2010 BPA Rate Case TR-10 Transmission & Ancillary Services Customer Workshop

November 5, 2008



Workshop Agenda

- Segmented Revenue Requirement Methodology
- Failure to Comply Penalty Charge
- LGIA Credits
- Customer Issues
- Next Steps



Key Messages

- The material we are sharing today is a work in progress and intended to provide customers a preliminary look at Transmission Service's development of the Initial Proposal for the 2010 BPA Rate Case.
- We are open to customer input and willing to make changes based on that input, if warranted.
- Please feel free to ask questions as we move through workshop materials.



Segmented Revenue Requirement Methodology



Segmented Revenue Requirement Methodology

SEGMENTED TRANSMISSION REVENUE REQUIREMENTS (\$thousands)

	Α	B Generation	С	D Southern	E Eastern	F Utility	G DSI	H Ancillary
FY 2010	TOTAL	Integration	NETWORK	Intertie	Intertie	Delivery	Delivery	Services
1 Operations & Maintenance	348,859	4,155	216,832	36,549	2,070	2,164	3,295	83,794
2 Transmission Acquisition & Ancillary Services	98,963	231	28,496	3,345	324	558	241	65,768
3 Non-Federal Debt Service	5,890	0	5,890	0	0	0	0	0
4 Depreciation	192,993	2,244	140,570	24,411	3,011	1,047	2,161	19,549
5 Net Interest Expense	150,888	1,730	121,146	16,531	2,908	776	1,837	5,960
6 Planned Net Revenues	57,893	383	51,309	3,659	644	172	407	1,319
7 Total Transmission Revenue Requirement	855,486	8,743	564,243	84,495	8,957	4,717	7,941	176,390
FY 2011								
8 Operations & Maintenance	358,366	4,264	223,115	37,518	2,126	2,223	3,383	85,737
9 Transmission Acquisition & Ancillary Services	99,505	221	29,141	3,324	303	554	229	65,733
10 Non-Federal Debt Service	4,690	0	4,690	0	0	0	0	0
11 Depreciation	204,535	2,303	151,240	25,225	3,036	1,078	2,201	19,452
12 Net Interest Expense	166,505	1,747	135,792	17,439	2,898	786	1,837	6,006
13 Planned Net Revenues	57,581	283	52,605	2,825	470	127	298	973
14 Total Transmission Revenue Requirement	891,182	8,818	596,583	86,331	8,833	4,768	7,948	177,901



Segmented Revenue Requirement Methodology

FY 2010	TOTAL	Generation Integration	NETWORK	Southern Intertie	Eastern Intertie	Utility Delivery	DSI Delivery	Ancillary Services
1 FCRTS INVESTMENT BASE	3,341,104	38,303	2,682,533	366,035	64,393	17,191	40,686	131,963
2 percent	100%	1.15%	80.29%	10.96%	1.93%	0.51%	1.22%	3.95%
3 FINANCING COSTS:								
4 CAPITAL LEASES	16,136	185	12,956	1,768	311	83	196	637
5 NON-FEDERAL DEBT SERVICE	5,890	0	5,890	0	0	0	0	0
6 NET INTEREST EXPENSE	150,888	1,730	121,146	16,531	2,908	776	1,837	5,960
7 NET REVENUES	57,893	383	51,309	3,659	644	172	407	1,319
6 DIRECT DEPRECIATION	142,296	1,488	101,141	17,765	2,634	654	1,562	17,052
7 percentage of Direct O&M w/out AS	100%	1.57%	81.80%	13.79%	0.78%	0.82%	1.24%	
8 TX GP DEPRECIATION for 391.2, 391.3, 397 & 353	40,301	632	32,967	5,557	315	329	501	
9 percentage of Direct O&M w/AS	76%	1.19%	62.15%	10.48%	0.59%	0.62%	0.94%	24.02%
10 REMAINING GEN PLANT & NON WIRES DEPRECIATION	10,396	124	6,462	1,089	62	64	98	2,497
11 TOTAL DEPRECIATION	192,993	2,244	140,570	24,411	3,011	1,047	2,161	19,549
1 DIRECT ASSIGNMENT:								
2 GENERATION INPUTS	65,131							65,131
3 COE/BOR TRANSMISSION	7,397		6,951			446		
4 NON-BBL ANCILLARY SERVICES	1,723		1,723					
5 ANCILLARY SERVICES O&M	46,264							46,264
6 GTAs	500		500			•	•	40.004
7 TOTAL DIRECT ASSIGN	48,487	0	2,223	0	0	0	0	46,264
8 3-YR AVG O&M: LINES	37,171	265	34,884	1,654	361	7	0	
9 3-YR AVG O&M: SUBS	50,263	1,105	36,640	10,402	322	707	1,087	
10 TOTAL 3-YR AVERAGE O&M	87,434							
11 System Operation, Maintenance & Environment	146,346	444	50.000	0.700	004	40		
12 DIRECT LINES O&M	62,216	444	58,388	2,768	604	12	4.040	
13 DIRECT SUBS O&M	84,130	1,850	61,328	17,411	539	1,183	1,819	
14 TOTAL DIRECT TRANS O&M	146,346	2,294	119,716	20,179	1,143	1,195	1,819	40.004
15 TOTAL DIRECT O&M	192,610	2,294	119,716	20,179	1,143	1,195	1,819	46,264
16 OVERHEAD CATEGORIES	156,249	1,861	97,116	16,370	927	969	1,476	37,530
17 TOTAL O&M	348,859	4,155	216,832	36,549	2,070	2,164	3,295	83,794
18 STATION SERVICE	2,089	46	1,524	432	13	29	45	
19 RAS/REDISPATCH	1,896	0	1,500	396	0	0	0	
20 SYNCHRONOUS CONDENSERS	4,091		3,342	749				
21 TOTAL TRANS ACQ & ANCLRY	98,963	231	28,496	3,345	324	558	241	65,768

2010 BPA Rate Case Workshop on November 5, 2008

Pre-Decisional. For Discussion Purposes Only.

Segmented Revenue Requirement Methodology

		Generation		Southern	Eastern	Utility	DSI	Ancillary
FY 2011	TOTAL	Integration	NETWORK	Intertie	Intertie	Delivery	Delivery	Services
1 INVESTMENT BASE	3,642,147	38,223	2,970,321	381,468	63,397	17,195	40,178	131,365
2 percent	100%	1.05%	81.55%	10.47%	1.74%	0.47%	1.10%	3.61%
3 FINANCING COSTS:								
4 CAPITAL LEASES	16,678	175	13,601	1,747	290	79	184	602
5 NON-FEDERAL DEBT SERVICE	4,690	0	4,690	0	0	0	0	0
6 NET INTEREST	166,505	1,747	135,792	17,439	2,898	786	1,837	6,006
7 NET REVENUES	57,581	283	52,605	2,825	470	127	298	973
6 SEGMENT DEPRECIATION	150,541	1,497	109,179	18,136	2,634	658	1,562	16,875
7 percentage of Direct O&M w/out AS	100%	1.57%	81.80%	13.79%	0.78%	0.82%	1.24%	
8 TX GP DEPRECIATION for 391.2, 391.3, 397 & 353	43,265	678	35,393	5,965	338	353	538	
9 percentage of Direct O&M w/AS	100%	1.19%	62.21%	10.48%	0.59%	0.62%	0.95%	23.96%
10 REMAINING GEN PLANT & NON WIRES DEPRECIATION	10,729	128	6,668	1,124	64	67	101	2,577
11 TOTAL DEPRECIATION	204,535	2,303	151,240	25,225	3,036	1,078	2,201	19,452
1 DIRECT ASSIGNMENT:								
2 GENERATION INPUTS	65,131							65,131
3 COE/BOR TRANSMISSION	7,397		6,951			446		
4 NON-BBL ANCILLARY SERVICES	1,723		1,723					
5 ANCILLARY SERVICES O&M	47,672							47,672
6 GTAs	500		500					
7 TOTAL O&M DIRECT ASSIGN	49,895	0	2,223	0	0	0	0	47,672
9 3-YR AVG O&M: LINES	37,171	265	34,884	1,654	361	7	0	
10 3-YR AVG O&M: SUBS	50,263	1,105	36,640	10,402	322	707	1,087	
11 TOTAL 3-YR AVG	87,434							
12 System Operation, Maintenance & Environment	151,310							
13 DIRECT LINES O&M	64,327	459	60,369	2,862	625	12	0	
14 DIRECT SUBS O&M	86,983	1,912	63,410	17,999	557	1,224	1,881	
15 TOTAL DIRECT TRANS O&M	151,310	2,371	123,779	20,861	1,182	1,236	1,881	
16 TOTAL DIRECT O&M	198,982	2,371	123,779	20,861	1,182	1,236	1,881	47,672
17 OVERHEAD CATEGORIES	158,884	1,893	98,836	16,657	944	987	1,502	38,065
18 TOTAL O&M	358,366	4,264	223,115	37,518	2,126	2,223	3,383	85,737
19 STATION SERVICE	2,089	46	1,524	432	13	29	45	
20 RAS/REDISPATCH	1,896	0	1,500	396	0	0	0	
21 SYNCHRONOUS CONDENSERS	4,091		3,342	749				
22 TOTAL TRANS ACQ & ANCLRY	99,505	221	29,141	3,324	303	554	229	65,733

Failure to Comply Penalty Charge



Responses to customer questions and comments about the proposed changes to the FTC Penalty Charge:

- We had proposed adding a clause to the force majeure language in the existing rate (shown in red below). After considering customer comments, we no longer plan to propose moving that clause forward into rate language changes.
- Parties who are unable to comply with a curtailment, load shedding, or redispatch order due to a force majeure on their system will not be subject to the Failure to Comply Penalty Charge provided that they immediately notify BPA-TS of the situation upon occurrence of the force majeure. BPA, however, will still assess the party costs incurred by BPA-TS in order to manage the reliability of the FCRTS that are caused by the failure to comply as provided in this section.



Protocols for Curtailments and Redispatch orders:

- We are redrafting the Curtailments and Redispatch business practice, which describes the order of actions and the communication protocols used by BPA. The draft should be ready for customer comment later this month. In general, these are our procedures:
 - The issuance of curtailment or redispatch orders is triggered by a SCADA alarm indicating that flows are near or are exceeding established OTCs for a flowgate. The BPA-TS protocol is to use the following methods for reducing flow (in order of precedence):
 - 1. Switching actions (impedance changes) as defined in the relevant Dispatch Standing Order (DSO)
 - 2. Reliability Redispatch (RRP)
 - 3. PBL Discretionary Redispatch (Attachment M)
 - 4. Curtailment Calculator Prototype (CCP)
 - Intertie Curtailments



Protocols for Curtailments and Redispatch orders:

- The Reliability Redispatch (RRP) orders are communicated via telephone to plant operators. The generation that is being moved has previously been bid for quantity and price. The determination of which generators to be used is computed automatically and the generators pairs are prioritized and selected based on the cost per megawatt of relief, least expensive to most expensive. The amount of relief needed is determined by the dispatcher on a case by case basis.
- The Curtailment Calculator Prototype (CCP) performs a pro-rata calculation, based on transmission priority, for all schedules that have a non-deminimus impact greater than 10% or 10 MWs on the flowgates being curtailed. The determination of which schedules impact the flowgate is based on the seasonal Path Transfer Distribution Factors that are used in the Short Term Firm Market evaluation unless outage conditions demand a recalculation. All schedule reductions are communicated via the NERC E-Tag to the various entities that receive the E-Tag distribution consistent with the NERC

E-Tag specification.



- Information We Make Available Related to Curtailments:
 - Schedule (E-Tag) information 168 hours after the fact.
 - Security events which reference OTC changes to our external interties (we do not post any flowgate OTC changes).
 - TSR Reductions due to path OTC changes.
- There is no method or option on our OASIS to show just all curtailed E-Tags, nor an option to view curtailments by a particular path (intertie or flowgate).



- Applicability of FTC Penalty to generators that do not modify output when directed to do so by a Dispatch Directive:
 - We are proposing that the FTC Penalty apply to generators when they do not modify output when a Dispatch Directive is issued. We would need to define Dispatch Directive in the rate schedule. An example of a Dispatch Directive is a signal to limit maximum output to schedule. Communication protocols related to Dispatch Directives are discussed at Joint Operating Committee (JOC) meetings.
- Exclusion of over-generation from Generation Imbalance during curtailments:
 - We are proposing that generation greater than schedules during a curtailment is an Intentional Deviation, so no credit would be given during those hours. The customer would still need to make up any under-generation relative to schedules.



Overview of Large Generator Interconnection Agreement (LGIA) Forecasting and Methodology and Calculation of Credits



Transmission Credits Overview

- Customers have two methods to recover funds advanced for the construction of Network Upgrades necessary to enable generation interconnection. (The methods below are also defined in our Business Practice for Transmission Credits-Generator Large, V3)
 - Method 1 Application of Transmission Credits against eligible transmission bills.
 - PTP Service: Transmission credit applied in a given month is based on the amount of transmission capacity reserved at the generator.
 - NT Service: Transmission credit applied in a given month is based on a ratio of the customer's MW share of a generating resource to their maximum Network load set on the hour of the transmission peak over the last twelve months.
 - Method 2 Cash payment based on the estimated output of the facility multiplied by the PTP Long-Term rate.
- Customers earn interest on the funds advanced for Network Upgrades.
 Interest accrues monthly from date of deposit and is currently based on the FERC Rate.

Slide 1

Transmission Credits Rate Case Process

- The Generation Interconnection Queue was assessed to determine which generation projects were likely to be completed prior to or during the rate period.
- For those projects likely to go forward, the Network Upgrades were calculated based on generation projects.
- To the extent possible, each Generation Interconnection project was tied to requests in the Transmission Queue to forecast sales eligible to receive Transmission Credits.
 - When a request in the Generation Interconnection Queue could not be tied to the Transmission Queue, 50% of the nameplate of the generator was used to forecast the eligible sales.
- The dollar-value of the Transmission Credits was determined by multiplying Transmission's rates by the forecasted sales eligible for credits.
- Interest expense was calculated based on the cost of the Network Upgrades less Transmission Credits repaid.



Transmission Credits Rate Analysis Results

- Customers currently receiving credits have advanced approximately \$120 million for Network Upgrades.
- For FY 09 through FY 11, the current forecast of Network Upgrades is for additional advancements of approximately \$268 million, for which customers will receive Transmission Credits in the rate period.
- Interest expense associated with Transmission Credits is forecast to be \$16.1 million and \$22.1 million in FY 10 and FY 11, respectively. This is an update from the revenue requirement workshop presentation on October 8, 2008.
- The current forecast shows that Transmission will issue Transmission Credits of approximately \$33.6 million and \$39.2 million in FY 10 and FY 11, respectively. This is an update from the revenue requirement workshop presentation on October 8, 2008.



Transmission Credits

	(A)	(B)	(C)	(E)	(F)	(G)	(H)
		Transmission Credits Forecasted (\$) in Thousands					
			Beginning Balance (Network	Network Upgrade		FY 10 Currently	FY 11
			-	10		1	
		Credit Start	Upgrade before	_	FY 09 Currently	Taking	Currently
	Request	Date	Rate Period)	Case Period	Taking Credits	Credits	Taking Credits
1	GI Request 1	FY 2008	\$ 2,337		\$ 1,089	\$ 1,089	\$ 181
2	GI Request 2	FY 2008	\$ 16,498		\$ 1,558	\$ 1,558	\$ 1,558
3	GI Request 3	FY 2008	\$ 14,194		\$ 6,230	\$ 6,230	\$ 3,115
4	GI Request 4	FY 2008	\$ 16,910		\$ 1,493	\$ 6,230	\$ 6,230
5	GI Request 5	FY 2008	\$ 12,590		\$ 935	\$ 935	\$ 935
6	GI Request 6	FY 2008	\$ 8,722	\$ 50	\$ 1,745	\$ 1,745	\$ 1,745
7	GI Request 7	FY 2008	\$ 6,631	\$ 8,600	\$ 1,558		\$ 1,558
8	GI Request 8	FY 2008	\$ 3,108		\$ 2,338	\$ 779	\$ -
9	GI Request 9	FY 2008	\$ 6,823	\$ 1,600	\$ 1,573	\$ 1,573	\$ 1,573
10	GI Request 10	Jun-10	\$ 230	\$ 60,000		\$ 584	\$ 1,168
11	GI Request 11	FY 2008	\$ 3,058		\$ 62	\$ 62	\$ 62
12	GI Request 12	FY 2008	\$ 1,083	\$ -	\$ -	\$ -	\$ -
13	GI Request 13	FY 2008	\$ 5,697	\$ -	\$ 1,184	\$ 1,184	\$ 1,184
14	GI Request 14	FY 2008	\$ 843	\$ -	\$ -	\$ -	\$ -
15	GI Request 15	FY 2008	\$ 4,696	\$ -	\$ 1,465	\$ 3,115	\$ 779
16	GI Request 16	Jan-10	\$ 512	\$ 3,300	\$ -	\$ 2,336	\$ 3,115
17	GI Request 17	FY 2008	\$ 2,709	\$ -	\$ 125	\$ 1,495	\$ 1,495
18	GI Request 18	FY 2008	\$ 322		\$ 389	\$ -	\$ -
19	GI Request 19	Oct-09	\$ 505	\$ 3,800	\$ -	\$ 966	\$ 966
20	GI Request 20	Dec-10	\$ 12,484	\$ -	\$ -	\$ -	\$ 3,894
21	GI Request 21	Jun-09		\$ 2,640	\$ 519	\$ 1,558	\$ 909
22	GI Request 22	Dec-10		\$ 60,501	\$ -	\$ -	\$ 1,298
23	GI Request 23	Sep-10		\$ -	\$ -	\$ 51	\$ 255
27	GI Request 24	Sep-10		\$ 3,700			\$ 779
28	GI Request 25	Dec-09		\$ 50		\$ 50	
29	GI Request 26	Oct-10		\$ 2,100			\$ 857
30	GI Request 27	Sep-10		\$ 8,400			\$ 623
31	GI Request 28	Sep-10		\$ 2,300			\$ 623
32	GI Request 29	Sep-10		\$ 7,300			\$ 2,336
33	GI Request 30	Aug-11		\$ 7,300			\$ 260
34	GI Request 31	Aug-11		\$ 26,800			\$ 260
35	GI Request 32	Aug-11		\$ 10,400			\$ 260
36	GI Request 33	Aug-11		\$ 60,000	\$ 39	\$ 584	\$ 1,168
	Total Network Upgrades and Transmission Credits Al	l LGIAs @ 50%		,			
37	nameplate		\$ 119,951	\$ 268,841	\$ 22,301	\$ 33,682	\$ 39,184

Transmission Credits Rate Case Treatment

Revenue Requirement

- The Network Upgrades associated with the Transmission Credits are factored into depreciation expense once it is placed into service.
- Interest expense associated with these Network Upgrades are currently included in the Non-Federal Debt Service on the income statement.
- Transmission Credits are included in the cash flow statement as accrued revenues, a non-cash element that affects the calculation of Minimum Required Net Revenues.

Sales Forecast

 Transmission sales associated with Transmission Credits will be included in the sales forecast and used to calculate transmission rates.



Customer Issues



Customer Issues

- How is BPA addressing the customer issues and requests for additional customer workshops?
 - BPA recently received 7 pages describing customer issues and requests for customer workshops to be addressed in the 2010 BPA Rate Case. In many cases, these issues are in addition to what we have received to date.
 - BPA is carefully reviewing each of these issues and assigning subject matter experts to provide customer response in upcoming workshops and/or at weekly rate case conference calls.



Next Steps

What additional information to post to external BPA Corporate Rates website?

