Transmission Cost of Service Analysis Workshop

December 5, 2011

Agenda

- Cost of Service Analysis
- Montana Intertie

Objectives

- As requested by customers and interested parties, BPA is providing a review of the transmission rates calculation process as it currently is performed.
  - For this review, the rate calculations presented here use the BP-12 Rate Case revenue requirement numbers with an adjustment for use of reserves for an “illustrative” analysis.
  - The “rates” shown in this presentation should *not* be considered to be the rates that would have been proposed in the BP-12 rate case had there not been a settlement.
- This review of the transmission rate development process will facilitate subsequent discussion of the scope of the COSA settlement provision (section 6 of the Settlement Agreement) as well as discussion of the topics decided upon.

Principles for COSA

COSA Principles

Traditional BPA transmission rate making principles

- Consistency with BPA statutes
- Cost causation—allocate costs to customers based on proportionate use
  - **Customer comment:** in accordance to industry accepted wholesale ratemaking principles.
- Simplicity, understandability, public acceptance, and feasibility of application
- Avoidance of rate shock
- Rate stability from rate period to rate period (both with regard to the level of rates and rate design to be implemented)
  - **Customer comment:** for clarity, revise parenthetical: "(both with regard to the level of the rates and the rate design to be implemented.)"

Additional principles proposed by some Customers

- Adherence to industry standards
- Any new approach to cost of service proposed for adoption must be administrable, understandable, durable and repeatable.
  - **Customer comment:** for clarity, revise: "Any new approach to cost of service proposed for adoption must be administrable, understandable, durable and repeatable."
- Advocates for change should demonstrate need for change and propose an alternative methodology

Rate Development Overview

- Segmentation
- Segmented Revenue Requirement
  - Operations and Maintenance
  - Transmission Acquisition and Ancillary Services
  - Depreciation
  - Investment Base
  - Net Interest
  - Planned Net Revenue
- Adjusted Segmented Revenue Requirement
  - Revenue Credits
  - Adjustments
  - Transmission Sales
- Rate Calculations
- Appendix
  - Long-Term Transmission Sales
  - FERC Coincidental Peak Tests

Segmentation

- The facilities of the FCRTS are classified and assigned to different segments.
- Historical investment and O&M associated with these segments are identified.
- Projected investment to be placed in service through the rate period is identified by segment.

Transmission Segments

- Generation Integration (GI) – Facilities to connect Federal generation to the Network
- Integrated Network (Network) – Facilities to provide bulk power transmission
- Southern Intertie – AC and DC connections to California
- Eastern Intertie – Townsend-Garrison 500 kV line and equipment
- Utility Delivery (UD) – Facilities to provide power to public customers at <34.5 kV
- Industrial Delivery (DSI) – Facilities to deliver power to Direct Service Industries (DSIs) at ≤34.5 kV
- Ancillary Services – Facilities and operations necessary for providing reliable transmission service as defined by FERC

Segmented Revenue Requirements

	A	B	C	D	E	F	G	H	I
1	Gross Annual Revenue Requirement	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
2	**FY 2012**								
3	**Operations & Maintenance**	3,944	246,017	34,018	2,420	3,325	1,374	94,364	**385,462**
4	**Tx Acquisition & Ancillary**	58	21,581	1,649	16	454	27	115,920	**139,705**
5	**Depreciation**	2,355	147,389	22,528	3,029	1,191	612	21,501	**198,604**
6	**Net Interest Expense**	2,028	129,591	16,050	2,597	720	425	6,280	**157,690**
7	**Planned Net Revenues**	1,079	71,224	14,061	1,383	383	226	3,343	**91,700**
8	**Total FY 2012**	**9,464**	**615,802**	**88,307**	**9,445**	**6,073**	**2,664**	**241,407**	**973,161**
9	**FY 2013**								
10	**Operations & Maintenance**	4,058	253,113	34,999	2,490	3,421	1,413	96,912	**396,406**
11	**Tx Acquisition & Ancillary**	58	21,716	1,649	16	454	27	115,920	**139,840**
12	**Depreciation**	2,529	162,419	23,494	3,069	1,257	635	24,720	**218,123**
13	**Net Interest Expense**	2,111	145,414	15,260	2,413	694	397	7,070	**173,359**
14	**Planned Net Revenues**	506	44,210	9,951	578	166	95	1,693	**57,199**
15	**Total FY 2013**	**9,261**	**626,872**	**85,353**	**8,567**	**5,992**	**2,567**	**246,315**	**984,927**
16	**RATE PERIOD AVERAGE**	**9,363**	**621,337**	**86,830**	**9,006**	**6,033**	**2,616**	**243,861**	**979,044**

Operations and Maintenance Costs

	A	B	C
1	O&M Expenses	**FY 12**	**FY 13**
2	System Operations	63,218	65,133
3	Transmission Scheduling	12,772	12,991
4	System Maintenance	142,513	146,545
5	Environmental Operations	4,199	4,286
6	**Total Direct O&M**	**222,702**	**228,955**
7	Direct ancillary services O&M	41,747	42,983
8	Scheduling (direct ancillary service)	12,772	12,991
9	**Net O&M (total less direct ancillary)**	**168,183**	**172,981**
10	**Overhead Costs**		
11	Transmission Marketing and Sales	16,968	17,296
12	Transmission Business Support	37,092	38,170
13	Transmission System Engineering	31,800	32,803
14	Corporate Services allocation to TS	77,100	78,781
15	**Other costs**		
16	Draw-down of Reserves	0	0
17	Undistributed Reduction	(200)	401
18	**Total Overhead**	**162,760**	**167,451**

Transmission direct O&M, the programs that constitute the actual 3-year averages of O&M from the Segmentation Study, is identified from the revenue requirement. From that is deducted the amounts associated with ancillary services, which are directly assigned. The remainder is split between lines and substations and segmented based on the 3-year averages. The remaining O&M programs are allocated to the segments/ancillary services based on the direct O&M.

Operations and Maintenance Segmentation

	A	B	C	D	E	F	G	H	I
19	O&M Allocation	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
20	**FY07-09 O&M by Segment**								
21	Transmission Lines	401	50,991	2,926	621	13	0		**54,951**
22		0.73%	92.79%	5.32%	1.13%	0.02%	0.00%		
23	Substations	1,126	44,236	10,242	316	1,274	532		**57,726**
24		1.95%	76.63%	17.74%	0.55%	2.21%	0.92%		
25	**Total Historical O&M**	1,527	95,227	13,167	937	1,287	532		**112,677**
26		1.36%	84.51%	11.69%	0.83%	1.14%	0.47%		
27	**FY 2012 Allocation of O&M**	2,279	142,137	19,654	1,398	1,921	794	54,519	**222,702**
28		1.02%	63.82%	8.83%	0.63%	0.86%	0.36%	24.48%	
29	**Overhead**	1,666	103,880	14,364	1,022	1,404	580	39,845	**162,760**
30	**FY 2012 Total**	**3,944**	**246,017**	**34,018**	**2,420**	**3,325**	**1,374**	**94,364**	**385,462**
31	**FY 2013 Allocation of O&M**	2,344	146,192	20,215	1,438	1,976	816	55,974	**228,955**
32		1.02%	63.85%	8.83%	0.63%	0.86%	0.36%	24.45%	
33	**Overhead**	1,714	106,921	14,784	1,052	1,445	597	40,938	**167,451**
34	**FY 2013 Total**	**4,058**	**253,113**	**34,999**	**2,490**	**3,421**	**1,413**	**96,912**	**396,406**
35	**Rate Period Average**	**4,001**	**249,565**	**34,508**	**2,455**	**3,373**	**1,393**	**95,638**	**390,934**

Transmission Acquisition and Ancillary Services

- Station Service is segmented based on the direct O&M segmented to substations.
- Costs directly assigned to relevant segments:
  - COE/BOR transmission
  - AC Remedial Action Scheme
  - Network Redispatch
  - Synchronous Condensing
  - GTA Settlement
  - Generation Inputs
  - Non-Between Business Unit Transmission Acquisition and Ancillary Services

Transmission Acquisition and Ancillary Services

	A	B	C	D	E	F	G	H	I
1	Transmission Acquisition and Ancillary Services	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
2	**FY 2012**								
3	**Station Service** (by O&M)	58	2,261	523	16	65	27		**2,950**
4	**COE/BOR** (per study)		6,794			389			**7,183**
5	**AC RAS** (all Intertie)			377					**377**
6	**Redispatch** (all Network)		400						**400**
7	**Sync Cond.** (by Location)		1,142	749					**1,891**
8	**Non BBL** (all Network)		10,480						**10,480**
9	**GTA Settlement** (all Network)		504						**504**
10	**Gen Inputs** (all ancillary)							115,920	**115,920**
11	**FY 2012 total**	**58**	**21,581**	**1,649**	**16**	**454**	**27**	**115,920**	**139,705**
12	**FY 2013**								
13	**Station Service** (by O&M)	58	2,261	523	16	65	27		**2,950**
14	**COE/BOR** (per study)		6,794			389			**7,183**
15	**AC RAS** (all Intertie)			377					**377**
16	**Redispatch** (all Network)		400						**400**
17	**Sync Cond.** (by Location)		1,142	749					**1,891**
18	**Non BBL** (all Network)		10,610						**10,610**
19	**GTA Settlement** (all Network)		509						**509**
20	**Gen Inputs** (all ancillary)							115,920	**115,920**
21	**FY 2013 total**	**58**	**21,716**	**1,649**	**16**	**454**	**27**	**115,920**	**139,840**
22	**Rate Period Average Tx Acq**	**58**	**21,648**	**1,649**	**16**	**454**	**27**	**115,920**	**139,773**

Segmented Investment Summary

	A	B	C	D	E	F	G	H	I
1		**Generation Integration**	**Network**	**Southern Intertie**	**Eastern Intertie**	**Utility Delivery**	**DSI Delivery**	**Other**	**Annual Total**
	Line Segmentation	$000	$000	$000	$000	$000	$000	$000	$000
2	FYE 2009 Investment	18,332	2,046,410	187,084	94,271	642	0		**2,346,739**
3	FY 2010 Additions	0	45,992	1,812	0	0	0		**47,804**
4	FY 2011 Additions	1,216	101,620	1,865	0	0	0		**104,701**
5	FY 2012 Additions	616	159,062	2,101	0	0	0		**161,779**
6	FY 2013 Additions	609	297,867	1,169	0	0	0		**299,645**
7	**FY 2012 Investment** /1	**19,856**	**2,273,553**	**191,812**	**94,271**	**642**	**0**		**2,580,133**
8	**FY 2013 Investment** /1	**20,468**	**2,502,017**	**193,447**	**94,271**	**642**	**0**		**2,810,845**
9	Substation Segmentation								
10	FYE 2009 Investment	43,204	1,899,155	498,066	23,866	24,876	15,557		**2,504,725**
11	FY 2010 Additions	0	38,935	1,309	0	31	0		**40,275**
12	FY 2011 Additions	6,455	195,161	5,028	0	321	0		**206,965**
13	FY 2012 Additions	3,494	253,957	20,281	0	419	0		**278,151**
14	FY 2013 Additions	4,107	224,836	8,610	0	468	0		**238,021**
15	**FY 2012 Investment** /1	**51,406**	**2,260,230**	**514,543**	**23,866**	**25,438**	**15,557**		**2,891,041**
16	**FY 2013 Investment** /1	**55,207**	**2,499,627**	**528,989**	**23,866**	**25,881**	**15,557**		**3,149,127**
17	Total Segmented Line & Sub Investment								
18	**FY 2012 Investment**	**71,262**	**4,533,783**	**706,355**	**118,137**	**26,079**	**15,557**		**5,471,174**
19		1.3%	82.9%	12.9%	2.2%	0.5%	0.3%		
20	**FY 2013 Investment**	**75,675**	**5,001,644**	**722,435**	**118,137**	**26,523**	**15,557**		**5,959,972**
21		1.3%	83.9%	12.1%	2.0%	0.4%	0.3%		

/1 Investment is Start of Year Investment plus half the additions expected during the Fiscal Year

Depreciation Segmentation

- Depreciation is calculated for each segment and ancillary service from the average gross investment.

  - The depreciation for control equipment, computer hardware/software and communications equipment associated with ancillary services is assigned directly to that service.

  - The depreciation from the transmission portion of these accounts is prorated to the segments based on their direct O&M.

  - The remaining general plant depreciation is prorated to the segments and ancillary services based on the total direct O&M.

Depreciation Segmentation

	A	B	C	D	E	F	G	H	I
1	Depreciation Summary	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
2	**FY 2012 Depreciation**								
3	Lines (0.021626)	429	49,168	4,148	2,039	14	0		55,798
	Subs (0.024938)	1,282	56,366	12,832	595	634	388		72,097
4	Spacer Damper (FAS71)		1,727						1,727
5	Tx General Plant /1	514	32,075	4,435	316	434	179		37,953
6	Ancillary General Plant							18,412	18,412
7	Net General Plant /2	129	8,053	1,113	79	109	45	3,089	12,617
8	**FY 2012 Total**	**2,355**	**147,389**	**22,528**	**3,029**	**1,191**	**612**	**21,501**	**198,604**
9	**FY 2013 Depreciation**								
10	Lines (0.021626)	443	54,109	4,183	2,039	14	0		60,787
	Subs (0.024938)	1,377	62,336	13,192	595	645	388		78,533
11	Spacer Damper (FAS71)		1,727						1,727
12	Tx General Plant /1	572	35,645	4,929	351	482	199		42,177
13	Ancillary General Plant							21,426	21,426
14	Net General Plant /2	138	8,603	1,190	85	116	48	3,294	13,473
15	**FY 2013 Total**	**2,529**	**162,419**	**23,494**	**3,069**	**1,257**	**635**	**24,720**	**218,123**
16	**Rate Period Average**	**2,442**	**154,904**	**23,011**	**3,049**	**1,224**	**624**	**23,110**	**208,363**

/1 Transmission General Plant allocated according to Historical Line & Sub O&M
/2 Net General Plant allocated according to Direct O&M allocation

Investment Base

- The investment base is the average net plant investment for a particular year. The net plant for the segments and ancillary services is adjusted for various items.
- Additions:
  - General Plant
  - Regulatory Assets (Spacer Dampers)
- Subtractions:
  - Customer-funded plant
  - Deferred revenue balances

FY 2012 Investment Base

	A	B	C	D	E	F	G	H	I
1	FY 2012 Investment	**Generation Integration**	**Network**	**Southern Intertie**	**Eastern Intertie**	**Utility Delivery**	**DSI Delivery**	**Ancillary Services**	**Annual Total**
		$000	$000	$000	$000	$000	$000	$000	$000
2	**Net Plant**	41,105	2,482,410	374,802	52,649	14,592	8,614		**2,974,172**
3		1.38%	83.47%	12.60%	1.77%	0.49%	0.29%		
4	**Account 353 & 397**								**243,005**
5	*Allocation by net plant*	3,358	202,826	30,623	4,302	1,192	704		
6	**Ancillary Services**							137,710	**137,710**
7	**Subtotal**	**44,463**	**2,685,236**	**405,425**	**56,951**	**15,784**	**9,318**	**137,710**	**3,354,887**
8		1.33%	80.04%	12.08%	1.70%	0.47%	0.28%	4.10%	
9	**Remaining General Plant (incl. Land)**								**308,206**
10	*Allocation by subtotal*	4,085	246,686	37,245	5,232	1,450	856	12,651	
11	**Customer funded Investments**		(251,071)	(5,549)					**(256,620)**
12	**Intangibles (spacer dampers)**		36,897						**36,897**
13	**Accrued Revenue Adjustment (Fiber)**								**(30,137)**
14	*Allocation by subtotal*	(399)	(24,122)	(3,642)	(512)	(142)	(84)	(1,237)	
15	**Accrued Revenue Adjustment (3rd AC)**			(95,245)					**(95,245)**
16	**FY 2012 Total**	**48,149**	**2,693,626**	**338,235**	**61,671**	**17,092**	**10,090**	**149,124**	**3,317,987**
17		1.45%	81.18%	10.19%	1.86%	0.52%	0.30%	4.49%	

FY 2013 Investment Base

	A	B	C	D	E	F	G	H	I
18	FY 2013 Investment	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
19	**Net Plant**	43,753	2,839,281	373,704	50,015	14,381	8,226		**3,329,360**
20		1.31%	85.28%	11.22%	1.50%	0.43%	0.25%		
21	**Account 353 & 397**								**258,717**
22	*Allocation by net plant*	3,400	220,634	29,040	3,887	1,118	639		
23	Ancillary Services							157,910	**157,910**
24	**Subtotal**	**47,153**	**3,059,915**	**402,744**	**53,902**	**15,499**	**8,865**	**157,910**	**3,745,987**
25		1.26%	81.69%	10.75%	1.44%	0.41%	0.24%	4.22%	
26	Remaining General Plant (incl. Land)								**337,895**
27	*Allocation (by subtotal)*	4,253	276,010	36,328	4,862	1,398	800	14,244	
28	Customer funded Investments		(279,928)	(10,958)					**(290,886)**
29	Intangibles (spacer dampers)		35,170						**35,170**
30	Accrued Revenue Adjustment (Fiber)								**(26,619)**
31	*Allocation (by subtotal)*	(335)	(21,744)	(2,862)	(383)	(110)	(63)	(1,122)	
32	Accrued Revenue Adjustment (3rd AC)			(92,180)					**(92,180)**
33	**FY 2013 Total**	**51,071**	**3,069,423**	**333,072**	**58,381**	**16,787**	**9,602**	**171,032**	**3,709,367**
34		1.38%	82.75%	8.98%	1.57%	0.45%	0.26%	4.61%	
35	**Rate Period Average**	**49,610**	**2,881,525**	**335,653**	**60,026**	**16,939**	**9,846**	**160,078**	**3,513,677**
36		1.41%	82.01%	9.55%	1.71%	0.48%	0.28%	4.56%	

Net Interest Segmentation

- Net Interest and Total Planned Net Revenue are segmented based on the Investment Base. First however, the elements related to the components pertaining to Transmission Credit Projects must be directly assigned to the relevant segments -- LGIA to Network and COI to Southern Intertie.

Net Interest

TRANSMISSION REVENUE REQUIREMENT
INCOME STATEMENT
($thousands)

		A FY 2012
1	OPERATING EXPENSES	
2	**DEPRECIATION & AMORTIZATION**	**198,604**
3	INTEREST EXPENSE	
4	INTEREST EXPENSE	
5	FEDERAL APPROPRIATIONS	23,086
6	CAPITALIZATION ADJUSTMENT	(18,968)
7	ON LONG-TERM DEBT	101,642
8	AMORTIZATION OF CAPITALIZED BOND PREMIUMS	561
9	DEBT SERVICE REASSIGNMENT INTEREST	54,352
10	**NON-FEDERAL INTEREST**	**44,842**
11	**AFUDC**	**(30,069)**
12	INTEREST INCOME	(17,757)
13	NET INTEREST EXPENSE	157,690
14	TOTAL EXPENSES	845,461
15	MINIMUM REQUIRED NET REVENUES	91,700

Net Interest Allocation

TRANSMISSION REVENUE REQUIREMENT
STATEMENT OF CASH FLOWS
($thousands)
FY 2012

		TOTAL	LGIA/COI	WITHOUT LGIA/COI
1	CASH FROM CURRENT OPERATIONS			
2	EXPENSES NOT REQUIRING CASH:			
3	DEPRECIATION & AMORTIZATION	198,604	7,720	190,793
4	TRANSMISSION CREDIT PROJECTS NET INTEREST	17,970	17,970	
5	AMORTIZATION OF CAPITALIZED BOND PREMIUMS	561		561
6	CAPITALIZATION ADJUSTMENT	(18,968)		(18,968)
7	ACCRUAL REVENUES (LGIA/AC INTERTIE/FIBER)	(48,616)	(41,985)	(6,631)
8	CASH PROVIDED BY CURRENT OPERATIONS	149,551	(16,295)	165,755
9	CASH FROM TREASURY BORROWING AND APPROPRIATIONS			
10	DEBT SERVICE REASSIGNMENT PRINCIPAL	(41,141)		(41,141)
11	REPAYMENT OF LONG-TERM DEBT	(25,000)		(25,000)
12	REPAYMENT OF CAPITAL APPROPRIATIONS	(175,110)		(175,110)
13	CASH FROM TREASURY BORROWING AND APPROPRIATIONS	(241,251)		(241,251)
14	ANNUAL INCREASE (DECREASE) IN CASH	(91,700)	(16,295)	(75,496)
15	MINIMUM REQUIRED NET REVENUES	91,700	16,295	75,496
16	TOTAL ANNUAL INCREASE (DECREASE) IN CASH	0	0	0

1/ Line 16 must be greater than or equal to zero, otherwise net revenues will be added so that there are no negative cash flows for the year.

Net Interest Allocation

		TOTAL	NETWORK	Southern Intertie
	FY 2012			
1	GROSS INTEREST	20,268	18,461	1,807
2	AFUDC	(2,298)	(2,298)	
3	TC PROJECTS NET INTEREST	17,970	16,163	1,807
4	TC PROJECTS MRNR			
5	TC PROJECTS DEPRECIATION	6,703	6,563	140
6	TC PROJECTS NON-CASH NET INTEREST	17,970	16,163	1,807
7	TC PROJECTS REVENUE CREDITS	(41,985)	(33,560)	(8,425)
8	EFFECT ON CASH FLOW - SURPLUS/(DEFICIT)	(17,312)	(10,834)	(6,478)
9	TC PROJECTS MRNR	17,312	10,834	6,478
	FY 2013			
10	GROSS INTEREST	22,133	20,641	1,492
11	AFUDC	(2,107)	(2,107)	
12	TC PROJECTS NET INTEREST	20,026	18,534	1,492
13	TC PROJECTS MRNR			
14	TC PROJECTS DEPRECIATION	7,720	7,440	280
15	TC PROJECTS NON-CASH NET INTEREST	20,026	18,534	1,492
16	TC PROJECTS REVENUE CREDITS	(48,220)	(39,795)	(8,425)
17	EFFECT ON CASH FLOW - SURPLUS/(DEFICIT)	(20,474)	(13,821)	(6,653)
18	TC PROJECTS MRNR	20,474	13,821	6,653

Net Interest Expense

	A	B	C
1	Net Interest	**FY 12** $000	**FY 13** $000
2	**Federal appropriations**	23,086	10,396
3	**Capitalization adjustment**	(18,968)	(18,968)
4	**Long-term debt**	101,642	137,021
5	**Capital bond premium amortization**	561	561
6	**Debt service reassignment**	54,352	52,556
7	**Non-federal interest**	44,842	47,321
8	**AFUDC**	(30,069)	(32,255)
9	**Interest income**	(17,757)	(23,273)
10	**Subtotal Interest Expense**	**157,690**	**173,359**
11	**less Project Interest**	17,970	20,026
12	**Net Interest Expense**	**139,720**	**153,333**

Segmented Net Interest Expense

	A	B	C	D	E	F	G	H	I
13	Interest Allocation	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
14	**FY 2012**								
15	Project Interest		16,163	1,807					**17,970**
16	Net Interest Allocation	2,028	113,428	14,243	2,597	720	425	6,280	
17	**FY 2012 Total Interest**	**2,028**	**129,591**	**16,050**	**2,597**	**720**	**425**	**6,280**	**157,690**
18	**FY 2013**								
19	Project Interest		18,534	1,492					**20,026**
20	Net Interest Allocation	2,111	126,880	13,768	2,413	694	397	7,070	
21	**FY 2013 Total Interest**	**2,111**	**145,414**	**15,260**	**2,413**	**694**	**397**	**7,070**	**173,359**
22	**Rate Period Average**	**2,069**	**137,502**	**15,655**	**2,505**	**707**	**411**	**6,675**	**165,524**

/1 Net Interest allocated by Plant Investment Base

Planned Net Revenue

	A	B	C	D	E	F	G	H	I
1	Planned Net Revenue	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
2	**FY 2012**								
3	Cash-flow MRNR /1								**91,700**
4	Customer funded projects		10,834	6,478					**17,312**
5	Remaining Cash Requirement								**74,388**
6	Allocated by Investment Bas	1,079	60,390	7,583	1,383	383	226	3,343	
7	**FY 2012 PNR**	**1,079**	**71,224**	**14,061**	**1,383**	**383**	**226**	**3,343**	**91,700**
8	**FY 2013**								
9	Cash-flow MRNR /1								**57,199**
10	Customer funded projects		13,821	6,653					**20,474**
11	Remaining Cash Requirement								**36,725**
12	Allocated by Investment Bas	506	30,389	3,298	578	166	95	1,693	
13	**FY 2013 PNR**	**506**	**44,210**	**9,951**	**578**	**166**	**95**	**1,693**	**57,199**
14	**Rate Period Average**	**793**	**57,717**	**12,006**	**980**	**275**	**161**	**2,518**	**74,450**

/1 MRNR = Minimum Required Net Revenue

Segmented Revenue Requirement

	A	B	C	D	E	F	G	H	I
1	Gross Annual Revenue Requirement	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
2	**FY 2012**								
3	**Operations & Maintenance**	3,944	246,017	34,018	2,420	3,325	1,374	94,364	**385,462**
4	**Tx Acquisition & Ancillary**	58	21,581	1,649	16	454	27	115,920	**139,705**
5	**Depreciation**	2,355	147,389	22,528	3,029	1,191	612	21,501	**198,604**
6	**Net Interest Expense**	2,028	129,591	16,050	2,597	720	425	6,280	**157,690**
7	**Planned Net Revenues**	1,079	71,224	14,061	1,383	383	226	3,343	**91,700**
8	**Total FY 2012**	**9,464**	**615,802**	**88,307**	**9,445**	**6,073**	**2,664**	**241,407**	**973,161**
9	**FY 2013**								
10	**Operations & Maintenance**	4,058	253,113	34,999	2,490	3,421	1,413	96,912	**396,406**
11	**Tx Acquisition & Ancillary**	58	21,716	1,649	16	454	27	115,920	**139,840**
12	**Depreciation**	2,529	162,419	23,494	3,069	1,257	635	24,720	**218,123**
13	**Net Interest Expense**	2,111	145,414	15,260	2,413	694	397	7,070	**173,359**
14	**Planned Net Revenues**	506	44,210	9,951	578	166	95	1,693	**57,199**
15	**Total FY 2013**	**9,261**	**626,872**	**85,353**	**8,567**	**5,992**	**2,567**	**246,315**	**984,927**
16	**RATE PERIOD AVERAGE**	**9,363**	**621,337**	**86,830**	**9,006**	**6,033**	**2,616**	**243,861**	**979,044**

Revenue Credits

- Use of Facilities – segmented based on historical UFT contract revenue
- Operations and Maintenance agreements – segmented based on historical O&M contract revenue
- COE/BOR transmission revenues – segmented per COE/BOR segmentation study
- Direct Assignment includes
  - Network: reservation fees, power factor penalties, irrigation transmission
  - Southern Intertie: AC non-federal participants, AC remedial action scheme
  - Eastern Intertie: TGT payments
  - DSI Delivery: DSI Delivery Charge
- General Revenues includes PCS & wireless charges, leases of land and right-of-way and other facilities

Revenue Credits

	A	B	C	D	E	F	G	H	I
1	Revenue Credits	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
2	Use of Facilities								
3	**Historical UFT allocation**	7 0.13%	2,326 46.08%	1,911 37.86%	627 12.42%	177 3.51%			5,047 *(forecast)*
4	**FY 2012 revenue**	7	2,371	1,948	639	181			**5,146**
5	**FY 2013 revenue**	7	2,371	1,948	639	181			**5,146**
6	Operation and Maintenance								
7	**Historical Revenue**		1,193 94.17%			2 0.17%	72 5.66%		1,267 *(forecast)*
8	**FY 2012 revenue**		1,078			2	65		**1,145**
9	**FY 2013 revenue**		1,078			2	65		**1,145**
10	COE/BOR (allocation by segmentation)								
11	**FY 2012 revenue**		94.58% 902			5.42% 52			*(forecast)* **954**
12	**FY 2013 revenue**		94.58% 902			5.42% 52			**954**

Revenue Credits

	A	B	C	D	E	F	G	H	I
17	Revenue Credits	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
18	Direct Assignment								
19	**FY 2012 revenue**		5,873	4,549	12,421		1,785		**24,627**
20	**FY 2013 revenue**		6,493	4,549	12,421		1,785		**25,247**
21	General Revenue Credits								
22	Average Net Plant	49,610	2,881,525	335,653	60,026	16,939	9,846	160,078	**3,513,677**
		1.41%	82.01%	9.55%	1.71%	0.48%	0.28%	4.56%	*(forecast)*
23	**FY 2012 revenue**	202	11,731	1,366	244	69	40	652	**14,304**
24	**FY 2013 revenue**	199	11,571	1,348	241	68	40	643	**14,110**
25	**Total Revenue Credits**								
26	**FY 2012**	**209**	**21,956**	**7,863**	**13,304**	**303**	**1,890**	**652**	**46,176**
27	**FY 2013**	**206**	**22,417**	**7,845**	**13,301**	**302**	**1,889**	**643**	**46,602**

Adjustments

	A	B	C	D	E	F	G	H	I
1	Adjustments	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
2	**Eastern Intertie**								
3	**FY 2012 Costs**				9,445				
4	less **Revenue Credit**				13,304				
5	less **Direct IM Sales Revenue**				115				
6	Net Plant allocation	48,149	2,693,626	338,235		17,092	10,090	149,124	3,256,317
	less Eastern Intertie	1.48%	82.72%	10.39%		0.52%	0.31%	4.58%	
7	**FY 2012 Redistribution**	59	3,288	413	(3,974)	21	12	182	**0**
8	**FY 2013 Costs**				8,567				
9	less **Revenue Credit**				13,301				
10	less **Direct IM Sales Revenue**				115				
11	Net Plant allocation	51,071	3,069,423	333,072		16,787	9,602	171,032	3,650,987
	less Eastern Intertie	1.40%	84.07%	9.12%		0.46%	0.26%	4.68%	
12	**FY 2013 Redistribution**	68	4,077	442	(4,849)	22	13	227	**0**
13	**DSI Delivery**								
14	**FY 2012 Costs (negative)**						2,664		
15	less **Revenue Credit**						1,890		
16	Net Plant allocation	48,149	2,693,626	338,235		17,092		149,124	3,246,227
	less DSI Delivery	1.48%	82.98%	10.42%		0.53%		4.59%	
17	**FY 2012 Redistribution**	(11)	(632)	(79)		(4)	762	(35)	**0**
18	**FY 2013 Costs (negative)**						2,567		
19	less **Revenue Credit**						1,889		
20	Net Plant allocation	51,071	3,069,423	333,072		16,787		171,032	3,641,385
	less DSI Delivery	1.40%	84.29%	9.15%		0.46%		4.70%	
21	**FY 2013 Redistribution**	(9)	(561)	(61)		(3)	666	(31)	**0**

Adjusted Segmented Revenue Requirement
(i.e., Rate Development Costs)

	A	B	C	D	E	F	G	H	I
1	Segmented Revenue Requirement	**Generation Integration** $000	**Network** $000	**Southern Intertie** $000	**Eastern Intertie** $000	**Utility Delivery** $000	**DSI Delivery** $000	**Ancillary Services** $000	**Annual Total** $000
2	**FY 2012**								
3	**Gross Costs**	9,464	615,802	88,307	9,445	6,073	2,664	241,407	**973,161**
	less								
4	**Revenue Credits**	209	21,956	7,863	13,304	303	1,890	652	**46,176**
5	**Adjustments**	47	2,655	333	(3,860)	17	774	147	**115**
6	**FY 2012 Revenue Reqmt**	**9,208**	**591,191**	**80,110**	**0**	**5,753**	**0**	**240,609**	**926,870**
7	**FY 2013**								
8	**Gross Costs**	9,261	626,872	85,353	8,567	5,992	2,567	246,315	**984,927**
	less								
9	**Revenue Credits**	206	22,417	7,845	13,301	302	1,889	643	**46,602**
10	**Adjustments**	58	3,516	381	(4,734)	19	678	196	**115**
11	**FY 2013 Revenue Reqmt**	**8,997**	**600,939**	**77,126**	**0**	**5,671**	**0**	**245,476**	**938,210**
12	**RATE PERIOD AVERAGE**	**9,102**	**596,065**	**78,618**	**0**	**5,712**	**0**	**243,042**	**932,540**

Network and Utility Delivery Sales

	A	B	C	D
		FY 12 MW	FY 13 MW	Avg MW
1	Network Sales			
2	**Formula Power Transmission (FPT)**	1,570	1,570	1,570
3	**Integration of Resources (IR)**	1,446	1,429	1,437
4	**Point-to-point long-term (PTP-LT)**	23,796	24,669	24,232
5	reduced for SDD	23,285	24,156	23,721
6	**Network Integration (NT)**	6,603	6,705	6,654
7	Annual Peak	8,061	8,169	8,115
8	**Reduced for SDD**	6,478	6,580	6,529
9	Annual Peak	7,936	8,044	7,990
10	**Point-to-Point short-term (PTP-ST)**	1,183	1,186	1,184
11	Point-to-Point block 1 sales /1	263	260	261
12	Point-to-Point block 2 sales	505	499	502
13	Point-to-Point hourly sales	415	427	421
14	**Total PTP-ST time weighted** /2	1,744	1,759	1,752
15	Utility Delivery Sales			
16	NT Customers	213	218	215
17	PTP Customers	3	3	3
18	**Total UD Sales**	216	221	219

Intertie Sales

	A	B	C	D
19	Intertie Sales	**FY 12** MW	**FY 13** MW	**Avg** MW
20	**Southern Intertie long-term (IS-LT)**	5,949	5,942	5,945
21	**Southern Intertie short-term (IS-ST)**	177	187	182
22	IS block 1 sales /1	49	50	49
23	IS block 2 sales	63	69	66
24	IS hourly sales	66	69	67
25	**Total IS-ST time weighted** /2	269	283	276
26	**Montana Intertie (IM)**	16	16	16
27	**Townsend-Garrison Trans. (TGT)**	1,730	1,730	1,730

/1 Block 1 sales are the first 5 days of a reservation. Block 2 sales are day 6 and beyond.
/2 Block 1 sales adjusted by factor of 7/5; Hourly sales adjusted by factor of 7/5 * 24/16.
/3 aMW is average annual MW. NT annual peaks are the maximum of 12 monthly loads.

Network Segment Rate Calculation

- The Network segment revenue requirement is reduced for the transmission portion of the legacy FPT revenues ("net revenue requirement").
- Under a 1 CP allocation, the base network sales (divisor) includes the IR demands, short-term and long-term PTP reserved capacities (including discounts) on an annual average basis, and the annual peak NT sales (including discounts). Under a 12 CP allocation, the base network sales (divisor) includes the same IR and PTP reserved capacities, with the NT sales (including discounts) also on an annual average basis.
- The base network rate is calculated as the net revenue requirement divided by the sales. Long-term and Short-term rates are calculated by dividing the base rate by the appropriate duration plus any short-term adjustment for peak period use.
- The NT Load Shaping revenue requirement is calculated as the difference between the allocation to NT based on the annual peak, and the expected base sales (including discounts) revenue. This is then divided by the annual NT sales (without discounts) to determine the NT Load Shaping rate.

Network Rate Calculation (1 CP)

	A	B	C	D	E	F
1	Network Rates	**Costs** $000	**Sales** MW	**Current Rates**	**Proposed Rates**	Change %
2	**Revenue Requirement**	596,065				
3	less FPT transmission revenues	23,358				
4	**Net Costs**	572,707				
5	**Tx Cost Allocation Sales (1CP)**					
6	**Base sales** (Slide 33, lines 3, 5, 9, 14)		34,900			
7	**Base rate, $/kW-year**				16.41	
8	**PTP Long-term rate, $/kW-mo**			1.298	**1.368**	5.4%
9	**PTP Short-term Block 1 rate, $/kW-day**			0.060	**0.063**	5.0%
10	**PTP Short-term Block 2 rate, $/kW-day**			0.046	**0.045**	-2.2%
11	**PTP Hourly rate, mills/kWh**			3.74	**3.93**	5.1%
12	NT Allocated Revenue	131,115				
13	NT Base Revenue	107,138				
14	**NT Load Shaping Costs**	23,977				
15	**Load Shaping sales** (Slide 33, line 7)		6,654			
16	**NT Load Shaping rate, $/kW-mo**			0.367	**0.300**	-18.2%
17	**NT Base Rate, $/kW-mo**			1.298	**1.368**	5.4%
18	**NT Rate (Base + Load Shaping), $/kW-mo**			1.665	**1.668**	0.2%

Network Rate Calculation (12 CP)

	A	B	C	D	E	F
				Current	**Proposed**	
1	Network Rates	**Costs**	**Sales**	**Rates**	**Rates**	Change
		$000	MW			%
2	**Revenue Requirement**	596,065				
3	less FPT transmission revenues	24,332				
4	**Net Costs**	571,733				
5	**Tx Cost Allocation Sales (12 CP)**					
6	**Base sales** (Slide 33, lines 3, 5, 8, 14)		33,439			
7	**Base rate, $/kW-year**				17.10	
8	**PTP Long-term rate, $/kW-mo**			1.298	**1.425**	9.8%
9	**PTP Short-term Block 1 rate, $/kW-day**			0.060	**0.065**	8.3%
10	**PTP Short-term Block 2 rate, $/kW-day**			0.046	**0.047**	2.2%
11	**PTP Hourly rate, mills/kWh**			3.74	**4.09**	9.4%
12	**NT Load Shaping rate, $/kW-mo** /1			0.367	**0.000**	--
13	**NT Base Rate, $/kW-mo**			1.298	**1.425**	9.8%
14	**NT Rate (Base + Load Shaping), $/kW-mo**			1.665	**1.425**	-14.4%

/1 With 12 CP, the Load Shaping charge is eliminated

Intertie Rates

- The base Southern Intertie rate is calculated as the net revenue requirement divided by the sales. Long-term and Short-term rates are calculated by dividing the base rate by the appropriate duration plus any short-term adjustment for peak period use.
- The Eastern Intertie rates are based on requirements in the Montana Intertie Agreement.
  - The TGT Rate is charged to the parties to the agreement and treated as a revenue credit to the Eastern Intertie revenue requirement.
  - The base IM Rate (point-to-point service) is calculated as the total annual costs identified in the Montana Intertie Agreement divided by the sum of TGT Rate transmission demand and IM Rate transmission demand. Long-term and Short-term rates are calculated by dividing the base rate by the appropriate duration plus any short-term adjustment for peak period use. No short-term sales are assumed, and any short-term sales would be credited monthly against the TGT rate charges.
  - The IE Rate is calculated as the unadjusted segmented revenue requirement divided by the capacity of the Eastern Intertie converted to an hourly rate. No sales are assumed, and any sales would be credited monthly against the TGT rate charges.

Intertie Rate Calculation

	A	B	C	D	E	F
1	Intertie Rates	**Costs** $000	**Sales** MW	**Current Rates**	**Proposed Rates**	Change %
2	**Southern Intertie**					
3	**Revenue Requirement**	78,618				
4	**Tx Cost Allocation Sales**					
5	Base sales, lines 22, 27		6,221			
6	Calculated Base S. Intertie rate, $/kW-year				12.64	
7	**Long-term Southern Intertie (IS) rate, $/kW-mo**			1.293	**1.053**	-18.6%
8	**IS Short-term Block 1 rate, $/kW-day**			0.060	**0.048**	-20.0%
9	**IS Short-term Block 2 rate, $/kW-day**			0.045	**0.035**	-22.2%
10	**IS Hourly rate, mills/kWh**			3.72	**3.03**	-18.5%
11	**Eastern Intertie**					
12	**Total Annual Costs** /1	12,536				
13	Cost Allocation Sales		1,746			
14	**Long-term Montana Intertie (IM) rate, $/kW-mo**			1.312	**0.598**	-54.4%
15	**IM Short-term Block 1 rate, $/kW-day**			0.061	**0.028**	-54.1%
16	**IM Short-term Block 2 rate, $/kW-day**			0.043	**0.020**	-53.5%
17	**IM Hourly rate, mills/kWh**			3.78	**1.72**	-54.5%
18	**Gross Revenue Requirement**	9,006				
19	Total Available Capacity		1,930			
20	**Eastern Intertie (IE) Hourly rate, mills/kWh**			1.13	**1.12**	-0.9%

/1 per Montana Intertie Agreement

Ancillary Service Rates

- Scheduling, System Control and Dispatch (SCD) is associated with all transmission sales (without discounts). The base SCD Rate is calculated as the ancillary services revenue requirement less generation input costs and less the ancillary SCD portion of the FPT revenues, divided by the expected sales. Long-term and Short-term rates are calculated by dividing the base rate by the appropriate duration plus any short-term adjustment for peak period use.
- Generation Supplied Reactive (GSR) is a formula rate and assumed to be zero for this model.
- Other Ancillary and Control Area Service Rates are not being reviewed here.

Utility Delivery Rate

- The Utility Delivery rate is calculated to recover the full revenue requirement for the Utility Delivery segment.

SCD and UD Rate Calculation

	A	B	C	D	E	F
1	Scheduling, System Control and Dispatch Rate	**Costs** $000	**Sales** MW	**Current Rates**	**Proposed Rates**	Change %
2	**Ancillary Revenue Requirement**	243,042				
3	less Gen Input Costs	115,920				
4	less FPT transmission revenues	4,337				
5	**Net Costs**	122,785				
6	**Tx Cost Allocation Sales**					
7	**Base sales** (Slide 33-4, lines 4, 5, 7, 15, 22, 27, 28)		40,313			
8	Calculated Base SCD rate, $/kW-year				3.05	
9	**Long-term SCD rate, $/kW-mo**			0.203	**0.254**	25.1%
10	**Block 1 rate, $/kW-day**			0.010	**0.012**	20.0%
11	**Block 2 rate, $/kW-day**			0.006	**0.008**	33.3%
12	**Hourly rate, mills/kWh**			0.59	**0.73**	23.7%
13	**Utility Delivery Rate**					
14	**UD Revenue Requirement**	5,712				
15	**UD sales**		219			
16	**Utility Delivery rate, $/kW-mo**			1.119	**2.177**	94.5%

Legacy Rates

- Integration of Resources rate combines the base network rate and the SCD charge into a single IR rate.
- Prior to the 2002 rates, the Formula Power Transmission rate components were set by calculating the unit costs associated with each class of equipment associated with each rate component using power flow model runs to determine the usages.
- For this model the FPT component rates are all assumed to change by the percentage change in the IR rate. The FPT sales are a small portion of total network sales and will continue to decline as the contracts expire.
- The assumptions regarding 1 CP or 12 CP change the network base rate which impacts these rates.

Legacy (IR & FPT) Rate Calculation (1 CP assumption)

	A	B	C	D	E	F
1	IR Rate	**Costs** $000	**Sales** MW	**Current Rates**	**Proposed Rates**	Change %
2	**Integration of Resources (IR) rate**			1.501	1.622	8.1%
3	Transmission portion of total			86.5%	84.3%	
4	Ancillary portion of total			13.5%	15.7%	
5	FPT Rate					
6	**FPT Revenue at current rates**	25,629				
7	FPT Sales forecast		1,570			
8	Current unit cost, $/kW-mo			1.361		
9	Calculated unit cost, $/kW-mo				1.470	
10	**Rates Summary**					
11	M-G Distance, $/kW-mi-yr			0.0587	**0.0634**	8.0%
12	M-G Miscellaneous Facilities, $/kW-yr			3.35	**3.62**	8.1%
13	M-G Terminal, $/kW-yr			0.68	**0.73**	7.4%
14	M-G Interconnection Terminal, $/kW-yr			0.61	**0.66**	8.2%
15	S-S Transformation, $/kW-yr			6.31	**6.82**	8.1%
16	S-S Interconnection Terminal, $/kW-yr			1.73	**1.87**	8.1%
17	S-S Intermediate Terminal, $/kW-yr			2.44	**2.64**	8.2%
18	S-S Distance, $/kW-mi-yr			0.5772	**0.6237**	8.1%

Legacy (IR & FPT) Rate Calculation

(12 CP assumption)

	A	B	C	D	E	F
				Current	Proposed	
1	IR Rate	Costs	Sales	Rates	Rates	Change
		$000	MW			%
2	**Integration of Resources (IR) rate**			1.501	1.679	11.9%
3	Transmission portion of total			86.5%	84.9%	
4	Ancillary portion of total			13.5%	15.1%	
5	FPT Rate					
6	**FPT Revenue at current rates**	25,629				
7	FPT Sales forecast		1,570			
8	Current unit cost, $/kW-mo			1.361		
9	Calculated unit cost, $/kW-mo				1.522	
10	**Rates Summary**					
11	M-G Distance, $/kW-mi-yr			0.0587	**0.0657**	11.9%
12	M-G Miscellaneous Facilities, $/kW-yr			3.35	**3.75**	11.9%
13	M-G Terminal, $/kW-yr			0.68	**0.76**	11.8%
14	M-G Interconnection Terminal, $/kW-yr			0.61	**0.68**	11.5%
15	S-S Transformation, $/kW-yr			6.31	**7.06**	11.9%
16	S-S Interconnection Terminal, $/kW-yr			1.73	**1.94**	12.1%
17	S-S Intermediate Terminal, $/kW-yr			2.44	**2.73**	11.9%
18	S-S Distance, $/kW-mi-yr			0.5772	**0.6456**	11.9%

Network Revenue Summary (1 CP assumption)

	A	B	C	D	E	F	G	H
			Current Rates			Proposed Rates		
1	Network Revenues	FY 12	FY 13	Avg	FY 12	FY 13	Avg	Change
		$000	$000	$000	$000	$000	$000	
3	**Formula Power Transmission (FPT)**	25,629	25,629	**25,629**	27,696	27,696	**27,696**	8.1%
4	Network Transmission Allocation	22,163	22,163	**22,163**	23,358	23,358	**23,358**	5.4%
5	Ancillary Service Allocation	3,466	3,466	**3,466**	4,337	4,337	**4,337**	25.1%
6	**Integration of Resources (IR)**	26,051	25,730	**25,891**	28,151	27,804	**27,978**	8.1%
7	Network Transmission Allocation	22,528	22,250	**22,389**	23,743	23,450	**23,597**	5.4%
8	Ancillary Service Allocation	3,523	3,480	**3,502**	4,408	4,354	**4,381**	25.1%
9	**Network Integration (NT-Base)**	100,894	102,491	**101,693**	106,336	108,018	**107,177**	5.4%
10	**Network Integration (NT-LS)**	29,079	29,531	**29,305**	23,792	24,161	**23,977**	-18.2%
10.a	**NT Base + LS**			**130,998**			**131,154**	0.1%
11	**NT SCD**	16,085	16,334	**16,210**	20,126	20,438	**20,282**	25.1%
12	**Point-to-Point long-term (PTP-LT)**	362,694	376,256	**369,475**	382,254	396,547	**389,401**	5.4%
13	**PTP-LT SCD**	57,967	60,093	**59,030**	72,530	75,190	**73,860**	25.1%
14	**Point-to-Point short-term (PTP-ST)**	27,901	28,050	**27,976**	28,697	28,863	**28,780**	2.9%
15	**PTP-ST SCD**	4,221	4,247	**4,234**	5,293	5,324	**5,309**	25.4%
16	Subtotal Transmission Revenues			573,001			596,289	4.1%
17	Subtotal SCD Revenues			86,441			108,169	25.1%
18	**Total Network Sale Revenues**			**659,442**			**704,458**	**6.8%**

Network Revenue Summary
(12 CP assumption)

	A	B	C	D	E	F	G	H
		Current Rates			Proposed Rates			
1	Network Revenues	**FY 12**	**FY 13**	**Avg**	**FY 12**	**FY 13**	**Avg**	Change
		$000	$000	$000	$000	$000	$000	
3	**Formula Power Transmission (FPT)**	25,629	25,629	**25,629**	28,669	28,669	**28,669**	11.9%
4	Network Transmission Allocation	22,163	22,163	**22,163**	24,332	24,332	**24,332**	9.8%
5	Ancillary Service Allocation	3,466	3,466	**3,466**	4,337	4,337	**4,337**	25.1%
6	**Integration of Resources (IR)**	26,051	25,730	**25,891**	29,141	28,781	**28,961**	11.9%
7	Network Transmission Allocation	22,528	22,250	**22,389**	24,732	24,427	**24,580**	9.8%
8	Ancillary Service Allocation	3,523	3,480	**3,502**	4,408	4,354	**4,381**	25.1%
9	**Network Integration (NT-Base)**	100,894	102,491	**101,693**	110,766	112,519	**111,643**	9.8%
10	**Network Integration (NT-LS)**	29,079	29,531	**29,305**	0	0	**0**	--
10.a	**NT Base + LS**			**130,998**			**111,643**	-14.8%
11	**NT SCD**	16,085	16,334	**16,210**	20,126	20,438	**20,282**	25.1%
12	**Point-to-point long-term (PTP-LT)**	362,694	376,256	**369,475**	398,181	413,070	**405,626**	9.8%
13	**PTP-LT SCD**	57,967	60,093	**59,030**	72,530	75,190	**73,860**	25.1%
14	**Point-to-point short-term (PTP-ST)**	27,901	28,050	**27,976**	29,842	30,015	**29,929**	7.0%
15	**PTP-ST SCD**	4,221	4,247	**4,234**	5,293	5,324	**5,309**	25.4%
16	Subtotal Transmission Revenues			573,001			596,109	4.0%
17	Subtotal SCD Revenues			86,441			108,169	25.1%
18	**Total Network Sale Revenues**			**659,442**			**704,277**	**6.8%**

Intertie, Utility Delivery, and SCD Revenue Summary

	A	B	C	D	E	F	G	H
			Current Rates			Proposed Rates		
19	Intertie Revenues	**FY 12**	**FY 13**	**Avg**	**FY 12**	**FY 13**	**Avg**	Change
		$000	$000	$000	$000	$000	$000	
20	**Southern Intertie long-term (IS-LT)**	92,297	92,200	**92,248**	75,086	75,086	**75,086**	-18.6%
21	**IS-LT SCD**	14,491	14,475	**14,483**	18,131	18,112	**18,122**	25.1%
22	**Southern Intertie short-term (IS-ST)**	4,257	4,456	**4,357**	3,414	3,572	**3,493**	-19.8%
23	**IS-ST SCD**	658	687	**672**	820	858	**839**	24.8%
24	**Montana Intertie long-term (IM)**	252	252	**252**	115	115	**115**	-54.4%
25	**IM SCD**	39	39	**39**	49	49	**49**	25.1%
26	Subtotal Transmission Revenues			96,857			78,694	-18.8%
27	Subtotal SCD Revenues			15,194			19,009	25.1%
28	**Total Intertie Sale Revenues**			**112,051**			**97,704**	**-12.8%**
29	**Utility Delivery Revenues**	2,902	2,969	**2,935**	5,646	5,776	**5,711**	94.5%
30	**Total SCD Revenue**	93,459	95,876	**94,668**	116,948	119,971	**118,460**	25.1%

Next Steps

- Next workshop: January 11, 2012.
- Determine the scope of the discussions for COSA in accordance to the settlement agreement.
- Deep dive into the issues identified to be in scope of process.
- Open to customer presentations or discussions on alternatives.

Appendix

B O N N E V I L L E   P O W E R   A D M I N I S T R A T I O N

Long-term Transmission Sales

(MegaWatts)

	(A) Transmission Rate Schedule	(B) MWs	(C) Oct	(D) Nov	(E) Dec	(F) Jan	(G) Feb	(H) Mar	(I) Apr	(J) May	(K) Jun	(L) Jul	(M) Aug	(N) Sep	(O) Annual
1	**Network**														
2	**FY 2012**														
3	Formula Power Transmission (FPT.1)	m_cd	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	**1,497**
4	Formula Power Transmission (FPT.3)	m_cd	66	76	87	87	79	73	69	68	63	65	67	66	**72**
5	Integration of Resources (IR)	m_cd	1,593	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	**1,446**
6	PTP CONFIRMED	m_cd	21,317	21,416	21,570	21,511	21,511	21,511	21,416	21,414	21,464	20,826	20,180	20,030	**21,181**
7	PTP SDD	m_cd	-442	-442	-434	-434	-434	-434	-454	-454	-454	-454	-479	-471	**-448**
8	PTP CF CONFIRMED	m_cd	305	305	305	305	305	305	385	385	385	385	385	385	**345**
9	PTP STUDY	m_cd	120	120	170	170	170	170	170	170	170	170	170	170	**162**
10	PTP EXPECTATION	m_cd	1,177	1,168	1,271	1,330	1,330	1,380	1,929	2,044	2,069	2,707	2,707	2,857	**1,831**
11	PTP SDD EXPECTATION	m_cd	9	9	-64	-64	-64	-64	-83	-83	-83	-83	-83	-91	**-62**
12	PTP CF EXPECTATION	m_cd	273	273	273	273	273	273	273	273	273	273	273	333	**278**
13	Point to Point (PTP)	m_cd	22,759	22,849	23,092	23,092	23,092	23,142	23,636	23,749	23,824	23,824	23,153	23,213	**23,285**
14	Point to Point (PTP) w/o SDD	m_cd	23,192	23,282	23,589	23,589	23,589	23,639	24,173	24,286	24,361	24,361	23,715	23,775	**23,796**
15	Network Load Service	m_cp	6,390	7,098	8,061	7,631	7,252	6,623	6,208	5,809	5,752	6,543	6,310	5,559	**6,603**
16	NT SDD EXPECTATION	m_cp	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	**-125**
17	Network Transmission (NT)	m_cp	6,264	6,972	7,936	7,506	7,126	6,498	6,082	5,684	5,626	6,417	6,185	5,433	**6,478**
18	Annual peak	a_cp													**7,936**
19	**Subtotal FY 2012**		**32,306**	**32,954**	**34,170**	**33,740**	**33,353**	**32,769**	**32,843**	**32,557**	**32,569**	**33,362**	**32,461**	**31,768**	**32,904**
20	**FY 2013**														
21	Formula Power Transmission (FPT.1)	m_cd	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	**1,497**
22	Formula Power Transmission (FPT.3)	m_cd	66	76	87	87	79	73	69	68	63	65	67	66	**72**
23	Integration of Resources (IR)	m_cd	1,433	1,433	1,433	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	**1,429**
24	PTP CONFIRMED	m_cd	19,621	19,180	19,055	19,104	19,104	19,104	19,029	18,999	18,949	18,949	18,948	18,938	**19,082**
25	PTP SDD	m_cd	-406	-406	-370	-369	-369	-369	-369	-369	-366	-366	-366	-366	**-374**
26	PTP CF CONFIRMED	m_cd	385	385	385	385	385	385	385	385	385	385	385	385	**385**
27	PTP STUDY	m_cd	267	267	267	267	267	397	397	397	397	397	1,147	1,147	**468**
28	PTP EXPECTATION	m_cd	3,328	3,728	3,968	3,978	3,978	4,712	4,812	4,812	4,962	4,962	4,813	4,823	**4,406**
29	PTP SDD EXPECTATION	m_cd	-91	-91	-144	-146	-146	-146	-146	-146	-151	-151	-151	-151	**-138**
30	PTP CF EXPECTATION	m_cd	333	333	383	383	383	303	303	303	303	303	303	303	**328**
31	Point to Point (PTP)	m_cd	23,437	23,396	23,544	23,602	23,602	24,386	24,411	24,381	24,479	24,479	25,079	25,079	**24,156**
32	Point to Point (PTP) less SDD	m_cd	23,934	23,893	24,058	24,117	24,117	24,901	24,926	24,896	24,996	24,996	25,596	25,596	**24,669**
33	Network Load Service	m_cp	6,488	7,201	8,169	7,725	7,391	6,716	6,299	5,908	5,850	6,650	6,417	5,652	**6,705**
34	NT SDD EXPECTATION	m_cp	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	**-125**
35	Network Transmission (NT)	m_cp	6,363	7,076	8,044	7,599	7,265	6,591	6,174	5,782	5,724	6,524	6,291	5,527	**6,580**
36	Annual peak	a_cp													**8,044**
37	**Subtotal FY 2013**		**32,921**	**33,603**	**34,731**	**34,339**	**33,996**	**34,100**	**33,704**	**33,281**	**33,316**	**34,118**	**34,487**	**33,721**	**33,860**
38	**Network Average for Rate Period**														
39	Formula Power Transmission (FPT)	m_cd	1,563	1,573	1,584	1,584	1,576	1,570	1,566	1,565	1,560	1,562	1,564	1,563	**1,570**
40	Integration of Resources (IR)	m_cd	1,513	1,433	1,433	1,430	1,430	1,430	1,430	1,430	1,430	1,430	1,430	1,430	**1,437**
41	Point to Point (PTP) with SDD	m_cd	23,098	23,123	23,318	23,347	23,347	23,764	24,024	24,065	24,151	24,151	24,116	24,146	**23,721**
42	Point to Point (PTP) w/o SDD	m_cd	23,563	23,587	23,823	23,853	23,853	24,270	24,549	24,591	24,678	24,678	24,655	24,685	**24,232**
43	Network Transmission (NT) with SDD	m_cp	6,314	7,024	7,990	7,553	7,196	6,544	6,128	5,733	5,675	6,471	6,238	5,480	**6,529**
44	Annual peak	a_cp													**7,990**
45	Network Transmission (NT) w/o SDD	m_cp	6,439	7,149	8,115	7,678	7,321	6,670	6,254	5,858	5,801	6,596	6,363	5,605	**6,654**
46	**Subtotal Network**		**32,613**	**33,278**	**34,450**	**34,039**	**33,675**	**33,434**	**33,274**	**32,919**	**32,942**	**33,740**	**33,474**	**32,745**	**33,382**

FERC CP Test

- **On and Off Peak Test** - Average of the system peaks during the purported peak period, as a percentage of the annual peak, to the average of the system peaks during the off-peak months, as a percentage of the annual peak. (A nineteen percentage point or less difference between these two figures supports using the 12 CP method.)

- **Low-to-Annual Peak Test** - Lowest monthly peak as a percentage of the annual peak. (Range of sixty-six percent or higher as indicative of a 12 CP system.)

- **Average to Annual Peak Test** - Average of the twelve monthly peaks as a percentage of annual peak. (The range for a utility to be considered 12 CP is eighty-one percent or higher.)

Golden Spread Electric Coop., et. al v. Southwestern Pub. Serv. Co., Opinion No. 501, 123 FERC ¶ 61,047 (2008)

FERC Coincidental Peak Tests

FERC Tests for Coincidental Peak Usage

		(A)	(B)	(C)	(D)	(E)	(F)	(G)
1	**Fiscal Year**	**Annual Peak (MW)**	**Annual Average (MW)**	**Avg of 11 off-peak Months (MW)**	**Annual Minimum (MW)**	**Test #1 1-(C)/(A)**	**Test #2 (D) / (A)**	**Test #3 (B) / (A)**
2	2006	26,153	22,562	22,236	18,983	15%	73%	86%
3	2007	30,425	27,042	26,734	21,250	12%	70%	89%
4	2008	30,726	28,050	27,807	24,928	10%	81%	91%
5	2009	29,955	26,136	25,789	23,654	14%	79%	87%
6	2010	29,553	25,637	25,281	21,494	14%	73%	87%
7					**Average over 5 years:**	**13%**	**75%**	**88%**
8					**12 CP condition:**	**≤ 19%**	**≥ 66%**	**≥ 81%**

9 Data is monthly transmission system peak (maximum hourly TTSL)

Transmission System Peaks