

**Appendix C  
Calculation of ATO Reserved Capacity Charge**

**Based on Commission-approved Rate Components  
Black Hills Phase 2 Rate Review 17AL-0477E  
Final Technical Conference, CCOS Model, Exhibit CRG-6**

**Step 1: Unbundle Base Rate Sales**

Document	Ref.	Description	Total Colo. Retail *	Document	Ref.	Description	Total Colo. Retail *
CRG-6, Cost of Service	Sched. M, Ln. 74	Base Rate Sales	\$ 162,320,048	CRG-6, Unbundled	Row 128	Demand Component	\$ 149,881,096
					Row 168	Energy Component	\$ 72,476
					Row 208	Customer Component	\$ 12,366,477
							<u>\$ 162,320,049</u>

**Step 2: Unbundle Demand Component**

CRG-6, Unbundled	Row 128	Demand Component	\$ 149,881,096	CRG-6, Unbundled	Row 248	Demand-Production	\$ 93,146,168
					Row 268	Demand-Transmission	\$ 21,392,226
					Row 328	Demand-Distribution	\$ 35,342,702
							<u>\$ 149,881,096</u>

**Step 3: Unbundle "Demand-Distribution" Component**

CRG-6, Unbundled	Row 328	Demand-Distribution	\$ 35,342,702	CRG-6, Unbundled	Row 368	Demand-Distribution, Primary	\$ 20,689,784
					Row 408	Demand-Distribution, Secondary	\$ 9,207,755
					Row 448	Demand-Distribution, Transformers	\$ 5,445,162
							<u>\$ 35,342,701</u>

\* Rounding explains slight difference in Total Colo. Retail figures.

Step 4: Allocate "Demand-Distribution-Primary" by sub-class; calculate Unit Costs \$/kW

Document	Ref.	Description	Total Colo. Retail	Document	Ref.	Description	Total Colo. Retail	Annual kW Billed	Sub-class Annual kW Billed	Sub-class Unit Cost \$/kW
							<i>a</i>	<i>b</i>	<i>c</i>	<i>d = (a / c)</i>
CRG-6, Unbundled	Row 1013	Demand-Distribution, Primary	\$ 20,689,784	CRG-6, Unbundled	Row 1013	Total Residential Service	\$ 9,272,296	-		
CRG-6, Unbundled	Row 942	Annual kW Billed	3,235,868	CRG-6, Unbundled	Row 942	Total Small General Service		567,328		
						Non Demand	\$ 489,374		-	-
						Demand Metered	\$ 1,807,126		567,328	3.1853
									<u>567,328</u>	
						Total Large General Service		1,438,559		
						Secondary	\$ 4,293,029		1,252,290	3.4281
						Primary	\$ 380,718		119,714	3.1802
						TOU	\$ 519,624		66,555	7.8074
									<u>1,438,559</u>	
						Total Large Power Service		1,182,401		
						Secondary	\$ 215,106		49,288	4.3643
						Primary	\$ 3,415,402		720,988	4.7371
						Transmission	\$ -		412,125	-
									<u>1,182,401</u>	
						Total Lighting Service	\$ 189,898		-	
						Total Irrigation Pumping	\$ 107,211	47,580		
							<u>\$ 20,689,784</u>	<u>3,235,868</u>		

Step 5: Allocate "Demand-Distribution-Secondary" Component by sub-class; calculate Unit Costs \$/kW

Document	Ref.	Description	Total Colo. Retail	Document	Ref.	Description	Total Colo. Retail	Annual kW Billed	Sub-class Annual kW Billed	Sub-class Unit Cost \$/kW
							<i>a</i>	<i>b</i>	<i>c</i>	<i>d = (a / c)</i>
CRG-6, Unbundled	Row 1014	Demand-Distribution, Secondary	\$ 9,207,755	CRG-6, Unbundled	Row 1014	Total Residential Service	\$ 5,139,596	-		
CRG-6, Unbundled	Row 942	Annual kW Billed	3,235,868	CRG-6, Unbundled	Row 942	Total Small General Service		567,328		
						Non Demand	\$ 272,793		-	-
						Demand Metered	\$ 1,003,214		567,328	1.7683
									567,328	
						Total Large General Service		1,438,559		
						Secondary	\$ 2,385,110		1,252,290	1.9046
						Primary	\$ -		119,714	-
						TOU	\$ 123,206		66,555	1.8512
									1,438,559	
						Total Large Power Service		1,182,401		
						Secondary	\$ 119,299		49,288	2.4204
						Primary	\$ -		720,988	-
						Transmission	\$ -		412,125	-
									1,182,401	
						Total Lighting Service	\$ 105,146	-		
						Total Irrigation Pumping	\$ 59,391	47,580		
							\$ 9,207,755	3,235,868		

**Appendix C cont'd**  
**Calculation of ATO Reserved Capacity Charge**

**Step 6: Assign Tariff Rate \$/kW for ATO Reserved Capacity Charge**

Description	see Step 4 Sub-class Distrib. Primary Unit Cost \$/kW *	see Step 5 Sub-class Distrib. Secondary Unit Cost \$/kW **	<b>Tariff Rate ATO Reserved Capacity Charge \$/kW</b>
	<i>a</i>	<i>b</i>	<i>c = (a + b)</i>
Total Small General Service			
Non Demand	-		
Demand Metered	3.1853	1.7683	<b>4.9536</b>
Total Large General Service			
Secondary	3.4281	1.9046	<b>5.3327</b>
Primary	3.1802	-	<b>3.1802</b>
TOU	7.8074	1.8512	<b>9.6586</b>
Total Large Power Service			
Secondary	4.3643	2.4204	<b>6.7847</b>
Primary	4.7371	-	<b>4.7371</b>
Transmission	-	-	-

\* These figures tie-out with Row 1081 (CRG-6 Unbundled).

\*\* These figures tie-out with Row 1082 (CRG-6 Unbundled).