



## **Generator Interconnection Feasibility Study**

**for**

[REDACTED]

**600 MW Nominal Output**

[REDACTED]

**SPP #GEN-2001-005**

**Transmission Reliability & Assessment  
Xcel Energy**

**May 18, 2001**

**SPP Generation Feasibility Study (#GEN-2001-005)  
May 18, 2001**

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## 1. Executive Summary

[REDACTED] has requested a generator interconnection feasibility study for a new plant [REDACTED] in the Southwestern Public Service Company (SPS) system. The requested date of operation is June 1, 2003. [REDACTED]  
[REDACTED]

The objective of this limited interconnection feasibility study is to determine if the plan can be connected at this location or if alternative points of interconnection must be required.

The study was based on powerflow and contingency analysis, using 2004 summer peak conditions. The 2004 model is sufficiently similar to the 2003 year as there are no major additions expected in that area of the system except for the addition of the Potter Co. – Frio Draw 345 kV line and its associated terminations. The study did not examine any transfer capability issues emanating from the plant. Such studies would be part of [REDACTED] transmission service request, not part of this limited generator interconnection feasibility study.

The studies has indicated that the connection of the plant on a single 230 kV line is not desirable for the SPS system. The single connection means that this plant has become the largest single hazard on the SPS system, exceeding the Tolk Plant units which are 540 MW net rating. This additional hazard will mean that any TRM or CBM reservations for generation reliability will have to be increased by 60 MW, thus reducing the import capacity into the SPS area. This cost of lost transmission opportunity should be borne by [REDACTED]

However, studies of alternative configurations were also done which place the gas turbines of [REDACTED] combined cycle plant on the 115 kV system and the steam unit on the 230 kV system. The recommended configuration for this plant is 115 kV Option C, at an estimated cost of \$5,629,591. This is a better configuration for the SPS system, due to its limited intertie capability.

Costs for three interconnection alternatives are provided.

## 2. Introduction

[REDACTED] has requested a generator interconnection feasibility study of their proposed plant [REDACTED] of the Southwestern Public Service Company (SPS) system. [REDACTED]

The objective of the study was to determine the interconnect facilities required to support the new plant. If any facilities immediate to the plant were overloaded, facility improvements would be necessary. Transfer studies were not done exporting the power to systems outside the SPS area.

The impact of the 550 MW plant ( summer rating) was initially studied for the system with no additional transmission projects included, beyond what is currently planned and budgeted.

The study included a steady state contingency analysis (PTI PSS/E function ACCC) which considers the impact of the 550 MW plant on transmission line loading and transmission bus voltages for outages of single transmission lines and transformers on the SPS system.

### 3. Study Methodology

#### A. Description

The Clovis generation interconnection study is requested by [REDACTED]. The proposed 550 MW generation connects to the 230 kV bus at [REDACTED]. The predicted 2004 summer peak conditions were used for the powerflow studies.

A steady state analysis of the impact of the nominal 600 MW plant on SPS facilities was done to ensure current SPP criteria and SPS planning requirements are met. The SPS planning requirements are stated in its annual FERC Form No. 715 filing. In general, they require that all facilities be within emergency ratings after a contingency and that there are no base case overloads.

An reference analysis was done for the 2004 summer peak base case to ensure that there were no single contingency overloads. This case output is #10226-000.

No model updates were needed or requested. The latest SPP 2004 summer peak model, with SPP update files applied was used. The automatic contingency analysis option of ACCC was used, outaging every transmission element in the Clovis-Portales transmission area.

#### 4. Study Results

The study results are discussed for the two interconnection alternatives, the all 230 kV option and the mixed 115 kV and 230 kV option. Only the significant overloads are discussed in the report. The reader is referred to the powerflow and contingency outputs for the full detail of the studies.

#### **Reference Case Analysis - Case #10226-000:**

The 2004 summer peak base case shows 150 MW flow to PNM at the Blackwater HVDC for a long-term contract. There is no local generation in the Roosevelt and Curry areas.

There are no overloads or voltage violations in the Roosevelt and Curry areas.

#### A. 230 kV Interconnection Option A

##### **Case #10226-010:**

In this case, the 550 MW generation plant was connected to the [REDACTED]. The export of 150 MW to PNM through the Blackwater HVDC was not changed. The overloads are:

<u>Case #</u>	<u>Outages</u>	<u>Overloads</u>
10226-010	Oasis-Roosevelt 230 kV	Roosevelt 230/115 kV 105.1%
	Roosevelt 230/115 kV	Curry-Roosevelt 115 kV 101.6%
		Oasis 230/115 kV 100.7%

This configuration is shown in Figure 1.

##### **Case #10226-011:**

Based on 10226-010, the transaction with PNM was changed to 200 MW import which represents the worst case power import into the Clovis area.

<u>Case #</u>	<u>Outages</u>	<u>Overloads</u>
10226-011	Oasis 230/115 kV	Curry-Roosevelt 115 kV 111.3%
	Oasis-Roosevelt 230 kV	Roosevelt 230/115 kV 112.2%
	Roosevelt 230/115 kV	Curry-Roosevelt 115 kV 106.9%
		Roosevelt 230/115 kV 101.8%
		Oasis 230/115 kV 106.6%

The overloads are significant, indicating that the addition of the generation in the area is straining the network.

**Case #10226-014:**

Based on 10226-010, the generation was reduced to see what level can be accommodated with no system improvements required. The generation would have to be reduced to 190 MW from 550 MW to alleviate the overloads. Once the generation was reduced to that level, there were no overloads in contingencies.

**Case #10226-031:**

Using case #0226-011, the following lines were removed to determine their criticality in relation to the added generation. The Potter- Frio Draw 345 kV line, the Frio Draw 345/230 kV transformer, the Frio Draw-Oasis line and the Frio Draw-Roosevelt 230 kV line were removed from the case because of the concern over their in-service dates and the projected in-service date of the [REDACTED] plant. The poor contingency performance indicates that these lines are essential to the project.

<u>Case #</u>	<u>Outages</u>	<u>Overloads</u>
10226-031	Norris Street-Oasis 115 kV	Curry-Roosevelt 115 kV 102.9%
	Canon-Oasis 115 kV	Curry-Roosevelt 115 kV 100.7%
	Oasis 230/115 kV	Curry-Roosevelt 115 kV 117.6%
		Roosevelt 230/115 kV 116.9%
	Oasis-Roosevelt 230 kV	Curry-Roosevelt 115 kV 141.8%
		Roosevelt 230/115 kV 148.3%
	Roosevelt 230/115 kV	Oasis 230/115 kV 110.5%
		Oasis-Roosevelt 230 kV 101.8%

**Case #10226-042:**

Using case #10226-031, the generation from the [REDACTED] plant was reduced to zero to test the network with 200 MW coming in from PNM.

<u>Case #</u>	<u>Outages</u>	<u>Overloads</u>
10226-042	Oasis-Roosevelt 230 kV	Roosevelt 230/115 kV 118.7%
		Curry-Roosevelt 115 kV 109.8%
	Oasis 230/115 kV	Roosevelt 230/115 kV 101.0%

This indicates that with 200 MW coming in from PNM, there are issues with the base case network.

## B. 230 kV Interconnection Option B

### Case #10226-050:

Using case #10226-010, line additions were made to see if the configuration using a single 230 kV line from the plant could be improved to remove the overloads found with the single 230 kV line configuration. The new line configuration is to cut the Roosevelt-Frio Draw 230 kV line and build two 230 kV lines from [REDACTED] generation to the cutting points connecting the existing lines to Roosevelt and Frio Draw. Cut the Roosevelt-Oasis 230 kV line and build two 230 kV lines from [REDACTED] generation to the cutting points connecting the existing lines to Roosevelt and Oasis. The configuration is shown in Figure 2. This case has 150 MW flowing to PNM.

<u>Case #</u>	<u>Outages</u>	<u>Overloads</u>
10226-050	Oasis-Roosevelt 230 kV	Roosevelt 230/115 kV 105.0%
	Roosevelt 230/115 kV	Curry-Roosevelt 115 kV 101.5%
		Oasis 230/115 kV 100.7%

This indicates that additional 230 kV lines will not solve these issues. The core problem is lack of 230/115 kV autotransformer capacity or too much generation tied to the 230 kV bus.

## C. 230 kV Interconnection Option C

### Case #10226-020:

Using case #10226-010, the following additions were made:

- Add a 230/115 kV, 225 MVA transformer at Frio Draw Interchange,
- Add a 12.5-mile 397 MCM 115 kV line from West Clovis to Frio Draw,
- Cut the Curry-Tucumcari 115 kV line and build two 4.5-mile, 397 MCM, 115 kV lines from Frio Draw to the cutting points connecting the existing lines to Curry and Tucumcari.

Thus the Curry-Tucumcari 115 kV line becomes two lines, the Curry-Frio Draw line and the Frio Draw-Tucumcari 115 kV line. The configuration is shown in Figure 3. Again in this case, there is 150 MW flowing to PNM at Blackwater.

There are no transmission overloads in contingencies for this configuration.

### Case #10226-021:

Using case #10226-020, the flow on to PNM was changed to take in 200 MW, a worst case configuration. The [REDACTED] generation level was 550 MW.



Again, there are no transmission overloads in contingencies for this configuration, indicating that splitting the generation between 115 kV and 230 kV appears strongly desirable.

#### D. 115 kV Interconnection Option A

##### **Case #10226-060:**

Using case #10226-010 as the starting point, the following additions were made:

- Cut the Roosevelt-Curry 115 kV line and build two 115 kV lines from Clovis generation to the cutting points connecting the existing lines to Roosevelt and Curry.
- Add a 5.5-mile 795 MCM 115 kV line from [REDACTED] generation to Curry.
- Add a 10-mile 795 MCM 115 kV line from [REDACTED] generation to Oasis.
- Add a 1.5-mile 795 MCM 230 kV line from [REDACTED] generation to Roosevelt.

The configuration is shown in Figure 4.

In this case, each gas turbine generates 150 MW on the 115 kV bus and the steam unit generates 275 MW on the 230 kV bus at [REDACTED] generation. 150 MW is flowing to PNM at Blackwater HVDC.

For this configuration also, there are no overloading violations in the Roosevelt and Curry areas.

#### E. 115 kV Interconnection Option B

##### **Case #10226-070:**

Using case #10226-060 as the starting point, the following additions were made:

- Cut the Portales-Roosevelt 115 kV line at Roosevelt and build a 115 kV line from [REDACTED] generation to the cutting point connecting the existing lines to Portales.
- Add a 5.5-mile 795 MCM 115 kV line from [REDACTED] generation to Curry. Remove the 795 MCM 115 kV line from Clovis generation to Oasis.

The configuration is shown in Figure 5. Each gas turbine generates 150 MW on the 115 kV bus, and the steam unit generates 275 MW on the 230 kV bus at [REDACTED] generation. 150 MW is flowing to PNM at Blackwater HVDC.

There are no transmission overloads in contingencies for this configuration.

##### **Case #10226-081:**

This case used the SPP 2004 winter peak base case under the same transmission conditions of Case #10226-070. This provided a check of the configuration in lighter load conditions.

Each gas turbine generates 164 MW on the 115 kV bus, and the steam unit generates 284 MW on the 230 kV bus at [REDACTED] generation. 150 MW is flowing to PNM at Blackwater HVDC.

There are no transmission overloads in contingencies for this configuration.

#### **F. 115 kV Interconnection Option C**

##### **Case #10226-090:**

Using case #10226-070 as the starting point, the following additions were made:

- Cut the Oasis-Curry 115 kV line and build two 115 kV lines from [REDACTED] generation to the cutting points connecting the existing lines to Oasis and Curry.
- Remove the Portales-Clovis generation 115 kV line and the Clovis generation-Curry 115 kV line, and put back the Portales-Roosevelt 115 kV line.

The configuration is shown in Figure 6. Each gas turbine generates 150 MW on the 115 kV bus and the steam unit generates 275 MW on the 230 kV bus at [REDACTED] generation. 150 MW is flowing to PNM at Blackwater HVDC.

There are no overloading violations in the Roosevelt and Curry areas.

##### **Case #10226-91:**

Using case #10226-090 as the starting point, the flow was changed on the Blackwater HVDC facility to flow 200 MW in to the SPS system from PNM.

There are no overloading violations in the Roosevelt and Curry areas.

##### **Case #10226-92:**

Using case #10226-091 as the starting point, the Frio Draw 345/230 kV autotransformer was taken out of service. This simulates the Frio Draw project not being in-service.

There are no overloading violations in the Roosevelt and Curry areas.

##### **Case #10226-101:**

Using the SPP 2004 winter peak base case under the same transmission conditions of Case #10226-090, a check of the lighter loading configuration was done. Each gas turbine generates 164MW on the 115 kV bus and the steam unit generates 284 MW on the 230 kV bus at [REDACTED] generation. 150 MW is flowing to PNM at Blackwater HVDC.

There are no transmission overloads in contingencies for this configuration.

**Case #10226-110:**

Using case #10226-090 as a starting point, Frio Draw Interchange was removed to test the proposed configuration without the new Potter Co – Frio Draw 345 kV line. The in-service date of this line may be very close to the desired in-service date of the plant. Each gas turbine generates 150 MW on the 115 kV bus and the steam unit generates 275 MW on the 230 kV bus at [REDACTED] generation. 150 MW is flowing to PNM at Blackwater HVDC.

There are no transmission overloads in contingencies for this configuration.

## ***Appendix A***

**Powerflow Saved Case Listing  
Configuration Drawings  
Cost Estimates**



Option 1 – Single 230 kV line [REDACTED]

systems of Xcel Energy or other electric companies, and other factors not specifically identified here.

Based on the estimated lead times, the estimated in-service date for this project would be 12 months from the date Requester completes a Relocation Agreement or other construction contract, and makes appropriate payment as required by those documents. This Engineering Estimate is Xcel Energy's best evaluation of the costs to complete the project as described above. However, there will be many factors that influence actual costs, such as; construction requirements of permitting authorities to secure approvals, inclement weather and other acts of god, unexpected increases in material costs, unexpected increases or changes in labor charges, scheduling, availability, and/or mobilization, ability to schedule outages on the existing electric facilities of Xcel Energy or other electric companies, emergencies occurring on the electric systems of Xcel Energy or electric companies, and other factors not specifically identified herein. **Therefore, the final charges to Requester under a Relocation Agreement or other construction contract, will be calculated using Xcel Energy's actual costs, including all appropriate overheads. Requester agrees to pay such final charges.**

**Xcel Energy will promptly notify Requester of any conditions of which it becomes aware that could:**

- increase the Engineering Estimate for the project by more than 20%,
- increase the estimated time from date of Relocation Agreement or other authorization-to-proceed to in-service date by more than 20% .

Engineering Estimate of Costs \$1,155,000 Trans + \$ 433,304 Subs = \$ 1,588,304 Total

Prepared By: Jeff Stebbins/Duane Wise

This estimate is valid for 120 days from the date shown below.

An Engineering Estimate must be signed by both parties and dated. Each signature below is made contingent upon this document being signed by the other party.

**Requester**

**Xcel Energy**

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Date*

**One 230kv Line Terminal and Modify Relays on Two 115kv terminals**

<b>Item Description</b>	<b>Qty</b>	<b>Price Ea.</b>	<b>Total</b>
1 230kv Line Breaker Terminals	1	433,304	<u>433,304</u>
<b>Total Project Expense</b>			<b>\$433,304</b>





Option 2 – Mixed 230 kV and 115 kV Interconnections, Study #10226-070

These are Xcel Energy's best estimates of lead time for the project. However, there will be many factors that influence these lead time estimates, such as; permitting authorities and required siting approvals, inclement weather and other acts of god, equipment delivery, company and non-company labor scheduling and availability, ability to schedule outages on the electric systems of Xcel Energy and other electric companies, emergencies occurring on the systems of Xcel Energy or other electric companies, and other factors not specifically identified here.

Based on the estimated lead times, the estimated in-service date for this project would be 18 months from the date Requester completes a Relocation Agreement or other construction contract, and makes appropriate payment as required by those documents.

This Engineering Estimate is Xcel Energy's best evaluation of the costs to complete the project as described above. However, there will be many factors that influence actual costs, such as; construction requirements of permitting authorities to secure approvals, inclement weather and other acts of god, unexpected increases in material costs, unexpected increases or changes in labor charges, scheduling, availability, and/or mobilization, ability to schedule outages on the existing electric facilities of Xcel Energy or other electric companies, emergencies occurring on the electric systems of Xcel Energy or electric companies, and other factors not specifically identified herein. **Therefore, the final charges to Requester under a Relocation Agreement or other construction contract, will be calculated using Xcel Energy's actual costs, including all appropriate overheads. Requester agrees to pay such final charges.**

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- increase the Engineering Estimate for the project by more than 20%,
- increase the estimated time from date of Relocation Agreement or other authorization-to-proceed to in-service date by more than 20% .

Engineering Estimate of Costs  $\$2,420,000$  Trans +  $\$4,238,929$  =  **$\$ 6,658,939$  total**

Prepared By: Jeff Stebbins/Duane Wise

This estimate is valid for 120 days from the date shown below.

An Engineering Estimate must be signed by both parties and dated. Each signature below is made contingent upon this document being signed by the other party.

**Requester**

**Xcel Energy**

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Date*

**[REDACTED] Generation**  
**Roosevelt Co. NM**  
**Study #10226-070**

<u>Location</u>	<u>Amount</u>
<b>[REDACTED]</b>	\$2,921,287
Roosevelt Revisions	\$837,978
Curry Co. Revisions	\$404,674
Portales Revisions	\$75,000
<b>Project Total</b>	<b>\$4,238,939</b>

Revised 4/17/01

**Generating Station**  
**One 230kv Line Terminal, 4 115kv Line Terminals, One 115kv Bus Tie Breaker**  
**and One 115kv Transfer Breaker.**

Rev. 4/17/01

<b>Item Description</b>	<b>Qty</b>	<b>SPS Price Ea.</b>	<b>SPS Total</b>
1 230kv Line Breaker Terminals	1	433,304	433,304
2 230kv Potential Transformers	1	145,406	145,406
3 Control House and Auxiliary Equipment	1	189,560	189,560
4 115kv Line Breaker Terminals	4	329,674	1,318,696
5 115kv Bus Tie Breaker	1	188,225	188,225
6 115kv Transfer Breaker	1	256,642	256,642
7 115kv Transfer Bus and Switch	4	64,419	257,676
8 115kv Potential Transformers	2	65,889	131,778
<b>Total Project Expense</b>			<b>\$2,921,287</b>

**Revisions**  
**One 230kv Line Terminal and One 115kv Line Terminal**  
**Modify Relays on One 115kv terminals**

Rev. 4/17/01

<u>Item Description</u>	<u>Qty</u>	<u>Price Ea.</u>	<u>Total</u>
1 230kv Line Breaker Terminal	1	433,304	433,304
1 115kv Line Terminal	1	329,674	329,674
1 115kv Terminal Relay Modification	1	75,000	75,000
<b>Total Project Expense</b>			<b>\$837,978</b>

Curry Co. Interchange  
One 115kv Line Terminal and one 115kv Terminal Relay Modification

Rev. 4/17/01

Item Description	Qty	Price Ea.	Total
1 115kv Line Terminal	1	329,674	329,674
2 Relay Terminal Modification	1	75,000	75,000
<b>Total 1999 Project Expense</b>			<b>\$404,674</b>

Portales Interchange  
One 115kv Terminal Relay Modification

Rev. 4/17/01

Item Description	Qty	Price Ea.	Total
1 Relay Terminal Modification	1	75,000	75,000
<b>Total 1999 Project Expense</b>			<b>\$75,000</b>

Option 3 – Mixed 230 kV and 115 Kv Interconnections, Study #10226-090

By signing below Requester agrees that this document sets forth the correct Project Information and Project Assumptions.

Permitting Requirements

Xcel Energy has reviewed the permitting requirements and siting issues that may be a factor for this project. Xcel Energy estimates that the following lead times are necessary to meet each listed requirement. These requirements must generally be satisfactorily resolved prior to starting any field construction.

<u>Permits Required/Siting Issues</u>	<u>Lead Time in Months</u>
Cultural and archaeological Survey	3 months
New Mexico Certificate of Convenience and Necessity	8 months
New Mexico Highway permits (concurrent)	2 months
Estimate of Total Lead Time for Permitting/Siting	<u>10 months</u>

Construction Requirements

Xcel Energy has reviewed the construction requirements for this project, and estimates the following lead times are necessary to attain each milestone:

<u>Construction Milestones - Transmission</u>	<u>Lead Time in Months</u>
Surveying (initial routes)	3 months
Line Design	4 months
Steel pole design and delivery	6 months
Topography surveying and structure staking (concurrent)	3 months
Line construction	3 months
<i>(Note: Much of this can be done during the permitting process).</i>	
Estimate of Total Lead Time for Construction	<u>12 months</u>

<u>Construction Milestones - Substation</u>	<u>Lead Time in Months</u>
Site Acquisition	3 months
Preliminary Engineering	2 month
Acquisition of Materials	7 months
Construction	6 months
Estimate of Total Lead Time for Construction	<u>18 months</u>

Option 3 – Mixed 230 kV and 115 Kv Interconnections, Study #10226-090

These are Xcel Energy's best estimates of lead time for the project. However, there will be many factors that influence these lead time estimates, such as; permitting authorities and required siting approvals, inclement weather and other acts of god, equipment delivery, company and non-company labor scheduling and availability, ability to schedule outages on the electric systems of Xcel Energy and other electric companies, emergencies occurring on the systems of Xcel Energy or other electric companies, and other factors not specifically identified here.

Based on the estimated lead times, the estimated in-service date for this project would be 18 months from the date Requester completes a Relocation Agreement or other construction contract, and makes appropriate payment as required by those documents.

This Engineering Estimate is Xcel Energy's best evaluation of the costs to complete the project as described above. However, there will be many factors that influence actual costs, such as; construction requirements of permitting authorities to secure approvals, inclement weather and other acts of god, unexpected increases in material costs, unexpected increases or changes in labor charges, scheduling, availability, and/or mobilization, ability to schedule outages on the existing electric facilities of Xcel Energy or other electric companies, emergencies occurring on the electric systems of Xcel Energy or electric companies, and other factors not specifically identified herein. **Therefore, the final charges to Requester under a Relocation Agreement or other construction contract, will be calculated using Xcel Energy's actual costs, including all appropriate overheads. Requester agrees to pay such final charges.**

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Engineering Estimate of Costs \$1,975,000 Trans + \$3,654,591 Subs = \$ 5,629,591 total

Prepared By: Jeff Stebbins/Duane Wise

This estimate is valid for 120 days from the date shown below.

An Engineering Estimate must be signed by both parties and dated. Each signature below is made contingent upon this document being signed by the other party.

**Requester**

**Xcel Energy**

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Signature*                      *Date*

\_\_\_\_\_  
*Signature*                      *Date*



[REDACTED]  
[REDACTED]

**Study #10226-090**

<b>Location</b>	<b>Amount</b>
[REDACTED]	\$2,921,287
Roosevelt Revisions	\$583,304
Curry Co. Revisions	\$75,000
Portales Revisions	\$75,000
<b>Project Total</b>	<b>\$3,654,591</b>

Revised 4/17/01

Generating Station

Rev. 4/17/01

One 230kv Line Terminal, 4 115kv Line Terminals, One 115kv Bus Tie Breaker  
and One 115kv Transfer Breaker.

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8 115kv Potential Transformers	2	65,889	131,778
<b>Total Project Expense</b>			<b>\$2,921,287</b>

**Roosevelt Interchange Revisions**  
**One 230kv Line Terminal and Modify Relays on Two 115kv terminals**

Rev. 4/17/01

<u>Item Description</u>	<u>Qty</u>	<u>Price Ea.</u>	<u>Total</u>
1 230kv Line Breaker Terminals	1	433,304	433,304
2 115kv Terminal Relay Modifications	2	75,000	<u>150,000</u>
<b>Total Project Expense</b>			<b>\$583,304</b>

Curry Co. Interchange  
One 115kv Line Terminal and one 115kv Terminal Relay Modification

Rev. 4/17/01

Item Description	Qty	Price Ea.	Total
1 Relay Terminal Modification	1	75,000	75,000
<b>Total 1999 Project Expense</b>			<b>\$75,000</b>

Rev. 4/17/01

Oasis Interchange  
One 115kv Terminal Relay Modification

Item Description	Qty	Price Ea.	Total
1 Relay Terminal Modification	1	75,000	75,000
<b>Total 1999 Project Expense</b>			<b>\$75,000</b>