

**Xcel Energy
Constructability Scope Document
Transmission Capital 5-Year Budget Submittal
2012 – 2016**

Revision #:	D2	Total Project Cost: \$
Date Submitted:	10/12/2010	
Project Title:	IREA Missile Site 230/115 kV Delivery Point	
Project Manager:	TBD	
Planner/Team:	Hari Singh / Gerry Stellern	
In Service Date:	May 2018	
Area of Work (NSP, NSPW, PSCo, SPS)	PSCo	
State Work Being Completed:	CO	
Project Category:	IA – Interconnection Agreement (7)	
Project Priority	High	
Request Type (New, Carryover, Reimbursable)	New	
Project Start Date:	1/22/2009	
Date Submitted:	1/22/2009	
Discretionary / Contingency / Non Discretionary	Non-Discretionary (Corporate Obligations)	
Distribution Associated Projects (None, Name of Proj)	None	Distribution Funded Yes / No: No
O&M Dollars Needed		

Project Description (Board Level)

IREA has requested a new 115 kV delivery point coming from PSCo's planned Missile Site substation to serve their loads at Strasburg and Bennett between Missile Site and Green Valley substations. The project consists of constructing a two (2)-breaker 230 kV bay at the PSCo Missile Site substation and installing a new 230/115 kV, 280 MVA autotransformer. This project scope assumes that PSCo would own (including cost responsibility) and operate all of the 230 kV facilities inside Missile Site substation and the 230 kV revenue metering equipment. IREA is responsible for the cost of the 280 MVA auto-transformer. PSCo will be designing and procuring the two-breaker bay, the revenue metering, and associated SCADA RTU/LCU equipment.

Detailed Project Description

(PSCo-owned): PSCo would have ownership and cost responsibility for constructing the 2-breaker bay, the revenue metering, and related equipment such as relaying modifications and terminations.

It is assumed that PSCo standard transmission design will be utilized (i.e. 2-breaker bay, laid out for ultimate breaker-and-a-half capability). It is assumed that PSCo will be responsible for the design, construction, costs, and ownership associated with installing the in/out 2-breaker bay, the revenue metering equipment, and SCADA RTU / LCU. PSCo will also be responsible for any 230 kV transmission line-relaying modifications required at the remote breaker stations (Pawnee, Smoky Hills, and Daniels Park).

(IREA-owned): IREA would have ownership and cost responsibility for purchasing a 280 MVA autotransformer.

(NOTE – for the purposes of this estimate package, the PM should obtain cost estimates for Engineering and Siting & LR for the design & construction of all of the defined PSCo-owned equipment (2-breaker 230 kV bay, revenue metering equipment, and related equipment such as protective relaying, etc., including any relaying modifications required. It is assumed that IREA will be responsible for the cost of the 280 MVA autotransformer.)

Necessity Description

The primary need for installing a new 115 kV load delivery point at Missile Site is to improve transmission service reliability for the IREA customer loads presently being supplied from the IREA surrounding substations.

Alternatives and Reason for Choice

None

Consequences of Not Doing Project

Reduced reliability for serving IREA loads at Strasburg and Bennett.

Operating Procedures

None

Risks/Issues

None

Comments-Transmission Initiatives

None

**Cost Estimates: (AFUDC Excluded)
(Whole Dollar Value)**

Years	Trans Line	Trans / Dist Sub	ROW	Land	Total
2009					\$0
2010					\$0
2011					\$0
2012					\$0
2013					\$0
2014					\$0
2015					\$0
2016					\$0
2017					\$0
2018					\$0
Total	\$0	\$0	\$0	\$0	\$0

CIAC(Yes, No)		Cash Flow Attached (Y, N)	
RWIP (Yes, No)			

Pricing Assumptions

- AFUDC is not included
- Escalation is/is not ??
- Xcel crews/contract ???
- Overtime?
- Contingency included?
- Estimate accuracy - %
- Other assumption

