c) The PST Base Setting is not exceeded.
- 7.2.1 If additional Dynamic Adjustments are incorporated in the Nomograms, those Dynamic Adjustments shall be treated as stated in Section 2.6.

Section 8 Usable SNMIC

- 8.1 Under some system conditions, the actual SNMI is at a level less than the SNMIC established in Section 7.1.2 or 7.1.3 which results in non-firm transfer capability (“Usable SNMIC”) being available. The Parties, as owners of the SNMTS facilities and pursuant to Amendment No. 5 to the Southwest New Mexico Transmission Project Participation Agreement (“Amendment #5”) signed November 21, 1994, may schedule any available Usable SNMIC consistent with FERC regulation.
- 8.1.1 EPE shall be responsible for determining and providing current schedules, upon request, of the amount of Usable SNMIC available for use by the Parties, and for administering the scheduling and curtailments of usable SNMIC.
- 8.1.2 PNM shall have the right to refuse schedules of Usable SNMIC at West Mesa above the PST Base Setting if such use would adversely impact NNMIC.
- 8.1.3 To the extent that Usable SNMIC is available, if Usable SNMIC needs to be apportioned due to simultaneous scheduling of a Party’s allocated share of non-firm capability, such apportionment shall be made as follows:
- 8.1.3.1 One third of the available Usable SNMIC shall be allocated to SWNMT Line A owners and shall be allocated on a non-firm basis among EPE, PNM and TNMP, up to an amount equal to the difference between their Capacity Entitlement (for TNMP 150 MW, for EPE 200 MW and for PNM

150 MW) and the Firm Transfer Capability established in Section 3.1 of Amendment # 5.

8.1.3.2 As an owner in the SNMTS, Tri-State's non-firm allocation of available Usable SNMIC shall be in proportion to its ownership in the remaining system. This results in an allocation of available Usable SNMIC of 9.5 percent ($2/3 * 1/7$) to Tri-State.

8.1.3.3 EPE, as the owner of the remainder of the SNMTS shall be allocated the remaining Usable SNMIC, on a non-firm basis.

8.1.3.4 This results in the following allocation of available Usable SNMIC to the Parties:

- (a) to EPE, 70.5 percent,
- (b) to PNM, 10.0 percent,
- (c) to TNMP, 10.0 percent, and
- (d) to Tri-State, 9.5 percent.

8.2 In the event the Parties desire to schedule Usable SNMIC above the amount allocated to each Party pursuant to Section 8.1.3.4 and Usable SNMIC is available, then such Usable SNMIC may be scheduled by the Parties.

8.2.1 Provided, however, that such use shall be subject to the continuing right of the Party, for any reason whatsoever, whose share of available Usable SNMIC:

- (a) is desired to refuse such use, or
- (b) is being used to cause that Party using those rights to curtail such use immediately upon notice.

8.3 In the event Usable SNMIC needs to be apportioned due to simultaneous scheduling of Usable SNMIC, such apportionment shall be made on a pro-rata basis according to each Party's respective allocations as set forth in Section 8.1.3.4.

8.4 The use of Usable SNMIC in no way decreases the Parties ability to schedule their firm SNMIC rights as delineated in Section 1.6 or 1.7 as applicable.

8.5 Usable SNMIC shall not be used for "after the fact" schedules. All Usable SNMIC shall be scheduled before such schedules are used according to normal utility practices.

8.6 Usable SNMIC shall only be utilized for schedules between the following points on the SNMTS:

- (a) WestMesa 345 kV and Las Cruces 115 kV,
- (b) Springerville 345 kV and Luna 345 kV, and
- (c) Greenlee 345 kV and Hidalgo 345 kV and Luna 345 kV.

Any Parties whose schedules utilize transmission of another Party beyond these points shall be required to purchase additional transmission capacity under such Party's OATT.

8.7 Usable SNMIC shall not be utilized for scheduling third party transactions.

8.8 It is understood that the Party permitting the use of its allocated share of SNMIC shall not charge the Party utilizing its share. Provided, however, the Party utilizing such share shall compensate the Party whose share is being utilized for any transmission losses incurred. Losses for schedules between:

- (a) WestMesa 345 kV and Las Cruces 115 kV shall be 1.71%,
- (b) Springerville 345 kV and Luna 345 kV shall be 3.32%,
- (c) Greenlee 345 kV and Hidalgo 345 kV shall be 0.68%, and
- (d) Greenlee 345 kV and Luna 345 kV shall be 0.76%.

These transmission loss rates may be updated in accordance with the applicable governing agreements. The return of losses shall be as agreed to by the respective parties operating personnel.

Section 9 Operation of the PST

9.1 EPE shall be solely responsible for operation of the PST.

9.2 EPE and PNM agree that the flows at the West Mesa 345 kV bus will fluctuate based on the dynamic electric system conditions in effect. EPE agrees to use its best efforts to match flows to schedules at the West Mesa 345 kV bus on an integrated hourly basis, except when PNM exercises its option under Section 3.1.2.1 of the EPE/PNM Settlement Agreement dated November 6, 2003 and the net schedule exceeds the south to north flow at West Mesa with the PST at 34 degrees (transfer capability of the PST). During such times, EPE shall use best efforts to maintain the integrated hourly flow over the PST at such south to north transfer capability without regard to the net schedule, and to telemeter to PNM when the PST tap mechanism is set at its maximum angle for south to north transfers.

9.3 In the event the flows over the PST suddenly change by more than 25 MW in either direction due to a transmission or generation outage, the PST tap mechanism shall not be operated thus preventing the PST from returning the flows to schedules. In this event, the PST tap mechanism shall return schedules to normal as soon as possible, but only after mutual agreement between the EPE and PNM operators, consistent with curtailment

procedures of Section 11.1.1, 13.1 and 13.2, as applicable.

- 9.4 EPE may request and PNM may agree, if available and at PNM's sole discretion, to increase the PST schedules above the PST Base Setting on a non-firm basis. As a result, the SNM import level will change on a non-firm basis pursuant to Section 7.
- 9.5 A Party, or third party, may purchase from PNM, in accordance with PNM's OATT, firm transmission in the NNMTS for delivery to the SNMTS and, from EPE in accordance with EPE's OATT, firm transmission in the SNMTS. For the duration of that purchase the PST Base Setting as delineated in Section 1.3 and SNMIC as delineated in Sections 1.6 and 1.7 will be increased by 1 MW for each 1 MW of increase above the original PST Base Setting.

Section 10 Curtailment of SNM Imports (ALIS)

- 10.1 If actual SNMI are higher than the allowable SNMI under the Nomogram, then EPE will notify the Parties pursuant to Section 5 to reduce their SNMI to their respective firm SNMIC as defined in Section 1.6 or 1.7. In order to effectuate such reduction, EPE will first pro-rata curtail all non-firm uses, including its own, of the SNMTS. If SNMI needs to be reduced further to bring total SNMI to within the Nomogram limit, EPE will reduce its SNMI as necessary.
- 10.2 In the event SNMI schedules need to be adjusted based on actual flows over the TEP system into SNM, EPE shall be responsible for making arrangements with TEP and Tri-State shall be responsible for making arrangements with EPE pursuant to Section 8.2 of the EPE/Tri-State Agreement, for such flows.
- 10.3 During forced or sustained outages of EPE's load side generators, forced or sustained outages of the Eddy County HVDC converter (or the Eddy County to Amrad 345 kV line) or EPE's purchases made through the converter, EPE (and TNMP in conjunction with the Eddy County HVDC converter, the Eddy County to Amrad 345 kV line, or TNMP's purchases made through the converter) shall immediately begin to take appropriate measures as necessary in accordance with NERC guidelines, including interrupting or curtailing its interruptible wholesale and/or retail loads, to maintain total SNMI within the limits of the Nomogram pursuant to Section 7.

Section 11 Operating Procedure With a SNM Line or Piece of Equipment Initially Out of Service (IOS)

- 11.1 For SNM line outages, curtailing NNMI is ineffective for reducing SNMI to within the SNMI limit dictated by the IOS Nomogram. Therefore, for SNM line outages, needed SNMI curtailments shall be determined by the use of IOS Nomograms under the following conditions:

11.1.1 With PST In-Service:

The SNMI value that can be obtained under the IOS Nomogram in effect while limiting the flow through the PST to the pre-outage firm rights of the SNM/NNM parties and parties purchasing transmission in accordance with Section 9.5 through the PST.

Exhibit 1 provides an example of such curtailment responsibility.

11.1.2 With PST Unavailable or Bypassed the SNMI shall be the lesser of:

- (a) The maximum SNMI under the IOS Nomogram in effect, or
- (b) The SNMI value that holds NNMIC at the same level as in the ALIS Nomogram (with PST out) at the SNMIC value stated in Section 1.7 and as modified by Section 9.5.

Exhibit 2 provides an example of such curtailment responsibility.

11.1.3 With an SNM line out and the PST unavailable or bypassed at the same time, SNMI shall first be curtailed by reducing EPE's SNMIC from the value stated in Section 1.6.4 to the value stated in Section 1.7.4. For further required curtailments, the curtailment for SNM Parties shall be pro-rata in proportion to the SNMIC allocations as delineated in Section 1.7 and third party purchases of firm transmission pursuant to Section 9.5.

Exhibit 3 provides an example of such curtailment responsibility.

11.1.4 Section 11.1.3 shall not apply for the EPE West Mesa-Arroyo 345 kV line, for which the curtailments shall be determined as in Section 11.1.1.

11.2 In the event actual SNMI needs to be reduced solely due to failure of the Hidalgo 65 MVAR reactor, all non-firm schedules shall be curtailed first. The next step to any required curtailment shall be obtained through pro-rata curtailments of firm SNMIC as shown in Section 1.6 or Section 1.7, as applicable, and modified by third party purchases pursuant to Section 9.5.

11.3 At least one Springerville-Luna (SL) reactor should always be on line in preparation for a Springerville-Luna outage so that a reactor is tripped with this critical SNM outage. However, if for some reason both reactors are out, all non-firm schedules shall be curtailed first, and, if further curtailments are required, EPE shall curtail its use of firm SNMI.

- 11.4 For SNM lines out, EPE shall notify the SNM Parties of the necessary curtailments pursuant to Section 5. PNM, EPE, TNMP and Tri-State shall share in SNMI curtailments in proportion to their respective firm rights to SNMIC as set forth in either Section 1.6 or 1.7, as applicable, and modified by third party purchases pursuant to Section 9.5.
- 11.4.1 For an economic (i.e., not forced or maintenance) outage of EPE's and TNMP's Eddy HVDC Terminal and/or the Amrad-Artesia 345 kV line, EPE and TNMP shall be solely responsible for any associated SNMI curtailment under the Amrad/Eddy IOS Nomogram, on a 2/3 (EPE) and 1/3 (TNMP) basis.
- 11.5 Since the IOS Nomograms were developed for a limited number of southern reactor configurations, if other southern reactor configurations are used with the IOS Nomograms, the allowable SNMI limit may be adjusted based on engineering judgement from more recent studies addressing the outage. Upon request, EPE shall provide PNM with documentation of these studies.
- 11.6 Except for conditions pursuant to Section 11.7 and to assist PNM, Tri-State and TNMP with implementing SNMI curtailments, EPE shall, upon request, provide:
- 11.6.1 PNM with any available and unscheduled Contingent Capacity energy associated with the SS-A or the contingent bank demand, as applicable. Such energy shall be scheduled according to Operating Procedure #5, signed March 9, 1979, and Operating Procedure #8, signed October 24, 1978 of the PNM/EPE Interconnection Agreement, Contingent Contract Demand Letter Agreement, signed November 18, 1994. EPE may also provide PNM with any remaining energy for PNM's SNMI curtailments, if available and at EPE's sole discretion, priced or returned in accordance with the applicable agreements.
- 11.6.2 TNMP and Tri-State with energy for TNMP's and Tri-State's SNMI curtailments, if available and at EPE's sole discretion, priced or returned in accordance with the applicable agreements.
- 11.7 With the loss of any one SWNMT line segment (Greenlee-Hidalgo 345 kV or Hidalgo-Luna 345 kV), EPE shall provide Firming Service pursuant to Amendment No. 5 to TNMP and PNM without charge.
- 11.7.1 EPE's Firming Service shall commence simultaneously with the occurrence of the outage of one SWNMT line segment delineated in Section 11.7 and continue until the earlier of:
- (a) the time that such outage ceases to be present, or
 - (b) EPE has determined that the SWNMT line segment cannot be returned to

service within a reasonable period of time, and EPE declares that the system must be operated under N-2 conditions (i.e., the IOS Nomogram).

- 11.7.2 EPE will provide Firming Service to TNMP in an aggregate amount not to exceed the lesser of:
- (a) 110 MW, or
 - (b) The sum of TNMP's respective actual transmission requirements between Greenlee and Hidalgo and between Hidalgo and Luna.
- 11.7.3 EPE will provide Firming Service to PNM in an aggregate amount not to exceed the lesser of:
- (a) 50 MW, or
 - (b) The sum of PNM's actual transmission requirements from Greenlee to Hidalgo and Luna.
- 11.7.4 In the event EPE requests it, PNM and TNMP will first use their respective transmission rights in the Greenlee to Hidalgo to Luna (Line A), and Luna to MD-1 to Hidalgo transmission lines, as well as other applicable transmission facilities.
- 11.7.5 In lieu of implementing pre-contingency curtailments, a Party may arm an automated load shedding scheme to provide an equivalent SNMI reduction. Such load shedding scheme must comply with all applicable WECC criteria and have the prior approval of the SNM Operating Agent.

Section 12 Curtailment of NNM Imports (ALIS)

- 12.1 So long as the PST flow is at or below the PST Base Setting, or SNMI is at or below the level delineated in Section 1.7 with the PST unavailable or bypassed, and actual or projected NNMI need to be reduced due to the inability to achieve the optimum reactor/capacitor configuration in NNM, PNM shall curtail NNMI as necessary to limit NNMI to within the allowable NNMIC under the Nomogram.

Section 13 Operating Procedure With NNM Line or Piece of Equipment Initially Out of Service (IOS)

- 13.1 For a NNM line outage, the flows through the NNMTS must be reduced such that the NNMI adhere to the appropriate NNM IOS Nomogram import limit. This reduction in flows can be accomplished by first pro-rata curtailing non-firm schedules in the NNMTS, including non-firm schedules over the PST that aggravate the IOS condition. If additional

curtailments are required, firm schedules over the NNMTS must be reduced, including SNM/NNM Parties (EPE, PNM and Tri-State) firm schedules over the PST. Except for EPE, reducing firm schedules over the PST for NNM flow reduction is at the option of the respective party. All other NNM flow reductions will be pro-rata curtailed between the NNM Parties.

13.2 With the PST in service, to effectuate the SNM/NNM Parties' curtailment of NNM flows, such Party has to curtail 1 MW of its power flow through the PST to implement each MW of its NNM flow curtailment responsibility.

13.2.1 The proportion to be used for SNM/NNM Parties for NNM flow reductions is 1 MW of power flow through the PST for each MW of required NNM flow curtailment responsibility. For a NNM line out, a SNM/NNM Party's needed NNM flow curtailment shall be determined as the product of the difference between the NNMIC under the ALIS Nomogram and the NNMIC under the appropriate IOS Nomogram (both NNMIC determined at a SNMIC that can be obtained while limiting the power flow through the PST to the pre-outage firm rights through the PST of the SNM/NNM Parties) and a SNM/NNM Party's "NNM Curtailment Responsibility Ratio".

13.2.2 Such "NNM Curtailment Responsibility Ratio" shall be defined as:

- (a) the Party's rights in the NNMTS that are delivered to the SNMTS divided by
- (b) the NNMIC under the ALIS Nomogram at the SNMIC delineated in Section 1.6 as modified by Section 9.5 while limiting the power flow through the PST to the pre-outage firm rights of the SNM/NNM Parties, plus the sum of each SNM/NNM Party's rights in the NNMTS that are used to deliver power and energy to the SNMTS.

13.2.3 When the SNM/NNM Parties reduce their NNMTS flow by reducing the flow over the PST, the allowable SNMI under the Nomogram in effect may also be reduced which may cause a curtailment in SNMI flows. To effectuate this SNMI flow curtailment, those SNM/NNM Parties who are reducing their schedules through the PST will curtail their use of SNMI rights on a pro-rata basis according to their pre-outage firm rights over the PST.

Exhibit 4 provides an example of such curtailment responsibility.

13.3 With the PST unavailable or bypassed, to effectuate the SNM/NNM Parties' curtailment of NNM flows, such a Party has to curtail more than 1 MW of its power flow into the SNMTS to implement each MW of its NNM flow curtailment. All NNM flow reductions will be pro-rata curtailed between the NNM Parties.

13.3.1 The proportion to be used for SNM/NNM Parties for NNM flow curtailment is 3.33 MW of SNMI for each 1 MW of NNM flow curtailment. The SNM/NNM Party's needed NNM flow curtailment shall be determined as the product of:

- (a) the difference between the NNMIC under the ALIS Nomogram (with PST out) and the NNMIC under the appropriate IOS Nomogram (with PST out and both NNMIC determined at the SNMIC delineated in Section 1.7 and as modified by Section 9.5); and,
- (b) a SNM/NNM Party's "NNM Curtailment Responsibility Ratio".

13.3.2 Such "NNM Curtailment Responsibility Ratio" shall be defined as:

- (a) the Party's rights in the NNMTS that are delivered to the SNMTS divided by
- (b) the NNMIC under the ALIS Nomogram (with PST out) at the SNMIC delineated in Section 1.7 and as modified by Section 9.5, plus the sum of each SNM/NNM Party's rights in the NNMTS that are delivered to the SNMTS.

Exhibit 5 provides as example of such curtailment responsibility.

13.4 Since the IOS Nomograms were developed for a limited number of northern reactor/capacitor configurations, if other northern reactor/capacitor configurations are used with the IOS Nomograms, the maximum NNMI can be adjusted based on engineering judgement and more recent studies addressing the outage. Upon request, PNM shall provide EPE with documentation of these studies.

13.5 For an economic (i.e., not forced or maintenance) outage of PNM's Blackwater HVDC terminal and/or BA-Guadalupe-Blackwater 345 kV line, PNM shall be solely responsible for any associated NNMI curtailments.

Section 14 Notification of Parties Regarding Changes to Annual Schedule

14.1 Within 15 days after Tri-State's notification to EPE of a change in the Annual Schedule, as that term is defined in the 1994 *Long Term Firm Transmission Service Agreement between El Paso Electric Company and Plains Electric Generation and Transmission Cooperative, Inc*, EPE shall notify the Parties by letter of the new Annual Schedule and the resulting PST Base Setting, SNMIC and Tri-State's share of the SNMIC. Following the receipt of notification of a change in the Annual Schedule, any Party may request within 15 days that EPE update and distribute Exhibits 1-5 reflecting such change.

Section 15 Term and Modifications To This Procedure

15.1 This Procedure shall become effective as of the date it is signed by the Parties and shall remain in effect until December 31, 2005. Thereafter, this Procedure shall automatically renew for successive periods of one (1) year unless superceded or modified following a ninety (90) day written notice given by any Party requesting a modification.

Section 16 Signature Clause

The signatories hereto represent that they have been duly authorized to enter into this Procedure of behalf of the Party for whom they sign. This Procedure may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one and the same instrument.

EL PASO ELECTRIC COMPANY

By: _____

Title: _____

Date:

PUBLIC SERVICE COMPANY OF NEW MEXICO

By: _____

Title: _____

Date:

TEXAS-NEW MEXICO POWER COMPANY

By: _____

Title: _____

Date:

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.

By: _____

Title: _____

Date:

EXHIBIT 1 EXAMPLE OF PRO-RATA CURTAILMENT REQUIRED FOR A SNM LINE OUTAGE WITH THE PST IN-SERVICE AND A PST SETTING OF 193 MW⁽¹⁾

Example of a SNM Line X outage which indicates an IOS SNMIC of 685 MW.

	<u>Pre-Outage</u>	<u>Curtailement</u>	<u>Post-Outage</u>
Total NNMIC	1100	0	1100
Total SNMIC	932	240	692
TNMP	110	$(110/932) \times 240 = 28$	82
PNM	75	$(75/932) \times 240 = 19$	56
Tri-State	102	$(102/932) \times 240 = 26$	76
EPE	645	$(645/932) \times 240 = 167$	478

Note: Curtailments given above assume no third party has purchased transmission capability from PNM and EPE pursuant to Section 9.5. If such transmission capability is purchased, the NNMIC and SNMIC will change accordingly.

(1) The SNMIC and PST Base Setting in this Exhibit 1 assume a Tri-State Annual Schedule of 42 MW.

EXHIBIT 2 EXAMPLE OF PRO-RATA CURTAILMENT REQUIRED FOR A SNM LINE OUTAGE WITH THE PST UNAVAILABLE OR BYPASSED

For SNM Line X Outage with the PST unavailable or bypassed, NNMI is to be held at a level no less than the NNMIC level in the ALIS (PST unavailable or bypassed) Nomogram at a SNMI value of 792 MW⁽¹⁾.

Assume at the ALIS (PST unavailable or bypassed) Nomogram 785 MW SNMI level, NNMIC is 1100 MW. On the Line X IOS (PST unavailable or bypassed) Nomogram, this 1100 MW NNMIC level corresponds to a SNMI level of 535 MW. Therefore a SNM Line X outage (with the PST unavailable or bypassed) indicates an IOS SNM Limit of 535 MW.

	<u>Pre-Outage</u>	<u>Curtailement</u>	<u>Post-Outage</u>
Total NNMIC	1100	0	1100
Total SNMIC	792	250	542
TNMP	110	$(110/792) \times 250 = 35$	75
PNM	75	$(75/792) \times 250 = 24$	51
Tri-State	102	$(102/792) \times 250 = 32$	70
EPE	505	$(505/792) \times 250 = 159$	346

Note: Curtailments given above assume no third party has purchased transmission capability from PNM and EPE pursuant to Section 9.5. If such transmission capability is purchased, the NNMIC and SNMIC will change accordingly.

(1) The SNMI in this Exhibit 2 assume a Tri-State Annual Schedule of 42 MW.

EXHIBIT 3 EXAMPLE OF PRO-RATA CURTAILMENT REQUIRED FOR A SNM LINE OUTAGE WITH THE PST UNAVAILABLE OR BYPASSED AT THE SAME TIME

For SNM Line X Outage with the PST removed from service at the same time, NNMI is to be held at a level no less than the NNMIC level in the ALIS (PST unavailable or bypassed) Nomogram at a SNMI value of 792 MW⁽¹⁾. EPE shall take the curtailment required from the SNMI value with the PST In-Service to the SNMI value with the PST unavailable or bypassed.

Assume at the ALIS (PST In-Service) Nomogram 932 MW⁽¹⁾ SNMI level, NNMIC is 1100 MW. Now, with the PST unavailable or bypassed, the ALIS (PST unavailable or bypassed) Nomogram SNMI level of 792 MW, NNMIC will be 1100 MW. On the Line X IOS (PST unavailable or bypassed) Nomogram, this 1100 MW NNMIC level corresponds to a SNMI level of 535 MW. Therefore a SNM Line X outage (with the PST unavailable or bypassed) indicates an IOS SNM Limit of 535 MW.

	<u>Pre-Outage</u>	<u>Curtailment</u>	<u>Post-Outage</u>
Total NNMIC	1100	0	1100
Total SNMIC (PST in)	932	140 (EPE takes)	792
Total SNMIC (PST out)	792	250	542
TNMP	110	$(110/792) \times 250 = 35$	75
PNM	75	$(75/792) \times 250 = 24$	51
Tri-State	102	$(102/792) \times 250 = 32$	70
EPE	505	$(505/792) \times 250 = 159$	346

Note: Curtailments given above assume no third party has purchased transmission capability from PNM and EPE pursuant to Section 9.5. If such transmission capability is purchased, the NNMIC and SNMIC will change accordingly.

(1) The SNMIC and PST Base Setting in this Exhibit 3 assume a Tri-State Annual Schedule of 42 MW.

EXHIBIT 4 EXAMPLE OF PRO-RATA CURTAILMENT OF SNM/NNM PARTY'S
 REQUIRED FOR A NNM LINE OUTAGE WITH THE PST IN-SERVICE
 (Section 13.2)

Pre Outage Conditions⁽¹⁾:

PST Setting at 193 MW
 SNMIC = 932 MW
 NNMIC = 1100 MW

Post Outage Conditions

Line X IOS Nomogram
 SNMIC = 932 MW
 NNMIC = 700 MW

Calculation of Total NNM Curtailment Required:

NNMIC = NNMIC(ALIS) - NNMIC(IOUS) = 1100 MW - 700 MW = 400 MW
 SNM/NNM(*) = 104 MW + 20 MW + 2 MW + 25 MW + 60 MW + 42 MW = 253 MW

(*) WestMesa Transmission Rights
 EPE: 104 MW SS-A
 20 MW SS-I
 2 MW WAPA
 PNM: 25 MW SS-A
 Tri-State: 60 MW (115 kV Transmission Capacity)
 42 MW⁽¹⁾ (EPE/Tri-State Agreement)

NNM Flow Curtailment Responsibility Ratio: $253 \text{ MW} / (253 \text{ MW} + 1100 \text{ MW}) = 0.1870$

Total SNM/NNM Party's NNM Flow Curtailment Responsibility:
 $400 \text{ MW} \times 0.1870 = 75 \text{ MW}$

Each SNM/NNM Party's NNM Flow Curtailment Responsibility:

EPE Flow Curtailment Responsibility:
 $(126 \text{ MW} / 253 \text{ MW}) \times 75 \text{ MW} = 37 \text{ MW}$

PNM Flow Curtailment Responsibility:
 $(25 \text{ MW} / 253 \text{ MW}) \times 75 \text{ MW} = 8 \text{ MW}^{(2)}$

Tri-State Flow Curtailment Responsibility:
 $(102 \text{ MW} / 253 \text{ MW}) \times 75 \text{ MW} = 30 \text{ MW}^{(2)}$

TNMP Flow Curtailment Responsibility: 0 MW

NNM Parties remaining pro-rata curtailments equals:

$400 \text{ MW} - 75 \text{ MW} = 325 \text{ MW}$

SNMIC Curtailment Required Due to Change in PST Setting:

The remainder of this Exhibit assumes Tri-State performs part of their required curtailment of NNM flow using their NNM loads. The remainder of the Tri-State curtailment is using the PST. Therefore the PST and SNMI operating points are reduced by:

$$37 \text{ MW (EPE reduction)} + 8 \text{ MW (PNM reduction)} + 30 \text{ MW (Tri-State reduction)} = 75 \text{ MW}$$

SNM Limit at PST Setting of 193 MW - 75 MW = 118 MW is determined from the applicable IOS Nomogram. This IOS Nomogram may or may not require a reduction in the SNM Limit from 932 MW. However, for the purposes of this Example, the IOS SNM Limit is taken as 862 MW.

$$\text{The new SNMI operating point is } 932 \text{ MW} - 75 \text{ MW} = 857 \text{ MW}$$

$$\text{Required SNMI Reduction} = 932 \text{ MW} - 862 \text{ MW} = 70 \text{ MW}$$

$$\text{Available Additional SNMI} = 862 \text{ MW} - 857 \text{ MW} = 5 \text{ MW}$$

PST Party's SNMI Curtailment Responsibility:

EPE SNMI Curtailment Responsibility:	126 MW / 193 MW = .6528
PNM SNMI Curtailment Responsibility:	25 MW / 193 MW = .1295
Tri-State SNMI Curtailment Responsibility:	42 MW / 193 MW = .2176

PST Party's SNMI Curtailment:

EPE SNMI Curtailment:	70 MW x .6528 = 46 MW
PNM SNMI Curtailment:	70 MW x .1295 = 9 MW ⁽³⁾
Tri-State SNMI Curtailment:	70 MW x .2176 = 15 MW ⁽³⁾

Post Outage, Post Curtailment Conditions:

NNMI Limit:	700 MW
SNMI Limit:	862 MW

Note: Curtailments given above assume no third party has purchased transmission capability from PNM and EPE pursuant to Section 9.5. If such transmission capability is purchased, the NNMIC and SNMIC will change accordingly.

- (1) The SNMIC and PST Base Setting in this Exhibit 4 assume a Tri-State Annual Schedule of 42 MW.
- (2) PNM and Tri-State, as SNM/NNM Party's with NNM loads, have the option of curtailing NNM loads as a means of reducing NNM flows.
- (3) If PNM and/or Tri-State does the required NNM curtailments using NNM loads only without reducing PNM PST flows, EPE will take all of the required SNMIC curtailments due to a change in the PST Setting.

EXHIBIT 5 EXAMPLE OF PRO-RATA CURTAILMENT OF SNM/NNM PARTY'S
 REQUIRED FOR A NNM LINE OUTAGE WITH THE PST UNAVAILABLE
 OR BYPASSED (Section 13.3)

Pre Outage Conditions⁽¹⁾:

SNMIC = 792 MW
 NNMIC = 1100 MW

Post Outage Conditions

SNMIC = 792 MW
 NNMIC = 700 MW

Calculation of Total NNM Curtailment Required:

NNMIC = NNMIC(ALIS) - NNMIC(LOS) = 1100 MW - 700 MW = 400 MW
 SNM/NNM(*) = 104 MW + 20 MW + 2 MW + 25 MW + 60 MW + 42 MW = 253 MW

(*) WestMesa Transmission Rights
 EPE: 104 MW SS-A
 20 MW SS-I
 2 MW WAPA
 PNM: 25 MW SS-A
 Tri-State: 60 MW (115 kV Transmission Capacity)
 42 MW** (EPE/Tri-State Agreement)

NNM Flow Curtailment Responsibility Ratio: $253 \text{ MW} / (253 \text{ MW} + 1100 \text{ MW}) = .1870$

Total SNM/NNM Party's NNM Flow Curtailment Responsibility:
 $400 \text{ MW} \times .1870 = 75 \text{ MW}$

Each SNM/NNM Party's NNM Flow Curtailment Responsibility:

EPE Flow Curtailment Responsibility: $(126 \text{ MW} / 253 \text{ MW}) \times 75 \text{ MW} = 37 \text{ MW}$
 PNM Flow Curtailment Responsibility: $(25 \text{ MW} / 253 \text{ MW}) \times 75 \text{ MW} = 8 \text{ MW}^{(2)}$
 Tri-State Flow Curtailment Responsibility: $(102 \text{ MW} / 253 \text{ MW}) \times 75 \text{ MW} = 30 \text{ MW}^{(2)}$
 TNMP Flow Curtailment Responsibility: 0 MW

NNM Parties remaining pro-rata curtailments equals: $400 \text{ MW} - 75 \text{ MW} = 325 \text{ MW}$

Each SNM/NNM Party's SNM Reduction for NNM Flow Curtailment Responsibility:

EPE SNM Reduction: $37 \text{ MW} \times 3.33 = 123 \text{ MW}$
 PNM SNM Reduction: $8 \text{ MW} \times 3.33 = 27 \text{ MW}^{(3)}$
 Tri-State SNM Reduction: $30 \text{ MW} \times 3.33 = 100 \text{ MW}^{(3)}$

Post Outage, Post Curtailment Conditions:

NNMI Limit: 700 MW
SNMI Limit: 543 MW

Note: Curtailments given above assume no third party has purchased transmission capability from PNM and EPE pursuant to Section 9.5. If such transmission capability is purchased, the NNMIC and SNMIC will change accordingly.

- (1) The SNMIC and PST Base Setting in this Exhibit 5 assume a Tri-State Annual Schedule of 42 MW.
- (2) PNM and Tri-State, as SNM/NNM Party's with NNM loads, have the option of curtailing NNM loads as a means of reducing NNM flows.
- (3) PNM and Tri-State, as SNM/NNM Party's with NNM loads, have the option of curtailing NNM loads.