

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672
2667 SCOMM 120 HOUSE SPEC. COMM. UTILITY RESTRUCTURING, 1999-2000

PER USE PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non-Rural	Type	High Cost Loop Fund		Long Term Support	Local Switching Support		ETC	Monthly	Total High Cost Fund Support		Per USF Loop	
					USF	Monthly		Monthly	LSS			Quarterly	Annual		
VERMONT	147332	VERMONT TEL CO-VT	Rural	C	19,827	\$87,130	Y	\$108,378	Y	\$88,598	Y	\$284,104	\$852,312	\$3,408,248	171.95
MONTANA	483310	CENTRAL MONTANA	Rural	C	7,731	\$178,948	Y	\$68,038	Y	\$34,957	Y	\$281,941	\$845,823	\$3,383,292	437.63
TEXAS	442088	HILL COUNTRY CO-OP	Rural	C	13,510	\$130,480	Y	\$82,099	Y	\$66,158	Y	\$278,737	\$836,211	\$3,344,844	247.58
CALIFORNIA	542343	THE VOLCANO TEL CO	Rural	C	9,827	\$130,809	Y	\$87,087	Y	\$79,598	Y	\$277,492	\$832,478	\$3,329,804	338.85
MINNESOTA	361456	UTC OF MINNESOTA	Rural	C	146,142	\$274,781	N	\$0	N	\$0	Y	\$274,781	\$824,283	\$3,297,132	22.56
ALASKA	813023	UNITED UTILITIES INC	Rural	C	5,678	\$137,984	Y	\$77,785	Y	\$51,519	Y	\$267,268	\$801,804	\$3,207,218	564.85
FLORIDA	210339	GTC INC	Rural	C	30,335	\$145,718	Y	\$98,083	X	\$23,277	Y	\$285,078	\$795,234	\$3,180,938	104.86
COLORADO	482208	CTE COLORADO	Rural	C	7,888	\$168,700	Y	\$82,278	Y	\$32,942	Y	\$283,918	\$791,754	\$3,187,016	402.82
OKLAHOMA	431980	CHICKASAW TEL CO	Rural	C	8,254	\$101,993	Y	\$61,822	Y	\$98,431	Y	\$282,248	\$788,738	\$3,148,952	381.26
MAINE	103313	NORTHLAND TEL CO-ME	Rural	C	22,278	\$141,004	Y	\$76,575	Y	\$44,108	Y	\$281,687	\$785,081	\$3,140,244	140.98
NORTH DAKOTA	381637	W RIVER TELECOM	Rural	C	15,704	\$122,224	Y	\$82,083	X	\$58,348	Y	\$280,635	\$781,905	\$3,127,820	199.18
NEW MEXICO	492270	PENASCO VALLEY TEL	Rural	C	2,998	\$157,818	Y	\$73,325	Y	\$28,438	Y	\$259,381	\$778,143	\$3,112,572	1,038.22
SOUTH CAROLINA	240542	ROCK HILL TEL CO	Rural	C	47,353	\$118,988	Y	\$58,170	X	\$85,113	Y	\$258,269	\$774,807	\$3,099,228	85.45
WYOMING	512297	UNION TELEPHONE CO	Rural	C	8,425	\$98,013	Y	\$34,577	X	\$125,238	Y	\$257,828	\$773,478	\$3,093,912	481.54
GEORGIA	223037	ALLTEL GEORGIA COMM	Rural	C	288,525	\$254,141	N	\$0	N	\$0	Y	\$254,141	\$762,423	\$3,049,892	10.57
CALIFORNIA	542339	THE SISKIYOU TEL CO	Rural	C	4,813	\$131,409	Y	\$81,713	Y	\$40,351	Y	\$253,473	\$760,419	\$3,041,878	859.37
NEVADA	552349	CHURCHILL COUNTY TEL	Rural	C	12,888	\$95,809	Y	\$51,712	Y	\$104,491	Y	\$251,812	\$755,438	\$3,021,744	234.88
GEORGIA	220360	ELLIJAY TEL CO	Rural	C	11,147	\$158,551	Y	\$78,128	Y	\$18,194	Y	\$250,873	\$752,819	\$3,010,478	270.07
GEORGIA	225192	SOUTHERN BELL-GA	Non-Rural	C	3,998,188	\$248,413	N	\$0	N	\$0	Y	\$248,413	\$745,238	\$2,980,958	0.75
MONTANA	482235	BLACKFOOT TEL COOP	Rural	C	7,689	\$119,193	Y	\$74,510	Y	\$53,584	Y	\$247,287	\$741,801	\$2,987,204	385.90
ALABAMA	250314	PEOPLES TEL CO	Rural	C	14,891	\$148,148	Y	\$78,805	Y	\$24,227	Y	\$248,978	\$740,934	\$2,963,736	201.74
OKLAHOMA	431988	DOBSON TEL CO	Rural	C	4,320	\$118,511	Y	\$64,084	Y	\$63,438	Y	\$248,013	\$738,039	\$2,952,158	883.37
OKLAHOMA	431984	OKLAHOMA COMM SYSTEM	Rural	C	18,888	\$120,230	Y	\$102,118	Y	\$20,890	Y	\$243,238	\$729,714	\$2,918,858	158.37
SOUTH CAROLINA	240508	UTC OF THE CAROLINAS	Rural	C	98,389	\$242,421	N	\$0	N	\$0	Y	\$242,421	\$727,283	\$2,908,052	29.57
MISSOURI	421888	GRAND RIVER MUT-MO	Rural	C	14,254	\$99,759	Y	\$84,934	Y	\$52,443	Y	\$237,138	\$711,408	\$2,845,632	199.84
KANSAS	411827	S & T TEL COOP ASSN	Rural	C	2,852	\$133,537	Y	\$55,593	Y	\$45,930	Y	\$235,080	\$705,180	\$2,820,720	989.03
ARIZONA	452178	VALLEY TEL COOP-AZ	Rural	C	7,218	\$83,997	Y	\$64,268	Y	\$84,987	Y	\$233,252	\$699,758	\$2,798,024	387.78
NEVADA	554431	CITIZENS-NV-NORTH	Rural	C	23,144	\$127,188	N	\$0	X	\$105,497	Y	\$232,885	\$698,055	\$2,792,220	120.85
NEBRASKA	371577	GREAT PLAINS COMMUN	Rural	C	33,078	\$102,092	N	\$0	X	\$128,485	Y	\$230,577	\$691,731	\$2,786,924	83.85
NORTH CAROLINA	230510	WILKES MEMBERSHIP	Rural	C	9,707	\$132,754	Y	\$79,343	Y	\$17,008	Y	\$229,105	\$687,315	\$2,749,280	283.22
OREGON	532393	PIONEER TEL COOP	Rural	C	14,924	\$91,594	Y	\$80,450	Y	\$58,819	Y	\$228,883	\$688,589	\$2,748,358	184.02
TEXAS	442040	BRAZORIA TEL CO	Rural	C	8,279	\$141,408	Y	\$55,550	Y	\$30,002	Y	\$228,958	\$680,874	\$2,723,498	433.75
SOUTH DAKOTA	391859	GOLDEN WEST TELECOMM	Rural	C	14,889	\$109,787	Y	\$53,793	Y	\$83,072	Y	\$228,652	\$679,958	\$2,718,824	182.92
ILLINOIS	341026	HARRISONVILLE TEL CO	Rural	C	17,877	\$103,888	Y	\$38,784	X	\$83,888	Y	\$228,559	\$679,877	\$2,718,708	152.08
NORTH DAKOTA	381607	CONSOLIDATED COOP	Rural	C	8,734	\$75,025	Y	\$67,458	Y	\$83,280	Y	\$225,783	\$677,289	\$2,708,158	310.19
MONTANA	482250	PROJECT TEL CO	Rural	C	4,982	\$103,311	Y	\$42,089	Y	\$78,808	Y	\$224,018	\$672,054	\$2,688,218	511.78
TEXAS	442059	COLORADO VALLEY TEL	Rural	C	6,249	\$111,220	Y	\$71,490	Y	\$39,128	Y	\$221,838	\$665,514	\$2,682,058	428.08
CALIFORNIA	543402	CITIZENS GOLDN STATE	Rural	C	14,990	\$182,182	N	\$0	X	\$59,510	Y	\$221,872	\$665,016	\$2,680,084	177.48
VIRGINIA	190479	GTE SOUTH INC -VA	Rural	C	35,140	\$142,774	N	\$0	X	\$75,879	Y	\$218,453	\$655,359	\$2,621,438	74.80
TENNESSEE	290579	TWIN LAKES TEL COOP	Rural	C	33,708	\$80,249	Y	\$94,348	Y	\$83,880	Y	\$218,255	\$654,785	\$2,618,080	77.70
MAINE	100024	SOMERSET TEL CO	Rural	C	11,598	\$87,172	Y	\$70,588	Y	\$53,738	Y	\$211,484	\$634,482	\$2,537,828	218.88
COLORADO	485102	U S WEST, INC - CO	Non-Rural	C	2,528,000	\$208,805	N	\$0	N	\$0	Y	\$208,805	\$628,415	\$2,505,880	0.99
MISSOURI	421922	CONTEL MO DBA GTE MO	Non-Rural	C	237,589	\$208,585	N	\$0	N	\$0	Y	\$208,585	\$625,755	\$2,503,020	10.54
GEORGIA	220379	PLANT TEL CO	Rural	C	9,493	\$90,230	Y	\$78,514	Y	\$39,455	Y	\$208,199	\$618,587	\$2,474,388	280.85
NORTH CAROLINA	230491	NORTH STATE TEL CO	Non-Rural	A	118,098	\$0	Y	\$205,811	N	\$0	Y	\$205,811	\$617,433	\$2,469,732	20.81
ARKANSAS	401724	SW ARKANSAS TEL COOP	Rural	C	5,708	\$121,751	Y	\$50,289	Y	\$32,724	Y	\$204,784	\$614,292	\$2,457,188	430.83
TENNESSEE	290552	CENTURY-ADAMSVILLE	Rural	C	7,810	\$128,922	Y	\$48,313	Y	\$29,132	Y	\$204,387	\$613,101	\$2,452,404	314.01
CALIFORNIA	544342	CITIZENS TUOLUMNE	Rural	C	5,808	\$179,808	N	\$0	X	\$22,483	Y	\$202,071	\$608,213	\$2,424,852	417.50
MISSISSIPPI	280446	BAY SPRINGS TEL CO	Rural	C	11,975	\$135,039	Y	\$47,203	X	\$19,335	Y	\$201,577	\$604,731	\$2,418,924	202.00
ARIZONA	455101	U S WEST, INC - AZ	Non-Rural	C	2,558,783	\$201,494	N	\$0	N	\$0	Y	\$201,494	\$604,482	\$2,417,928	0.94
KANSAS	411833	SOUTHERN KANSAS TEL	Rural	C	4,718	\$107,495	Y	\$28,448	X	\$68,465	Y	\$200,409	\$601,227	\$2,404,908	509.73
TEXAS	442101	CENTURY-LAKE DALLAS	Rural	C	8,283	\$104,805	Y	\$37,845	Y	\$55,151	Y	\$197,801	\$583,403	\$2,373,812	288.58
SOUTH CAROLINA	240539	POND BRANCH TEL CO	Rural	C	14,572	\$97,540	Y	\$64,310	Y	\$35,000	Y	\$198,850	\$580,550	\$2,382,200	182.11
IDAHO	472225	CENTURY TEL OF IDAHO	Rural	C	3,923	\$123,903	Y	\$35,448	Y	\$38,483	Y	\$195,832	\$587,498	\$2,348,984	599.03

PER USE PAYMENT

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First Quarter 1999

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					USF	Loops		Monthly	LSS			Monthly	Quarterly	Annual	Per USF Loop	
KANSAS	411841	UNITED TEL ASSN	Rural	C		5,710		\$84,593	Y	\$29,819	Y	\$42,611	\$157,023	\$471,089	\$1,884,278	330.00
NEVADA	552302	CONTEL OF CALIF. NV	Rural	C		32,905		\$0	N	\$0	X	\$158,039	\$468,117	\$1,872,488		58.91
MONTANA	484322	CITIZENS-MONTANA	Rural	C		8,191		\$119,521	N	\$0	X	\$36,359	\$155,880	\$487,640	\$1,870,560	228.37
MISSOURI	421957	UTC OF MISSOURI	Rural	C		235,259		\$155,427	N	\$0	N	\$0	\$155,427	\$468,281	\$1,865,124	7.93
IDAHO	72213	ALBION TEL CO INC	Rural	C		4,868		\$59,496	Y	\$34,685	Y	\$80,845	\$155,026	\$465,078	\$1,860,312	382.15
NORTH DAKOTA	31604	BEK COMM COOP	Rural	C		7,454		\$33,981	Y	\$49,383	Y	\$71,880	\$154,984	\$484,952	\$1,859,808	249.50
LOUISIANA	270430	ELIZABETH TEL CO	Rural	C		3,057		\$97,424	Y	\$34,531	Y	\$22,087	\$154,022	\$482,086	\$1,848,284	604.60
NEW MEXICO	494449	NAVAJO COMMUN-NM	Rural	C		4,936		\$124,143	N	\$0	X	\$29,419	\$153,582	\$480,886	\$1,842,744	373.33
TEXAS	442118	MUENSTER TEL CORP-TX	Rural	C		3,297		\$82,587	Y	\$39,536	Y	\$30,981	\$153,084	\$459,252	\$1,837,008	557.18
IDAHO	472222	FREMONT TELCON	Rural	C		6,078		\$74,234	Y	\$32,759	Y	\$45,788	\$152,779	\$458,337	\$1,833,348	301.74
NEW HAMPSHIRE	123321	MCTA, INC	Rural	C		11,755		\$49,219	Y	\$22,400	X	\$79,530	\$151,149	\$453,447	\$1,813,788	154.30
MINNESOTA	361451	PAUL BUNYAN RURAL	Rural	C		9,341		\$48,847	Y	\$65,729	Y	\$36,288	\$150,864	\$452,592	\$1,810,388	193.61
GEORGIA	220377	PINELAND TEL COOP	Rural	C		11,711		\$79,383	Y	\$48,711	X	\$21,990	\$150,084	\$450,192	\$1,800,768	153.77
CALIFORNIA	542321	HAPPY VALLEY TEL CO	Rural	C		3,072		\$94,994	Y	\$39,305	Y	\$15,782	\$150,081	\$450,183	\$1,800,732	588.18
VERMONT	143331	NORTHLAND TEL CO-VT	Rural	C		5,842		\$45,650	Y	\$38,989	Y	\$85,252	\$148,871	\$449,613	\$1,798,452	318.78
NORTH CAROLINA	235193	SOUTHERN BELL-NC	Non-Rural	C		2,337,945		\$148,839	N	\$0	N	\$0	\$148,839	\$448,517	\$1,788,088	0.78
GEORGIA	220358	DARIEN TEL CO	Rural	C		5,730		\$58,718	Y	\$47,711	Y	\$41,813	\$148,242	\$444,726	\$1,778,904	310.45
KANSAS	411785	J B N TEL CO INC	Rural	C		2,877		\$98,682	Y	\$33,569	Y	\$15,452	\$147,703	\$443,109	\$1,772,438	618.07
MISSISSIPPI	283301	SOUTHEAST MS TEL CO	Rural	C		3,511		\$99,783	Y	\$39,198	Y	\$8,397	\$147,378	\$442,134	\$1,768,536	503.71
MONTANA	485104	U S WEST INC - MT	Non-Rural	C		350,983		\$148,885	N	\$0	N	\$0	\$148,885	\$440,655	\$1,762,820	5.02
ALASKA	613001	ARCTIC SLOPE TEL	Rural	C		2,278		\$37,133	Y	\$24,229	Y	\$84,980	\$148,342	\$439,026	\$1,758,104	771.57
ALASKA	613019	OTZ TEL COOPERATIVE	Rural	C		2,979		\$51,548	Y	\$29,097	Y	\$83,980	\$144,825	\$433,875	\$1,735,500	582.58
MISSOURI	421882	FIDELITY TEL CO	Rural	C		13,220		\$55,854	Y	\$51,885	X	\$35,855	\$143,404	\$430,212	\$1,720,848	130.17
ILLINOIS	341037	IL CONSOLIDATED TEL	Rural	C		74,919		\$10,103	Y	\$132,344	N	\$0	\$142,447	\$427,341	\$1,709,384	22.82
TENNESSEE	290280	ARDMORE TEL CO	Rural	C		9,327		\$40,245	Y	\$34,225	Y	\$67,747	\$142,217	\$428,651	\$1,708,604	182.97
NORTH DAKOTA	381447	NORTH DAKOTA TEL CO	Rural	C		18,967		\$25,322	Y	\$18,112	Y	\$99,242	\$140,876	\$422,028	\$1,688,112	89.00
VIRGINIA	190249	ROANOKE & BOTETOURT	Rural	C		9,729		\$87,390	Y	\$38,856	Y	\$13,378	\$139,822	\$418,686	\$1,675,484	172.21
WEST VIRGINIA	205050	C & P TEL CO OF WV	Non-Rural	C		800,553		\$139,426	N	\$0	N	\$0	\$139,426	\$418,278	\$1,673,112	2.09
SOUTH CAROLINA	240517	ALLTEL SO CAROLINA	Rural	C		51,515		\$80,293	Y	\$59,054	N	\$0	\$139,347	\$418,041	\$1,672,164	32.48
WISCONSIN	330841	CENCOM WI DBA PTI	Rural	C		28,159		\$4,382	Y	\$83,401	X	\$49,408	\$137,171	\$411,513	\$1,648,052	58.48
GEORGIA	220368	HART TEL CO	Rural	C		9,429		\$20,317	Y	\$45,454	Y	\$70,439	\$136,210	\$408,630	\$1,634,520	173.35
VIRGINIA	190226	CLIFTON FORGE WAYNES	Rural	A		35,933		\$0	Y	\$81,104	X	\$75,031	\$136,135	\$408,405	\$1,633,820	45.48
GEORGIA	220351	CAMDEN TEL & TEL CO	Rural	C		20,777		\$17,635	Y	\$22,256	Y	\$98,094	\$135,985	\$407,955	\$1,631,820	78.54
GEORGIA	220344	ALMA TEL CO	Rural	C		6,780		\$77,659	Y	\$38,647	Y	\$19,557	\$135,863	\$407,589	\$1,630,358	241.18
NORTH DAKOTA	381834	SOURIS RIVER TELECOM	Rural	C		11,757		\$12,886	Y	\$14,428	Y	\$108,411	\$135,505	\$406,515	\$1,628,080	138.31
GEORGIA	220348	BULLOCH COUNTY RURAL	Rural	C		9,246		\$53,198	Y	\$58,728	Y	\$23,543	\$135,469	\$406,407	\$1,625,628	175.82
MICHIGAN	310713	HIAWATHA TEL CO	Rural	C		5,714		\$69,707	Y	\$32,629	Y	\$32,901	\$135,297	\$405,891	\$1,623,584	284.14
MISSOURI	421931	NE MISSOURI RURAL	Rural	C		8,078		\$43,373	Y	\$18,093	Y	\$74,734	\$134,200	\$402,600	\$1,610,400	199.38
GEORGIA	220378	PLANTERS RURAL COOP	Rural	C		8,211		\$65,903	Y	\$51,564	Y	\$14,811	\$132,278	\$398,834	\$1,587,336	193.32
MISSISSIPPI	280452	DELTA TEL CO	Rural	C		4,134		\$81,354	Y	\$32,263	Y	\$18,287	\$131,884	\$395,652	\$1,582,808	382.83
KANSAS	411807	MOKAN DIAL INC-KS	Rural	C		3,036		\$72,888	Y	\$15,541	X	\$41,470	\$129,899	\$389,697	\$1,558,788	513.43
WASHINGTON	522451	WESTERN WAHIAKUM	Rural	C		1,103		\$81,113	Y	\$35,257	Y	\$13,401	\$129,771	\$389,313	\$1,557,252	1,411.83
MINNESOTA	361350	ARVIG TEL CO	Rural	C		12,080		\$812	Y	\$52,075	Y	\$78,654	\$129,541	\$388,623	\$1,554,492	128.68
MINNESOTA	361427	MANKATO CITIZENS TEL	Rural	A		38,818		\$0	Y	\$47,374	X	\$80,622	\$127,998	\$383,988	\$1,535,952	41.95
NEBRASKA	371591	SE NEBRASKA TEL CO	Rural	C		4,252		\$67,630	Y	\$37,982	Y	\$22,088	\$127,880	\$383,040	\$1,532,180	360.34
WISCONSIN	330859	CENTRAL STATE TEL CO	Rural	C		10,342		\$65,645	Y	\$48,199	Y	\$13,486	\$127,330	\$381,990	\$1,527,880	147.74
INDIANA	320800	NORTHWESTERN INDIANA	Rural	C		12,451		\$5,516	Y	\$34,018	Y	\$67,190	\$126,722	\$380,186	\$1,520,864	122.13
OKLAHOMA	432008	MICLOUD TEL CO	Rural	C		8,186		\$47,298	Y	\$44,881	Y	\$34,359	\$126,536	\$379,808	\$1,518,432	185.95
ARIZONA	452171	ARIZONA TELEPHONE CO	Rural	C		3,355		\$55,554	Y	\$31,548	Y	\$39,258	\$126,358	\$379,074	\$1,516,298	451.95
WASHINGTON	522453	YELM TELEPHONE CO	Rural	C		11,139		\$45,493	Y	\$44,984	X	\$35,844	\$126,301	\$378,903	\$1,515,612	138.08
NORTH CAROLINA	230511	YADKIN VALLEY TEL	Rural	A		27,084		\$0	Y	\$72,919	Y	\$52,515	\$125,434	\$376,302	\$1,505,208	55.58
WYOMING	511585	UTC OF THE WEST-WY	Rural	C		7,399		\$58,126	N	\$0	X	\$68,735	\$124,881	\$374,583	\$1,498,332	202.50
ALABAMA	250300	HOPPER TEL CO INC	Rural	C		3,515		\$79,979	Y	\$29,788	Y	\$13,378	\$123,143	\$369,429	\$1,477,718	420.40
MINNESOTA	361385	EAST OTTER TAIL TEL	Rural	C		17,469		\$9,329	Y	\$40,449	Y	\$72,625	\$122,403	\$367,209	\$1,468,836	84.08

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WASHINGTON	522447	TOLEDO TELEPHONE CO	Rural	C	1,974	\$48,891	Y	\$26,581	Y	\$26,649	Y		\$102,121	\$306,363	\$1,225,452	620.80
NEW YORK	150118	PORT BYRON TEL CO	Rural	C	3,395	\$63,959	Y	\$33,452	Y	\$4,591	Y		\$102,002	\$306,006	\$1,224,024	360.54
TEXAS	442071	FIVE AREA TEL CO OP	Rural	C	6,947	\$33,458	Y	\$26,083	Y	\$42,456	Y		\$101,979	\$305,937	\$1,223,748	176.15
GEORGIA	220394	WILKES TEL & ELC CO	Rural	C	11,450	\$40,115	Y	\$29,872	Y	\$32,101	Y		\$101,888	\$305,664	\$1,222,056	106.78
OKLAHOMA	451989	BIXBY TEL CO	Rural	C	8,653	\$57,022	Y	\$27,888	X	\$16,646	Y		\$101,556	\$304,668	\$1,218,672	140.64
TEXAS	442151	TAYLOR TEL CO-OP INC	Rural	C	6,858	\$24,881	Y	\$41,594	Y	\$33,861	Y		\$100,336	\$301,008	\$1,204,032	175.57
MISSOURI	421865	CITIZENS TEL CO - MO	Rural	C	4,042	\$49,484	Y	\$21,173	X	\$28,823	Y		\$99,460	\$296,360	\$1,193,520	295.28
ILLINOIS	341049	MADISON TEL CO	Rural	C	1,480	\$44,841	Y	\$16,588	X	\$37,811	Y		\$99,240	\$297,720	\$1,190,880	804.65
NORTH DAKOTA	381932	RESERVATION TEL COOP	Rural	C	7,326	\$30,973	Y	\$25,265	Y	\$42,807	Y		\$99,045	\$297,135	\$1,188,540	162.24
NEW HAMPSHIRE	120045	KEARSARGE TEL CO	Rural	C	6,835	\$24,712	Y	\$14,203	Y	\$80,055	Y		\$98,670	\$296,910	\$1,187,640	173.76
CALIFORNIA	542301	CALAVERAS TEL CO	Rural	C	3,104	\$48,719	Y	\$40,759	Y	\$8,972	Y		\$98,450	\$295,350	\$1,181,400	380.61
NEW YORK	150089	DEPOSIT TEL CO	Rural	C	8,426	\$32,645	Y	\$31,902	Y	\$33,597	Y		\$98,144	\$294,432	\$1,177,728	139.77
OKLAHOMA	431981	CHOUTEAU TEL CO	Rural	C	3,444	\$38,131	Y	\$22,901	Y	\$36,872	Y		\$97,904	\$293,712	\$1,174,848	341.13
MINNESOTA	381445	NORTHLAND DBA PTI	Rural	C	28,967	\$0	Y	\$22,181	X	\$75,587	Y		\$97,768	\$293,304	\$1,173,216	40.46
NEW YORK	150109	ALLTEL NY-JAMESTOWN	Rural	C	48,095	\$0	Y	\$0	X	\$97,661	Y		\$97,661	\$292,983	\$1,171,932	24.37
WISCONSIN	330916	MOUNT HOREB TEL CO	Rural	C	4,287	\$59,825	Y	\$19,808	X	\$18,016	Y		\$97,649	\$292,947	\$1,171,768	273.34
OKLAHOMA	432020	POTTAWATOMIE TEL CO	Rural	C	2,220	\$45,993	Y	\$26,556	Y	\$24,450	Y		\$96,999	\$290,997	\$1,163,968	524.32
ARKANSAS	401733	YELCOT TEL CO INC	Rural	C	3,612	\$32,984	Y	\$26,176	Y	\$37,437	Y		\$96,577	\$289,731	\$1,158,924	320.85
WASHINGTON	522431	MASHELL TELECOM INC	Rural	C	3,307	\$57,955	Y	\$28,405	Y	\$10,176	Y		\$96,536	\$289,006	\$1,158,432	350.30
OKLAHOMA	432030	TOTAH TELEPHONE CO	Rural	C	2,125	\$35,165	Y	\$20,025	Y	\$41,334	Y		\$96,524	\$289,572	\$1,158,288	545.08
ARIZONA	453334	TABLE TOP TEL CO	Rural	C	4,488	\$18,274	Y	\$27,987	X	\$50,056	Y		\$96,319	\$288,957	\$1,155,828	257.54
PENNSYLVANIA	170192	NORTH PENN TEL CO	Rural	C	4,875	\$33,344	Y	\$19,824	Y	\$42,877	Y		\$95,845	\$287,535	\$1,150,140	235.93
TEXAS	442097	KERRVILLE TEL CO	Rural	C	22,072	\$0	Y	\$37,229	Y	\$58,389	Y		\$95,618	\$286,854	\$1,147,416	51.99
WASHINGTON	522412	ELLENSBURG TEL CO	Rural	C	24,079	\$0	Y	\$15,208	Y	\$80,406	Y		\$95,614	\$286,842	\$1,147,366	47.65
MINNESOTA	381348	ACE TEL ASSN-MN	Rural	C	11,313	\$0	Y	\$10,684	Y	\$84,790	Y		\$95,474	\$286,422	\$1,145,688	101.27
ALASKA	613016	MUKLUK TEL CO INC	Rural	C	1,140	\$43,683	Y	\$22,405	Y	\$29,357	Y		\$95,445	\$286,335	\$1,145,340	1,004.68
WASHINGTON	522418	PEND OREILLE TEL	Rural	C	2,261	\$64,819	Y	\$12,948	Y	\$17,024	Y		\$94,791	\$284,373	\$1,137,492	503.09
ILLINOIS	341003	EGYPTIAN COOP ASSN	Rural	C	3,085	\$43,159	Y	\$12,246	X	\$39,340	Y		\$94,745	\$284,235	\$1,136,940	366.54
KANSAS	411808	MOONDRIDGE TEL CO	Rural	C	2,775	\$50,631	Y	\$18,001	Y	\$28,052	Y		\$94,684	\$284,052	\$1,136,268	409.44
ARKANSAS	401727	CENTURY TEL-SOUTH AR	Rural	C	1,271	\$66,340	Y	\$18,166	Y	\$9,899	Y		\$94,407	\$283,221	\$1,132,884	891.33
MINNESOTA	381410	JOHNSON TEL CO	Rural	C	1,744	\$46,664	Y	\$29,676	Y	\$16,049	Y		\$94,389	\$283,167	\$1,132,608	649.47
NEW MEXICO	492272	ROOSEVELT CNTY RURAL	Rural	C	2,257	\$40,744	Y	\$24,467	Y	\$28,905	Y		\$94,116	\$282,348	\$1,129,392	500.40
MICHIGAN	310689	PTI COMM-MICHIGAN	Rural	C	12,043	\$0	Y	\$29,804	Y	\$84,176	Y		\$93,980	\$281,940	\$1,127,760	93.64
MONTANA	482249	NW TEL SYSTEMS, INC	Rural	C	56,729	\$78,079	Y	\$15,783	N	\$0	Y		\$93,862	\$281,586	\$1,126,344	19.85
NORTH CAROLINA	230501	SKYLINE MEMBERSHIP	Rural	A	31,585	\$0	Y	\$73,116	Y	\$19,795	Y		\$92,911	\$278,733	\$1,114,932	35.30
NEW YORK	150111	ONEIDA COUNTY RURAL	Rural	C	3,601	\$48,041	Y	\$34,268	Y	\$10,383	Y		\$92,692	\$278,076	\$1,112,304	306.69
NORTH DAKOTA	381610	DAKOTA CENTRAL COOP	Rural	C	5,164	\$26,007	Y	\$29,651	Y	\$36,763	Y		\$92,421	\$277,263	\$1,109,052	214.77
COLORADO	462199	PLAINS COOP TEL ASSN	Rural	C	1,481	\$60,862	Y	\$21,648	Y	\$9,630	Y		\$92,140	\$276,420	\$1,105,680	748.58
TEXAS	442134	RIVIERA TEL CO INC	Rural	C	1,166	\$35,268	Y	\$19,129	Y	\$37,313	Y		\$91,710	\$275,130	\$1,100,520	943.84
MINNESOTA	381348	WILDERNESS VALLEY TEL	Rural	A	0	\$80,086	Y	\$146	Y	\$11,205	Y		\$91,417	\$274,251	\$1,097,004	#DIV/0!
NORTH DAKOTA	383303	SRT COMMUNICATIONS	Rural	A	32,014	\$0	Y	\$45,260	Y	\$46,054	Y		\$91,314	\$273,942	\$1,095,788	34.23
TENNESSEE	260571	MILLINGTON TEL CO	Rural	C	23,954	\$0	Y	\$32,144	X	\$59,156	Y		\$91,300	\$273,900	\$1,095,600	45.74
ALASKA	613012	JUNEAU & DOUGLAS TEL	Rural	C	23,646	\$0	Y	\$0	X	\$90,969	Y		\$90,969	\$272,907	\$1,091,628	46.17
FLORIDA	210329	GTC, INC.	Rural	C	9,116	\$48,815	Y	\$28,539	X	\$13,246	Y		\$90,600	\$271,800	\$1,087,200	119.26
OREGON	532359	BEAVER CREEK COOP	Rural	C	4,436	\$41,665	Y	\$34,808	X	\$13,862	Y		\$90,333	\$270,999	\$1,083,996	244.36
ALABAMA	250284	BUTLER TEL CO	Rural	C	4,623	\$53,626	Y	\$27,628	Y	\$9,027	Y		\$90,281	\$270,843	\$1,083,372	224.63
PENNSYLVANIA	170201	QUAKER STATE TEL CO	Rural	C	42,632	\$0	N	\$0	X	\$90,004	Y		\$90,004	\$270,012	\$1,080,048	25.33
OREGON	532456	MALHEUR HOME TEL CO	Rural	C	13,792	\$39,370	N	\$0	X	\$50,139	Y		\$89,509	\$268,527	\$1,074,108	77.88
TEXAS	442093	INDUSTRY TEL CO	Rural	C	2,000	\$39,364	Y	\$27,426	Y	\$22,506	Y		\$89,296	\$267,894	\$1,071,576	535.79
MAINE	100029	UNITY TEL CO, INC.	Rural	C	4,604	\$26,634	Y	\$26,443	Y	\$34,183	Y		\$89,260	\$267,780	\$1,071,120	232.65
GEORGIA	220371	INTERSTATE TEL CO	Rural	C	14,620	\$0	Y	\$0	Y	\$88,318	Y		\$88,318	\$264,954	\$1,059,816	71.51
COLORADO	462203	RYE TELEPHONE CO	Rural	C	1,664	\$43,761	Y	\$16,333	Y	\$26,106	Y		\$88,202	\$264,606	\$1,058,424	567.82
WASHINGTON	522446	TENINO TELEPHONE CO	Rural	C	3,117	\$34,059	Y	\$23,002	Y	\$30,920	Y		\$87,961	\$263,943	\$1,055,772	336.71
WISCONSIN	330870	CRANDON TEL CO	Rural	C	3,599	\$46,152	Y	\$25,273	Y	\$16,126	Y		\$87,551	\$262,653	\$1,050,612	291.92

PER USF PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non-Rural	Type	High Cost Loop Fund		LTS	Long Term Support		Local Switching Support		ETC	Monthly	Total High Cost Fund Support			Per USF Loop
					USF	Loops		Monthly	Monthly	LSS	Monthly			Quarterly	Annual		
TEXAS	442141	SANTA ROSA TEL COOP	Rural	C		2 240		Y	\$17,228	Y	\$18,034	Y	\$73,504	\$220,512	\$882,048	393.77	
KANSAS	411781	CUNNINGHAM TEL CO	Rural	C		1,521		Y	\$48,943	Y	\$18,320	Y	\$73,384	\$220,152	\$880,808	578.97	
OREGON	532392	PINE TEL SYSTEM INC	Rural	C		778		Y	\$31,947	Y	\$18,534	Y	\$73,207	\$219,621	\$878,484	1,129.18	
ALABAMA	250315	PINE BELT TEL CO	Rural	C		2 448		Y	\$38 311	Y	\$22,008	Y	\$73,078	\$219,234	\$876,838	358.23	
SOUTH CAROLINA	240528	CONTEL-SC DBA GTE SC	Rural	C		22 810		N	\$0	X	\$72,812	Y	\$72,812	\$218,438	\$873,744	38.84	
WISCONSIN	330940	RHINELANDER TEL CO	Rural	C		14 247		Y	\$4,265	Y	\$88,425	Y	\$72,890	\$218,070	\$872,280	61.23	
KENTUCKY	285182	SO CENTRAL BELL-KY	Non-Rural	C		1,173,820		N	\$0	N	\$0	Y	\$72,271	\$218,813	\$867,252	0.74	
WISCONSIN	330913	CENTURY-MONROE CNTY	Rural	C		10 855		Y	\$14,980	Y	\$16,037	Y	\$72,158	\$218,474	\$865,868	79.77	
ARIZONA	452302	CONTEL CALIF - AZ	Rural	C		8,037		N	\$0	X	\$84,043	Y	\$72,044	\$218,132	\$864,528	107.57	
NEBRASKA	371595	UTC OF THE WEST-NE	Rural	C		27,852		N	\$0	X	\$71,818	Y	\$71,818	\$215,448	\$861,792	30.94	
KENTUCKY	280421	WEST KENTUCKY RURAL	Rural	A		16,909		Y	\$26,387	Y	\$43,290	Y	\$71,782	\$215,348	\$861,384	50.94	
KENTUCKY	280418	SOUTH CENTRAL RURAL	Rural	A		25 821		Y	\$0	Y	\$70,275	Y	\$71,645	\$214,935	\$859,740	33.58	
NEW YORK	150131	TRUMANSBURG HOME TEL	Rural	C		8,511		Y	\$15,151	Y	\$17,102	Y	\$71,572	\$214,718	\$858,884	131.91	
MICHIGAN	310728	SHIawassee TEL CO	Rural	C		5,760		Y	\$38,879	Y	\$15,259	Y	\$71,459	\$214,377	\$857,508	148.38	
WISCONSIN	330974	WOOD COUNTY TEL CO	Rural	C		28 585		Y	\$0	Y	\$0	Y	\$71,358	\$214,088	\$856,272	29.98	
MAINE	100022	SACO RIVER TEL & TEL	Rural	A		8,758		Y	\$0	Y	\$19,421	Y	\$71,340	\$214,020	\$856,080	97.75	
PENNSYLVANIA	170191	NORTH EASTERN PA TEL	Rural	A		11 463		Y	\$0	Y	\$25,713	Y	\$71,280	\$213,840	\$855,360	74.82	
IOWA	351348	ACE TEL ASSN-IA	Non Rural	C		4 358		Y	\$9,820	Y	\$17,830	Y	\$71,209	\$213,827	\$854,508	198.08	
NEW YORK	150078	CHAUTAUQUA & ERIE	Rural	C		11 383		Y	\$0	Y	\$0	Y	\$71,101	\$213,303	\$853,212	74.95	
OKLAHOMA	431995	HINTON TEL CO	Rural	C		3 388		Y	\$29,130	Y	\$30,084	Y	\$70,993	\$212,979	\$851,918	251.80	
WEST VIRGINIA	200267	ARMSTRONG TEL CO	Rural	C		4 484		Y	\$28 710	Y	\$22,115	Y	\$70,988	\$212,958	\$851,832	189.97	
NEBRASKA	371542	EASTERN NEBRASKA TEL	Rural	C		2 908		Y	\$21,729	Y	\$13,448	Y	\$70,928	\$212,778	\$851,112	292.88	
IOWA	351888	GRAND RIVER MUT-IA	Rural	C		8 595		Y	\$0	Y	\$11,820	Y	\$70,878	\$212,634	\$850,538	98.98	
PENNSYLVANIA	170185	MARIANNA - SCENERY	Rural	A		2,714		Y	\$0	Y	\$8,983	Y	\$70,870	\$212,010	\$848,040	312.47	
NEW YORK	150071	ARMSTRONG TEL CO-NY	Rural	C		3,353		Y	\$24 759	Y	\$19,855	Y	\$70,111	\$210,333	\$841,332	250.92	
ALASKA	813018	NUSHAGAK TEL COOP	Rural	C		2 435		Y	\$30,384	Y	\$17,491	Y	\$70,059	\$210,177	\$840,708	345.28	
IDAHO	472232	DIRECT COMM-ROCKLAND	Rural	C		1,292		Y	\$34,787	Y	\$11,211	Y	\$70,047	\$210,141	\$840,584	650.59	
TEXAS	442078	GANADO TELEPHONE CO	Rural	C		2,881		Y	\$45,425	Y	\$18,774	Y	\$70,047	\$210,141	\$840,584	650.59	
MICHIGAN	310879	BLOOMINGDALE TEL CO	Rural	C		2,104		Y	\$42,829	Y	\$19,147	Y	\$69,935	\$208,805	\$839,220	293.33	
NEBRASKA	371524	BLAIR TEL CO	Rural	C		8,372		Y	\$0	Y	\$4,072	Y	\$69,874	\$208,022	\$838,088	397.38	
NEW MEXICO	492263	LA JICARITA RURAL	Rural	C		1,908		Y	\$35,148	Y	\$20,373	Y	\$69,514	\$208,542	\$834,188	99.84	
IDAHO	472228	MIDVALE TEL EXCH INC	Rural	C		1,088		Y	\$29,197	Y	\$15,907	Y	\$69,311	\$207,933	\$831,732	435.92	
SOUTH CAROLINA	240533	MCCLELLANVILLE TEL	Rural	C		1,685		Y	\$44,980	Y	\$15,850	Y	\$69,211	\$207,633	\$830,532	777.85	
OREGON	532371	CASCADE UTIL INC	Rural	C		9,435		Y	\$3,153	Y	\$23,985	Y	\$69,082	\$208,948	\$827,784	491.27	
SOUTH DAKOTA	391686	VIVIAN TELEPHONE CO	Rural	A		18,148		Y	\$25,830	Y	\$38,392	Y	\$68,878	\$208,028	\$824,112	87.35	
PENNSYLVANIA	170178	ALLTEL PENNSYLVANIA	Rural	C		225,421		Y	\$0	Y	\$68,544	N	\$68,655	\$205,985	\$823,880	45.40	
NEVADA	553304	HUMBOLDT TEL CO	Rural	C		748		Y	\$31,814	Y	\$18,789	Y	\$68,544	\$205,632	\$822,528	3.85	
SOUTH CAROLINA	240536	PALMETTO RURAL COOP	Rural	A		12,004		Y	\$0	Y	\$23,555	Y	\$68,544	\$205,632	\$822,528	3.85	
INDIANA	320753	CLAY CTY RURAL COOP	Rural	C		11,345		Y	\$19,947	Y	\$19,137	Y	\$68,544	\$205,632	\$822,528	3.85	
HAWAII	823021	SANDWICH ISLES COMM	Rural	C		348		Y	\$20,938	Y	\$13,091	Y	\$68,544	\$205,632	\$822,528	3.85	
NEW YORK	150092	EDWARDS TEL CO	Rural	C		2,135		Y	\$40,538	Y	\$19,842	Y	\$68,544	\$205,632	\$822,528	3.85	
NEW YORK	150105	MIDDLEBURGH TEL CO	Rural	C		8,400		Y	\$18,557	Y	\$18,704	Y	\$68,544	\$205,632	\$822,528	3.85	
ALASKA	613004	BUSH-TELL INC	Rural	C		831		Y	\$18,875	Y	\$20,838	Y	\$68,544	\$205,632	\$822,528	3.85	
COLORADO	482204	COLUMBINE ACQ CORP	Rural	C		1,187		Y	\$43,175	Y	\$14,739	Y	\$68,544	\$205,632	\$822,528	3.85	
MINNESOTA	381414	LAKEDALE TEL CO	Rural	C		11,836		Y	\$0	Y	\$27,188	Y	\$68,544	\$205,632	\$822,528	3.85	
NORTH CAROLINA	230474	CONCORD TEL CO	Rural	C		103,380		Y	\$0	Y	\$88,245	N	\$68,544	\$205,632	\$822,528	3.85	
IOWA	351280	NORTHWEST IOWA TEL	Rural	A		4,511		Y	\$0	Y	\$8,824	X	\$68,544	\$205,632	\$822,528	3.85	
PENNSYLVANIA	170188	FRONTIER-PA	Rural	C		28,842		N	\$0	X	\$68,081	Y	\$68,544	\$205,632	\$822,528	3.85	
NEW MEXICO	492259	BACA VALLEY TEL CO	Rural	C		824		Y	\$32,491	Y	\$15,950	Y	\$68,544	\$205,632	\$822,528	3.85	
SOUTH CAROLINA	240541	RIDGEWAY TEL CO	Rural	A		1,899		Y	\$0	Y	\$4,893	Y	\$68,544	\$205,632	\$822,528	3.85	
NEW HAMPSHIRE	120049	UNION TEL CO	Rural	C		7,021		Y	\$0	Y	\$5,532	Y	\$68,544	\$205,632	\$822,528	3.85	
IOWA	351086	AMANA COLONIES TEL	Rural	A		14,509		Y	\$8,232	Y	\$25,778	X	\$68,544	\$205,632	\$822,528	3.85	
MAINE	100003	LINCOLNVILLE TEL CO	Rural	C		11,880		Y	\$1,094	Y	\$30,375	Y	\$68,544	\$205,632	\$822,528	3.85	
ARKANSAS	401892	ARKANSAS TEL CO	Rural	C		7,802		Y	\$24,898	Y	\$9,948	X	\$68,544	\$205,632	\$822,528	3.85	

PER USF PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non Rural	Type	High Cost Loop Fund		Long Term Support		Local Switching Support		ETC	Monthly	Total High Cost Fund Support		Per USF Loop
					USF	Loops	LTS	Monthly	LSS	Monthly			Quarterly	Annual	
LOUISIANA	270439	CENTURY TEL RINGGOLD	Rural	C		1,858		\$28,139	Y	\$13,385	Y	\$56,384	\$169,152	\$676,608	364.18
WISCONSIN	330922	NORTH WEST DBA PTI	Rural	C		80,181		\$0	Y	\$56,244	N	\$56,244	\$168,732	\$674,928	8.42
IDAHO	472223	GEM STATE UTIL ID	Rural	C		1,517		\$30,269	Y	\$11,212	X	\$56,218	\$168,648	\$674,592	444.69
NEW YORK	150129	TOWNSHIP TEL CO	Rural	C		4,598		\$5,898	Y	\$14,088	Y	\$55,522	\$166,566	\$666,264	144.97
MICHIGAN	310672	COMM CORP OF MI	Rural	C		4,717		\$24,136	Y	\$11,092	Y	\$55,446	\$166,338	\$665,352	141.05
KENTUCKY	260407	GTE SOUTH INC - KY	Non-Rural	C		431,728		\$55,387	N	\$0	N	\$55,387	\$166,101	\$664,404	1.54
NEBRASKA	371516	ARAPAHOE TEL CO	Rural	C		2,594		\$12,960	Y	\$8,518	Y	\$55,357	\$166,071	\$664,284	256.08
ALABAMA	250297	GROVE HILL TEL CORP	Rural	C		2,472		\$34,414	Y	\$13,318	Y	\$55,244	\$165,732	\$662,928	268.17
NORTH CAROLINA	230496	RANDOLPH MEMBERSHIP	Rural	A		9,448		\$36	Y	\$30,261	Y	\$55,116	\$165,348	\$661,392	70.02
NEW YORK	150107	NEWPORT TEL CO	Rural	C		3,485		\$24,127	Y	\$22,851	Y	\$55,071	\$165,213	\$660,852	189.63
ARKANSAS	401709	MADISON CCJNTY TEL	Rural	C		3,457		\$23,317	Y	\$12,305	Y	\$54,532	\$163,596	\$654,384	189.29
NEW YORK	150110	OGDEN TEL CO	Rural	C		22,407		\$0	N	\$0	X	\$54,506	\$163,518	\$654,072	29.19
ILLINOIS	341047	MCDONOUGH TEL COOP	Rural	A		4,519		\$15,274	Y	\$15,287	Y	\$54,318	\$162,954	\$651,816	144.24
OKLAHOMA	431979	CHEROKEE TEL CO	Rural	C		4,982		\$0	Y	\$937	Y	\$54,027	\$162,081	\$648,324	130.66
TEXAS	442103	LA WARD TEL EXCHANGE	Rural	C		1,137		\$27,439	Y	\$8,436	Y	\$53,826	\$160,878	\$643,512	565.97
TENNESSEE	294336	CUC DBA CITIZENS-TN	Rural	C		73,062		\$53,227	N	\$0	N	\$53,227	\$159,681	\$638,724	8.74
PENNSYLVANIA	170196	PALMERTON TEL CO	Rural	A		11,898		\$0	Y	\$22,603	X	\$53,215	\$159,645	\$638,580	53.66
KANSAS	411840	TWIN VALLEY TEL INC	Rural	C		2,475		\$14,754	Y	\$7,597	Y	\$53,007	\$159,021	\$636,084	257.00
KANSAS	411784	ELKHART TEL CO INC	Rural	C		1,640		\$5,844	Y	\$6,470	X	\$52,988	\$158,904	\$635,616	387.57
NEBRASKA	371536	CURTIS TEL CO	Rural	C		848		\$29,688	Y	\$14,031	Y	\$52,835	\$158,505	\$634,020	747.67
ILLINOIS	340976	ADAMS TEL COOP	Rural	A		4,447		\$15,575	Y	\$15,301	Y	\$52,709	\$158,127	\$632,508	142.23
MAINE	100002	BRYANT POND TEL CO	Rural	C		6,473		\$8,141	Y	\$16,406	Y	\$52,585	\$157,755	\$631,020	97.48
NORTH DAKOTA	381631	RED RIVER RURAL TEL	Rural	A		3,681		\$7,026	Y	\$10,102	Y	\$52,537	\$157,611	\$630,444	171.27
VIRGINIA	193029	NEW CASTLE TEL CO	Rural	C		2,223		\$31,600	Y	\$16,313	Y	\$52,389	\$157,187	\$628,788	282.86
WISCONSIN	330931	CTE OF SO WISCONSIN	Rural	C		6,801		\$7,883	Y	\$17,092	Y	\$52,389	\$157,187	\$628,668	82.44
LOUISIANA	270438	RESERVE TEL CO	Rural	C		5,119		\$0	Y	\$10,285	Y	\$51,895	\$155,685	\$622,740	121.65
OKLAHOMA	431986	ATLAS TEL CO	Rural	C		2,041		\$12,008	Y	\$7,452	Y	\$51,848	\$155,544	\$622,178	304.84
ILLINOIS	341043	LA HARPE TEL CO	Rural	C		1,095		\$29,663	Y	\$13,194	X	\$51,689	\$155,007	\$620,028	566.24
MINNESOTA	361475	RUNESTONE TEL ASSN	Rural	A		4,209		\$12,868	Y	\$13,670	Y	\$51,596	\$154,794	\$619,176	147.11
TEXAS	442168	WES-TEX TEL CO-OP	Rural	C		3,220		\$17,420	Y	\$11,885	Y	\$51,315	\$153,945	\$615,780	191.24
WISCONSIN	330964	FRONTIER-WISCONSIN	Rural	C		25,807		\$0	N	\$0	X	\$51,243	\$153,729	\$614,916	23.83
ILLINOIS	341025	SHAWNEE TELEPHONE CO	Rural	C		4,828		\$6,642	Y	\$14,351	X	\$51,149	\$153,447	\$613,788	127.13
KANSAS	411839	TRI-COUNTY TEL ASSN	Rural	A		3,420		\$13,101	Y	\$17,194	Y	\$51,072	\$153,216	\$612,884	179.20
ALASKA	613017	ALASKA TEL CO	Rural	A		4,275		\$15,531	Y	\$14,557	Y	\$51,025	\$153,075	\$612,300	143.23
NEBRASKA	371555	HAMILTON TEL CO	Rural	A		6,304		\$14,072	Y	\$11,629	Y	\$51,024	\$153,072	\$612,268	97.13
TEXAS	442143	SOUTH PLAINS TEL	Rural	C		4,657		\$11,359	Y	\$15,584	Y	\$50,767	\$152,301	\$609,204	130.81
KENTUCKY	260402	ALLTEL KENTUCKY	Rural	C		23,306		\$0	Y	\$25,521	X	\$50,724	\$152,172	\$608,688	26.12
FLORIDA	210291	GTC, INC	Rural	C		4,598		\$28,472	Y	\$12,334	X	\$50,717	\$152,151	\$608,604	132.42
ARKANSAS	401720	CENTURY OF REDFIELD	Rural	C		1,845		\$23,957	Y	\$10,010	Y	\$50,641	\$151,923	\$607,892	329.37
SOUTH CAROLINA	240532	LOCKHART TEL CO INC	Rural	A		875		\$1,568	Y	\$2,055	Y	\$50,579	\$151,737	\$606,948	899.18
ARIZONA	452173	TOHONO O'ODHAM UTIL	Rural	C		3,518		\$16,187	Y	\$23,923	Y	\$50,532	\$151,596	\$606,384	172.46
MINNESOTA	381430	MELROSE TEL CO	Rural	C		9,749		\$3,855	Y	\$30,445	Y	\$50,388	\$151,164	\$604,656	62.02
TEXAS	442091	ETS TEL CO, INC	Rural	C		355		\$26,744	Y	\$20,889	Y	\$50,364	\$151,092	\$604,368	1,702.45
TEXAS	442073	BORDER TO BORDER	Rural	C		92		\$32,910	Y	\$12,235	Y	\$50,273	\$150,819	\$603,276	6,567.35
NEW YORK	150072	FRONTIER-AUSABLE VAL	Rural	C		6,173		\$14,855	N	\$0	X	\$50,029	\$150,087	\$600,348	97.25
MICHIGAN	310677	ISLAND TEL CO	Rural	C		1,050		\$25,115	Y	\$12,715	Y	\$49,385	\$148,095	\$592,380	564.17
ILLINOIS	341085	ODIN TEL EXCH INC	Rural	C		1,198		\$24,295	Y	\$13,879	X	\$49,314	\$147,942	\$591,788	493.96
MINNESOTA	381479	SCOTT RICE TEL CO	Rural	A		14,427		\$0	Y	\$29,455	Y	\$49,248	\$147,744	\$590,976	40.96
MISSISSIPPI	260461	NOXAPATER TEL CO	Rural	C		1,045		\$20,712	Y	\$14,971	Y	\$49,048	\$147,138	\$588,552	563.21
MISSISSIPPI	260456	GEORGETOWN TEL CO	Rural	C		317		\$26,090	Y	\$11,685	Y	\$48,985	\$146,955	\$587,820	1,854.32
NEW YORK	150122	FRONTIER-SENECA GORH	Rural	C		9,890		\$0	N	\$0	X	\$48,912	\$146,736	\$586,944	59.35
OREGON	532364	COLTON TEL CO	Rural	C		1,218		\$26,293	Y	\$12,724	Y	\$48,781	\$146,343	\$585,372	480.80
MINNESOTA	381401	HALSTAD TEL CO	Rural	A		1,431		\$13,411	Y	\$9,359	Y	\$48,746	\$146,238	\$584,952	408.77
IOWA	351328	WEBSTER-CALHOUN COOP	Rural	A		5,051		\$18,164	Y	\$23,411	Y	\$48,302	\$144,906	\$579,624	114.75

PER USF PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non-Rural	Type	High Cost Loop Fund		Long Term Support		Local Switching Support		ETC	Total High Cost Fund Support			
					USF Loops	Monthly	LTS	Monthly	LSS	Monthly		Monthly	Quarterly	Annual	Per USF Loop
SOUTH DAKOTA	391640	ARMOUR INDEPENDENT	Rural	A	1,841	\$0	Y	\$3,874	Y	\$38,104	Y	\$41,778	\$125,334	\$501,338	305.51
IOWA	351115	BUTLER BREMER MUTUAL	Non-Rural	A	2,981	\$8,181	Y	\$9,275	Y	\$26,051	Y	\$41,507	\$124,521	\$498,084	167.09
INDIANA	320797	NEW PARIS TEL INC	Rural	C	1,989	\$15,042	Y	\$6,879	Y	\$19,574	Y	\$41,485	\$124,485	\$497,940	250.35
NEW YORK	150128	FRONTIER-SYLVAN LAKE	Rural	C	17,085	\$1,758	N	\$0	X	\$39,607	Y	\$41,383	\$124,089	\$496,358	29.09
ILLINOIS	341024	HAMILTON COUNTY COOP	Rural	A	2,374	\$8,339	Y	\$9,527	Y	\$23,458	Y	\$41,324	\$123,972	\$495,888	208.88
MINNESOTA	361442	NEW ULM TELECOM, INC	Rural	C	11,750	\$0	Y	\$5,890	Y	\$35,425	Y	\$41,315	\$123,945	\$495,780	42.19
TEXAS	442154	CONTEL TX DBA GTE TX	Non-Rural	C	220,148	\$41,314	N	\$0	N	\$0	Y	\$41,314	\$123,942	\$495,768	2.25
WISCONSIN	330898	CENTURY-LARSEN-RDFLD	Rural	C	2,442	\$18,688	Y	\$9,574	Y	\$13,025	Y	\$41,285	\$123,855	\$495,420	202.87
IOWA	351108	BARNES CITY COOP	Rural	A	172	\$1,348	Y	\$1,241	Y	\$38,603	Y	\$41,192	\$123,578	\$494,304	2,873.86
MINNESOTA	361510	WOODSTOCK TEL CO	Rural	A	1,308	\$5,414	Y	\$8,933	Y	\$28,832	Y	\$41,179	\$123,537	\$494,148	377.79
OREGON	532385	MONROE TELEPHONE CO	Rural	C	1,012	\$11,188	Y	\$6,480	Y	\$23,382	Y	\$41,048	\$123,144	\$492,578	486.74
NORTH DAKOTA	381638	MIDSTATE COMM	Rural	A	1,150	\$0	Y	\$2,977	Y	\$38,008	Y	\$40,985	\$122,955	\$491,820	427.67
MINNESOTA	361482	SHERBURNE CTY RURAL	Rural	A	10,648	\$0	Y	\$23,219	Y	\$17,680	Y	\$40,899	\$122,697	\$490,788	48.09
NORTH CAROLINA	230500	SERVICE TEL CO	Rural	A	1,224	\$481	Y	\$2,085	Y	\$38,335	Y	\$40,861	\$122,583	\$490,332	400.80
NORTH CAROLINA	230469	BARNARDSVILLE TEL CO	Rural	C	1,338	\$25,109	Y	\$12,509	Y	\$3,208	Y	\$40,826	\$122,478	\$489,812	388.15
KENTUCKY	260408	FOOTHILLS RURAL COOP	Rural	A	13,897	\$0	Y	\$37,281	Y	\$3,532	Y	\$40,813	\$122,439	\$489,758	35.78
NORTH DAKOTA	381636	UNITED TEL MUTUAL	Rural	A	7,375	\$0	Y	\$15,223	Y	\$25,553	Y	\$40,778	\$122,328	\$489,312	86.35
NORTH DAKOTA	381623	NOONAN FARMERS TEL	Rural	A	252	\$1,492	Y	\$1,114	Y	\$38,180	Y	\$40,766	\$122,298	\$489,192	1,941.24
PENNSYLVANIA	170183	MAHANOY & MAHANTONGO	Rural	C	4,019	\$15,180	Y	\$18,075	Y	\$7,289	Y	\$40,504	\$121,512	\$488,048	120.94
ILLINOIS	340984	CASS COUNTY TEL CO	Rural	C	3,124	\$12,557	Y	\$5,541	X	\$22,322	Y	\$40,420	\$121,280	\$485,040	155.26
WASHINGTON	522404	ASOTIN TEL - WA	Non-Rural	C	1,216	\$24,105	Y	\$7,842	Y	\$8,329	Y	\$40,278	\$120,828	\$483,312	397.48
ALABAMA	250316	RAGLAND TEL CO	Rural	C	1,348	\$24,858	Y	\$13,368	Y	\$1,892	Y	\$40,118	\$120,354	\$481,416	357.13
KANSAS	411781	H & B COMMUNICATIONS	Rural	C	1,064	\$14,427	Y	\$12,188	Y	\$13,489	Y	\$40,082	\$120,188	\$480,744	451.83
ALASKA	813025	YUKON TEL CO INC	Rural	C	464	\$10,272	Y	\$7,432	Y	\$22,355	Y	\$40,059	\$120,177	\$480,708	1,038.01
WISCONSIN	330934	PLATTEVILLE DBA PTI	Rural	C	9,070	\$0	Y	\$0	X	\$39,935	Y	\$39,935	\$119,805	\$479,220	52.84
IOWA	351112	BREDA TEL COOP	Rural	A	1,125	\$3,809	Y	\$2,788	Y	\$33,338	Y	\$39,915	\$119,745	\$478,880	425.78
SOUTH DAKOTA	391642	BALTIC TELECOM COOP	Rural	A	2,720	\$8,269	Y	\$4,982	Y	\$28,643	Y	\$39,874	\$119,622	\$478,488	175.81
ILLINOIS	341016	GENESEO TEL CO	Rural	A	7,872	\$0	Y	\$12,384	Y	\$27,282	Y	\$39,828	\$118,878	\$475,512	80.41
MINNESOTA	361501	WEST CENTRAL TEL	Rural	A	3,732	\$7,722	Y	\$11,213	Y	\$20,875	Y	\$39,810	\$118,830	\$474,338	127.24
WISCONSIN	330987	FRONTIER OF VIROQUA	Rural	A	3,728	\$0	Y	\$8,381	Y	\$31,147	Y	\$39,528	\$118,584	\$474,338	127.24
WEST VIRGINIA	200277	WEST SIDE TEL-WV	Rural	A	2,667	\$4,171	Y	\$6,617	Y	\$28,715	Y	\$39,503	\$118,509	\$474,036	177.74
MINNESOTA	361409	HUTCHINSON TEL CO	Rural	A	11,968	\$0	Y	\$20,751	Y	\$18,525	Y	\$39,276	\$117,828	\$471,312	39.39
NORTH DAKOTA	381815	GRIGGS COUNTY TEL CO	Rural	A	2,210	\$0	Y	\$5,344	Y	\$33,873	Y	\$39,217	\$117,651	\$470,804	212.94
ILLINOIS	341021	GRANDVIEW MUTUAL TEL	Rural	A	95	\$1,223	Y	\$889	Y	\$37,084	Y	\$39,178	\$117,528	\$470,112	4,948.55
MINNESOTA	361483	SLEEPY EYE TEL CO	Rural	C	5,997	\$572	Y	\$14,504	Y	\$23,936	Y	\$39,012	\$117,036	\$468,144	78.08
INDIANA	320801	CTE OODN	Rural	C	1,832	\$20,555	Y	\$10,804	Y	\$7,500	Y	\$38,959	\$116,877	\$467,508	288.48
TEXAS	440425	CAMERON TEL CO TEXAS	Rural	C	1,230	\$15,989	Y	\$7,188	Y	\$15,892	Y	\$38,829	\$116,487	\$465,948	378.82
NEW YORK	150073	BERKSHIRE TEL CORP	Rural	C	8,299	\$0	Y	\$1,037	Y	\$37,745	Y	\$38,782	\$116,348	\$465,384	73.88
ALASKA	813028	NORTH COUNTRY TEL CO	Rural	A	178	\$1,395	Y	\$1,181	Y	\$36,204	Y	\$38,760	\$116,280	\$465,120	2,813.03
ARKANSAS	401722	E RITTER TEL CO	Rural	A	4,571	\$12,295	Y	\$13,244	Y	\$13,162	Y	\$38,701	\$116,103	\$464,412	101.80
MAINE	100015	COMMUNITY SERVICE	Rural	A	11,075	\$0	Y	\$31,175	Y	\$7,402	Y	\$38,577	\$115,731	\$462,924	41.80
NEBRASKA	371592	STANTON TEL CO, INC	Rural	C	1,183	\$19,018	Y	\$5,349	Y	\$13,918	Y	\$38,283	\$114,849	\$459,398	388.33
WISCONSIN	330920	NIAGARA TEL CO	Rural	C	4,075	\$1,940	Y	\$1,759	Y	\$34,573	Y	\$38,272	\$114,816	\$459,284	112.70
IOWA	351101	ATKINS TEL CO, INC	Rural	A	877	\$1,568	Y	\$2,054	Y	\$34,645	Y	\$38,267	\$114,801	\$459,204	678.29
PUERTO RICO		CENTENNIAL PCS OPER	Non-Rural	A	4,873	\$8,771		\$29,482		\$0	Y	\$38,253	\$114,759	\$459,036	94.20
NEBRASKA	371530	CONSOLIDATED TELCO	Rural	A	1,593	\$5,712	Y	\$6,141	Y	\$28,347	Y	\$38,200	\$114,600	\$458,400	287.76
ARKANSAS	401712	MOUNTAIN VIEW TEL CO	Rural	A	8,191	\$12,210	Y	\$14,734	Y	\$10,887	Y	\$37,811	\$113,433	\$453,732	73.29
IOWA	351107	BALDWIN-NASHVILLE	Rural	A	318	\$1,141	Y	\$1,523	Y	\$35,045	Y	\$37,709	\$113,127	\$452,508	1,422.98
MISSOURI	421942	ROCK PORT TEL CO	Rural	A	1,886	\$2,911	Y	\$2,325	Y	\$32,308	Y	\$37,542	\$112,626	\$450,504	287.20
MINNESOTA	361356	BENTON COOP TEL CO	Rural	A	3,819	\$3,924	Y	\$12,871	Y	\$20,698	Y	\$37,491	\$112,473	\$449,892	117.80
NORTH DAKOTA	381622	MOORE & LIBERTY TEL	Rural	A	908	\$248	Y	\$2,882	Y	\$34,539	Y	\$37,449	\$112,347	\$449,388	450.29
SOUTH CAROLINA	240524	HEATH SPRINGS TEL CO	Rural	A	1,257	\$326	Y	\$2,930	Y	\$34,171	Y	\$37,427	\$112,281	\$449,124	357.30
MINNESOTA	361484	UPSALA COOP TEL ASSN	Rural	A	977	\$1,223	Y	\$3,387	Y	\$32,812	Y	\$37,422	\$112,266	\$449,084	459.84
MICHIGAN	310711	MIDWAY TEL CO	Rural	C	878	\$20,570	Y	\$8,986	Y	\$9,803	Y	\$37,359	\$112,077	\$448,308	511.77

PER USE PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non Rural	Type	High Cost Loop Fund		Long Term Support		Local Switching Support		ETC	Monthly	Total High Cost Fund Support		
					USF	Loops	Monthly	LTS	Monthly	LSS			Monthly	Quarterly	Annual
MAINE	100034	WEST PENOBSCOT TEL	Rural	C	2,342	\$5,539	Y	\$11,991	Y	\$15,008	Y	\$32,538	\$97,614	\$390,456	166.72
MISSOURI	421807	MOKAN DIAL INC-MO	Rural	C	744	\$21,522	Y	\$7,717	X	\$3,298	Y	\$32,535	\$97,605	\$390,420	524.76
NEVADA	552353	MOAPA VALLEY TEL CO	Rural	C	3,560	\$0	Y	\$0	Y	\$32,337	Y	\$32,337	\$97,011	\$388,044	109.00
OREGON	532373	GERVAIS TELEPHONE CO	Rural	A	1,107	\$878	Y	\$2,239	Y	\$29,125	Y	\$32,240	\$96,720	\$386,880	349.49
WISCONSIN	330891	HEADWATERS TEL CO	Rural	C	5,201	\$0	Y	\$13,097	Y	\$19,121	Y	\$32,218	\$96,654	\$386,616	74.33
NORTH CAROLINA	230497	PIEDMONT MEMBERSHIP	Rural	A	3,102	\$0	Y	\$8,676	Y	\$23,454	Y	\$32,130	\$96,390	\$385,580	124.29
MINNESOTA	361485	SPRING GROVE COOP	Rural	A	1,238	\$3,121	Y	\$2,988	Y	\$25,983	Y	\$32,072	\$96,216	\$384,864	311.38
ARIZONA	452109	SAN CARLOS APACHE	Rural	C	712	\$18,362	Y	\$10,374	Y	\$5,308	Y	\$32,044	\$96,132	\$384,528	540.07
ILLINOIS	341087	VIOLA HOME TEL CO	Rural	A	793	\$1,510	Y	\$1,995	Y	\$28,350	Y	\$31,855	\$95,565	\$382,280	482.04
KENTUCKY	260401	DUO COUNTY TEL COOP	Rural	A	11,390	\$0	Y	\$29,553	Y	\$2,294	Y	\$31,847	\$95,541	\$382,184	33.55
INDIANA	320815	ROCHESTER TEL CO	Rural	A	7,647	\$0	Y	\$13,681	X	\$18,143	Y	\$31,824	\$95,472	\$381,888	49.94
IOWA	351334	WESTERN IOWA ASSN	Rural	A	3,481	\$11,044	Y	\$10,857	Y	\$9,739	Y	\$31,840	\$94,920	\$379,680	109.07
NEBRASKA	371581	PIERCE TEL CO	Rural	A	1,875	\$2,610	Y	\$4,933	Y	\$23,993	Y	\$31,536	\$94,608	\$378,432	201.83
MINNESOTA	361399	GARDONVILLE COOP TEL	Rural	A	3,049	\$8,139	Y	\$10,585	Y	\$14,782	Y	\$31,506	\$94,518	\$378,072	124.00
MINNESOTA	361500	NORTHERN TEL CO - MN	Rural	A	36	\$810	Y	\$614	Y	\$30,068	Y	\$31,490	\$94,470	\$377,880	10,496.67
NORTH DAKOTA	382247	NEMONT TEL COOP - ND	Non-Rural	A	251	\$3,583	Y	\$2,218	Y	\$25,685	Y	\$31,466	\$94,398	\$377,592	1,504.35
MISSOURI	421927	NEW FLORENCE TEL CO	Rural	A	488	\$1,430	Y	\$1,275	Y	\$28,751	Y	\$31,456	\$94,368	\$377,472	806.56
MINNESOTA	361372	CLEMENTS TEL CO	Rural	A	192	\$14,518	Y	\$1,188	Y	\$15,646	Y	\$31,352	\$94,058	\$376,224	1,959.50
OHIO	300594	THE CHAMPAIGN TEL CO	Rural	A	11,445	\$0	Y	\$27,916	Y	\$3,433	Y	\$31,349	\$94,047	\$376,188	32.87
IOWA	351298	SOUTH SLOPE COOP TEL	Rural	A	9,445	\$0	Y	\$20,836	Y	\$10,447	Y	\$31,283	\$93,849	\$375,396	39.75
MISSOURI	421945	SENECA TEL CO	Rural	A	2,946	\$0	Y	\$6,202	Y	\$25,086	Y	\$31,288	\$93,804	\$375,216	127.36
UTAH	502277	CENTRAL UTAH TEL INC	Rural	C	1,380	\$12,751	Y	\$7,297	Y	\$11,218	Y	\$31,266	\$93,798	\$375,192	269.92
MINNESOTA	361515	ZUMBROTA TEL CO	Rural	A	2,161	\$0	Y	\$4,888	Y	\$28,392	Y	\$31,280	\$93,780	\$375,120	173.59
OKLAHOMA	432032	VALLIANT TEL CO	Rural	C	2,218	\$2,315	Y	\$3,389	Y	\$25,503	Y	\$31,207	\$93,621	\$374,484	168.84
GEORGIA	220387	FRONTIER OF GEORGIA	Rural	A	23,956	\$0	Y	\$23,703	Y	\$7,459	Y	\$31,162	\$93,486	\$373,944	15.61
IDAHO	472423	INLAND TEL-ID	Non-Rural	C	336	\$17,460	Y	\$7,222	Y	\$8,456	Y	\$31,138	\$93,414	\$373,656	1,112.07
ALASKA	613022	TEL UTIL OF ALASKA	Rural	C	5,520	\$0	Y	\$0	X	\$30,863	Y	\$30,863	\$92,589	\$370,356	67.09
ILLINOIS	341075	REYNOLDS TEL CO. INC	Rural	A	571	\$1,537	Y	\$1,328	Y	\$27,998	Y	\$30,691	\$92,583	\$370,332	648.57
NEW YORK	150125	STATE TEL CO	Rural	A	8,142	\$0	Y	\$20,493	Y	\$10,350	Y	\$30,843	\$92,529	\$370,116	45.46
WISCONSIN	330918	NELSON TEL COOP	Rural	A	3,911	\$4,887	Y	\$9,718	Y	\$16,181	Y	\$30,786	\$92,358	\$369,432	94.46
FLORIDA	210318	FRONTIER COMM-SOUTH	Rural	C	4,146	\$13,135	N	\$0	X	\$17,589	Y	\$30,724	\$92,172	\$368,688	88.93
GEORGIA	220380	PROGRESSIVE RURAL	Rural	A	4,822	\$9,001	Y	\$14,527	Y	\$7,182	Y	\$30,710	\$92,130	\$368,520	76.42
MISSISSIPPI	280466	SLEDGE TEL CO	Rural	C	540	\$18,605	Y	\$7,347	Y	\$4,531	Y	\$30,483	\$91,449	\$365,796	677.40
ILLINOIS	341061	FRONTIER-MT. PULASKI	Rural	C	2,299	\$0	N	\$0	X	\$30,357	Y	\$30,357	\$91,071	\$364,284	158.45
MISSOURI	421886	GOODMAN TEL CO	Rural	C	1,788	\$12,502	Y	\$3,131	Y	\$14,719	Y	\$30,352	\$91,056	\$364,224	203.70
NEBRASKA	371525	THREE RIVER TELCO	Rural	C	1,343	\$10,239	Y	\$7,016	Y	\$12,905	Y	\$30,180	\$90,480	\$361,920	269.49
MINNESOTA	361454	PINE ISLAND TEL CO	Rural	C	2,899	\$10,212	Y	\$10,568	Y	\$9,308	Y	\$30,068	\$90,264	\$361,056	124.55
NEBRASKA	371562	HOME TEL CO OF NE	Rural	A	845	\$2,719	Y	\$2,308	Y	\$24,930	Y	\$29,957	\$89,871	\$359,484	425.42
NEBRASKA	371557	HARTMAN TEL EXCH INC	Rural	C	451	\$10,735	Y	\$4,781	Y	\$14,295	Y	\$29,611	\$89,433	\$357,732	793.20
MONTANA	482241	HOT SPRINGS TEL CO	Rural	C	690	\$18,140	Y	\$5,411	Y	\$8,224	Y	\$29,775	\$89,325	\$357,300	517.83
SOUTH DAKOTA	391653	CITY OF FAITH MUNIC	Rural	A	370	\$1,259	Y	\$1,102	Y	\$27,342	Y	\$29,703	\$89,109	\$356,436	963.34
IOWA	351098	ARCADIA TEL CO	Rural	A	333	\$1,177	Y	\$1,433	Y	\$27,057	Y	\$29,667	\$89,001	\$356,004	1,069.08
MINNESOTA	361404	HARMONY TEL CO	Rural	A	951	\$2,881	Y	\$2,510	Y	\$24,268	Y	\$29,659	\$88,977	\$355,908	374.25
ARKANSAS	401790	CONTEL KS DBA GTE AR	Non-Rural	C	21,291	\$0	N	\$0	X	\$29,647	Y	\$29,647	\$88,941	\$355,784	16.71
NEBRASKA	371556	HARTINGTON TEL CO	Rural	A	1,614	\$0	Y	\$0	Y	\$29,640	Y	\$29,640	\$88,920	\$355,680	220.37
ILLINOIS	341020	GRAFTON TEL CO	Rural	C	823	\$13,982	Y	\$5,136	X	\$10,263	Y	\$29,381	\$88,143	\$352,572	428.40
OREGON	532384	MONITOR COOP TEL	Rural	C	728	\$10,298	Y	\$7,621	Y	\$11,246	Y	\$29,365	\$88,095	\$352,380	484.04
ILLINOIS	341050	MARSEILLES TEL CO	Rural	A	3,906	\$0	Y	\$5,379	Y	\$23,971	Y	\$29,350	\$88,050	\$352,200	80.17
MINNESOTA	361387	EMILY COOP TEL CO	Rural	C	1,410	\$8,589	Y	\$7,620	Y	\$13,047	Y	\$29,256	\$87,768	\$351,072	248.99
MAINE	100031	WARREN TEL CO	Rural	C	1,701	\$7,835	Y	\$8,658	Y	\$12,562	Y	\$29,255	\$87,765	\$351,060	206.38
MINNESOTA	361426	MANCHESTER-HARTLAND	Rural	A	643	\$2,299	Y	\$2,542	Y	\$24,269	Y	\$29,110	\$87,330	\$349,320	543.27
INDIANA	320775	HANCOCK RURAL CORP	Rural	A	6,646	\$0	Y	\$14,802	Y	\$14,216	Y	\$29,020	\$87,080	\$348,240	52.40
GEORGIA	220346	BLUE RIDGE TEL CO	Rural	A	10,205	\$0	Y	\$21,438	Y	\$7,517	Y	\$28,953	\$86,859	\$347,436	34.05
MISSOURI	421912	MCDONALD COUNTY TEL	Rural	A	3,159	\$3,104	Y	\$5,127	Y	\$20,859	Y	\$28,890	\$86,670	\$346,680	109.74

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non-Rural	Type	High Cost Loop Fund		LTS	Long Term Support		Local Switching Support		ETC	Monthly	Total High Cost Fund Support		
					USF Loops	Monthly		Monthly	LSS	Monthly	Quarterly			Annual	Per USF Loop	
ARIZONA	452228	MIDVALE-AZ	Rural	C	530	\$10,225	Y	\$7,368	Y	\$8,881	Y	\$26,454	\$70,362	\$317,448	598.96	
PENNSYLVANIA	170158	CITIZENS - KECKSBURG	Rural	A	5,364	\$0	Y	\$13,810	X	\$12,572	Y	\$26,382	\$70,148	\$316,584	59.02	
MINNESOTA	361382	BRIDGEWATER TEL CO	Rural	A	7,050	\$1,012	Y	\$14,402	Y	\$10,930	Y	\$26,344	\$70,032	\$316,128	44.84	
VIRGINIA	190248	SCOTT COUNTY COOP	Rural	A	5,925	\$7,198	Y	\$15,810	Y	\$3,296	Y	\$26,304	\$70,912	\$315,648	53.27	
MICHIGAN	310875	BARAGA TEL CO	Rural	A	5,153	\$767	Y	\$13,202	X	\$12,280	Y	\$26,249	\$70,747	\$314,988	61.13	
IOWA	351319	VAN BUREN TEL CO	Rural	A	2,734	\$8,475	Y	\$8,745	Y	\$9,007	Y	\$26,227	\$70,681	\$314,724	115.11	
WASHINGTON	522410	COWICHE TELEPHONE CO	Rural	C	2,068	\$7,177	Y	\$7,858	X	\$11,377	Y	\$26,212	\$70,636	\$314,544	152.10	
NEVADA	552351	LINCOLN CTY TEL SYS	Rural	C	2,231	\$2,459	Y	\$9,545	Y	\$14,191	Y	\$26,195	\$70,585	\$314,340	140.80	
TENNESSEE	290554	BLEDSE TEL COOP	Rural	A	10,074	\$0	Y	\$24,044	Y	\$2,151	Y	\$26,195	\$70,585	\$314,340	31.20	
WISCONSIN	330908	MARQUETTE-ADAMS COOP	Rural	C	3,530	\$0	Y	\$2,708	Y	\$23,424	Y	\$26,132	\$70,398	\$313,584	88.83	
SOUTH CAROLINA	240550	WEST CAROLINA RURAL	Rural	A	11,379	\$0	Y	\$25,099	Y	\$978	Y	\$26,075	\$70,225	\$312,900	27.50	
NEBRASKA	371517	ARLINGTON TEL CO	Rural	C	1,085	\$9,318	Y	\$8,680	Y	\$8,044	Y	\$26,020	\$70,080	\$312,240	287.78	
ILLINOIS	340998	FRONTIER-DEPUE	Rural	A	805	\$1,499	Y	\$2,155	Y	\$22,320	Y	\$25,974	\$77,922	\$311,688	387.19	
MINNESOTA	361439	MINNESOTA VALLEY TEL	Rural	A	1,040	\$3,826	Y	\$4,322	Y	\$17,982	Y	\$25,910	\$77,730	\$310,920	298.96	
MINNESOTA	361495	VALLEY TEL CO - MN	Rural	A	806	\$2,649	Y	\$0	Y	\$23,188	Y	\$25,817	\$77,451	\$309,804	384.37	
SOUTH DAKOTA	391681	HANSON COUNTY TEL CO	Rural	A	1,497	\$0	Y	\$3,156	Y	\$22,648	Y	\$25,804	\$77,412	\$309,648	208.85	
WISCONSIN	330917	MT VERNON TEL CO	Rural	C	9,346	\$0	Y	\$8,114	Y	\$19,690	Y	\$25,804	\$77,412	\$309,648	33.13	
MINNESOTA	361854	INTERSTATE TELECOMM	Rural	A	1,628	\$4,545	Y	\$4,897	Y	\$16,270	Y	\$25,712	\$77,138	\$308,544	189.52	
MISSOURI	421900	KLM TEL CO	Rural	A	1,496	\$5,070	Y	\$5,201	Y	\$15,262	Y	\$25,533	\$76,599	\$308,396	204.81	
OREGON	532387	HEHALEM TEL & TEL	Rural	C	2,852	\$0	Y	\$1,524	Y	\$24,003	Y	\$25,527	\$76,581	\$308,324	107.41	
UTAH	502284	BEEHIVE TEL CO - UT	Rural	C	795	\$4,517	Y	\$5,293	X	\$15,670	Y	\$25,480	\$76,440	\$305,780	384.80	
MINNESOTA	361408	HOME TEL CO - MN	Rural	A	1,854	\$4,681	Y	\$5,561	Y	\$15,165	Y	\$25,407	\$76,221	\$304,684	184.45	
MISSOURI	421928	NEW LONDON TEL CO	Rural	C	948	\$12,586	Y	\$7,081	Y	\$5,670	Y	\$25,337	\$76,011	\$304,044	320.72	
OHIO	300598	MCCLURE TEL CO	Rural	C	751	\$8,787	Y	\$3,629	X	\$12,886	Y	\$25,302	\$75,908	\$303,624	404.29	
MINNESOTA	361370	CLARA CITY TEL EXCH	Rural	C	1,583	\$1,308	Y	\$6,025	Y	\$17,875	Y	\$25,208	\$75,618	\$302,472	191.08	
WISCONSIN	330982	UNION TEL CO	Rural	A	4,409	\$3,563	Y	\$11,710	Y	\$9,930	Y	\$25,203	\$75,609	\$302,436	88.60	
NORTH CAROLINA	230495	RANDOLPH TEL CO	Rural	A	4,344	\$0	Y	\$9,471	Y	\$15,695	Y	\$25,168	\$75,498	\$301,992	69.52	
INDIANA	320825	SUNMAN TEL CO	Rural	A	4,315	\$0	Y	\$9,485	Y	\$15,696	Y	\$25,161	\$75,483	\$301,932	69.97	
NEBRASKA	371583	HOOPER TEL CO	Rural	A	1,285	\$3,132	Y	\$4,001	Y	\$18,022	Y	\$25,155	\$75,465	\$301,880	234.91	
NORTH DAKOTA	381601	ABSARAKA COOP TEL CO	Rural	A	38	\$825	Y	\$578	Y	\$23,745	Y	\$25,148	\$75,444	\$301,776	7,941.47	
MICHIGAN	310737	WINN TEL CO	Rural	C	738	\$18,223	Y	\$5,718	Y	\$1,103	Y	\$25,042	\$75,126	\$300,504	407.19	
NEVADA	554432	CITIZENS-NV-SOUTH	Non-Rural	C	2,687	\$708	N	\$0	X	\$24,205	Y	\$24,913	\$74,739	\$298,956	112.09	
IOWA	351114	THE BURT TEL CO	Rural	A	455	\$1,411	Y	\$1,487	Y	\$22,005	Y	\$24,883	\$74,649	\$298,598	658.25	
NEBRASKA	371545	EUSTIS TEL EXCHANGE	Rural	A	489	\$1,458	Y	\$1,486	Y	\$21,914	Y	\$24,838	\$74,514	\$298,056	609.52	
MICHIGAN	310676	BARRY COUNTY TEL CO	Rural	A	8,022	\$0	Y	\$22,028	Y	\$2,789	Y	\$24,817	\$74,451	\$297,804	37.12	
MINNESOTA	361507	WINSTED TEL CO	Rural	A	1,610	\$0	Y	\$3,787	Y	\$21,022	Y	\$24,809	\$74,427	\$297,708	184.91	
IOWA	351405	HILLS TEL CO, INC-IA	Rural	A	1,978	\$7,339	Y	\$7,123	Y	\$10,287	Y	\$24,749	\$74,247	\$296,988	150.30	
ILLINOIS	341092	STELLE TEL CO	Rural	A	86	\$1,189	Y	\$744	Y	\$22,801	Y	\$24,734	\$74,202	\$296,808	3,451.26	
ILLINOIS	340993	CROSSVILLE TEL CO	Rural	A	678	\$1,567	Y	\$1,562	Y	\$21,578	Y	\$24,705	\$74,115	\$296,480	437.26	
NEBRASKA	371585	K & M TEL CO, INC	Rural	A	882	\$2,345	Y	\$2,771	Y	\$19,584	Y	\$24,700	\$74,100	\$296,400	447.73	
ALASKA	613028	SUMMIT TEL & TEL -AK	Rural	A	148	\$14,185	Y	\$8,743	Y	\$3,530	Y	\$24,458	\$73,374	\$293,496	2,010.25	
KENTUCKY	260419	THACKER/GRIGSBY TEL	Rural	A	7,274	\$3,042	Y	\$18,493	Y	\$2,840	Y	\$24,375	\$73,125	\$292,500	40.21	
COLORADO	482195	SOUTH PARK TEL CO	Rural	C	81	\$23,282	Y	\$265	Y	\$676	Y	\$24,223	\$72,669	\$290,878	3,588.59	
WISCONSIN	330955	STATE LONG DISTANCE	Rural	A	9,200	\$0	Y	\$13,703	Y	\$10,514	Y	\$24,217	\$72,651	\$290,604	31.59	
WISCONSIN	330954	STOCKBRIDGE & SHERWD	Rural	A	3,083	\$3,306	Y	\$9,012	Y	\$11,876	Y	\$24,194	\$72,582	\$290,328	94.17	
IDAHO	472220	FILER MUTUAL TEL -ID	Rural	C	2,282	\$0	Y	\$1,265	Y	\$22,798	Y	\$24,081	\$72,183	\$288,732	126.53	
ILLINOIS	341079	FRONTIER-SCHUYLER	Rural	C	3,048	\$4,722	N	\$0	X	\$19,264	Y	\$23,986	\$71,958	\$287,832	94.43	
MISSOURI	421934	ORCHARD FARM TEL CO	Rural	C	769	\$12,395	Y	\$9,228	Y	\$2,344	Y	\$23,967	\$71,901	\$287,604	374.00	
MISSOURI	421880	ALMA TEL CO	Rural	A	360	\$1,238	Y	\$1,382	Y	\$21,259	Y	\$23,879	\$71,837	\$286,548	795.97	
COLORADO	482202	ROGGEN TEL COOP CO	Rural	C	270	\$12,350	Y	\$6,252	Y	\$5,212	Y	\$23,814	\$71,442	\$285,788	1,058.40	
MINNESOTA	361389	FARMERS MUTUAL TEL	Rural	A	1,148	\$4,240	Y	\$5,082	Y	\$14,437	Y	\$23,759	\$71,277	\$285,108	248.79	
IOWA	351259	NORTHERN IOWA TEL CO	Rural	A	2,895	\$9,029	Y	\$8,720	Y	\$5,908	Y	\$23,657	\$70,971	\$283,884	105.34	
KENTUCKY	260415	PEOPLES RURAL COOP	Rural	A	7,197	\$0	Y	\$19,779	Y	\$3,834	Y	\$23,613	\$70,839	\$283,356	39.37	
MISSOURI	421759	CRAW-KAN TEL COOP-MO	Rural	A	2,378	\$7,871	Y	\$8,665	Y	\$9,053	Y	\$23,589	\$70,787	\$283,088	119.04	

PER USF PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non-Rural	Type	High Cost Loop Fund		Long Term Support		Local Switching Support		ETC	Monthly	Total High Cost Fund Support		Per USF Loop
					USF Loops	Monthly	LTS	Monthly	LSS	Monthly			Quarterly	Annual	
MISSOURI	421878	FARBER TEL CO	Rural	A	235	\$1,350	Y	\$1,227	Y	\$18,384	Y	\$20,961	\$62,883	\$251,532	1,070.35
WISCONSIN	330942	RICHLAND-GRANT COOP	Rural	A	2,823	\$7,490	Y	\$8,241	Y	\$5,193	Y	\$20,924	\$62,772	\$251,088	95.73
IOWA	351251	MEDIAPOLIS TEL CO	Rural	A	2,129	\$4,683	Y	\$5,816	Y	\$10,280	Y	\$20,779	\$62,337	\$249,348	117.12
WISCONSIN	330905	MANAWA TEL CO	Rural	A	2,381	\$1,179	Y	\$6,852	Y	\$12,739	Y	\$20,770	\$62,310	\$249,240	104.68
MICHIGAN	310734	WALDRON TEL CO	Rural	C	623	\$7,707	Y	\$1,115	Y	\$11,892	Y	\$20,714	\$62,142	\$248,568	386.99
INDIANA	320830	TRI-COUNTY TEL CO	Rural	A	3,388	\$5,603	Y	\$9,808	Y	\$5,047	Y	\$20,658	\$61,974	\$247,896	73.17
INDIANA	320778	HOME TEL CO INC	Rural	A	2,253	\$0	Y	\$6,534	Y	\$14,079	Y	\$20,613	\$61,839	\$247,356	109.79
INDIANA	320783	LIGONIER TEL CO	Rural	A	2,649	\$0	Y	\$3,114	Y	\$17,492	Y	\$20,608	\$61,816	\$247,272	93.35
WISCONSIN	330843	AMHERST TEL CO	Rural	A	4,627	\$0	Y	\$13,024	Y	\$7,568	Y	\$20,592	\$61,776	\$247,104	53.40
NEBRASKA	371558	HEMINGFORD COOP TEL	Rural	C	957	\$9,362	Y	\$3,468	Y	\$7,731	Y	\$20,581	\$61,683	\$246,732	257.82
INDIANA	320742	BLOOMINGDALE HOME	Rural	C	601	\$9,928	Y	\$4,698	X	\$5,900	Y	\$20,527	\$61,581	\$246,324	409.86
IOWA	351205	HUXLEY COOP TEL CO	Rural	A	1,739	\$2,840	Y	\$4,712	Y	\$12,640	Y	\$20,392	\$61,176	\$244,704	140.72
ILLINOIS	341093	YATES CITY TEL CO	Rural	C	542	\$8,566	Y	\$2,424	X	\$9,356	Y	\$20,346	\$61,038	\$244,152	450.46
WISCONSIN	330951	SOMERSET TEL CO	Rural	A	2,182	\$0	Y	\$1,946	Y	\$18,366	Y	\$20,312	\$60,936	\$243,744	111.71
TENNESSEE	290583	WEST TENNESSEE TEL	Rural	A	4,583	\$2,996	Y	\$12,366	Y	\$4,699	Y	\$20,261	\$60,783	\$243,132	53.05
MINNESOTA	361391	FELTON TEL CO INC	Rural	C	692	\$8,165	Y	\$5,285	Y	\$8,792	Y	\$20,261	\$60,783	\$243,132	351.02
OREGON	532378	TRANS-CASCADES TEL	Rural	C	159	\$13,403	Y	\$4,714	Y	\$2,104	Y	\$20,221	\$60,663	\$242,852	1,526.11
MICHIGAN	310703	KALEVA TEL CO	Rural	A	2,468	\$8,239	Y	\$8,038	Y	\$5,938	Y	\$20,215	\$60,645	\$242,580	98.29
MISSOURI	421887	GRANBY TEL CO - MO	Rural	A	2,748	\$0	Y	\$6,527	Y	\$13,673	Y	\$20,200	\$60,600	\$242,400	88.27
NEW YORK	150116	PATTERSONVILLE TEL	Rural	C	1,368	\$2,299	Y	\$2,358	Y	\$15,525	Y	\$20,180	\$60,540	\$242,180	174.72
VIRGINIA	190225	CITIZEN'S TEL COOP	Rural	A	6,625	\$355	Y	\$18,248	Y	\$3,510	Y	\$20,113	\$60,339	\$241,356	36.43
IOWA	351248	MONTEZUMA MUTUAL TEL	Rural	A	2,010	\$0	Y	\$5,031	Y	\$14,746	Y	\$20,113	\$60,339	\$241,356	118.07
KANSAS	411845	WAMEGO TEL CO INC	Rural	A	5,035	\$0	Y	\$10,674	Y	\$8,693	Y	\$19,787	\$59,301	\$237,204	47.11
UTAH	503032	BEAR LAKE COMM	Rural	C	667	\$9,458	Y	\$4,337	Y	\$5,914	Y	\$19,709	\$59,127	\$236,506	354.58
PENNSYLVANIA	170204	SOUTH CANAAN TEL CO	Non-Rural	A	2,763	\$0	Y	\$5,357	X	\$14,317	Y	\$19,674	\$59,022	\$236,066	85.45
MASSACHUSETTS	110037	RICHLAND TEL CO	Rural	C	1,066	\$4,137	Y	\$2,977	Y	\$12,526	Y	\$19,640	\$58,920	\$235,680	221.09
IDAHO	472227	MUD LAKE TEL COOP	Rural	A	1,421	\$5,269	Y	\$4,101	Y	\$10,234	Y	\$19,604	\$58,812	\$235,248	185.55
ARKANSAS	401699	DECATUR TEL CO INC	Rural	C	1,319	\$1,544	Y	\$3,540	Y	\$14,499	Y	\$19,583	\$58,749	\$234,996	178.16
WISCONSIN	330842	AMERY TELCOM, INC	Rural	A	6,093	\$0	Y	\$11,478	Y	\$8,079	Y	\$19,555	\$58,665	\$234,680	38.51
WISCONSIN	330855	BRUCE TEL CO, INC	Rural	C	1,602	\$5,559	Y	\$9,764	Y	\$4,151	Y	\$19,474	\$58,422	\$233,688	145.87
NEBRASKA	371540	DILLER TEL CO	Rural	C	960	\$2,806	Y	\$3,230	Y	\$13,385	Y	\$19,421	\$58,263	\$233,052	242.76
IOWA	351281	SCHALLER TEL CO	Rural	A	1,763	\$5,559	Y	\$3,591	Y	\$10,171	Y	\$19,321	\$57,963	\$231,852	131.51
NORTH CAROLINA	230478	ELLERBE TEL CO	Rural	A	2,112	\$0	Y	\$4,801	Y	\$14,416	Y	\$19,217	\$57,651	\$230,804	109.19
GEORGIA	220389	TRENTON TEL CO	Rural	A	6,247	\$0	Y	\$11,314	Y	\$7,896	Y	\$19,212	\$57,636	\$230,544	36.90
SOUTH DAKOTA	391870	MIDSTATE TEL COMPANY	Rural	A	4,585	\$5,047	Y	\$11,697	Y	\$2,283	Y	\$19,027	\$57,081	\$228,324	49.80
MINNESOTA	361186	GTE NORTH INC - MN	Rural	C	3,853	\$0	N	\$0	X	\$18,975	Y	\$18,975	\$56,925	\$227,700	59.10
WISCONSIN	330602	LUCK TEL CO	Rural	A	2,272	\$1,564	Y	\$5,522	Y	\$11,661	Y	\$18,947	\$56,841	\$227,384	100.07
IOWA	351217	KEYSTONE FRMS COOP	Rural	A	1,023	\$3,587	Y	\$4,267	Y	\$11,043	Y	\$18,917	\$56,751	\$227,004	221.90
MISSOURI	421820	MILLER TEL CO - MO	Rural	A	1,032	\$1,091	Y	\$2,620	Y	\$15,088	Y	\$18,779	\$56,337	\$225,348	218.36
TEXAS	442065	CUMBY TEL COOP INC	Rural	C	749	\$6,902	Y	\$3,814	Y	\$8,035	Y	\$18,751	\$56,253	\$225,012	300.42
MINNESOTA	361448	OSAKIS TEL CO	Non-Rural	A	1,856	\$0	Y	\$5,568	Y	\$13,058	Y	\$18,646	\$55,936	\$223,752	120.56
UTAH	504449	NAVAJO COMMUN-UT	Rural	C	363	\$14,379	N	\$0	X	\$4,252	Y	\$18,631	\$55,893	\$223,572	615.90
WISCONSIN	330944	FRONTIER-ST CROIX	Rural	A	8,559	\$0	Y	\$10,932	Y	\$7,482	Y	\$18,414	\$55,242	\$220,968	25.82
WISCONSIN	330851	BONDUEL TEL CO	Rural	A	1,788	\$0	Y	\$5,099	Y	\$13,302	Y	\$18,401	\$55,203	\$220,812	123.50
IOWA	351277	RADCLIFFE TEL CO	Rural	A	522	\$1,495	Y	\$1,706	Y	\$15,180	Y	\$18,361	\$55,063	\$220,332	422.09
WISCONSIN	330925	BAYLAND TEL CO	Rural	A	1,886	\$0	Y	\$5,179	Y	\$13,121	Y	\$18,300	\$54,900	\$219,600	116.44
PENNSYLVANIA	170206	SUGAR VALLEY TEL CO	Rural	C	1,119	\$5,736	Y	\$6,242	Y	\$8,199	Y	\$18,177	\$54,531	\$218,124	194.93
MONTANA	482252	RONAN TEL CO	Rural	A	3,620	\$0	Y	\$8,556	X	\$11,559	Y	\$18,115	\$54,345	\$217,380	80.05
ALABAMA	250312	ONEONTA TEL CO	Rural	A	7,105	\$0	Y	\$15,420	Y	\$2,586	Y	\$18,008	\$54,024	\$216,096	30.41
IOWA	351237	MARNE & ELK HORN TEL	Rural	A	1,452	\$4,978	Y	\$5,612	Y	\$7,303	Y	\$17,893	\$53,679	\$214,716	147.88
IOWA	351301	SOUTHWEST TEL EXCH	Rural	A	718	\$3,262	Y	\$3,779	Y	\$10,717	Y	\$17,758	\$53,274	\$213,096	296.79
IOWA	351285	SAC COUNTY MUTUAL	Rural	A	1,092	\$3,036	Y	\$3,457	Y	\$11,264	Y	\$17,757	\$53,271	\$213,084	195.13
INDIANA	320813	PULASKI-WHITE RURAL	Rural	A	2,066	\$2,177	Y	\$5,586	Y	\$9,928	Y	\$17,689	\$53,067	\$212,268	102.74
ALABAMA	250311	OAKMAN TEL CO (TDS)	Rural	A	2,607	\$6,270	Y	\$8,491	Y	\$2,695	Y	\$17,656	\$52,968	\$211,672	81.27

PER USF PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non Rural	Type	High Cost Loop Fund		LTS	Long Term Support		Local Switching Support		ETC	Monthly	Total High Cost Fund Support			
					USF	Loops		Monthly	Monthly	LSS	Monthly			Quarterly	Annual	Per USF Loop	
IDAHO	472221	FARMERS MUTUAL TEL	Rural	A		3,070		\$0	Y	\$5,057	Y	\$10,371	Y	\$15,428	\$46,284	\$185,138	60.30
IOWA	351306	SULLY TEL ASSOC	Rural	A		1,036		\$2,983	Y	\$3,380	Y	\$8,998	Y	\$15,341	\$46,023	\$184,092	177.69
WISCONSIN	330953	SPRING VALLEY TEL CO	Rural	A		1,019		\$1,124	Y	\$2,284	Y	\$11,908	Y	\$15,316	\$45,948	\$183,792	180.37
IOWA	351156	EAST BUCHANAN COOP	Rural	A		1,554		\$4,474	Y	\$5,487	Y	\$5,312	Y	\$15,273	\$45,819	\$183,276	117.94
MICHIGAN	310705	CENTURY-NORTH MICH	Rural	A		3,027		\$0	Y	\$8,998	Y	\$8,177	Y	\$15,175	\$45,525	\$182,100	60.16
TEXAS	442107	LIVINGSTON TEL CO	Rural	A		6,743		\$0	Y	\$15,150	Y	\$0	Y	\$15,150	\$45,450	\$181,800	26.96
WISCONSIN	330866	COCHRANE COOP TEL CO	Rural	A		1,222		\$3,115	Y	\$3,182	Y	\$8,851	Y	\$15,148	\$45,444	\$181,776	148.75
INDIANA	320744	CAMDEN TEL CO - IN	Rural	A		1,782		\$4,651	Y	\$6,144	Y	\$4,308	Y	\$15,103	\$45,309	\$181,236	101.70
IOWA	351343	WYOMING MUTUAL TEL	Rural	A		719		\$1,558	Y	\$2,587	Y	\$10,919	Y	\$15,084	\$45,192	\$180,768	251.42
WISCONSIN	330896	LAKEFIELD TEL CO	Rural	A		1,667		\$2,935	Y	\$5,081	Y	\$7,037	Y	\$15,053	\$45,159	\$180,636	108.36
WEST VIRGINIA	200256	ARMSTRONG OF WV	Rural	A		2,857		\$0	Y	\$7,283	Y	\$7,882	Y	\$14,965	\$44,895	\$179,580	62.86
PENNSYLVANIA	170194	FRONTIER-OSWAYO RIVR	Rural	C		2,337		\$1,276	N	\$0	X	\$13,606	Y	\$14,882	\$44,646	\$178,584	78.42
TENNESSEE	290561	CROCKETT TEL CO	Rural	A		4,422		\$0	Y	\$11,024	Y	\$3,873	Y	\$14,897	\$44,091	\$176,384	39.88
TENNESSEE	290584	YORKVILLE TEL COOP	Rural	A		1,973		\$5,853	Y	\$6,440	Y	\$2,392	Y	\$14,685	\$44,055	\$176,220	89.32
IOWA	351329	WELLMAN COOP TEL	Rural	A		1,372		\$0	Y	\$4,074	Y	\$10,598	Y	\$14,670	\$44,010	\$176,040	128.31
COLORADO	462198	PINE DRIVE TEL CO	Rural	A		742		\$1,547	Y	\$1,892	Y	\$11,206	Y	\$14,645	\$43,935	\$175,740	236.85
TENNESSEE	290576	PEOPLES TEL CO	Rural	A		4,607		\$0	Y	\$10,291	Y	\$4,280	Y	\$14,551	\$43,653	\$174,812	37.90
MONTANA	482244	LINCOLN TEL CO INC	Rural	C		1,079		\$973	Y	\$239	Y	\$13,285	Y	\$14,497	\$43,491	\$173,984	161.23
VERMONT	140062	PERKINSVILLE TEL CO	Rural	C		877		\$6,162	Y	\$3,606	Y	\$4,694	Y	\$14,464	\$43,392	\$173,568	197.91
OREGON	532226	MIDVALE TEL EXCH -OR	Rural	C		230		\$8,402	Y	\$2,298	Y	\$3,718	Y	\$14,418	\$43,254	\$173,018	752.24
IOWA	351263	OGDEN TEL CO - IA	Rural	A		1,854		\$0	Y	\$4,800	Y	\$9,580	Y	\$14,380	\$43,140	\$172,580	93.07
MISSISSIPPI	280448	CALHOUN CITY TEL CO	Rural	A		3,965		\$240	Y	\$11,050	Y	\$2,995	Y	\$14,285	\$42,855	\$171,420	43.23
ALABAMA	250322	UNION SPRINGS TEL CO	Rural	A		4,612		\$2,898	Y	\$9,441	Y	\$1,838	Y	\$14,277	\$42,831	\$171,324	37.15
IOWA	351110	BERNARD TEL CO INC	Rural	C		598		\$9,512	Y	\$2,277	Y	\$2,487	Y	\$14,276	\$42,828	\$171,312	287.44
IOWA	351294	SCRANTON TEL CO	Rural	A		539		\$1,512	Y	\$1,698	Y	\$11,087	Y	\$14,275	\$42,825	\$171,300	317.81
MINNESOTA	361380	DELANEY TEL CO	Rural	A		343		\$1,200	Y	\$1,429	Y	\$11,630	Y	\$14,259	\$42,777	\$171,108	498.86
IOWA	351139	COOPERATIVE TEL CO	Rural	A		1,483		\$5,001	Y	\$4,886	Y	\$4,363	Y	\$14,250	\$42,750	\$171,000	116.88
IOWA	351177	FARMERS TEL CO -RICE	Rural	A		1,743		\$5,528	Y	\$5,568	Y	\$3,014	Y	\$14,106	\$42,316	\$169,272	97.12
KANSAS	411791	LA HARPE TEL CO INC	Rural	A		399		\$1,317	Y	\$1,477	Y	\$11,282	Y	\$14,076	\$42,228	\$168,112	423.34
IOWA	351344	PRAIRIE TEL CO	Rural	A		1,127		\$3,813	Y	\$3,189	Y	\$7,059	Y	\$14,061	\$42,183	\$168,732	149.72
WISCONSIN	330877	CTE FAIRWATER-BRAND	Rural	C		1,280		\$3,071	Y	\$6,348	Y	\$4,805	Y	\$14,022	\$42,066	\$168,264	133.54
WISCONSIN	330900	LEMONWEIR VALLEY TEL	Rural	A		3,288		\$0	Y	\$8,014	Y	\$5,979	Y	\$13,993	\$41,979	\$167,916	51.10
IDAHO	472234	TROY TELEPHONE CO	Rural	C		927		\$7,931	Y	\$3,931	Y	\$2,125	Y	\$13,987	\$41,961	\$167,844	181.08
IOWA	351235	MANILLA TEL CO	Rural	A		590		\$1,548	Y	\$1,879	Y	\$10,514	Y	\$13,941	\$41,823	\$167,292	283.55
WISCONSIN	330910	MILLTOWN MUTUAL TEL	Rural	C		2,548		\$0	Y	\$3,453	Y	\$10,483	Y	\$13,936	\$41,808	\$167,232	65.63
KANSAS	411758	COUNCIL GROVE TEL CO	Rural	A		2,117		\$0	Y	\$4,429	Y	\$9,410	Y	\$13,839	\$41,517	\$166,088	78.44
INDIANA	320828	FRONTIER-THORNTOWN	Rural	C		2,863		\$0	N	\$0	X	\$13,777	Y	\$13,777	\$41,331	\$165,324	62.08
IOWA	351292	SEARSBORO TEL CO	Rural	A		337		\$2,840	Y	\$2,052	X	\$8,841	Y	\$13,733	\$41,199	\$164,796	489.01
ILLINOIS	341058	MONTROSE MUTUAL TEL	Rural	C		1,649		\$1,617	Y	\$3,316	X	\$8,773	Y	\$13,708	\$41,118	\$164,472	99.74
OKLAHOMA	432025	SW OKLAHOMA TEL CO	Rural	C		962		\$3,564	Y	\$2,152	Y	\$7,972	Y	\$13,688	\$41,064	\$164,256	170.74
INDIANA	320751	CITIZENS TEL CORP	Rural	A		2,411		\$1,066	Y	\$5,288	Y	\$7,288	Y	\$13,642	\$40,926	\$163,704	67.90
KANSAS	411852	ZENDA TEL COMPANY	Rural	C		231		\$3,254	Y	\$2,647	Y	\$7,740	Y	\$13,641	\$40,923	\$163,692	706.62
MINNESOTA	361383	EAGLE VALLEY TEL CO	Rural	A		670		\$1,568	Y	\$2,253	Y	\$9,811	Y	\$13,632	\$40,898	\$163,584	244.16
OHIO	300618	GERMANTOWN INDEPEND	Rural	A		4,018		\$0	Y	\$10,188	Y	\$3,404	Y	\$13,592	\$40,776	\$163,104	40.59
IOWA	351273	PEOPLES TEL CO - IA	Rural	A		880		\$1,404	Y	\$2,508	Y	\$9,607	Y	\$13,517	\$40,551	\$162,204	184.32
IOWA	351133	C-M-L TEL COOP ASSN	Rural	A		840		\$5,258	Y	\$4,975	Y	\$3,201	Y	\$13,434	\$40,302	\$161,208	191.91
WISCONSIN	330892	HILLSBORO TEL CO	Rural	A		1,638		\$0	Y	\$4,195	Y	\$9,222	Y	\$13,417	\$40,251	\$161,004	98.29
INDIANA	320827	SWEETSER RURAL TEL	Rural	A		1,774		\$0	Y	\$3,911	Y	\$9,475	Y	\$13,386	\$40,158	\$160,632	90.55
IOWA	351278	READLYN TEL CO	Rural	A		778		\$1,523	Y	\$2,621	Y	\$9,168	Y	\$13,332	\$39,996	\$159,984	205.63
IOWA	351275	PRAIRIEBURG TEL CO	Rural	A		218		\$1,279	Y	\$1,329	Y	\$10,626	Y	\$13,234	\$39,702	\$158,808	735.22
COLORADO	462196	PEETZ COOP TEL CO	Rural	C		219		\$5,238	Y	\$2,043	Y	\$5,040	Y	\$13,221	\$39,663	\$158,652	724.44
IOWA	351276	PRESTON TEL CO	Rural	A		1,200		\$3,108	Y	\$3,882	Y	\$6,215	Y	\$13,203	\$39,609	\$158,436	132.03
ILLINOIS	341048	MCNABB TEL CO	Rural	C		483		\$3,186	Y	\$977	X	\$9,023	Y	\$13,186	\$39,558	\$158,232	327.60
VIRGINIA	190238	MT GROVE-WILLIAMSVIL	Rural	A		1,450		\$5,348	Y	\$7,049	Y	\$727	Y	\$13,122	\$39,366	\$157,464	108.60

PER USF PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non Rural	Type	High Cost Loop Fund		Long Term Support		Local Switching Support		ETC	Total High Cost Fund Support			Per USF Loop
					USF Loops	Monthly	LTS	Monthly	LSS	Monthly		Monthly	Quarterly	Annual	
IOWA	351214	KALONA COOP TEL CO	Rural	A	1,932	\$0	Y	\$4,501	Y	\$8,585	Y	\$11,088	\$33,258	\$133,032	68.88
IOWA	351105	AYRSHIRE FARMERS MUT	Rural	C	375	\$1,708	Y	\$2,441	X	\$6,930	Y	\$11,077	\$33,231	\$132,924	354.48
IOWA	351180	FARMERS & BUSINESSME	Rural	A	1,118	\$3,058	Y	\$3,580	Y	\$4,458	Y	\$11,072	\$33,218	\$132,884	118.84
ALABAMA	250295	GRACEBA TOTAL COMM	Rural	A	4,335	\$0	Y	\$9,319	Y	\$1,737	Y	\$11,058	\$33,188	\$132,872	30.80
IOWA	351182	FARMERS COOP TEL CO	Rural	A	1,381	\$3,130	Y	\$4,410	Y	\$3,512	Y	\$11,052	\$33,158	\$132,824	95.34
IOWA	351222	LA MOTTE TEL CO	Rural	A	873	\$1,588	Y	\$2,117	Y	\$7,332	Y	\$11,017	\$33,051	\$132,204	188.44
IOWA	351309	TERRIL TEL CO	Rural	A	495	\$1,488	Y	\$0	Y	\$9,515	Y	\$10,981	\$32,943	\$131,772	288.21
WISCONSIN	330865	CLEAR LAKE TEL CO-WI	Rural	A	1,407	\$0	Y	\$2,938	Y	\$8,008	Y	\$10,948	\$32,838	\$131,352	93.38
NEW YORK	150078	CASSADAGA TEL CORP	Rural	A	1,434	\$0	Y	\$3,421	Y	\$7,511	Y	\$10,932	\$32,798	\$131,184	91.48
WISCONSIN	330849	BLACK EARTH TEL CO	Rural	A	1,470	\$0	Y	\$4,171	Y	\$8,737	Y	\$10,908	\$32,724	\$130,898	89.04
ALABAMA	250317	ROANOKE TEL CO	Rural	A	5,118	\$0	Y	\$9,271	Y	\$1,523	Y	\$10,794	\$32,382	\$129,528	25.31
IOWA	351243	MILLER TEL CO - IA	Rural	A	104	\$1,245	Y	\$925	Y	\$8,500	Y	\$10,670	\$32,010	\$128,040	1,231.15
TENNESSEE	280574	CENTURY-OLTEWAH-COL	Rural	A	8,011	\$0	Y	\$7,938	Y	\$2,725	Y	\$10,663	\$31,989	\$127,958	15.97
SOUTH DAKOTA	391888	WESTERN TEL CO	Rural	A	1,108	\$2,847	Y	\$3,454	Y	\$4,558	Y	\$10,650	\$31,950	\$127,800	173.17
MICHIGAN	310892	DRENTH TEL CO	Rural	A	738	\$1,549	Y	\$2,247	Y	\$8,854	Y	\$10,650	\$31,950	\$127,800	51.01
KANSAS	411756	COLUMBUS TELEPHONE	Rural	A	2,471	\$0	Y	\$3,973	Y	\$8,530	Y	\$10,503	\$31,509	\$126,038	46.21
VIRGINIA	180243	PEMBROKE TEL COOP	Rural	A	2,725	\$0	Y	\$8,988	Y	\$3,507	Y	\$10,493	\$31,479	\$125,918	149.88
INDIANA	320798	NEW LISBON TEL CO	Rural	A	840	\$1,480	Y	\$1,879	Y	\$7,337	Y	\$10,478	\$31,428	\$125,712	151.15
WISCONSIN	330847	DELMONT TEL CO	Rural	A	827	\$1,475	Y	\$2,150	Y	\$8,792	Y	\$10,417	\$31,251	\$125,004	389.11
IOWA	351223	LAUREL TEL CO INC	Rural	A	313	\$1,128	Y	\$1,473	Y	\$7,809	Y	\$10,410	\$31,230	\$124,920	202.50
IOWA	351188	GOLDFIELD TEL CO	Rural	A	816	\$1,560	Y	\$1,871	Y	\$8,984	Y	\$10,395	\$31,185	\$124,740	117.14
IOWA	351295	SHELL ROCK TEL CO	Rural	A	1,063	\$1,007	Y	\$3,143	Y	\$8,227	Y	\$10,377	\$31,131	\$124,524	33.58
WISCONSIN	330858	BURLINGTON B&W	Rural	A	3,700	\$0	Y	\$5,688	Y	\$4,681	Y	\$10,349	\$31,047	\$124,188	108.17
IOWA	351174	FARMERS MUTUAL TEL	Rural	A	1,131	\$3,822	Y	\$3,773	Y	\$2,800	Y	\$10,195	\$30,585	\$122,340	275.84
MICHIGAN	310714	OGDEN TEL CO	Rural	C	442	\$1,888	Y	\$2,488	Y	\$8,004	Y	\$10,180	\$30,480	\$121,920	92.08
OHIO	300850	OTTOVILLE MUTUAL	Rural	A	1,323	\$3,136	Y	\$4,047	Y	\$2,989	Y	\$10,152	\$30,458	\$121,824	211.41
WISCONSIN	330924	KENDALL TEL, INC	Rural	A	573	\$1,538	Y	\$2,013	Y	\$8,544	Y	\$10,089	\$30,285	\$121,140	248.57
IOWA	351199	HAWKEYE TEL CO	Rural	A	491	\$1,481	Y	\$1,770	Y	\$8,858	Y	\$10,089	\$30,287	\$121,088	283.21
IOWA	351208	IAMO TEL CO - IA	Rural	A	423	\$2,488	Y	\$2,434	Y	\$5,083	Y	\$9,983	\$29,949	\$119,798	90.24
VIRGINIA	180237	HIGHLAND TEL COOP	Rural	A	1,319	\$4,184	Y	\$4,484	Y	\$1,271	Y	\$9,919	\$29,757	\$119,028	115.54
IOWA	351189	RIVER VALLEY COOP	Rural	A	1,025	\$2,971	Y	\$3,145	Y	\$3,753	Y	\$9,869	\$29,607	\$118,428	139.82
IOWA	351257	NORTH ENGLISH COOP	Rural	A	835	\$1,488	Y	\$2,873	Y	\$5,590	Y	\$9,729	\$29,187	\$118,748	198.94
ILLINOIS	341086	ONEIDA TEL EXCHANGE	Rural	C	588	\$0	Y	\$1,038	X	\$8,879	Y	\$9,715	\$29,145	\$118,580	180.12
IOWA	351242	MILES COOP TEL ASSN	Rural	A	725	\$1,555	Y	\$2,191	Y	\$5,928	Y	\$9,674	\$29,022	\$118,088	115.88
WEST VIRGINIA	200257	SPRUCE KNOB SENECA	Rural	A	1,002	\$1,188	Y	\$2,479	Y	\$8,029	Y	\$9,674	\$29,022	\$118,088	57.58
COLORADO	482197	PHILLIPS COUNTY TEL	Rural	A	2,008	\$0	Y	\$3,701	Y	\$5,930	Y	\$9,631	\$28,893	\$115,572	441.07
IOWA	351288	OKAN MUTUAL TEL CO	Rural	A	282	\$1,035	Y	\$1,447	Y	\$7,148	Y	\$9,630	\$28,890	\$115,580	58.72
INDIANA	320780	MONON TEL CO	Rural	A	1,987	\$0	Y	\$4,528	Y	\$5,097	Y	\$9,625	\$28,875	\$115,500	158.79
IOWA	351202	HOSPERS TEL EXCH INC	Rural	A	728	\$1,555	Y	\$1,902	Y	\$8,150	Y	\$9,607	\$28,821	\$115,284	244.87
IOWA	351289	PALO COOP TEL ASSN	Rural	A	470	\$1,433	Y	\$1,122	Y	\$7,028	Y	\$9,583	\$28,749	\$114,988	34.47
MISSISSIPPI	280447	BRUCE TEL CO - MS	Rural	A	3,327	\$0	Y	\$8,825	Y	\$2,731	Y	\$9,558	\$28,688	\$114,872	17.78
MARYLAND	180216	ARMSTRONG TEL OF MD	Rural	A	8,453	\$0	Y	\$7,908	Y	\$1,641	Y	\$9,549	\$28,647	\$114,588	338.18
IOWA	351213	JORDAN SOLDIER VLY	Rural	A	340	\$1,193	Y	\$0	Y	\$8,332	Y	\$9,525	\$28,575	\$114,300	70.05
ARKANSAS	401704	LAVACA TEL CO-AR	Rural	A	1,628	\$0	Y	\$4,288	Y	\$5,218	Y	\$9,504	\$28,512	\$114,048	27.55
PENNSYLVANIA	170152	FRONTIER-CANTON	Rural	C	4,135	\$0	N	\$0	X	\$9,492	Y	\$9,492	\$28,478	\$113,904	59.52
IOWA	351171	FARMERS MUTUAL JESUP	Rural	A	1,907	\$0	Y	\$5,298	Y	\$4,163	Y	\$9,459	\$28,377	\$113,508	179.03
MICHIGAN	310894	FARMERS DBA CHAPIN	Rural	A	632	\$1,584	Y	\$2,048	Y	\$5,819	Y	\$9,429	\$28,287	\$113,148	182.45
IOWA	351157	ELLSWORTH COOP ASSN	Rural	A	684	\$2,419	Y	\$2,898	Y	\$4,078	Y	\$9,395	\$28,185	\$112,740	184.22
OHIO	300589	BASCOM MUTUAL TEL CO	Rural	A	811	\$1,557	Y	\$1,979	Y	\$5,844	Y	\$9,380	\$28,140	\$112,580	64.19
WISCONSIN	330872	CUBA CITY EXCHANGE	Rural	A	1,750	\$0	Y	\$3,518	Y	\$5,845	Y	\$9,381	\$28,083	\$112,332	57.37
IOWA	351338	WILTON TEL CO	Rural	A	1,945	\$0	Y	\$4,187	Y	\$5,132	Y	\$9,299	\$27,897	\$111,588	192.48
IOWA	351320	VAN HORNE COOP TEL	Rural	A	574	\$1,539	Y	\$0	Y	\$7,887	Y	\$9,208	\$27,618	\$110,472	58.72
MICHIGAN	310708	LENNON TEL CO	Rural	A	1,888	\$0	Y	\$4,913	Y	\$4,228	Y	\$9,141	\$27,423	\$109,892	240.71
SOUTH DAKOTA	391882	TRI-COUNTY TELCOM	Rural	A	454	\$2,435	Y	\$2,015	Y	\$4,857	Y	\$9,107	\$27,321	\$108,284	

PER USF PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non Rural	Type	High Cost Loop Fund		Long Term Support		Local Switching Support		ETC	Monthly	Total High Cost Fund Support		Per USF Loop
					USF Loops	Monthly	LTS	Monthly	LSS	Monthly			Quarterly	Annual	
ILLINOIS	341011	FRONTIER OF LAKESIDE	Rural	C	928	\$0	N	\$0	X	\$8,837	Y	\$8,837	\$20,511	\$82,044	88.41
MISSISSIPPI	287449	MYRTLE TEL CO	Rural	A	909	\$1,357	Y	\$2,678	Y	\$2,801	Y	\$6,834	\$20,502	\$82,008	90.22
OHIO	300588	THE ARTHUR MUTUAL	Rural	A	1,240	\$398	Y	\$3,299	Y	\$3,116	Y	\$6,811	\$20,433	\$81,732	85.91
MICHIGAN	310725	SAND CREEK TEL CO	Rural	A	1,168	\$879	Y	\$3,102	Y	\$3,013	Y	\$6,794	\$20,382	\$81,528	89.92
IOWA	351148	CUMBERLAND TEL CO	Rural	A	424	\$1,362	Y	\$1,398	Y	\$4,024	Y	\$6,782	\$20,346	\$81,384	191.94
OKLAHOMA	432141	SANTA ROSA TEL COOP	Rural	A	686	\$3,537	Y	\$3,200	Y	\$0	Y	\$6,737	\$20,211	\$80,844	117.85
NEW HAMPSHIRE	120048	MERIDEN TEL CO	Rural	C	529	\$0	Y	\$892	Y	\$5,841	Y	\$6,733	\$20,199	\$80,798	152.73
LOUISIANA	270428	DELCAMBRE TEL CO	Rural	A	1,418	\$0	Y	\$4,232	Y	\$2,494	Y	\$6,726	\$20,178	\$80,712	57.00
IOWA	351169	FARMERS MUTUAL COOP	Rural	A	533	\$1,508	Y	\$1,699	Y	\$3,492	Y	\$6,697	\$20,091	\$80,364	150.78
IOWA	351229	LOST NATION-ELWOOD	Rural	C	682	\$3,168	Y	\$0	Y	\$3,529	Y	\$6,695	\$20,085	\$80,340	117.80
OHIO	300682	VANLUE TEL CO	Rural	A	742	\$1,547	Y	\$2,042	Y	\$3,092	Y	\$6,681	\$20,043	\$80,172	108.05
KENTUCKY	280417	SALEM TEL CO	Rural	A	2,018	\$0	Y	\$4,879	Y	\$1,798	Y	\$6,675	\$20,025	\$80,100	39.69
IOWA	351130	CLARENCE TEL CO	Rural	A	854	\$1,441	Y	\$2,327	Y	\$2,879	Y	\$6,647	\$19,941	\$79,784	93.40
IOWA	351283	ROYAL TEL CO	Rural	A	480	\$1,447	Y	\$0	Y	\$5,168	Y	\$6,613	\$19,839	\$79,358	185.33
OHIO	300654	RIDGEVILLE TEL CO	Rural	A	718	\$1,559	Y	\$1,628	Y	\$3,387	Y	\$6,574	\$19,722	\$78,888	110.18
OHIO	300639	THE NEW KNOXVILLE	Rural	A	1,125	\$818	Y	\$2,074	Y	\$3,641	Y	\$6,533	\$19,599	\$78,398	69.69
OHIO	300633	MIDDLE POINT HOME	Rural	A	716	\$1,559	Y	\$1,859	Y	\$3,008	Y	\$6,426	\$19,278	\$77,112	107.70
ALASKA	613005	CIRCLE UTILITIES	Rural	A	34	\$785	Y	\$570	Y	\$4,932	Y	\$6,267	\$18,801	\$75,204	2,211.88
IOWA	351191	GRAND MOUND COOP TEL	Rural	A	591	\$1,548	Y	\$1,811	Y	\$2,845	Y	\$6,204	\$18,612	\$74,448	125.97
MINNESOTA	361387	FRONTIER-MINNESOTA	Rural	C	112,830	\$8,178	N	\$0	N	\$0	Y	\$6,178	\$18,534	\$74,138	0.66
ALABAMA	250307	MOUNDVILLE TEL CO	Rural	A	1,745	\$0	Y	\$4,985	Y	\$1,174	Y	\$6,159	\$18,477	\$73,908	42.35
IOWA	351327	WEBB-DICKENS TEL	Rural	C	445	\$0	Y	\$690	X	\$5,477	Y	\$6,137	\$18,411	\$73,644	165.49
VIRGINIA	190220	BURKE'S GARDEN TEL	Rural	A	114	\$1,290	Y	\$1,023	Y	\$3,772	Y	\$6,085	\$18,255	\$73,020	840.53
IOWA	351148	DEEP RIVER MUTUAL	Rural	A	297	\$1,088	Y	\$1,529	Y	\$3,456	Y	\$6,073	\$18,219	\$72,878	245.37
TEXAS	442043	NORTH TEXAS TEL CO	Rural	A	898	\$2,802	Y	\$3,218	Y	\$0	Y	\$6,020	\$18,080	\$72,240	80.63
IOWA	351179	FENTON CO-OP TEL CO	Rural	A	360	\$1,238	Y	\$1,404	Y	\$3,330	Y	\$5,972	\$17,916	\$71,884	199.07
IOWA	351341	FRONTIER-SCHUYLER	Rural	C	990	\$0	N	\$0	X	\$5,917	Y	\$5,917	\$17,751	\$71,004	71.72
MISSISSIPPI	280451	DECATUR TEL CO -MS	Rural	A	2,010	\$0	Y	\$5,041	Y	\$852	Y	\$5,893	\$17,679	\$70,718	35.18
OHIO	300651	PATTERSONVILLE TEL	Rural	A	393	\$1,308	Y	\$1,584	Y	\$2,981	Y	\$5,871	\$17,613	\$70,452	179.27
COLORADO	482178	AGATE TEL CO	Rural	A	118	\$1,303	Y	\$911	Y	\$3,643	Y	\$5,857	\$17,571	\$70,284	605.90
NEW HAMPSHIRE	120042	DIXVILLE TEL CO	Rural	A	481	\$2,408	Y	\$799	Y	\$2,644	Y	\$5,849	\$17,547	\$70,188	152.25
GEORGIA	220354	CHICKAMAUGA TEL CORP	Rural	C	5,704	\$0	Y	\$5,775	X	\$0	Y	\$5,775	\$17,325	\$69,300	12.15
MISSISSIPPI	280462	MOUND BAYOU TEL & CO	Rural	A	957	\$1,288	Y	\$1,180	Y	\$3,274	Y	\$5,720	\$17,180	\$68,640	71.72
NEW YORK	150114	ORISKANY FALLS TEL	Rural	C	742	\$895	Y	\$2,246	Y	\$2,575	Y	\$5,716	\$17,148	\$68,592	92.44
NEVADA	552223	GEM STATE UTIL-NV	Rural	C	448	\$3,352	Y	\$1,640	X	\$722	Y	\$5,714	\$17,142	\$68,588	153.05
WISCONSIN	330857	CASCO TEL CO	Rural	C	1,239	\$0	Y	\$2,153	X	\$3,544	Y	\$5,697	\$17,091	\$68,384	55.18
MAINE	100005	COBBOSSEECONTEE TEL	Rural	A	732	\$1,552	Y	\$2,688	Y	\$1,415	Y	\$5,635	\$16,905	\$67,820	92.38
VIRGINIA	190238	NORTH RIVER TEL COOP	Rural	A	968	\$1,175	Y	\$3,109	Y	\$1,314	Y	\$5,598	\$16,794	\$67,178	87.31
IOWA	351121	CENTER JUNCTION TEL	Rural	A	151	\$1,322	Y	\$1,182	Y	\$3,001	Y	\$5,505	\$16,515	\$66,080	437.48
WYOMING	512290	ALL WEST COMM -WY	Rural	C	346	\$1,254	Y	\$36	Y	\$4,141	Y	\$5,431	\$16,293	\$65,172	188.36
COLORADO	482201	RICO TEL CO	Rural	C	144	\$2,177	Y	\$825	Y	\$2,376	Y	\$5,378	\$16,134	\$64,538	448.17
IOWA	351128	CENTURY-CHESTER	Rural	A	207	\$2,579	Y	\$1,594	Y	\$1,197	Y	\$5,370	\$16,110	\$64,440	311.30
PENNSYLVANIA	170197	PENNSYLVANIA TEL CO	Rural	A	1,297	\$152	Y	\$4,004	Y	\$1,023	Y	\$5,179	\$15,537	\$62,148	47.82
PENNSYLVANIA	170200	PYMATUNING IND TEL	Rural	A	2,367	\$0	Y	\$3,870	Y	\$1,120	Y	\$5,090	\$15,270	\$61,080	25.80
ALABAMA	250285	CASTLEBERRY TEL CO	Rural	A	940	\$1,300	Y	\$2,747	Y	\$982	Y	\$5,029	\$15,087	\$60,348	84.20
IOWA	351119	CASEY MUTUAL TEL CO	Rural	A	457	\$1,414	Y	\$1,389	Y	\$2,233	Y	\$5,016	\$15,048	\$60,192	131.71
SOUTH DAKOTA	391871	MOBRIDGE TELECOMM	Rural	A	2,472	\$0	Y	\$2,980	Y	\$1,992	Y	\$4,972	\$14,916	\$59,684	24.14
PENNSYLVANIA	170195	ARMSTRONG TEL NORTH	Rural	A	511	\$1,484	Y	\$1,508	Y	\$1,946	Y	\$4,938	\$14,814	\$59,258	115.88
MICHIGAN	310688	CLIMAX TEL CO	Rural	A	1,524	\$0	Y	\$1,690	Y	\$2,999	Y	\$4,689	\$14,087	\$56,288	38.92
PENNSYLVANIA	170210	VENUS TEL CORP	Rural	A	1,288	\$193	Y	\$3,045	Y	\$1,449	Y	\$4,687	\$14,081	\$56,244	43.67
PENNSYLVANIA	170178	FRONTIER-LAKEWOOD	Rural	C	1,529	\$0	N	\$0	X	\$4,632	Y	\$4,632	\$13,898	\$55,584	38.35
TENNESSEE	290588	HUMPHREYS COUNTY TEL	Rural	A	1,875	\$0	Y	\$2,910	Y	\$1,479	Y	\$4,389	\$13,187	\$52,688	31.44
NEVADA	552284	BEEHIVE TEL CO - NV	Rural	C	82	\$361	Y	\$1,334	X	\$2,843	Y	\$4,338	\$13,014	\$52,056	634.83
TEXAS	442038	BLOSSOM TEL CO	Rural	A	1,315	\$98	Y	\$4,198	Y	\$0	Y	\$4,294	\$12,882	\$51,528	39.18

PER USF PAYMENT

High Cost Fund Support by Study Area
First Quarter 1999

State	SAC	Study Area Name	Rural/Non Rural	Type	High Cost Loop Fund		Long Term Support		Local Switching Support		ETC	Monthly	Total High Cost Fund Support		Per USF Loop
					USF Loops	Monthly	LTS	Monthly	LSS	Monthly			Quarterly	Annual	
MICHIGAN	315090	MICHIGAN BELL TEL CO	Non-Rural	C	5,312,788	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
INDIANA	320772	GTE NORTH INC - IN	Non-Rural	C	734,704	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
INDIANA	320779	CONTEL IN DBA GTE IN	Non-Rural	C	179,777	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
INDIANA	320832	UTC OF INDIANA	Non-Rural	C	233,235	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
INDIANA	325080	INDIANA BELL TEL CO	Non-Rural	C	2,184,982	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
WISCONSIN	330886	GTE NORTH INC - WI	Non-Rural	C	481,131	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
WISCONSIN	335220	WISCONSIN BELL	Non-Rural	C	2,209,723	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
WISCONSIN		CTC COMM	Non-Rural		422	\$0		\$0		\$0	Y	\$0	\$0	\$0	0.00
WISCONSIN		SHARON TEL CO	Non-Rural		67	\$0		\$0		\$0	Y	\$0	\$0	\$0	0.00
ILLINOIS	341015	GTE NORTH INC - IL	Non-Rural	C	658,398	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
ILLINOIS	341038	CONTEL IL DBA GTE IL	Non-Rural	C	188,488	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
ILLINOIS	345070	ILLINOIS BELL TEL CO	Non-Rural	C	8,830,127	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
IOWA	355141	U S WEST, INC - IA	Non-Rural	C	1,033,852	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
IOWA		LOST NATION-ELWOOD	Non-Rural		380	\$0		\$0		\$0	N	\$0	\$0	\$0	0.00
MINNESOTA	361140	CONTEL MN DBA GTE MN	Non-Rural	C	120,581	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
MINNESOTA	365142	U S WEST, INC - MN	Non-Rural	C	2,133,116	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
NEBRASKA	371568	ALIAMT COMM CO	Non-Rural	C	279,581	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
NEBRASKA	375143	U S WEST, INC - NE	Non-Rural	C	522,260	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
NORTH DAKOTA	385144	U S WEST, INC - ND	Non-Rural	C	249,644	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
SOUTH DAKOTA	395145	U S WEST, INC - SD	Non-Rural	C	268,185	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
KANSAS	415214	SOUTHWESTERN BELL KS	Non-Rural	C	1,331,425	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
MISSOURI	425213	SOUTHWESTERN BELL MO	Non-Rural	C	2,499,418	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
OKLAHOMA	432080	GTE SOUTHWEST INC-OK	Non-Rural	C	112,671	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
OKLAHOMA	435215	SOUTHWESTERN BELL OK	Non-Rural	C	1,815,640	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
TEXAS	442080	GTE SOUTHWEST INC-TX	Non-Rural	C	1,610,872	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
TEXAS	445216	SOUTHWESTERN BELL TX	Non-Rural	C	9,328,001	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
IDAHO	475103	U S WEST, INC - ID	Non-Rural	C	458,955	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
UTAH	505107	U S WEST, INC - UT	Non-Rural	C	1,049,110	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
WASHINGTON	522416	GTE NORTHWEST INC-WA	Non-Rural	C	710,800	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
WASHINGTON	525181	U S WEST, INC - WA	Non-Rural	C	2,380,323	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
OREGON	532418	GTE NORTHWEST INC-OR	Non-Rural	C	455,293	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
CALIFORNIA	545170	PACIFIC BELL	Non-Rural	C	18,838,970	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
NEVADA	552348	CENTEL OF NV	Non-Rural	C	790,515	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
NEVADA	555173	NEVADA BELL	Non-Rural	C	330,523	\$0	N	\$0	N	\$0	N	\$0	\$0	\$0	0.00
DELAWARE	585010	DIAMOND STATE TEL	Non-Rural	C	532,170	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
DISTRICT OF COLUMBIA	575020	C & P TEL CO OF WASH	Non-Rural	C	919,999	\$0	N	\$0	N	\$0	N	\$0	\$0	\$0	0.00
RHODE ISLAND	585114	NEW ENGLAND TEL - RI	Non-Rural	C	853,123	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
ALASKA	613000	ANCHORAGE TEL UTIL	Non-Rural	C	183,729	\$0	Y	\$0	N	\$0	Y	\$0	\$0	\$0	0.00
HAWAII	623100	GTE HAWAIIAN TEL CO	Non-Rural	C	707,649	\$0	N	\$0	N	\$0	Y	\$0	\$0	\$0	0.00

1438 ILEC STUDY AREAS
5 CLEC SERVING AREAS

NATIONAL TOTALS

MONTHLY	\$72,019,032	\$38,135,813	\$32,580,462	\$143,735,407	N/A	N/A
QUARTERLY	N/A	N/A	N/A	N/A	\$431,206,221	N/A
ANNUAL	N/A	N/A	N/A	N/A	N/A	\$1,724,824,884



National Conference of State Legislatures

The Energy Project

Restructuring and Small Electric Customers

State Legislative Report / Vol. 23, No. 15

By **Matthew Brown**, Program Director, NCSL

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NCSL Home Page

Introduction

Since the Energy Policy Act of 1992 and the Federal Energy Regulatory Commission's (FERC) rulings 888 and 889, federal, state and local policymakers are exploring new options to let retail customers choose their electricity provider. Because some degree of competition already exists in these markets, policymakers have one of two options: limited, wholesale competition as it is now developing under federal law and full-scale retail competition.

- The wholesale competition model would allow the electric industry's structure to evolve and let competitive forces emerge over time. With this course, the electric industry will change, but those changes will be in response to the Federal Energy Policy Act of 1992 and FERC rulings. These federal laws and rules are designed to encourage competition among utilities for the sale of electricity to one another—but not competition for the sale of electricity to retail customers. FERC's ruling tries to ensure that any power generator has an equal opportunity to send power over anyone else's transmission power lines. It does not address competition for retail customers' business.
- The full-scale retail competition model would restructure the industry more radically. Full-scale retail competition allows not only competition among generators of electricity for sales to one another, but also lets all electricity consumers—such as homes or businesses—choose their electricity provider.

To date, 13 states have enacted legislation to allow this type of retail competition and a small number of other states are attempting to bring retail competition to their electric markets under the authority of their state utility commissions. Most of the remaining states are studying the issue or are considering legislation. The federal government also is considering the merits of imposing a national restructuring requirement for retail competition on the electric industry.

Most states hope that retail competition will make the electric industry more efficient over the long term. Some advocates of full-scale retail competition point out that electric utilities have been effectively insulated from the competitive pressures that have forced other industries in this country to drastically improve their efficiency during the past decade. It may be, for instance, that competition will force power generators to run their power plants more efficiently than they have in the past. States that enact restructuring legislation hope that competition will force less efficient electricity providers or facilities out of the market, and that competition will produce lower prices, a new generation of customer services and improved technology.

Some also argue that a failure to allow full-scale retail competition could be detrimental to small electricity consumers. Under today's regulated system, most big power companies have the authority to negotiate special contracts with some customers—often offering them substantially discounted rates as an incentive to remain in the utility's service area. Those who advocate allowing retail competition soon suggest that the smaller customers now are at a disadvantage because they have no parallel access to negotiated special contract deals.

Competition brings the opportunity for many cost savings and improvements in the electric industry. With those opportunities come risks, however. And not all consumers will be exposed to those risks in equal measure. Electric costs and prices may not decline to the same extent for all customers or across all states in a restructured industry. They may decline at different rates or even increase for several reasons, including the following:

- Some cross subsidies may disappear
- Some customers' electricity use profile is more attractive than others'
- It is less expensive to serve one large customer than to serve many small customers

These factors are not so much reasons that a state should not introduce retail competition. Rather, they may point to accommodations or provisions that may be included in restructuring legislation.

Some Cross Subsidies May Disappear

In some states industrial customers' electric rates have subsidized residential customers' electric rates. These subsidies may disappear under competition. In many places those subsidies already are disappearing and, indeed, industrial customers in some states are being subsidized by residential customers through "special contracts," or contracts between a utility and a large customer at a particularly low electric rate.

Some Customers' Electricity Use Profile is more Attractive than Others'

The least expensive electric generating plants to run are those that operate all the time, while the most expensive plants are those that run only occasionally, usually during the times of peak electricity use. As a result, the least expensive electricity customers to serve are those that use a constant amount of electricity.

over the course of the day. In contrast, most customers use little electricity for much of the day and a great deal of power for a short period, making them more expensive to serve. Hospitals or factories that are open 24 hours are examples of the least expensive customers to serve; a typical home is an example of a more expensive customer.

It Is less Expensive to Serve one Large Customer than to Serve many Small Customers

The National Regulatory Research Institute estimates that, on average, it costs approximately \$57 each year to serve the basic billing, meter reading and other customer service needs of an electricity customer, whether large or small. Electricity suppliers would prefer to service one large customer account, so that this \$57 administrative cost appears small by comparison with the large customer's entire electricity bill. If there are a multitude of small accounts, that same administrative cost could be as high as 10 percent of each customer's annual electric bill.

The regulated electric system has aggregated these different customers on the basis of geography, so that the small and large customers share the electric system's fixed costs. The competitive market would allow the large customers to separate themselves from the smaller customers and possibly strike better deals than smaller customers. It is for this reason that states have crafted legal provisions to help residential or small commercial consumers benefit from competition. Because low-income residential customers may fare less well than typical residential consumers, several states have developed provisions specifically for low-income customers.



Policy Options for Wholesale or Retail Competition

Policymakers have available to them a number of options that can give residential and small commercial electricity consumers a greater ability to participate in and benefit from both retail and wholesale competition. Some of these options are available even under today's market. Others have to do with managing the transition from retail price regulation to competition, and still others have to do with new rules for the fully competitive market. Policymakers have options available to them that may reduce costs and prices or change the incentives in the electric industry, even without a full-scale restructuring of the electric industry.

Performance Based Ratemaking

Performance based ratemaking (PBR) gives utilities an incentive to cut costs and earn a better return on their investments if they meet certain goals. PBR attempts to imitate the cost cutting or other incentives that might appear in a competitive market, while maintaining a price-regulated market. Some PBR systems encourage utilities to reduce their costs. Others hold prices steady and still others encourage utilities to invest in energy efficiency or other activities that state policymakers feel are desirable. A few states already have adopted this practice, and some, including Vermont, are examining the possibility of adopting more performance based ratemaking practices as an alternative to enacting full-scale restructuring legislation.

Some observers feel that PBR is a good substitute for competition because it involves fewer risks for residential and small commercial customers than full-scale competition; it maintains the regulators' control of the system, albeit a looser control. Others feel that even a PBR system is too regulated, and that the competitive market could better achieve the benefits of competition.

Municipalization

Local governments that are part of a utility's service territory may decide that they can buy power more cheaply or under better terms if they break away from their investor-owned utility's service territory by taking away the utility's franchise. Through this option, a local government could take over the operations of all or part of the existing utility and operate it as a public entity, with an elected board of directors. The new public utility would continue to provide electric service to its citizens, but would do so with a greater degree of local control over the utility's operations. If the citizens did not approve of the utility's decisions or performance they could elect a new board of directors. This new utility also could participate in the competitive wholesale market. If it could buy power cheaply at wholesale, it could then pass its savings directly to its customers.

Few local governments have chosen this option recently, although after the 1992 Federal Energy Policy Act many observers expected a surge in municipalization. The lack of interest in municipalization stems from the complexity and political and legal difficulties involved in taking over the existing utility's functions, as well as the lack of an assured benefit for doing so. Municipalization succeeds in reducing electric prices if the municipal utility's management is better at buying or generating electricity or at managing other costs than an investor owned utility. Yet, there is little assurance that a government-operated utility will be a better run utility.



Options for Managing the Transition from Price Regulation

If states decide to let all retail electricity customers choose their electricity provider, policymakers have at their disposal a number of options that will protect small customers during the transition from a regulated to a competitive marketplace. These options do not address long-term policies for enabling residential and small commercial consumers of electricity to participate in the competitive market, but they may ease the transition for these consumers.

Stranded Cost Treatment

If policymakers allow all customers to choose their electricity supplier, some of the long-lived assets that electric utilities currently own may not be able to produce power at lower, market-determined prices. These uneconomic long-lived assets are known as stranded costs, or the investments that utilities made under regulation that may not be viable in a competitive marketplace. Policymakers can let utilities and their shareholders absorb these losses, have ratepayers pay for them, or even require the general public to pay for them through taxes. If the losses are large enough and the utility's shareholders are required to absorb them, an electric utility could go bankrupt. At the same time, customers' rates may decrease more slowly if they are required to bear the entire burden of these costs. Therefore, policymakers must balance the financial viability of electric utilities against rate decreases for electric customers. The choices about stranded cost recovery could place today's electric utilities in a strong or weak competitive position when they begin to compete for retail customers' business, and could affect the number and type of service options available to customers.

Securitization is one way to help pay for utility stranded costs while reducing consumer rates. This process refinances stranded utility assets through new securities. Consumers pay the interest and principal on these securities through a charge that is placed on their electric bill. Legislation in California, Illinois, Rhode Island,

Montana and Pennsylvania permits utilities to use securitization to manage their stranded or uneconomic asset charges. The new securities that take their place are authorized under state law and offered at the lower costs associated with a publicly assured debt instrument. The difference between the utility cost of capital and that of new security can be used to finance a rate reduction for small consumers, while allowing for utility stranded cost recovery.

Securitization is controversial for several reasons. Most importantly, it gives utilities an ironclad assurance that they will recover stranded costs, when no other method of paying for stranded costs allows for such an assurance. Some observers point out that securitization sets a definite and irrevocable dollar figure for stranded cost recovery, and does not allow for upward or downward revision of the amount that utilities could recover as circumstances change. The assurance of recovery of stranded costs is also a benefit of securitization, for it is that very assurance that allows new bonds to be issued at such a low interest rate. The savings from this lower interest rate can finance some rate reductions.

Rate Freezes and Reductions

Rate reductions for small customers have become part of the transition process in many states that have passed restructuring legislation. California, Connecticut, Massachusetts, Rhode Island and Illinois all have mandated lower residential or industrial and commercial rates during the transition period to full competition. Pennsylvania and Montana instituted a rate freeze during the transition period. Many policymakers have viewed these special rate treatments as a means of ensuring that the interests of all consumers, not just those of large customers with substantial buying power, are protected in the move to greater competition.

Some view mandated rate reductions with more skepticism. In Rhode Island and Massachusetts the mandated rate reductions have brought down electric rates to the point that power marketers now are claiming that the profit margins for entering these states' markets will be too small. Those skeptics of mandated rate reductions also claim that the methods for utilities to recover their stranded costs also can make it difficult for competitors to participate in the marketplace. As a result, there has been little competition for new residential or small commercial customers' business. However, customers in those states have benefited from the rate reductions, even if they have not switched electricity providers.

In Pennsylvania, where the state's restructuring legislation did not mandate a particular rate reduction—and therefore customers did not see an immediate reduction in their electric rates—the competition for customers' business has been fiercer. However customers have no legislative assurance that their prices will be lower.



Options for Managing Full-Scale Retail Competition

Policymakers who allow retail customers to choose their electricity supplier can provide some options that are particularly suited to enhancing residential and small commercial customers' ability to benefit from a competitive retail market. These options may be best designed as long-term policies, rather than transitional mechanisms between a regulated and a competitive marketplace.

Consumer Information

<http://www.ncsl.org/programs/esnr/mbslr.htm>

2/16/99

Large consumers of electricity are likely to have the personnel and financial resources to understand and analyze the service options offered to them. Smaller consumers may not have the time or resources to fully understand or research their options. When New Hampshire offered a retail choice pilot program to 17,000 electricity customers, for instance, more than half the participants in the program decided to remain with their original providers. Many said that they felt overwhelmed by the array of choices available to them. A well-designed consumer education program can help consumers understand their options in a competitive electricity industry and make educated choices among a variety of service offerings.

A companion to consumer education is reliable market information in the form of standardized billing terms and disclosure requirements that permit the customer to compare the price, environmental characteristics or quality of the products available in the marketplace.

Addressing Market Structures

Many states have attempted to craft legislation that encourages competition for all consumers' business. Most attempt to make it easy for new electricity providers to sell power in the marketplace. These rules also may discourage utility companies that operate simultaneously in both competitive and regulated businesses from taking advantage of that fact. A company that owns power lines, for instance, might offer to transmit power from its sister generation company, while refusing to transmit power for another unrelated power generator. The rules also may try to prevent undue concentration of control of the power generation business. These state policies often specify codes of conduct for participants in the market, and also may require that utilities separate or even sell some portions of their business in order to promote competition.

Aggregation of Loads

Some groups of consumers may be able to combine their electric loads so that, as a group, they may appear more attractive to electricity providers than they would as individual customers. Municipalities can aggregate customers to create a balanced and geographically concentrated load and negotiate for better terms of service. Churches, credit unions, neighborhood associations or other "affinity" groups also may consider aggregating their load. Municipal utilities, cooperatives, and buying clubs or newly formed entities created specifically for this purpose also can negotiate on behalf of a large group of customers. Aggregators may be able not only to negotiate for better electricity prices but also may provide customers with other commodities of value such as energy efficiency services or electricity supplies from environmentally benign resources.

Aggregation has a limited capacity to assist less economically attractive customers become more attractive. A hospital, for instance, could negotiate a good electricity price because it uses a great deal of electricity; with its usage spread fairly evenly throughout the day; the cost of serving the hospital is relatively low. The combination of the hospital's attractive load profile with a group of residential customers' unattractive load profiles will improve the appeal of the residential customers' load, but degrade the hospital's appeal. As a result, the hospital might have little incentive to join residential customers who are more expensive to serve.

Even if customers with similarly unattractive load profiles combine their accounts, they will simply become one large account with an unattractive load profile. Power providers prefer to serve one large group of customers because it is relatively inexpensive to market to, bill and provide other customer services to that one large group. But the single aggregated customer still is not as appealing as a customer with large usage spread evenly over the entire day and year. Aggregation helps residential customers, but will not enable them to strike deals that are as advantageous as those made by some other large electricity users.

Another way that small customers are aggregated is through the default provider. The default provider is the electricity marketer that serves those customers that do not choose a new supplier. The default provider can be the energy marketer affiliated with the pre-existing utility or it can be an entirely new entity. In recently proposed legislation in Ohio, the default providers would be newly created regional entities, several of which would be created within the state. The restructuring law in Massachusetts creates ways for municipal aggregation to provide default service. The ability of the default provider to access energy supplies at competitive rates may well determine the effects of electricity restructuring on a substantial portion—if not the majority—of the small customer base.

Consumer Protection

In most states, the existing legal and regulatory framework provides consumer protection and complaint resolution mechanisms under the authority of the state regulatory commission. In a competitive market, policymakers may consider revising consumer protection mechanisms that will guarantee customers fair billing practices, reasonable credit and collection procedures, fair and accessible dispute resolution procedures, protection against service disconnections, protection against slamming (in which suppliers switch a customer's electricity provider without the customer's knowledge or permission), and basic standards for services and products.

Many of these consumer protections are part of the principle of universal service. This principle states that everyone should have access to the electricity system and a basic electricity supply. To ensure the continuation of universal service several states have proposed the creation of a provider of last resort. This provider, who may or may not also be the default provider, will provide electricity service to consumers who might be refused service or offered service under unduly restrictive terms by competitive suppliers. These might include new consumers, those who are perceived as bad credit risks and those who live in neighborhoods where competitive electricity suppliers do not market heavily.

Low-Income Protections

There is some concern that, in a fully competitive retail electricity market, low-income consumers will fare worse than other customers. There is a real danger that they will have fewer competitive supply offerings and higher-cost supplies because of their perceived higher credit risks. To ensure that basic affordable electric service will be universally available, several states have created programs that are specifically tailored to this segment of the consumer market. Of the 13 states with restructuring laws, six—California, Connecticut, Maine, Massachusetts, Pennsylvania and Rhode Island—create or endorse the concept of discounted rates for low-income customers.

Six states—California, Connecticut, Illinois, Massachusetts, Montana and Pennsylvania—either continue or create new low-income energy efficiency programs. In New Hampshire and Illinois the regulations developed to implement the restructuring law provided funding to support a percentage of income payment plan—similar to that which already exists in Ohio—that would limit low-income electric bills to a reasonable proportion of household income. Some states—including Connecticut, Pennsylvania and Rhode Island—also endorse deferred-payment plans to help customers who are having trouble paying their electric bills.



Conclusion

As the electric industry continues to evolve through its most fundamental change in a half-century, it is becoming evident that there is potential for all electric customers to benefit from full-scale retail competition. It is also becoming apparent that those benefits will be easier for some customers to attain than for others. Several states have enacted restructuring legislation that may make it easier for residential and small commercial customers to gain the benefits of competition. These measures and others described in this report may help all electricity consumers to have the information and the ability to benefit from the opportunities that competition offers.



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Last Dance for the Regulated Disco?

The music's over for pipes and wires—long seen as a “natural monopoly”—according to California Commissioner Jessie Knight.

BACK IN DECEMBER 1995, THE CALIFORNIA PUBLIC Utilities Commission launched a two-year pilot program to test the idea of letting builders and contractors design lateral distribution facilities for residential gas and electric service. Private firms would consult with utilities, who would credit contractors for costs saved by outsourcing. More than 250 subdivisions participated.

Late last year, the PUC declared the program an unqualified success. “Builders, design firm, and the utilities have proven that they can coordinate the necessary resources... saving builders as much as two months on an otherwise seven-month design process.” The commission then instructed the state’s six major investor-owned gas and electric utilities to file tariffs to set out a bidding process for the private design of electric and gas distribution lines. (*Decision 97-12-099, Dec. 16, 1997*).

Nevertheless, the PUC worried that, in helping private firms design lateral lines, utilities might end up giving away transformers, meters or other services or line facilities (TSM) to construction firms at below cost. To address the problem, the commission issued a second decision, limiting the size of any free dollar allowances for TSM to the revenue the utility might expect to receive from the load to be served by the new distribution facilities. (*Decision 97-12-098, Dec. 16, 1997*).

Does this new program mark the beginning of the end of distribution as a regulated monopoly?

Recently, the PUC has taken a somewhat ambiguous position, hinting that distribution is a monopoly—but only

until customers decide otherwise: “We view distribution as a natural monopoly with respect to serving those customers who do not opt for self-generation or construct transmission and distribution facilities to serve their consumption.” (See, e.g., *Decision 95-12-063, Dec. 20, 1995, modified Jan. 10, 1996, 166 PUR4th 1, 40.*)

Not one to mince words, California Commissioner Jessie J. Knight Jr. believes the end is near. He endorsed the new pilot program and cost-limiting rule, but gave it his own unique spin:

COMPETITION IS COMING to the provision of distribution services... It may be that there is no reason why the local utility distribution companies should be the only ones to construct and own line extensions... **THIS IS PARTICULARLY POSSIBLE** for industrial and commercial customers... **IN MY MIND**, it is appropriate to allow a customer to build, own and maintain a distribution plant that is wholly on the customer’s property.

...

THE DESIGN OF DISTRIBUTION SERVICES is clearly not a natural monopoly. The pilot program proved that the design of distribution systems to serve residential customers can be performed by a wide variety of firms...

IN MY OPINION, the construction of distribution facilities does not exhibit any of the characteristics of a monopoly function... This commission will have to revisit the concept that the provision of distribution service is a natural monopoly. We have taken the first tentative steps toward allowing distribution competition... **THE INDUSTRY WAS SLOW** to see the advent of competition in generation and retail provision of electricity. Now it is starting to grasp the eventual reality that competition in transmission services is coming... Soon [it] will have to come to grips with competition within the bastion of distribution. It is only a matter of time...

THE TIME OF THE NATURAL MONOPOLY over distributions services will, in my estimation, be over much sooner than the conventional wisdom in this industry would have us believe.

Source: Excerpts from concurring opinions written by Commissioner Jessie J. Knight Jr. in Rulemaking 92-03-050, *Decision 97-12-098* and *Decision 97-12-099, Dec. 16, 1997 (Cal.P.U.C.)*.

SCOMM

120:3

*Electric Utility Restructuring Report
to the
Alaska Legislature
and the
Alaska Public Utilities Commission*

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Floyd Damron, CH2M HILL - Anchorage Office

Timeline

<u>Step</u>	<u>Day #</u>	<u>Date</u>	<u>Description</u>
1.	1	18-Jan -99	Anticipated Contract start date
2.	11	29-Jan	Data Collection
3.	32	19-Feb	Benchmark Existing Operation
4.	39	26-Feb	Model Wholesale Market
5.	46	5-Mar	Model Retail Market
6.	53	12-Mar	Pilot Program Design Recommendation Delivered
7.	60	19-Mar	Cost/Benefit Analysis
8.	72	31-Mar	<u>Draft report delivered</u>
9.	85	13-Apr	End of Public Comment Period
10.	84-95	Mid Apr	Legislative Hearing(s)
11.	103-115	Early May	APUC Hearing
12.	163	30-June-99	Final Report Due
13.	347	31-Dec-99	Available for Consultation for this time period

Scenario 2: Kilowatt Commoditization

- ☆ The system's best role is to produce efficiently priced kilowatt hours.
- ☆ Regulation imposes inefficiencies.
- ☆ Appropriate market structure can ensure efficiency.
- ☆ Experience in other states demonstrates benefits; inaction imposes opportunity costs.
- ☆ Commit to retail competition at the earliest practical date.

Scenario 3: Controlled Evolution

- ☆ A competitive system can be designed to deliver benefits to all customers.
- ☆ Current flaws and market failures can be addressed with focused regulatory and legislative efforts - rules.
- ☆ Commoditization and retail competition are tools to accomplish policy ends.
- ☆ The restructuring experience in other states counsels a long-term view.
- ☆ Commit to a date that allows policy implementation.

CORRECTION

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Methodology

Outline of Report

- ☆ Introduction & Overview
- ☆ Recommendations
- ☆ Rural Issues
- ☆ Local Choice
- ☆ Wholesale Competition (Competitive Advantage)
- ☆ Network Integrity
 - Reliability
 - Alternative Energy
- ☆ Consumer Protection
 - Universal Service
 - Affordability
- ☆ Stranded Costs
- ☆ Taxes & Fees
- ☆ Employment
- ☆ Modeling

Task Report Structure

- ☆ Issue
- ☆ Dynamic
- ☆ Implications
- ☆ Assessment
- ☆ Key Decisions
- ☆ Focused Discussion
- ☆ Tables & Figures

Scenario 1: Fill the Pot Holes

- ☆ The system is fundamentally fixed - don't break it.
- ☆ Current flaws can be repaired with focused regulatory and legislative efforts.
- ☆ The restructuring experience in other states counsels caution.
- ☆ No need to commit to retail competition.
- ☆ Protects the structure that protects rural customers.

Scenario 2: Kilowatt Commoditization

- ☆ The system's best role is to produce efficiently priced kilowatt hours.
- ☆ Regulation imposes inefficiencies.
- ☆ Appropriate market structure can ensure efficiency.
- ☆ Experience in other states demonstrates benefits; inaction imposes opportunity costs.
- ☆ Commit to retail competition at the earliest practical date.

Scenario 3: Controlled Evolution

- ☆ A competitive system can be designed to deliver benefits to all customers.
- ☆ Current flaws and market failures can be addressed with focused regulatory and legislative efforts - rules.
- ☆ Commoditization and retail competition are tools to accomplish policy ends.
- ☆ The restructuring experience in other states counsels a long-term view.
- ☆ Commit to a date that allows policy implementation.

Rural Issues - Key Decisions

- ☆ To what extent should the likely impacts of restructuring on rural communities, rural areas, and rural consumers be defined in broader terms than short-term financial impacts?
- ☆ What level of public policy intervention is appropriate to address rural utilities' concerns regarding tax revenues, employment impacts, service quality, and loss of local control of electric service?

Rural Issues - Viewpoints

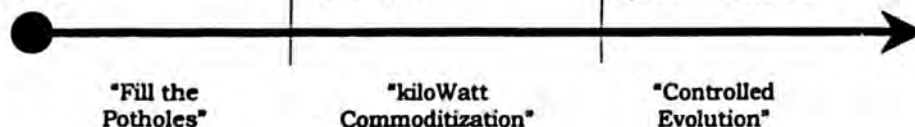
- ☆ "Rural Alaska could be devastated at this time by retail electric deregulation, [that] would encourage cherry picking of large customers, leaving small customers to bear the costs of maintaining the system."
Stephen Conn, Alaska Public Interest Research Group
- ☆ "The loss or reduction of PCE would severely retard implementation of the Rural Sanitation 2005 Action Plan."
Governor's Council on Rural Sanitation
- ☆ "Rural Alaska does not lend itself to deregulation at this time due to the size of the market and the lack of an interconnected grid."
Eric Yould, Executive Director, ARECA
- ☆ "What rural Alaska needs a lot more than competition in the electric industry is some support from Juneau to help us with building some infrastructure which will lead to economic development thus promoting and supporting healthy economies."
Robert Wilkinson, Gen. Manager, Copper Valley Electric Assoc.

Rural Issues - Agenda

Bush - Integrate APUC & DOE programs to facilitate technology development; explore virtual aggregation.
Railbelt - Uniform cost allocation methodology; transmission access rules.

Railbelt - Establish Power Exchange and Independent System Operator; adopt system-wide tariffs for ancillary services. Consider exemption or "opt-in" for non-interconnected utilities.

Bush - Conduct technology pilots. Create system benefits charge.
Railbelt - Establish rules for non-discriminatory access to transmission, power, services.



Local Choice - Key Decisions

- ☆ **Rates.** Should the state of Alaska proceed with electric industry restructuring if lower rates for residential and small business consumers cannot be guaranteed for both the short- and long-term?
- ☆ **Competitive Safeguards.** If policymakers choose to restructure, how should state regulators ensure that truly competitive generation markets will be created? Should robust wholesale markets exist before retail access is adopted? To prevent the creation of unregulated monopolies, should specific definitions of what constitutes effective competition be in place before restructuring takes place? Should state and federal agencies update and strictly enforce antitrust and other statutes to protect consumers?
- ☆ **Protection from Price Cross-Subsidization.** How should state regulators prevent the practice of cross subsidization between a company's regulated and non-regulated subsidiaries?

Local Choice - Key Decisions (cont'd)

- ☆ **Access to Information.** To what extent should consumers be able to determine and compare the prices for transmission, distribution, and retail energy services and have access to information about the generation sources of the electricity they purchase?
- ☆ **Aggregation Protection.** To what extent should the ability of consumers to aggregate their electricity purchases be protected?
- ☆ **Consumer Protections.** What is the need for state agencies to update and strictly enforce consumer protection laws to ensure fair marketing, sales and service practices? Should all sellers of electricity be licensed and be subject to penalty for license violations? What is the state policy regarding other consumer protection issues such as privacy protection; "slamming" (unauthorized switching of providers); "pre-selling" (securing customers before a supplier has the technical ability or legal authorization to provide service); fair and understandable billing; and clearly written terms and conditions of service?

Local Choice - Viewpoints

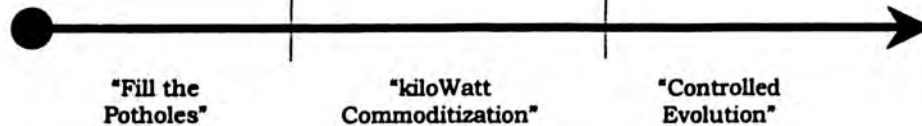
- ☆ "Through regulation and cooperative structure, Alaska's electric utility customers have already achieved many of the benefits of competition in terms of quality of service and low rates for customers."
Edwin Kozak, General Manager, Kodiak Electric
- ☆ "Railbelt consumers will be better off if regulators and utilities allow customers at the retail level to choose their retail suppliers so that the benefits of competition can begin to flow."
Chugach Electric Association
- ☆ "We believe that if electric service territory protection is to be abandoned in Alaska, the order of preference is as follows: (1) Southcentral, (2) Railbelt, (3) Bush."
Mike Kelly, Pres. & CEO, Golden Valley Electric Association

Local Choice - Agenda

Clarify and/or increase local utility control. Legislatively delegate more oversight function to utility boards.

Open access w/ "opt-in" provisions; encourage non-geographic & new geographic cooperative or preferred provider entities to increase buying power of small communities.

Use certification and regulatory powers to promote public policy goals. Adopt standards and encourage creation of new entities.



Wholesale Markets - Key Decisions

- ☆ Are the benefits, incentives, advantages and subsidies inherent in current legal, regulatory and tax structure still appropriate today?
- ☆ To what extent they should they be modified to reflect new and emerging market conditions?
- ☆ To what extent is a "level playing field" (in which all competitors are subject to the same structural, legal, and financial rules) in the best interests of the State?
- ☆ Are there certain competitive protections and advantages that should be maintained to help guide and influence a desired outcome?
- ☆ How do you measure and allocate stranded investment?
- ☆ What are the public policy standards that should guide regulatory bodies in assessing horizontal market power?
- ☆ To what extent must utility control of generation resources be broken up prior to restructuring in order to ensure the future competitiveness of markets?

Wholesale Markets - Viewpoints

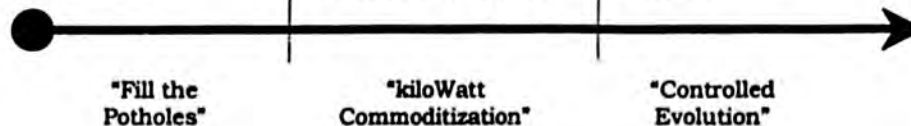
- ☆ "Wholesale competition has always existed in the Railbelt and there is no question that competition at the wholesale level has already greatly benefited Railbelt consumers."
Eugene Bjornstad, General Manager, Chugach Electric
- ☆ "Contracts protect Chugach from stranded investment - each in its own way. . . [Regarding the 'cherry picking' concern -] The KEY is, all customers must be free to choose."
Chugach Electric Association
- ☆ "There is no wholesale competition in Alaska, nor any of the competitive market mechanisms in place by which to initiate such competition."
Meera Kohler, General Manager, ML&P
- ☆ "At best, retail electric competition will be imperfect competition because there will not be numerous sellers competing with each other and the costs of facilitating competition will be substantial."
Edwin Kozak, General Manager, Kodiak Electric

Wholesale Markets - Agenda

Implement policy to encourage expansion of "merchant class" generators.
Discourage new ratebase investment in generation.
Accelerate reduction of stranded costs.

Implement Independent System Operator for transmission operation and governance.
Implement Power Exchange to increase competition and transparency in wholesale markets.

Implement rules to utilize restructuring to promote public policy goals.
Establish level playing field for all non-essential, value-added products and services.



Reliability - Key Decisions

- ☆ How do you assure reliability in the context of more open and competitive markets?
- ☆ What is the most appropriate structure to balance the needs for system reliability and open market requirements for non-discriminatory open access?
- ☆ Will remuneration be adequate to encourage transmission expansion in a timely manner?
- ☆ Will restructuring and unbundling of generation, as a competitive function, from the regulated functions of transmission and distribution result in a loss of economies of scope across functions and increase reliability costs?

Alternative Energy - Key Decisions

- ☆ Are environmental regulations and laws in force today sufficient to protect environmental values in a more competitive electric utility industry?
- ☆ Is there a serious potential for increased emissions under retail competition in the electric industry?
- ☆ If so, are there measures which should be adopted as part of restructuring which would reduce the risk of adverse environment consequences at acceptable costs?
- ☆ Is it a measure of restructuring success that viable renewable energy, energy efficiency, and other industries will offer products and services to customers?
- ☆ Are structural or financial mechanisms or provisions required to ensure that outcome?
- ☆ What kinds of mechanisms or provisions are best suited for accomplishing public policy goals in Alaska?
- ☆ To what extent should such mechanisms be included in restructuring legislation?

Network Integrity - Viewpoints

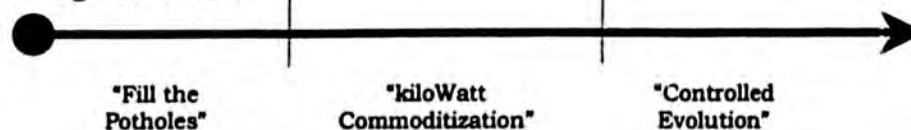
- ☆ "[Reliability] is a red herring. . . . We believe there is no significant threat [to reliability] but even if there were, there is no reason to believe that the APUC is not capable of monitoring and resolving reliability issues in the future just as they have in the past."
Eugene Bjornstad, General Manager, Chugach Electric
- ☆ "We believe there are benefits to be gained from Alaska watching and learning from electric deregulation successes and failures as they unfold in the lower 48. We believe GVEA's member-owners will be advantaged by a slow and careful approach to deregulation."
Mike Kelly, Pres. and CEO, Golden Valley Elec. Assoc.
- ☆ "We also face questions regarding reliability. When it's 50 degrees below zero, Alaska consumers want to know their electrical company can meet the demand."
Rep. Norman Rokeberg and Sen. Bert Sharp
- ☆ "The Railbelt area could benefit from restructuring of the transmission grid if set up as an independent transmission company (ITC)."
Henry Lang, PE, Consultant

Network Integrity - Agenda

Formalize service quality standards across broad range of metrics. Consider performance-based regulation mechanisms. Encourage alternative energy development through IRP or PBR.

Create Independent System Operator. Conduct proceeding to establish reliability-based must-run criteria. Establish non-discriminatory access and trading systems.

Establish policy to support development of alternative & distributed technology. Create competitive distribution service mechanisms, e.g. PBR, separations.



Universal Service - Key Decisions

- ☆ Is preserving or enhancing universal service benefits in the electricity sector an essential component of industry restructuring and the introduction of retail market competition?
- ☆ How will Universal Service be defined?
- ☆ What policy framework should be constructed for Universal Service in Alaska?
- ☆ Will restructured markets ensure that universal service benefits are retained in the absence of legislative, regulatory, or fiscal provisions?
- ☆ If such supports are deemed appropriate, what type and level of supports should be adopted?

Affordability - Key Decisions

- ☆ How should "affordability" be defined?
- ☆ Will retail competition pose a serious threat to short and long-term affordability of electric service?
- ☆ Is maintaining affordable electric service (however defined) an essential element of successful introduction of market forces into the electricity industry?
- ☆ What mechanisms should be instituted to ensure continued affordability of electric service in any restructuring legislation?
- ☆ How should affordability protection mechanisms be structured and funded to address needs in the most efficient manner?

Consumer Issues - Viewpoints

- ☆ "Everyone who receives an electrical bill could be largely affected through changes in how electrical service is delivered."
Rep. Norman Rokeberg & Sen. Bert Sharp
- ☆ "All consumers must have universal access to affordable service. [A] provider of last resort must be identified for those consumers who either do not choose or are unable to access the market due to limited market power."
ARECA

Consumer Issues - Viewpoints (cont'd)

- ☆ "The APUC should develop customer protection rules."
Mary Ann Pease, Vice President, Aurora Power
- ☆ "We think the supplier of last resort obligation should reside with the Distribution Service Provider."
Chugach Electric Association
- ☆ "If competition is undertaken this must be accompanied with protections that insure affordability and availability as a matter of public policy."
Stephen Conn, Alaska Public Interest Research Group
- ☆ "[Restructuring in Alaska] should not proceed without guaranteed lower rates for residential and small business consumers. Equitable benefit of any restructuring must ensure that rural, remote and less profitable customers are not adversely impacted."
Gary Brooks, Business Manager, IBEW Local 1547

Consumer Issues - Agenda

Formalize universal service policy. Increase customer education. Encourage innovative service offerings. Consider performance-based regulation. Formalize service quality metrics.

Establish universal service/provider of last resort. Provide uniform customer information. Strengthen regulation of distribution function. Adopt license requirements.

Use certification, license and regulatory powers to promote clearly articulated public policy goals. Consider competitive auction of distribution function, PBR. Adopt standards and encourage creation of new entities.

●
"Fill the Potholes"

"kiloWatt Commoditization"

"Controlled Evolution"

Stranded Costs - Key Decisions

- ☆ To what extent does "reasonable opportunity to earn a fair return" equate to "guaranteed recovery of investments?"
- ☆ What is the most appropriate method for calculating stranded costs?
- ☆ To what extent can stranded costs be mitigated by utilities?
- ☆ How should stranded costs be allocated?
- ☆ Over what period should allowable costs be collected?

Stranded Costs - Viewpoints

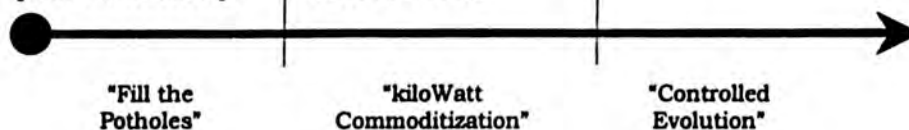
- ☆ "Stranded investment for rural Alaska is huge. . . . In the face of retail competition, utilities could lose energy sales to competing providers, which could reduce sales from the Four Dam Pool projects."
Robert Wilkinson, Gen. Mgr., Copper Valley Electric Assoc.
- ☆ "KEA's loss of ten of its largest customers alone would reduce debt service money paid to the State by approximately \$1.2 million/yr."
Edwin Kozak, General Manager, Kodiak Electric
- ☆ "If the utility's plant is needed to maintain electric system reliability there is no stranded investment. In the case of no stranded investment, it is very unlikely that retail competition would develop as there is no savings for the consumer."
Charles Walls, President & CEO, AVEC
- ☆ Consumers and the industry stand to benefit in numerous ways once choice and free-market principles are substituted for the current system."
Mary Ann Pease, Vice President, Aurora Power

Stranded Costs - Agenda

Discourage new ratebase generation, assets; encourage accelerated depreciation and shortened amortization periods. Assess & accelerate "glide path" for recovery.

Consider divestiture/asset auctions; transfer reliability requirement to independent system operator; contract reformation. Establish exemptions or "opt-in" rules for rural utilities.

Consider securitization/competition transition charge; determine must-run requirements. Condition divestiture, sale or asset transfers on rules designed to reduce stranded costs.



Taxes & Fees - Key Decisions

- ☆ What is the most effective means to create a revenue neutral position amongst government entities (state and local jurisdictions, among communities, etc.) in a restructured electric industry?
- ☆ What tax laws or rules must be changed to establish a level playing field for all electricity providers in a competitive marketplace?
- ☆ What role should the state play in attempting to mitigate the tax revenue impacts on local governments?
- ☆ To what extent should tax laws and tax incentives be used to encourage or support a specific industry, economic sector, or regions in the state?
- ☆ As a matter of public policy, there are also a number of other questions. These include: what is the most desirable type of tax or fee; who pays the tax; how does it impacts economic activity; what is the revenue potential; what is the nexus; what is the true "incidence" of the tax (who actually pays); and how does it effect Alaska's economic development potential?

Taxes & Fees - Viewpoints

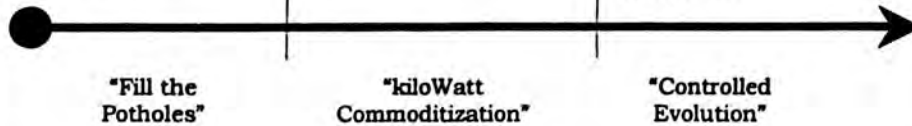
- ☆ "The tax benefits of nonprofit status and tax-exempt revenue bonds are primarily federal tax benefits. Alaska's consumer-owned utilities pay state and local property taxes."
ARECA
- ☆ "[T]here are no prohibitions on investor-owned utilities buying either cooperative or municipal utilities. In both instances, the investor-owned utility would need to buy out the debt and capital credits of the member-owned utilities. This could represent quite a penalty to the ratepayers as much of the municipal debt is tax exempt, and virtually all of the cooperative debt is at a federally subsidized rate."
ARECA

Taxes & Fees - Agenda

Encourage increased reliance on market-based financing. Consider modifications to tax law to encourage new investment, as appropriate.

Establish "level-playing field" for new investment. Consider stranded cost treatment for tax consequences of transition to competition.

Rationalize tax policy and mechanisms to advance public policy goals and non-discriminatory competitive environment. Consider use of taxes to internalize costs of public policy programs.



Utility Employees - Key Decisions

- ☆ Are unacceptable employment changes occurring in the electric utility industry today? To what extent can those changes be addressed under the current system of regulation and operations? What measures or mechanisms should be instituted today to address these adverse trends?
- ☆ Will restructuring (or the continued "preparation for restructuring" activities) cause unacceptable employment changes in the electric industry in Alaska? To what extent are those changes within the control of Alaska policy makers, and to what extent are they part of broader industry or nation-wide market forces and trends? Why are those changes unacceptable? Which adverse results are most likely to develop?
- ☆ What structural or economic mechanisms should be instituted to prevent unacceptable employment changes during the transition to and in a more competitive industry environment? How should those mechanisms be incorporated in current regulatory agendas and/or in restructuring legislation

Utility Employees - Viewpoints

- ☆ "Rapid, radical deregulation may cause electric power companies to continually restructure their business functions, resulting in constant anxiety in the work force and financial instabilities in the industry and communities. Cost-cutting measures and work force reductions are being implemented throughout the electric power industry. As a result, the existing work force and the electric systems are stressed to a point that threatens worker safety and public safety."

International Brotherhood of Electrical Workers

- ☆ "The IBEW forthrightly opposes deregulation in Alaska. Safeguards for worker and public safety and strict reliability standards must be built into any restructuring scheme in order to protect the public's best interests."

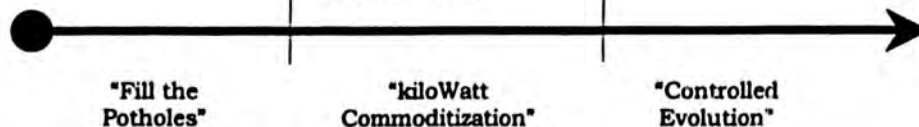
Gary Brooks, Business Manager, IBEW Local 1547

Utility Employees - Agenda

Establish or strengthen service quality standards or performance-based regulation to target worker safety and utility system operational criteria.

Create independent system operator (and funding mechanism) to ensure reliability. Regulate distribution function to ensure safe work and adequate response performance.

Establish detailed service quality, performance based, safety regulation. Encourage competition based on safe, responsive, reliable operations.



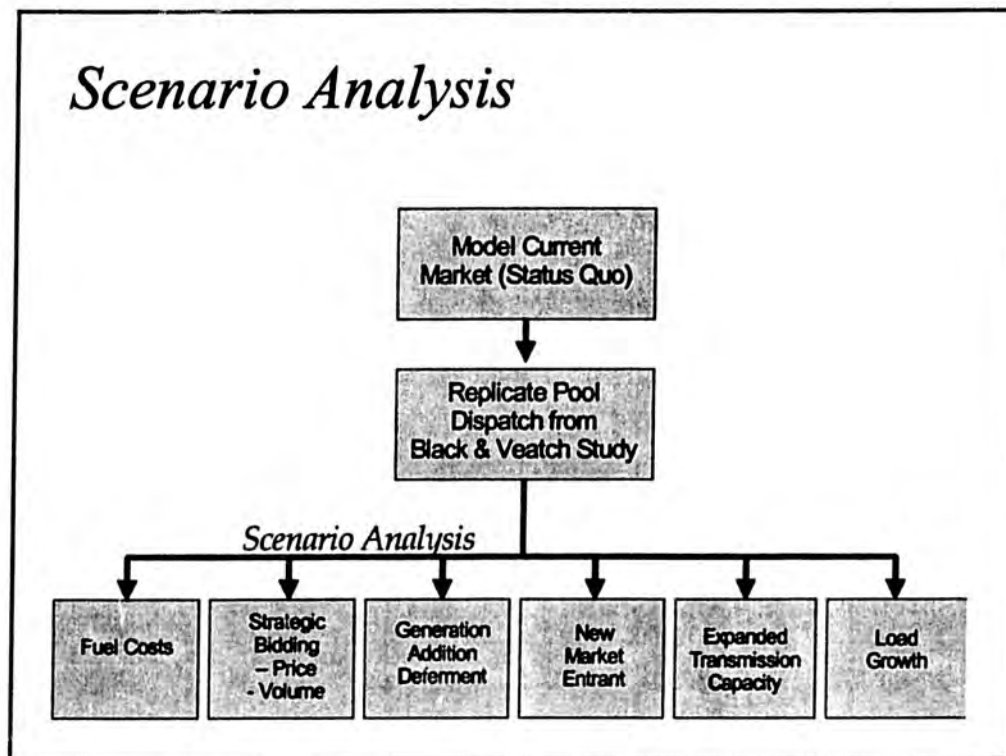
Modeling

- ☆ Computer modeling is not a crystal ball, it is an analytic tool
- ☆ Modeling competitive markets is highly dependent upon the assumptions that underlie the analysis.
 - Fuel costs
 - Plant operating characteristics
 - Timing of new entrants
 - Load growth
- ☆ This study follows on the heels of the central dispatch planning study completed by Black & Veatch International (BVI) for the APUC in October 1998.
- ☆ In order to provide consistent and useful results, we relied on input assumptions, data, and projections developed for the BVI study to the maximum extent possible.

Modeling (cont'd)

- ☆ A market dispatch model is used to simulate generation dispatch in a pool environment.
- ☆ The model dispatches generation to meet load based on generator cost, and calculates the market prices that result when the last generator is dispatched to meet the last increment of load.
- ☆ It is not an hourly operation model for real time dispatch and trading.
- ☆ For the purposes of estimating future market behavior, more complex optimization models do not necessarily yield more accurate results.
- ☆ One principal objective is to model strategic bidding behavior of market participants.

Scenario Analysis



Major Assumptions

- ☆ Transmission
 - Transmission limitations and reliability issues alter dispatch order
 - Transmission capacity limits resulted in three zonal market prices
 - Pricing based on postage stamp rates adopted by FERC in *Pro Forma* tariffs
 - No transmission owner is able to capture differences in zonal prices through transmission pricing.
- ☆ Market Price and Bidding Behavior
 - Centrally dispatched power pool
 - Pool determines dispatch order based on generator bid prices
 - Except in the market power cases, all generators are assumed to bid the variable generation costs.
 - Market clearing price = bid price of the last unit dispatched to meet load.
- ☆ Market Power
 - To assess whether any generator could exercise market power, several scenarios were run to assess impacts of strategic bidding behavior.
- ☆ Consumer Behavior
 - The model does not consider demand responsiveness to price

Status Quo Case

☆ Objective

- Estimate the benefits from competitive wholesale markets
- Estimate generations sales, revenues and total costs for the three generating utilities before any cost savings due to changes in market structure are modeled

Total Sales, NPV Costs and Revenues for Study Period, Status Quo Case

Utility	Sales (MWh)	Total Costs (\$Millions)	Generator Revenues (\$ Millions)
MLP	26,946,946	276	302
CEA	71,492,787.2	782	911
GVEA	14,537,990	301	255
Total	112,977,724	1,359	1,468

Pooled Dispatch Case

☆ Objective

- To estimate the cost savings from employing a pool dispatch in the Railbelt.
- To benchmark model to the BVI results

☆ Major Assumptions

- Transmission limits were increased to allow more efficient dispatching (duplicates BVI analysis)

Total Sales, NPV Costs & Revenues for Study Period, Pooled Dispatch Scenario

Utility	Sales (MWh)	Total Costs (\$Millions)	Generator Revenues (\$ Millions)
MLP	30,741,791	320	377
CEA	75,729,252	835	964
GVEA	6,506,680	163	90
Total	112,977,724	1,318	1,431

Pooled Dispatch Case (cont'd)

Change from Status Quo Scenario

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)	
	MWh	%	\$Millions	%
MLP	3,794,845	14%	\$ 44.26	16%
CEA	4,236,465	6%	\$ 53.17	7%
GVEA	(8,031,310)	-55%	\$(138.36)	-46%
Total	0		\$ (40.94)	

Pooled Dispatch Case (cont'd)

Comparison of BVI and CH2MHILL Study Results (Net Present Value \$000's)

	BVI Costs (BVI Table ES-1)	Costs w/o Capital	Costs w/ Capital for New GVEA Plants
Individual	1,433	1,359	1,421
Pooled	1,403	1,318	1,380
Savings from Pooled Dispatch	30	41	41
Percentage Savings	2.09%		2.89%

Fuel Costs Case

☆ Objectives

- To isolate the impact of differences in natural gas fuel contracts on the wholesale market

☆ Assumptions

- Fuel costs for all natural gas plants were set equal to the cost for the CEA Beluga 1-8 plants

Fuel Cost Equalization Case

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	59,555	0.2%	-32.1	-11.2%	-37.8	-11.2%	-5.7
CEA	-42,983	-0.1%	-9.4	-1.1%	-11.3	-1.2%	-1.8
GVEA	-16,572	-0.3%	-0.2	-0.1%	-0.2	-0.2%	0.0
Total	0		-41.7		-49.2		-7.5

Market Power Cases

☆ Objective

- To test the impacts of increased bid prices and reduced bid quantities on market price

☆ Cases

- CEA's bid price is 20% over its marginal costs
- CEA's bid price is 20% over its marginal costs, and MLP is assigned 35 MW of transmission capacity
- CEA's bid price is 20% over its marginal costs, and MLP is assigned all 70 MW of transmission capacity
- CEA's bid price is 40% over its marginal costs
- CEA's bid price is 40% over its marginal costs, and MLP is assigned 35 MW of transmission capacity
- CEA's bid price is 40% over its marginal costs, and MLP is assigned all 70 MW of transmission capacity.
- CEA withholds Beluga 3 capacity
- CEA withholds Beluga 6-8 capacity

Market Power Cases (cont'd)

CEA Bids 20% Over Marginal Cost, Contract Transmission Capacity

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	51,759	0.2%	0.9	0.3%	5.2	1.4%	4.4
CEA	-4,788,948	-6.8%	-47.6	-6.0%	109.4	10.2%	157.0
GVEA	4,737,189	42.1%	53.2	24.7%	57.6	38.9%	4.3
Total	0		6.4		172.2		165.8

CEA Bids 20% Over Marginal Costs, 35 MW Transmission Capacity for MLP

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	2,922,646	8.7%	36.2	10.2%	62.5	14.2%	26.3
CEA	-7,252,587	-10.6%	-80.2	-10.6%	60.8	5.9%	141.0
GVEA	4,329,941	40.0%	48.9	23.1%	53.0	36.9%	4.2
Total	0		4.9		176.3		171.4

Market Power Cases (cont'd)

CEA Bids 20% Over Marginal Costs, 70 MW Transmission Capacity for MLP

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	14,823,013	32.5%	190.6	37.3%	245.4	39.5%	54.9
CEA	-16,268,111	-27.4%	-197.2	-30.9%	-125.3	-14.9%	71.8
GVEA	1,445,098	18.2%	8.8	5.1%	-1.5	-1.7%	-10.4
Total	0		2.2		118.6		116.3

CEA bids 40% over Marginal Cost

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	59,555	0.2%	1.0	0.3%	12.0	3.1%	11.0
CEA	-6,719,276	-9.7%	-64.0	-8.3%	251.3	20.7%	315.2
GVEA	6,659,721	50.6%	73.1	31.0%	80.7	47.1%	7.5
Total	0		10.1		343.9		333.8

Market Power Cases (cont'd)

CEA bids 40% above Marginal Cost, and MLP Transmission Capacity increases to 35MW

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	2,950,355	8.8%	36.7	10.3%	74.1	16.5%	37.4
CEA	-9,454,754	-14.3%	-98.8	-13.4%	193.7	16.7%	292.5
GVEA	6,504,399	50.0%	71.2	30.4%	78.3	46.4%	7.1
Total	0		9.1		346.1		337.0

CEA bids 40% above Marginal Cost, and MLP owns 70MW Transmission Capacity

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	9,653,370	23.9%	123.6	27.9%	209.6	35.8%	86.0
CEA	-14,255,834	-23.2%	-165.7	-24.7%	83.3	8.0%	249.0
GVEA	4,602,464	41.4%	51.6	24.1%	55.9	38.2%	4.3
Total	0		9.5		348.8		339.3

Market Power Cases (cont'd)

CEA Withholds Beluga 3

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	0	0.0%	0.0	0.0%	0.2	0.0%	0.2
CEA	-269,975	-0.4%	-1.3	-0.2%	24.3	2.5%	25.5
GVEA	269,975	4.0%	2.6	1.6%	2.6	2.8%	0.1
Total	0		1.3		27.1		25.8

CEA Withholds Beluga 7-8

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	304	0.0%	0.0	0.0%	0.3	0.1%	0.3
CEA	-541,484	-0.7%	43.8	5.0%	39.0	3.9%	-4.9
GVEA	541,180	7.7%	5.2	3.1%	5.5	5.8%	0.3
Total	0		49.0		44.8		-4.3

CEA Withholds Beluga 6-8

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	304	0.0%	0.0	0.0%	0.3	0.1%	0.3
CEA	-541,484	-0.7%	47.3	5.4%	39.0	3.9%	-8.4
GVEA	541,180	7.7%	5.2	3.1%	5.5	5.8%	0.3
Total	0		52.6		44.8		-7.8

Canceling Generation Additions

☆ Objective

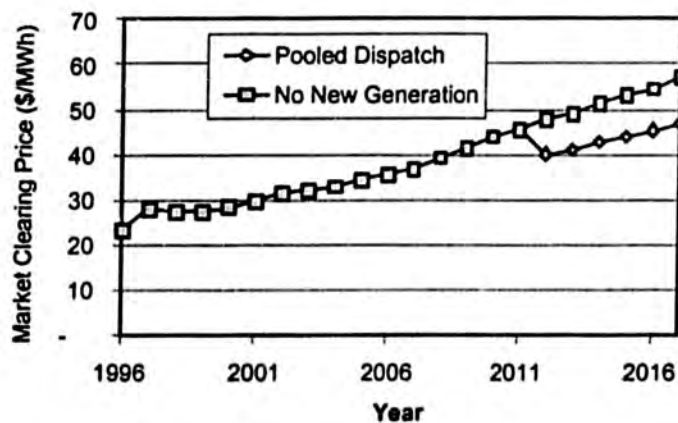
- Estimate the impacts of not building the only generator addition included in the BVI base case

No New Generation Capacity Added

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	0	0.0%	0.0	0.0%	1.9	0.5%	1.9
CEA	28,914	0.0%	0.3	0.0%	6.0	0.6%	5.7
GVEA	-28,914	-0.4%	-42.6	-35.5%	5.3	5.5%	47.8
Total	0		-42.3		13.2		55.5

Canceling Generation Additions (cont'd)

Impact on Market Prices of Canceling Generation Additions



New Market Entrant Case

☆ Objective

- To examine the impact of an independent power producer (IPP) on the costs and revenues of the three Railbelt utilities

☆ Assumptions

- 100 MW of new generation in the GVEA service territory in the year 2002
- Cost and operating characteristics of a GE 7EA gas-fired combined cycle unit

New Market Entrant Case (cont'd)

New Entrant in the Status Quo Case

	Sales by Company (MWh)			Total NPV Costs (\$M's)			Total NPV Revenues (\$M's)		
	Base Case Resources	Add GE 7EA CC in 2002	Difference	Base Case Resource \$	Add GE 7EA CC in 2002	Difference	Base Case Resource \$	Add GE 7EA CC in 2002	Difference
MLP	26,946,946	30,793,550	3,846,604	275.5	320.6	45.1	301.7	378.0	76.3
CEA	71,492,787	60,770,096	(10,722,691)	782.1	672.0	(110.1)	911.4	904.0	(7.3)
GVEA	14,537,960	7,398,078	(7,139,882)	300.9	171.3	(129.6)	254.6	98.8	(155.8)
IPP	-	14,016,000	14,016,000	-	120.6	120.6	-	159.8	159.8
Total	112,977,724	112,977,724	(0)	1,358.6	1,264.5	(74.0)	1,467.7	1,540.7	72.9

New Entrant in the Pooled Dispatch Base Case

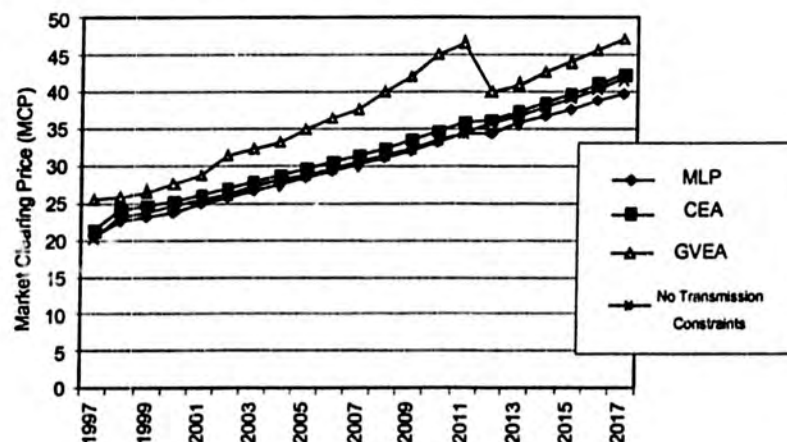
	Sales by Company (MWh)			Total NPV Costs (\$000's)			Total NPV Revenues (\$000's)		
	Base Case Resources	Add GE 7EA CC in 2002	Difference	Base Case Resource \$	Add GE 7EA CC in 2002	Difference	Base Case Resource \$	Add GE 7EA CC in 2002	Difference
MLP	30,741,791	29,745,134	(996,656)	319.8	308.9	(10.9)	378.5	350.3	(28.2)
CEA	75,729,252	66,200,801	(9,528,452)	835.3	730.5	(104.8)	964.0	826.8	(137.2)
GVEA	6,506,680	3,015,790	(3,490,891)	162.6	120.0	(42.6)	90.5	36.7	(53.8)
IPP	-	14,016,000	14,016,000	-	120.6	120.6	-	111.8	111.8
Total	112,977,724	112,977,724	(0)	1,317.8	1,280.0	(37.8)	1,431.1	1,325.7	(105.4)

Transmission Constraint Cases

- ☆ Objective
 - To examine the value of increased transmission capacity
- ☆ Assumptions
 - Remove all transmission constraints in the Railbelt

Transmission Constraint Cases (cont'd)

Annual Market Clearing Price with No Transmission Constraints



Transmission Constraint Cases (cont'd)

No Transmission Capacity Constraint

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	4,561,801	12.9%	45.9	12.6%	38.5	9.3%	-7.4
CEA	-898,542	-1.2%	-5.8	-0.7%	-32.4	-3.5%	-26.5
GVEA	-3,663,260	-128.8%	-50.6	-45.2%	-77.7	-606.4%	-27.1
Total	0		-10.5		-71.6		-61.1

MLP Receives 35 MW of Transmission Capacity

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	2,868,609	8.5%	35.3	9.9%	53.9	12.5%	18.6
CEA	-2,870,399	-3.9%	-36.5	-4.6%	-48.3	-5.3%	-11.8
GVEA	1,790	0.0%	0.2	0.1%	0.2	0.2%	0.0
Total	0		-1.0		5.8		6.8

Load Growth Cases

☆ Objective

- To assess the impact that varying load growth forecasts have on utility costs and revenues

Load Growth Forecast Increased by 2%

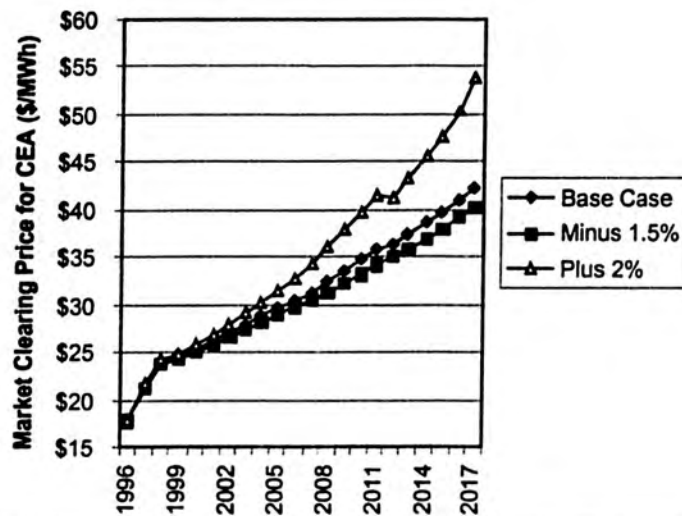
	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	7,542,987	19.7%	79.8	20.0%	118.5	23.9%	38.7
CEA	16,710,445	18.1%	188.9	18.4%	290.6	23.2%	101.7
GVEA	7,542,842	53.7%	97.1	37.4%	120.2	57.0%	23.1
Total	31,796,274		365.7		529.3		163.5

Load Growth Forecast Decreased by 1.5%

	Increase in Sales between 1996 and 2017		Increase in Costs (\$M)		Increase in Generator Revenue		Increase in Profit
	MWh	%	\$Millions	%	\$ Millions	%	\$ Millions
MLP	-4,448,137	-16.9%	-44.1	-16.0%	-66.8	-21.6%	-22.7
CEA	-11,416,719	-17.8%	-121.9	-17.1%	-146.4	-17.9%	-24.5
GVEA	-2,751,412	-73.3%	-33.7	-26.2%	-44.0	-94.4%	-10.2
Total	-18,616,268		-199.7		-257.1		-57.5

Load Growth Cases (cont'd)

Annual MCP for CEA under Alternate Growth Forecasts



Stranded Costs

- ☆ Stranded costs are defined as the reduction in generator revenues due to the introduction of competition into the Railbelt
- ☆ Stranded cost = $NPV(\text{Net Generator Revenue}[R,y]) - NPV(\text{Net Generation Revenue}[C,y])$

Stranded Cost Estimates

Stranded Costs by Scenario (\$Millions)

Scenario		Increase in NPV Revenue	Increase in NPV Costs	Stranded Cost
Table 5	Base Case	(\$414)	(\$41)	\$373
Table 6	Fuel Cost Equalization	(\$463)	(\$83)	\$380
Table 7	Fuel Cost Equalization with Increases MLP Transmission	(\$459)	(\$88)	\$371
Table 8	CEA Bids 20% over Marginal Cost, Contract Transmission Capacity	(\$242)	(\$35)	\$207
Table 9	CEA Bids 20% Over Marginal Costs, 35 MW Transmission Capacity for MLP	(\$238)	(\$36)	\$202
Table 10	CEA Bids 20% Over Marginal Costs, 70 MW Transmission Capacity for MLP	(\$295)	(\$39)	\$257
Table 11	CEA Fossil Fleet bids 40% over Marginal Cost	(\$70)	(\$31)	\$39
Table 12	CEA Fleet bids 40% above Marginal Cost, and MLP T Capacity 35MW	(\$68)	(\$32)	\$36
Table 13	CEA Fleet bids 40% above Marginal Cost, and MLP owns 70MW T Capacity	(\$65)	(\$31)	\$34
Table 14	Withholding of Beluga 3 by CEA	(\$387)	(\$40)	\$347
Table 15	Withholding of Beluga 7-8 by CEA	(\$369)	\$6	\$377
Table 16	Withholding of Beluga 6-8	(\$369)	\$12	\$381
Table 17	No New Generation Capacity Added	(\$401)	(\$83)	\$317
Table 23	No Transmission Capacity Constraint	(\$485)	(\$51)	\$434
Table 24	MLP Receives 35 MW of Transmission Capacity	(\$408)	(\$42)	\$366
Table 25	Load Growth Forecast Increased by 2%	\$115	\$325	\$209
Table 26	Load Growth Forecast Decreased by 1.5%	(\$671)	(\$241)	\$430
Table 18	New Entrant in the Status Quo Case	(\$501)	(\$195)	\$306
Table 19	New Entrant in the Pooled Dispatch Base Case	(\$631)	(\$158)	\$473
Table 20	New Entrant when the CEA Fleet Bids 40% above Dispatch Cost	(\$648)	(\$161)	\$486
Table 21	Impact of CEA Bidding 40% above Dispatch Cost (with IPP in 2002)	(\$304)	\$158	\$146
Table 22	Impact of IPP on CEA's Withdrawal of Beluga Unit 3	(\$609)	(\$158)	\$451

Restructuring in Alaska

☆ Restructuring?

Alaska can undertake restructuring - meaning a fundamental change in the structure and operation of the electric utility system in the Railbelt.

☆ Competition?

It is not clear that the result would be robust competition.

Elements of Competition

- | | |
|------------------------------|-------------------------------------|
| ☆ Number of Suppliers. | ☆ Price Discovery Mechanism. |
| ☆ Number of Buyers. | ☆ Pricing Information. |
| ☆ System Reliability. | ☆ Settlements and Billing. |
| ☆ Non-Discriminatory Access. | ☆ Market Monitoring and Compliance. |
| ☆ Transmission Governance. | ☆ Ease of Entry. |
| ☆ Market Clearing Mechanism. | ☆ Ease of Exit. |

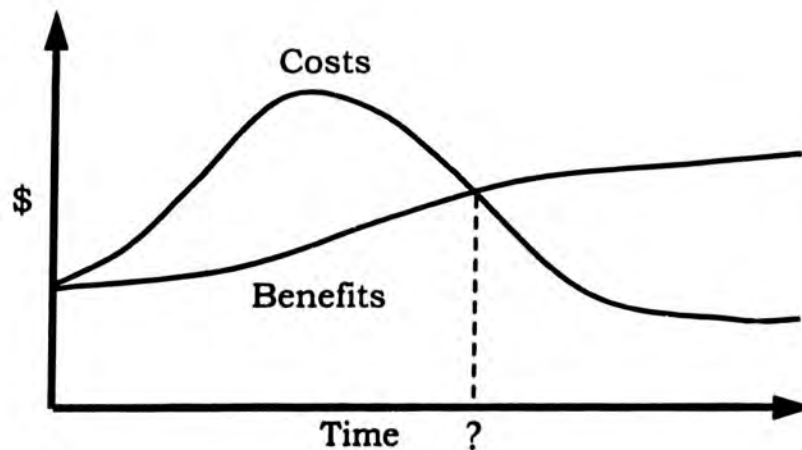
Restructuring Benefits

- ☆ Administration
 - Reduced regulation
 - Specialized institutions
 - Reduced transactions costs
- ☆ Social
 - Consumer choice
 - New products and services
 - Convergence benefits
 - Targeted program funding
 - Internalization of costs
- ☆ Industry
 - Market discipline
 - Price signals -- marginal cost pricing
- ☆ Rough estimate of range of benefits --
 - Decrease in generator costs from NPV \$40 to \$75 million through 2017
 - Decrease in customer costs from NPV \$35 to \$50 million through 2017

Restructuring Costs

- ☆ Administration
 - New institutions
 - New regulations and oversight responsibilities
- ☆ Social
 - Consumer education
 - Cost shifting to large customers with many choices to smaller customers
 - Discrimination
 - Stranded benefits
- ☆ Industry
 - Stranded costs
 - Market power
 - Employees
- ☆ Rough estimate of range of benefits --
 - New institutions and oversight requirements: \$25 to \$250 million
 - Unchecked exercise of market power could cost customers as much as \$50 million
 - Estimates of stranded costs vary widely from \$35 million to several hundred million dollars.

Timing of Benefits and Costs



Restructuring in Alaska: Time for Action?

- ☆ Preparing for competition? Yes
 - Bush
 - Virtual aggregation
 - Technology pilots
 - PCE reform
 - Railbelt
 - Complete a limited regulatory reform agenda
 - Maximize potential for market success
- ☆ Implementing competition? Not yet
 - Experience in other states is too new and limited to "problem states"
 - Experience from other states that have restructured is not directly applicable to Alaska
 - Invention is required

Recommendations

- ☆ Continue and expand efforts to improve rural system efficiencies through aggregation of administrative, fuel-purchasing, operations, logistical and other appropriate functions among geographically separate but proximate villages.
- ☆ In order to build practical experience in the use and deployment of distributed energy systems which offer potential long-term cost savings, consider the creation of a pilot program based on technology demonstration and deployment, conducted in coordination with government and non-governmental organizations.
- ☆ Initiate a specific set of market-friendly regulatory reforms today in order to bring the real competitive opportunity into focus.

Recommendations (cont'd)

☆ Complete a regulatory agenda that -

- (a) calculates and allocates component costs for Railbelt utilities in a rational and uniform manner (unbundling and cost allocation);
- (b) rationalizes access to, and governance of, the transmission system to create a non-discriminatory open access network while ensuring reliability;
- (c) rationalizes oversight of generation siting and construction to minimize stranded cost exposure and to foster the emergence of a competitive wholesale market with new merchant generators; and
- (d) implements central dispatch/power pooling recommendations of the October 1998 Black & Veatch study in the Railbelt to harvest near-term savings and to facilitate emergence of a competitive wholesale market over the longer term.

Recommendations (cont'd)

☆ Maximize potential for market success -

- (a) Mitigate regulatory and structural inefficiencies to produce near-term savings and encourage efficient market behavior.
- (b) Design pilot and retail competition to encourage technology-based competition and to realize the potential for technological innovation to reduce costs.
- (c) Design efficient commodity markets to enable value-added service innovation.
- (d) Exploit Alaska's small electricity systems to lead the industry trend toward new, modular distributed energy systems.
- (e) Harmonize restructuring agendas in telecommunications, natural gas, and electricity to realize convergence benefits.

Recommendations (cont'd)

- ☆ Any market, regardless of size and scope, must carry its own administrative and oversight costs.
- ☆ To increase market liquidity, consider contract-based competition in small increments of energy, e.g., 500 kWh contracts.
- ☆ To increase market liquidity, consider a BTU Exchange, e.g., create a market exchange where both gas and electricity are traded as BTU contract.
- ☆ Consider retail market simulation modeling as part of the decision to move to a full retail competition pilot or retail competition.
- ☆ Full retail market opening must be preceded by modeling and simulation in any case.

Benefit Estimates

- ☆ Benefit and cost estimates equal the differences between the competitive scenarios and current regulated rates.
- ☆ Each scenario is designed to isolate a single independent variable. The results cannot be summed.
- ☆ The dynamic interaction of unit dispatch and changes in market clearing prices can produce results that are difficult to interpret and compare across multiple scenarios.
- ☆ The magnitude of potential savings suggests that more open and competitive markets can provide substantial benefits to electricity customers in the Railbelt.

Scenario	Generator Savings (\$ Million)	Customer Benefits (\$ Million)	Potential Stranded Costs (\$ Million)
Status Quo with Wholesale Competition	\$ 0	\$ 414	\$ 414
Pooled Dispatch	\$ 41	\$ 45*	\$ 373
Fuel Cost Equalization	\$ 83	\$ 462	\$ 380
CEA Bids 20% Over Marginal Cost, Contract Transmission Capacity	\$ 35	\$ 242	\$ 207
CEA Bids 40% Over Marginal Cost, Contract Transmission Capacity	\$ 31	\$ 70	\$ 39
No New Generation Additions	\$ 83	\$ 401	\$ 317
IPP in Pooled Dispatch	\$ 158	\$ 631	\$ 473
No Transmission Constraints	\$ 51	\$ 485	\$ 434

Benefits - Policy Implications

Issue	Implication	Policy Focus
Differences in zonal market clearing prices are the result of differences in generator costs and transmission constraints.	Many of the benefits from competition come from displacing more expensive GVEA generation with less costly resources.	Focus on solutions that remove north/south transmission constraints and encourage merchant plant development.
Concentration of generating resources in the Railbelt.	The modeling analysis demonstrates that most of the consumer benefits from competition could be compromised by the exercise of market power.	Regulatory and public policy initiatives to mitigate market power are essential to realize benefits.
Differences in generation costs between CEA & ML&P.	The modeling analysis suggests that the differences – and competitive positions – can largely be explained from differences in fuel prices (more than in generation operational characteristics).	Focus on restructuring initiatives that provide opportunities to rationalize fuel cost differences. Consider recovery for above-market fuel contracts.

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A Report to

**Legislative Joint
Committee on Electric
Restructuring and the
Alaska Public Utilities
Commission**

Submitted by

CH2MHILL

**Study of Electric Utility
Restructuring in Alaska**

April 1, 1999

Report to:
The Alaska Public Utilities
Commission
and the
Alaska State Legislature

Study of Electric Utility Restructuring
in Alaska

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Background

The electric power industry in the US is undergoing major changes that are reshaping traditional roles, creating opportunities for new participants, and redefining the scope and character of government regulation.

These changes arise out of the interaction of several driving forces:

- dramatic discrepancies in rates between regions, and between utilities within regions;
- regulatory and public policy support for market competition and customer choice over traditional forms of cost-of-service regulation;
- growing electricity demand resulting from a persistent – albeit modified – linkage with economic growth;
- public perceptions and public policy regarding the dangers and costs of air and water pollution, climate modification, and industrial safety; and
- the current economics of power generation and power purchase, which work against electricity producers whose costs are heavily fixed.

The electric power industry is responding to these forces by experimenting with a host of business strategies: flexible pricing for large customers; increased power purchases; consolidations through mergers and acquisitions; diversification into non-utility businesses; aggressive efforts to contain costs, new service offerings and corporate restructuring. Emerging from these experiments is a less tightly integrated, more diversified, and above all, much more competitive industry. It is an industry that, during the next decade, may shift from the traditional generation, transmission, and distribution relationships to a much more heterogeneous structure. Entities in the new regime may include utility companies fulfilling various traditional roles, independent power producers, regional power producers, independent systems operations, power exchanges, marketers and brokers, and a wide range of novel energy service providers.

But the path from the traditional electric power business to the more competitive industry of the future is strewn with issues and obstacles, some of which may resist resolution and movement more stubbornly than is commonly assumed today. The issues may include disagreements over the rules and procedures that should govern access to transmission and distribution facilities; the division of regulatory

authority between federal, state and local government agencies; protection of all customer classes; new demands for more stringent environmental protection; and a number of questions related to cost allocation, cost recovery, and system reliability. How these issues are resolved will control the pace and scope of change in the industry and, in turn, will answer an overarching question of increasing concern: "What are the potential risks, benefits, and impacts of electric utility industry restructuring on all Alaska consumers and the economy of the State as a whole?"

Overview of the Alaska Electricity Industry*

In terms of its electric power industry, Alaska is a patchwork of unconnected grids. Due to its extremely low population density and the distance between population centers around the State, there are many small generators operating independently of one another. Three of the five largest plants in the State are primarily gas-fired plants. Alaska is the Nation's second largest oil producer and oil-fired plants account for a much larger portion of the generation i. Alaska than in most other States. Alaska is also a significant producer of natural gas. The State's average electricity price in 1996 was the sixth most expensive in the Nation, since there are few economies of scale and there are no connections to the grid of the forty-eight contiguous States. Consumers have some of their bills subsidized by the State government.

Only one of the five largest utilities in the State is an investor-owned utility. Alaska Electric Light and Power operates in the panhandle of the State, around the capital, Juneau. Though it operates the fourth largest capability total of any utility, none of its plants is among the five largest in the State.

The five largest plants are operated by the Chugach Electric Association, the City of Anchorage, and the Golden Valley Electric Association. Chugach and Golden Valley are cooperatives. Cooperatives are groups organized under the law into utility companies that generate, transmit, and/or distribute electricity to specified areas not being served by other utilities. Such ventures are generally exempt from Federal income tax laws. Chugach operates two of the three largest plants in the State including the largest, Beluga, a gas-fired plant north of Anchorage. It also operates Bradley Lake, a hydroelectric plant in the Fairbanks area and the third largest plant in the State.

The City of Anchorage operates the gas-fired George M Sullivan plant. Sullivan is the second-largest plant in the State. The fourth-largest plant is Golden Valley's North Pole plant. Ironically, it is located in the south central part of the State.

*Source: http://www.eia.doe.gov/cneaf/electricity/st_profiles/alaska/ak.html

Almost half of the State's generation is from utility gas-fired facilities, while another fifth comes from utility renewable sources. Alaska was among the leaders in nonutility shares of capability and generation in 1996. Alaska's emissions of sulfur dioxide, nitrogen oxides, and carbon dioxide were among the lowest in the Nation in both absolute terms and in concentrations per square mile. These low totals are due to the low generation level (ninth lowest in the Nation) and the relatively "clean" means of generation that are utilized in the State.

Legislative action in Alaska has taken a different direction than other States with regard to deregulation. One bill introduced in 1997 would prevent retail competition unless clear evidence exists that it would be in the public interest. However, in January 1998, the largest utility in Alaska, the Chugach Electric Association, urged the Public Utility Commission and the State legislature to allow retail competition in the Greater Anchorage area.

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FIGURE 1.1
Alaska's Largest Utilities and Generating Plants

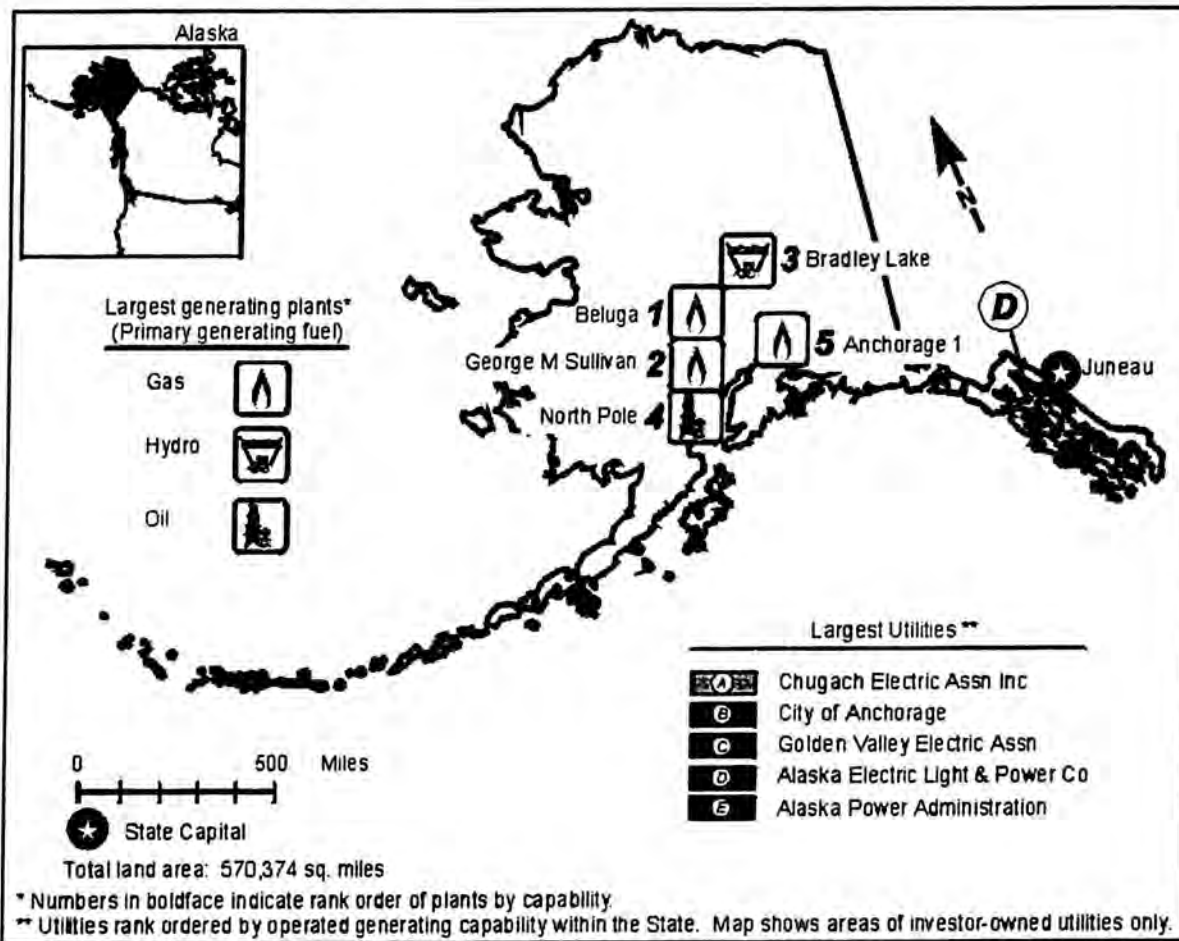


FIGURE 1.2
Alaska's Railbelt Service Area

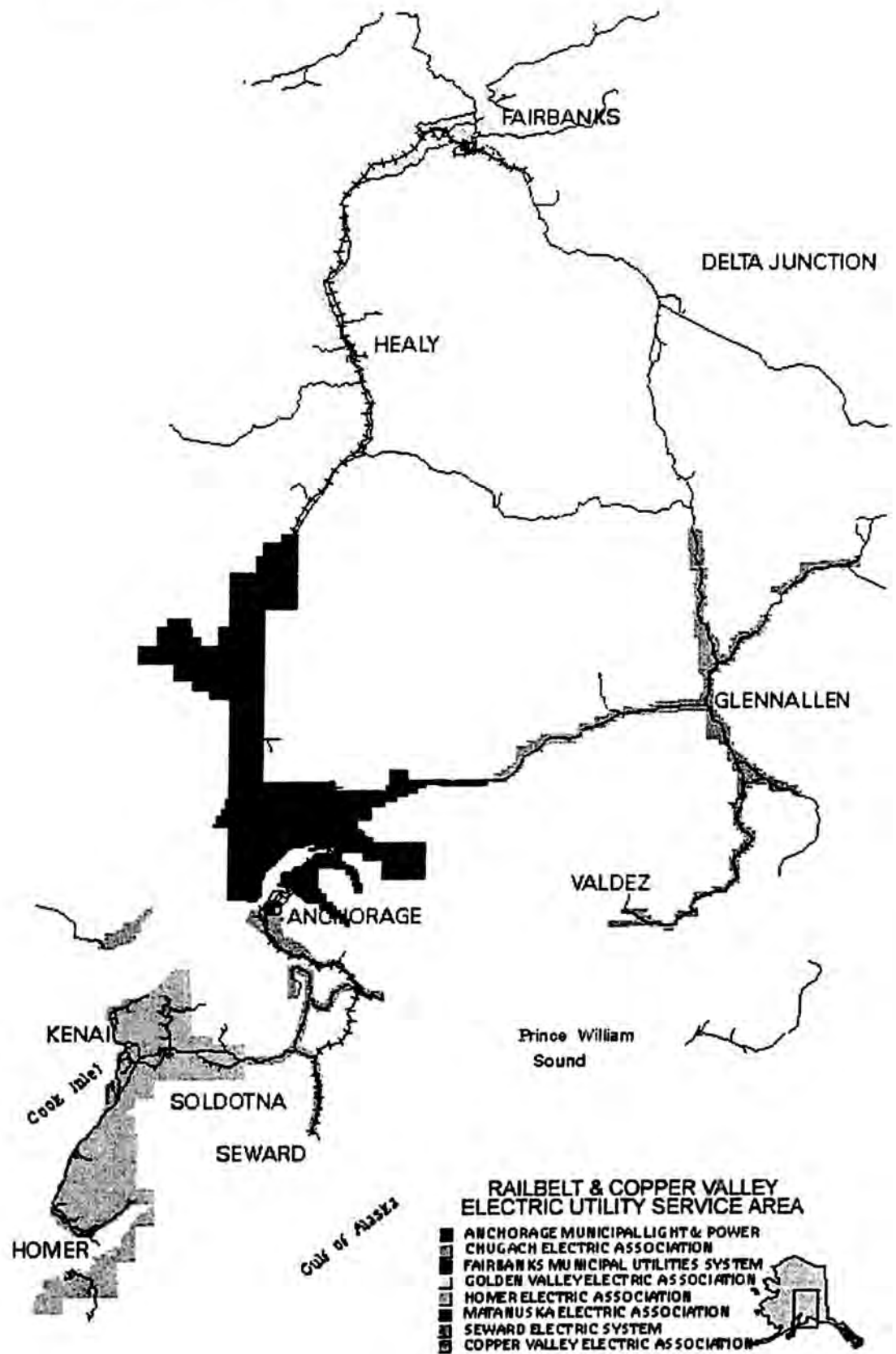


TABLE 1.1
1996 Summary Statistics.

Item	Value	US Rank
NERC Region(s)		ASCC
Net Exporter or Importer		--
State Primary Generating Fuel		Gas
Population (as of 7/96)	604,966	48
Average Revenue (cents/kWh)	10.24	45
Industry		
Capability (MWe)	2,010	42
Generation (MWh)	6,147,022	43
Capability/person (KWe/person)	3.32	17
Generation/person (MWh/person)	10.16	32
Sulfur Dioxide Emissions (Thousand Short Tons)	16	45
Nitrogen Oxide Emissions (Thousand Short Tons) 30	40	
Carbon Dioxide Emissions (Thousand Short Tons)	7,730	44
Sulfur Dioxide/sq. mile (Tons)	0.03	50
Nitrogen Oxides/sq. mile (Tons)	0.05	49
Carbon Dioxide/sq. mile (Tons)	13.55	51
Utility		
Capability (MWe)	1,734	47
Generation (MWh)	4,982,268	49
Average Age of Coal Plants	30 years	
Average Age of Oil-fired Plants	17 years	
Average Age of Gas-fired Plants	20 years	
Average Age of Nuclear Plants	--	
Average Age of Hydroelectric Plants	18 years	
Average Age of Other Plants	14 years	
Nonutility		
Capability (MWe)	276	35
Percentage Share of Capability	13.7	11
Generation (MWh)	1,164,754	35
Percentage Share of Generation	18.9	10

-- = Not applicable.

TABLE 1.2
Five Largest Utility Plants, 1996

Plant Name	Type	Operating Utility	Net Capability (MWe)
1. Beluga	Gas/Hydro	Chugach Electric Assn. Inc.	334
2. George M Sullivan	Gas/Hydro	City of Anchorage	220
3. Bradley Lake	Hydro	Chugach Electric Assn. Inc.	108
4. North Pole	Oil	Golden Valley Elec Assn. Inc.	106
5. Anchorage 1	Gas	City of Anchorage	79

TABLE 1.3
Top Five Utilities with Largest Generating Capability, and Type, Within the State, 1996
 (Megawatts Electric)

Utility	Net Summer Capability	Net Coal Capability	Net Oil Capability	Net Gas Capability	Net Nuclear Capability	Net Hydro/ Other Capability
A. Chugach Electric Assn. Inc.	607	—	38	445	—	125
B. City of Anchorage	299	—	3	297	—	—
C. Golden Valley Elec Assn. Inc.	171	25	146	—	—	—
D. AK Electric Light & Pwr.	109	—	94	—	—	15
E. Alaska Power Administration	108	—	—	—	—	108
Total	1,294	25	281	742	—	248
Percentage of Industry Capability	64.4	—	—	—	—	—

— = Not available.

FIGURE 1.3
Utility Generating Capability by Primary Energy Source, 1996

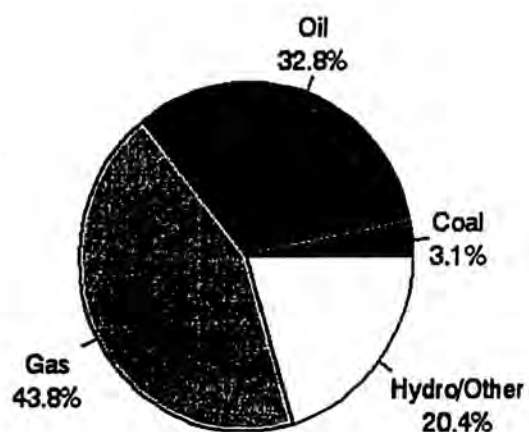


FIGURE 1.4
Utility Generation by Primary Energy Source, 1996

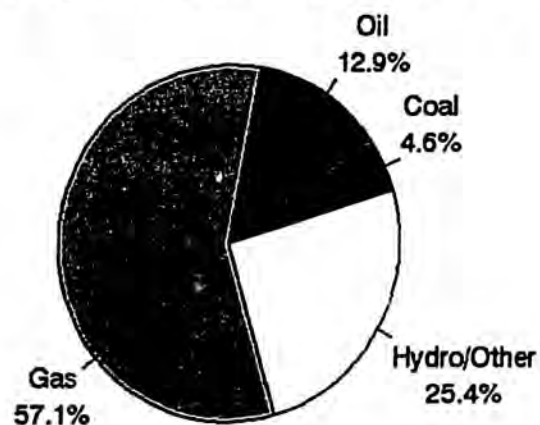


FIGURE 1.5
Energy Consumed at Electric Utilities by Primary Energy Source, 1996

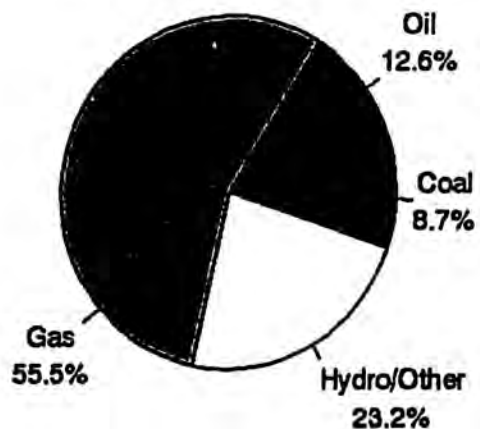
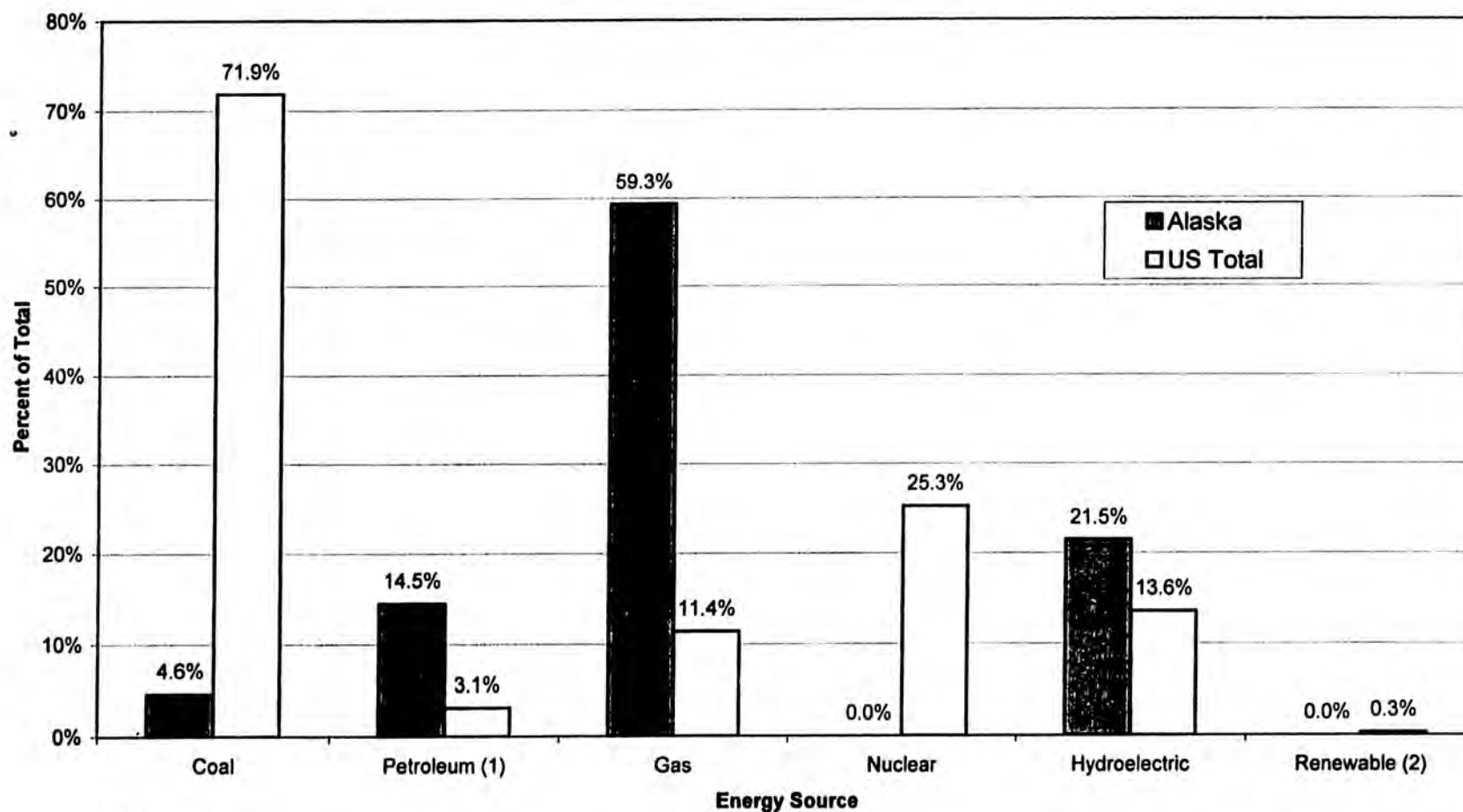


FIGURE 1.6 Net Generation by Energy Source 1997 Source: EIA, Electric Power Annual



Notes:

(1) Includes petroleum coke

(2) Includes geothermal, biomass, wind, solar thermal, and photovoltaic (excludes hydroelectric).

TABLE 1.4
Electric Power Industry Generating Capability by Primary Energy Source, 1986, 1991, and 1996
 (Megawatts Electric)

Fuel	1986	1991	1996	Percentage Share 1986	Percentage Share 1991	Percentage Share 1996
Coal	56	56	54	3.3	3.1	2.7
Oil	89	498	569	29.0	27.9	28.3
Gas	742	756	759	42.9	42.3	37.8
Nuclear	--	--	--	--	--	--
Hydro/Other	203	237	353	12.1	13.3	17.6
Total Utility	1,470	1,547	1,734	87.3	86.6	86.3
Total Nonutility	214	240	276	12.7	13.4	13.7
Industry	1,684	1,787	2,010	100.0	100.0	100.0

-- = Not available.

TABLE 1.5
Electric Power Industry Generation of Electricity by Primary Energy Source, 1986, 1991, and 1996
 (Thousand Kilowatthours)

Fuel	1986	1991	1996	Percentage Share 1986	Percentage Share 1991	Percentage Share 1996
Coal	292,944	325,914	229,129	5.7	6.3	3.7
Oil	458,956	407,088	643,278	9.0	7.8	10.5
Gas	2,691,148	2,657,316	2,843,998	52.8	51.1	46.3
Nuclear	--	--	--	--	--	--
Hydro/Other	808,724	896,113	1,265,863	15.9	17.2	20.6
Total Utility	4,251,772	4,286,431	4,982,268	83.4	82.4	81.1
Total Nonutility	848,290	917,328	1,164,754	16.6	17.6	18.9
Industry	5,100,062	5,203,759	6,147,022	100.0	100.0	100.0

-- = Not available.

TABLE 1.6
Electric Power Industry Consumption by Primary Energy Source, 1986, 1991 and 1996
 (Quadrillion Btu)

Fuel	1986	1991	1996	Percentage Share 1986	Percentage Share 1991	Percentage Share 1996
Coal	0.006	0.006	0.005	6.5	8.7	5.7
Oil	0.006	0.005	0.007	6.4	6.2	8.3
Gas	0.036	0.031	0.031	39.0	42.3	36.5
Nuclear	--	--	--	--	--	--
Hydro/Other	0.008	0.009	0.013	9.2	12.5	15.2
Total Utility	0.056	0.052	0.056	61.2	69.7	65.8
Total Nonutility	0.035	0.022	0.029	38.8	30.3	34.2
Industry	0.091	0.074	0.086	100.0	100.0	100.0

-- = Not available.

FIGURE 1.7
Utility Generation of Electricity by Primary Energy Source, 1986-1996

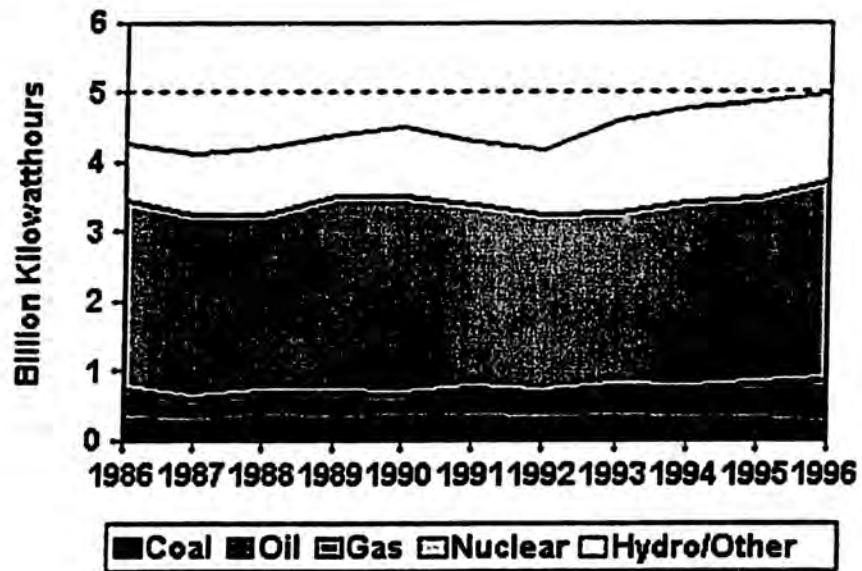


FIGURE 1.8
Utility Delivered fuel Prices for Coal, Oil, and Gas, 1986-1996
(1996 Dollars)

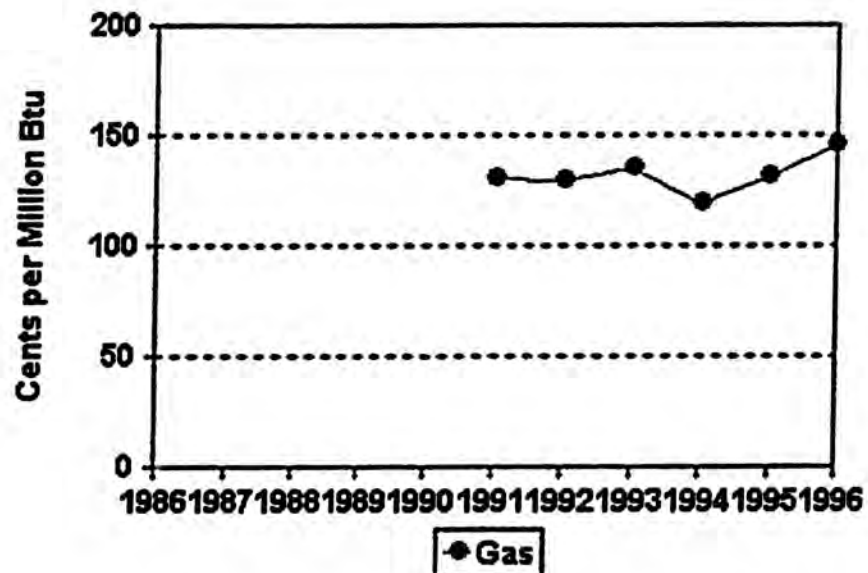


TABLE 1.7
Utility Delivered Fuel Prices for Coal, Oil, and Gas, 1986, 1991, and 1996
 (Cents per million Btu, 1996 Dollars)

Fuel	1986	1991	1996	ANNUAL GROWTH RATE 1986-1996 (PERCENT)
Coal	--	--	--	--
Oil	--	--	--	--
Gas	--	129.9	144.6	--

-- = Not available.

TABLE 1.8
Electric Power Industry Emissions Estimates, 1986, 1991, and 1996
 (Thousand Short Tons)

Emission Type	1986	1991	1996	Annual Growth Rate 1986-1996 (Percent)
Sulfur Dioxide	8	11	16	7.2
Nitrogen Oxide	25	29	30	1.8
Carbon Dioxide	5,715	6,524	7,730	3.1

-- = Not available.

FIGURE 1.9
Estimated Sulfur Dioxide Emissions, 1986-1996

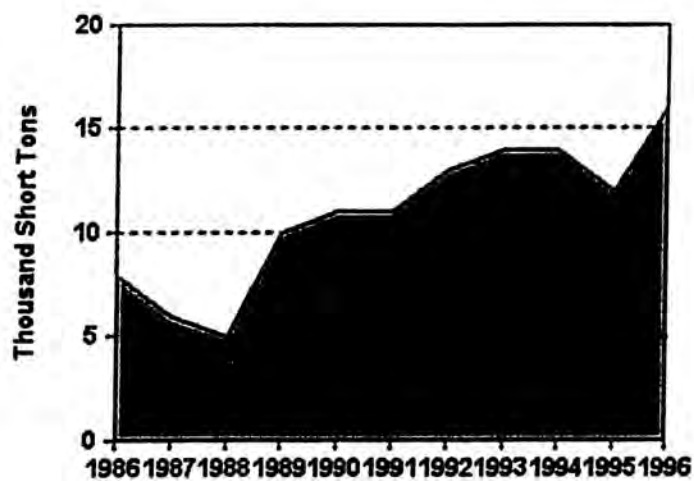


FIGURE 1.10
Estimated Nitrogen Oxide Emissions, 1986-1996

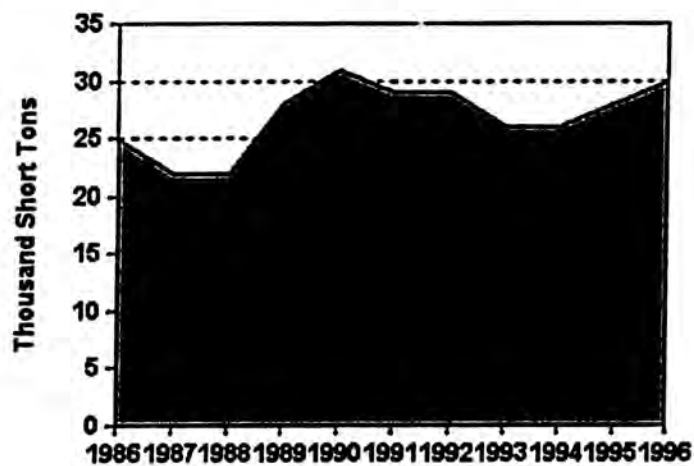


FIGURE 1.11
Estimated Carbon Dioxide Emissions, 1986-1996

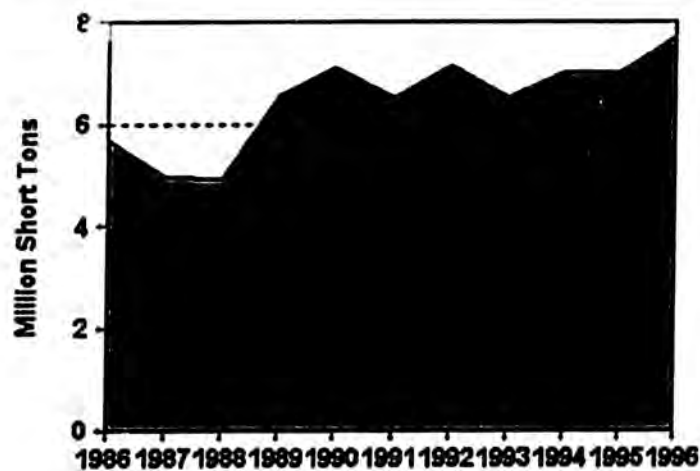


TABLE 1.9
Utility Retail Sales by Sector, 1986, 1991, and 1996 (Megawatthours)

Sector	1986	1991	1996	Annual Growth Rate 1986-1996 (Percent)	Percentage Share 1986	Percentage Share 1991	Percentage Share 1996
Residential	1,616,038	1,602,777	1,766,184	0.9	40.1	37.7	37.0
Commercial	1,776,352	2,005,247	2,249,874	2.4	44.1	47.1	47.1
Industrial	462,944	465,878	584,198	2.4	11.5	10.9	12.2
Other	174,140	181,811	179,306	0.3	4.3	4.3	3.8
Total	4,029,473	4,255,713	4,779,562	1.7	100.0	100.0	100.0

TABLE 1.10
Utility Retail Sales Statistics, 1986, 1991, and 1996

Item	Investor-Owned Utility	Public	Federal	Cooperative	Total
1986					
Number of Utilities	20	22	1	21	64
Number of Retail Customers	16,542	57,788	3	151,816	226,149
Retail Sales (MWh)	285,602	1,305,342	1,617	2,436,912	4,029,473
Percentage of Retail Sales	7.1	32.4	(s)	60.5	100.0
Revenue from Retail Sales (thousand 1996 \$)	38,363	136,891	65	281,607	456,946
Percentage of Revenue	8.4	30.0	(s)	61.6	100.0
1991					
Number of Utilities	24	36	1	22	83
Number of Retail Customers	19,702	61,044	2	156,343	237,091
Retail Sales (MWh)	356,454	1,349,999	3,840	2,545,420	4,255,713
Percentage of Retail Sales	8.4	31.7	0.1	59.8	100.0
Revenue from Retail Sales (thousand 1996 \$)	44,287	142,741	57	281,906	468,998
Percentage of Revenue	9.4	30.4	(s)	60.1	100.0
1996					
Number of Utilities	23	37	1	20	81
Number of Retail Customers	22,515	60,885	2	172,701	256,103
Retail Sales (MWh)	400,655	1,473,648	5,030	2,900,229	4,779,562
Percentage of Retail Sales	8.4	30.8	0.1	60.7	100.0
Revenue from Retail Sales (thousand 1996 \$)	46,535	146,590	110	296,254	489,489
Percentage of Revenue	9.5	30.0	(s)	60.5	100.0

(s) = Nonzero percentage less than 0.05.