

Table F-4. Expected and Actual Response Rates by Strata: AMI

Ownership	Size	Nbr of Orgs	Cell Response Goal	AMI Survey Section	Response Rate Goal	AMI Response Rate
Municipal	Large	17	14	12	85%	71%
	Medium	18	14	13	80%	72%
	Small	58	47	42	82%	72%
	Wholesaler or G&T	6	5	4	80%	67%
	XMultiRegion				0%	
Municipal Total		99	81	71	82%	72%
Cooperative	Large	19	18	17	95%	89%
	Medium	20	16	15	80%	75%
	Small	18	14	12	80%	67%
	Wholesaler or G&T	59	47	40	80%	68%
	XMultiRegion					
Cooperative Total		116	96	84	82%	72%
Investor Owned	Large	109	98	103	90%	94%
	Medium	18	16	15	90%	83%
	Small	59	53	55	90%	93%
	Wholesaler or G&T	33	30	30	90%	91%
Investor Owned Total		219	197	203	90%	93%
Power Marketer	Large	10	6	6	60%	60%
	Medium	5	5	2	100%	40%
	Small	42	25	19	60%	45%
	Wholesaler or G&T	49	29	20	60%	41%
	XMultiRegion	59	35	33	60%	56%
Power Marketer Total		165	101	80	61%	48%
Political Subdivision	Large	7	7	6	100%	86%
	Medium	4	4	2	100%	50%
	Small	3	2	0	53%	0%
	Wholesaler or G&T	25	20	15	80%	60%
Political Subdivision Total		39	33	23	84%	59%

Appendix F: The FERC Survey

Ownership	Size	Nbr of Orgs	Cell Response Goal	AMI Survey Section	Response Rate Goal	AMI Response Rate
Municipal Marketing Authority	Wholesaler or G&T	19	15	11	80%	58%
Municipal Marketing Authority Total	19	15	11	80%	58%	58%
CSP	Small	68	54	19	80%	28%
CSP Total		68	54	19	80%	28%
State	Large	2	2	2	100%	100%
	Medium	1	1	1	100%	100%
	Small	6	6	6	95%	100%
	Wholesaler or G&T	12	12	9	100%	75%
State Total		21	21	18	99%	86%
Federal	Small	6	6	4	100%	67%
	Wholesaler or G&T	3	3	2	100%	67%
Federal Total		9	9	6	100%	67%
RTOs/ISOs	Small	7	6	6	80%	86%
RTOs/ISOs Total		7	6	6	80%	86%
Grand Total		762	612	521	80%	68%

Source: FERC Survey

Working with the Data

By analyzing entities that responded to each survey, 125 entities were identified to have responded to the 2004 EIA-861 survey, but not to the FERC Survey. In order to address the effect of this non-response, the demand response potential information provided by these 125 entities on their EIA Form 861 for the year 2004 was utilized to develop an estimate of the annual demand response resource contribution.⁹

Second, a number of respondents only provided information on a sub-set of the DR questions in the FERC Survey. These partial responses are particularly crucial in cases where respondents did not fill out the Potential Peak Reduction (PPR) and/or Annual Peak Reduction (APR) fields, thus omitting any estimate of existing demand response resource potential or actual performance in 2005. For example, a number of entities included only the number of customers enrolled in demand response programs or time-based tariffs and did not provide information on PPR. By comparing survey results for the EIA and FERC Survey, entities with about 3,500 MW of PPR (as reported in EIA-861 survey) reported only demand response program information on customer enrollment. This problem of partial response was particularly common for industrial customers enrolled in either time-of-use or real-time pricing tariffs.

⁹ This assumes that all the demand response programs/tariffs included in the EIA-861 survey in 2004 were continued without any changes in enrollment in 2005. Commission staff acknowledges that it is possible that a few entities may have discontinued the demand response programs/tariffs offered in 2004 by the time this report was complete.

To address this missing data issue, PPR values provided by an entity from the EIA Form 861 database were used to estimate resource contribution in cases where that entity did not report PPR values for a particular customer class in their FERC Survey response.¹⁰

Another notable data issue that Commission staff and Utilipoint addressed was the potential for over-reporting and the double-counting of PPR and enrolled DR load. On the matter of over-reporting, a number of entities reported in their response to the FERC Survey the same PPR values for commercial and industrial customers enrolled in a demand response program or time-based tariff. In these cases, FERC Survey respondents may have erroneously entered the total demand response resource for each program in both customer classes instead of splitting it appropriately. Based on the comments provided by FERC Survey respondents, about 200 MW of PPR may have been counted twice for commercial and industrial customers.

On the matter of double-counting, the possibility of utilities that reported PPR values for customers enrolled in DR programs that were offered (and also reported) by wholesale market entities like RTOs and ISOs may have resulted in “double-counted” DR resources in the raw data. Specifically, a number of entities appear to have provided data about DR resources that were essentially a part of the DR programs operated by their respective RTOs or ISOs. In cases where utilities specifically indicated that a DR program or tariff was linked to an RTO/ISO DR program, the PPR values of the respondent were adjusted to avoid double-counting. Data quality checks were also performed on all utility responses in those regions with ISOs and RTOs, which involved comparisons of information reported in the FERC Survey by ISO/RTOs on their DR programs with utility responses to the FERC Survey. Through this process, 3,222 MW of PPR is estimated to have been double-counted between utility and RTO/ISO DR programs. In developing an estimate of annual DR resource contribution, this “double-counting” resulted in demand response potential values being adjusted downward.

A final notable issue that is always present in surveys is data quality. A number of data quality checks were developed to assess reasonableness of survey responses on demand response resource potential. For example, a number of respondents did not notice that data about PPR, APR, and maximum demand of enrolled customers was requested in terms of megawatts and provided data in kilowatts.¹¹

¹⁰ Entities report PPR values by customer class on the EIA Form 861; hence, FERC aggregated survey responses by each entity to the customer class level in addressing missing data values for PPR (i.e., partial non-response).

¹¹ For cases where an entity’s PPR value looked suspiciously high (e.g. because it may have been reported in kW, not MW), FERC compared the demand response resource estimates for an entity with their annual peak demand as reported in the EIA-861 survey. For example, an entity with annual peak demand of 25 MW cannot report a demand response resource of 1,000 MW. Obviously, in this case, the demand response resource was reported in terms of kW instead of MW; and PPR values were adjusted accordingly.

Appendix F: The FERC Survey

Appendix G: FERC Survey Respondents*

Municipally Owned Utilities (986 Entities)

Adrian Public Utilities Comm (MN)	City of Abbeville (LA)	City of Beloit (KS)
Aitkin Public Utilities Comm (MN)	City of Abbeville (SC)	City of Benkelman (NE)
Albany Wtr Gas&Light Comm (GA)	City of Acworth (GA)	City of Benton (AR)
Algoma Utility Comm (WI)	City of Adel (GA)	City of Bentonville (AR)
Anchorage Municipal Light and Power (AK)	City of Alameda (CA)	City of Berea Municipal Utilities (KY)
Atlantic Municipal Utilities (IA)	City of Albany (MO)	City of Beresford (SD)
Austin Energy (TX)	City of Albion (ID)	City of Bethany (MO)
Bancroft Municipal Utilities (IA)	City of Alexander City (AL)	City of Big Stone City (SD)
Barton Village, Inc (VT)	City of Alexandria (MN)	City of Biggs (CA)
Beaver City Corporation (UT)	City of Algona (IA)	City of Black River Falls (WI)
Town of Benson (NC)	City of Alpha (MN)	City of Blackwell (OK)
Bloomer Electric & Water Co (WI)	City of Alta (IA)	City of Blaine (WA)
Board of Water Elec & Comm (IA)	City of Alta Vista (IA)	City of Blanding (UT)
Borough of Blakely (PA)	City of Altamont (KS)	City of Blooming Prairie (MN)
Borough of Butler (NJ)	City of Altamont (IL)	City of Blue Earth (MN)
Borough of Catawissa (PA)	City of Altus (OK)	City of Blue Hill (NE)
Borough of Chambersburg (PA)	City of Ames (IA)	City of Bluffton (IN)
Borough of Duncannon (PA)	City of Anaheim (CA)	City of Bonners Ferry (ID)
Borough of Ellwood City (PA)	City of Anderson (IN)	City of Boscobel (WI)
Borough of Goldsboro (PA)	City of Anita (IA)	City of Bountiful (UT)
Borough of Grove City (PA)	City of Ansley (NE)	City of Bowie (TX)
Borough of Hatfield (PA)	City of Anthony (KS)	City of Bowling Green (OH)
Borough of Lewisberry (PA)	City of Arcadia (WI)	City of Brady (TX)
Borough of Milltown (NJ)	City of Arcanum (OH)	City of Breese (IL)
Borough of New Wilmington (PA)	City of Argyle (WI)	City of Bristol (TN)
Borough of Olyphant (PA)	City of Arlington (SD)	City of Broken Bow (NE)
Borough of Pemberton (NJ)	City of Ashland (KS)	City of Bronson (KS)
Borough of Perkasié (PA)	City of Attica (KS)	City of Brookings (SD)
Borough of Royalton (PA)	City of Auburn (IA)	City of Brooklyn (IA)
Borough of Smethport (PA)	City of Augusta (KS)	City of Brownfield (TX)
Borough of St Clair (PA)	City of Aurora (SD)	City of Brownton (MN)
Borough of Wampum (PA)	City of Axtell (KS)	City of Brundidge (AL)
Borough of Watsonstown (PA)	City of Aztec (NM)	City of Bryan (TX)
Borough of Zelienople (PA)	City of Azusa (CA)	City of Buffalo (MN)
Bozrah Light & Power Co (CT)	City of Baldwin City (KS)	City of Buffalo (IA)
Brainerd Public Utilities (MN)	City of Bangor (WI)	City of Buford (GA)
Bremen Elec Light & Power Co (IN)	City of Bardwell (KY)	City of Burbank (CA)
Bristol Virginia Utilities (VA)	City of Barnesville (MN)	City of Burley (ID)
Brodhead Water & Light Comm (WI)	City of Barron (WI)	City of Burlington (KS)
Brownsville Pub Utilities Board (TX)	City of Bastrop (TX)	City of Burlington (CO)
Cairo Public Utility Company (IL)	City of Battle Creek (NE)	City of Burwell (NE)
Canton Municipal Utilities (MS)	City of Baudette (MN)	City of Bushnell (IL)
Carrollton Board of Public Wks (MO)	City of Bay City (MI)	City of Bushnell (FL)
Cascade Municipal Utilities (IA)	City of Bayard (NE)	City of Butler (MO)
Cedar Falls Utilities (IA)	City of Beatrice (NE)	City of Caldwell (TX)
Cedarburg Light & Wtr Comm (WI)	City of Bedford (VA)	City of Calhoun (GA)
Chillicothe Municipal Utils (MO)	City of Belleville (KS)	City of California (MO)
City & Cnty of San Francisco (CA)	city of Bellville (TX)	City of Camden (SC)

Municipally Owned Utilities (Cont'd)

City of Cameron (MO)	City of Dayton (IA)	City of Farmersville (TX)
City of Campbell (MO)	City of Deaver (WY)	City of Farmington (NM)
City of Carlyle (IL)	City of Declo (ID)	City of Farnhamville (IA)
City of Carmi (IL)	City of Denison (IA)	City of Fayette (MO)
City of Cartersville (GA)	City of Detroit (MI)	City of Fennimore (WI)
City of Carthage (MO)	City of Detroit Lakes (MN)	City of Flandreau (SD)
City of Casey (IL)	City of Dighton (KS)	City of Floresville (TX)
City of Castroville (TX)	City of Doerun (GA)	City of Floydada (TX)
City of Cavalier (ND)	City of Dothan (AL)	City of Fonda (IA)
City of Celina (OH)	City of Dover (DE)	City of Forest Grove (OR)
City of Center (CO)	City of Dover (OH)	City of Fort Collins (CO)
City of Central City (NE)	City of Duncan (OK)	City of Fountain (CO)
City of Centralia (MO)	City of Dunnell (MN)	City of Franklin (VA)
City of Centralia (WA)	City of Dysart (IA)	City of Fredericktown (MO)
City of Chanute (KS)	City of Eagle River (WI)	City of Fredonia (AZ)
City of Chappell (NE)	City of Earlville (IA)	City of Gaffney (SC)
City of Charlevoix (MI)	City of Easton (MO)	City of Galion (OH)
City of Chattahoochee (FL)	City of Eaton Rapids (MI)	City of Gallup (NM)
City of Cheformak (AK)	City of Edmond (OK)	City of Galva (KS)
City of Cheney (WA)	City of Eitzen (MN)	City of Garden City (KS)
City of Chewelah (WA)	City of El Dorado Springs (MO)	City of Gardner (KS)
City of Chicopee (MA)	City of Elba (AL)	City of Garnett (KS)
City of Chignik (AK)	City of Electra (TX)	City of Garrett (IN)
City of Claremore (OK)	City of Elfin Cove (AK)	City of Gas City (IN)
City of Clewiston (FL)	City of Elizabethton (TN)	City of Gastonia (NC)
City of Clintonville (WI)	City of Elk Point (SD)	City of Geary (OK)
City of Coggon (IA)	City of Elk River (MN)	City of Geneseo (IL)
City of Colby (KS)	City of Elkhorn (WI)	City of Georgetown (TX)
City of Coleman (TX)	City of Ellaville (GA)	City of Gering (NE)
City of College Station (TX)	City of Ellensburg (WA)	City of Giddings (TX)
City of Collins (MS)	City of Ellsworth (IA)	City of Gillette (WY)
City of Colorado Springs (CO)	City of Elroy (WI)	City of Gilman City (MO)
City of Columbia (MO)	City of Elsmore (KS)	City of Girard (KS)
City of Columbia City (IN)	City of Elwood (KS)	City of Gladstone (MI)
City of Columbus (WI)	City of Emerson (NE)	City of Glasco (KS)
City of Commerce (GA)	City of Enterprise (UT)	City of Glen Elder (KS)
City of Cornelius (NC)	City of Enterprise (KS)	City of Glenwood Springs (CO)
City of Cornell (WI)	City of Erie (KS)	City of Glidden (IA)
City of Corning (IA)	City of Escanaba (MI)	City of Goldsmith (TX)
City of Covington (IN)	City of Escondido (CA)	City of Goldthwaite (TX)
City of Crane (MO)	City of Estelline (SD)	City of Goodland (KS)
City of Croswell (MI)	City of Estherville (IA)	City of Gothenburg (NE)
City of Crystal Falls (MI)	City of Eudora (KS)	City of Grafton (ND)
City of Cuba City (WI)	City of Eugene (OR)	City of Granbury (TX)
City of Cuero (TX)	City of Fairbury (NE)	City of Grand Haven (MI)
City of Cumberland (WI)	City of Fairfax (MN)	City of Grand Island (NE)
City of Curtis (NE)	City of Fairhope (AL)	City of Grand Junction (IA)
City of Cushing (OK)	City of Faith (SD)	City of Grand Marais (MN)
City of Cuyahoga Falls (OH)	City of Falls City (NE)	City of Granite (OK)
City of Danville (VA)	City of Falmouth (KY)	City of Granite Falls (MN)
City of David City (NE)	City of Farmer City (IL)	City of Green Cove Springs (FL)

Municipally Owned Utilities (Cont'd)

City of Greendale (IN)	City of Jackson (GA)	City of Lincoln Center (KS)
City of Greenfield (IA)	City of Jackson (TN)	City of Lindsborg (KS)
City of Greensburg (KS)	City of Jacksonville Beach (FL)	City of Linton (IN)
City of Groton (SD)	City of Jasper (IN)	City of Livingston (TX)
City of Guttenberg (IA)	City of Jetmore (KS)	City of Lodi (CA)
City of Hallettsville (TX)	City of Jewett City (CT)	City of Lodi (WI)
City of Halstad (MN)	City of Jonesville (LA)	City of Logan (UT)
City of Hannibal (MO)	City of Kansas City (KS)	City of Logansport (IN)
City of Harrisonburg (VA)	City of Kaukauna (WI)	City of Lompoc (CA)
City of Hart Hydro (MI)	City of Kiel (WI)	City of Long Grove (IA)
City of Hartley (IA)	City of Kimball (NE)	City of Los Angeles (CA)
City of Hastings (NE)	City of Kimballton (IA)	City of Lowell (MI)
City of Haven (KS)	City of King Cove (AK)	City of Lubbock (TX)
City of Hawarden (IA)	City of Kingman (KS)	City of Luverne (MN)
City of Hebron (NE)	City of Kings Mountain (NC)	City of Mabel (MN)
City of Hecla (SD)	City of Kinston (NC)	City of Macon (MO)
City of Helper (UT)	City of Kirkwood (MO)	City of Maddock (ND)
City of Hempstead (TX)	City of Kotlik (AK)	City of Madelia (MN)
City of Henning (MN)	City of La Crosse (KS)	City of Madison (NE)
City of Hermann (MO)	City of La Grange (GA)	City of Madison (SD)
City of Hermiston (OR)	City of La Junta (CO)	City of Malden (MO)
City of Heyburn (ID)	City of Lafayette (AL)	City of Mangum (OK)
City of Hickman (NE)	City of Lafayette (LA)	City of Manitou (OK)
City of Higginsville (MO)	City of LaFayette (GA)	City of Mankato (KS)
City of Highland (IL)	City of Lake Crystal (MN)	City of Mansfield (MO)
City of Highlands (NC)	City of Lake Mills (IA)	City of Mansfield (GA)
City of Hill City (KS)	City of Lake View (IA)	City of Manti (UT)
City of Hinton (IA)	City of Lake Worth (FL)	City of Maquoketa (IA)
City of Holland (MI)	City of Lakeland (FL)	City of Marietta (GA)
City of Holton (KS)	City of Lakin (KS)	City of Marion (KS)
City of Holyoke (MA)	City of Lamar (MO)	City of Marshall (MO)
City of Holyrood (KS)	City of Lamar (CO)	City of Marshall (IL)
City of Homestead (FL)	City of Lamoni (IA)	City of Marshall (MN)
City of Hominy (OK)	City of Lampasas (TX)	City of Marshall (MI)
City of Hope (AR)	City of Lanett (AL)	City of Martinsville (VA)
City of Hopkinton (IA)	City of Lansing (MI)	City of Mascoutah (IL)
City of Horton (KS)	City of Las Animas (CO)	City of Mason (TX)
City of Houston (MO)	City of Laurel (NE)	City of McCleary (WA)
City of Howard (SD)	City of Laurens (IA)	City of McGregor (IA)
City of Hubbard (OH)	City of Laurens (SC)	City of McLaughlin (SD)
City of Hudson (OH)	City of Laurinburg (NC)	City of McLeansboro (IL)
City of Hudson (IA)	City of Lawrenceville (GA)	City of McPherson (KS)
City of Hugoton (KS)	City of Lebanon (MO)	City of Medford (WI)
City of Hunnewell (MO)	City of Lebanon (IN)	City of Memphis (MO)
City of Imperial (NE)	City of Lebanon (OH)	City of Menasha (WI)
City of Independence (MO)	City of Leesburg (FL)	City of Mendon (OH)
City of Independence (IA)	City of Lewes (DE)	City of Mesa (AZ)
City of Indianola (NE)	City of Lexington (OK)	City of Metropolis (IL)
City of Iola (KS)	City of Lexington (NE)	City of Milford (DE)
City of Jackson (MO)	City of Lexington (TX)	City of Milford (IA)
City of Jackson (MN)	City of Liberal (MO)	City of Milton (WA)

Municipally Owned Utilities (Cont'd)

City of Milton-Freewater (OR)	City of Ogden (IA)	City of Richland Center (WI)
City of Minden (LA)	City of Oglesby (IL)	City of Richmond (IN)
City of Mishawaka (IN)	City of Orange City (IA)	City of Rising Sun (IN)
City of Mitchell (NE)	City of Orangeburg (SC)	City of River Falls (WI)
City of Monroe (UT)	City of Orrville (OH)	City of Riverside (CA)
City of Monroe (NC)	City of Ortonville (MN)	City of Robertsdale (AL)
City of Monroe City (MO)	City of Osage (IA)	City of Robinson (KS)
City of Montezuma (IA)	City of Osborne (KS)	City of Rockport (MO)
City of Montezuma (KS)	City of Ouzinkie (AK)	City of Rocky Mount (NC)
City of Moorhead (MN)	City of Owatonna (MN)	City of Rolla (MO)
City of Mora (MN)	City of Owensboro (KY)	City of Roodhouse (IL)
City of Moran (KS)	City of Oxford (KS)	City of Roseville (CA)
City of Morgan City (UT)	City of Painesville (OH)	City of Rushmore (MN)
City of Morrill (KS)	City of Palmetto (GA)	City of Sabetha (KS)
City of Mount Vernon (MO)	City of Palmyra (MO)	City of Saint Peter (MN)
City of Mountain Iron (MN)	City of Palo Alto (CA)	City of Salamanca (NY)
City of Mountain Lake (MN)	City of Paris (MO)	City of Salem (VA)
City of Mountain View (MO)	City of Parker (SD)	City of Salisbury (MO)
City of Mt Pleasant (IA)	City of Paullina (IA)	City of Sallisaw (OK)
City of Mulberry (KS)	City of Pawhuska (OK)	City of San Antonio (TX)
City of Mulvane (KS)	City of Peabody (MA)	City of San Saba (TX)
City of Murray (UT)	City of Pella (IA)	City of Sanborn (IA)
City of Muscoda (WI)	City of Perry (MO)	City of Sandersville (GA)
City of Muscotah (KS)	City of Perry (OK)	City of Sargent (NE)
City of Naperville (IL)	City of Petoskey (MI)	City of Savonburg (KS)
City of Nebraska City (NE)	City of Piggott (AR)	City of Schuyler (NE)
City of Needles (CA)	City of Piqua (OH)	City of Scribner (NE)
City of Neodesha (KS)	City of Plankinton (SD)	City of Seaford (DE)
City of Neola (IA)	City of Plattsburgh (NY)	City of Seattle (WA)
City of New Braunfels (TX)	City of Plymouth (WI)	City of Seguin (TX)
City of New Hampton (IA)	City of Pocahontas (IA)	City of Seneca (KS)
City of New Holstein (WI)	City of Pomona (KS)	City of Sergeant Bluff (IA)
City of New Lisbon (WI)	City of Poplar Bluff (MO)	City of Seward (NE)
City of New Martinsville (WV)	City of Port Angeles (WA)	City of Seymour (TX)
City of New Richmond (WI)	City of Portland (MI)	City of Shasta Lake (CA)
City of New Smyrna Beach (FL)	City of Powell (WY)	City of Sheboygan Falls (WI)
City of Newberry (FL)	City of Pratt (KS)	City of Shelby (OH)
City of Newburg (MO)	City of Preston (IA)	City of Shelly (MN)
City of Newfolden (MN)	City of Princeton (IL)	City of Shiner (TX)
City of Newkirk (OK)	City of Pryor (OK)	City of Shullsburg (WI)
City of Newton (IL)	City of Radford (VA)	City of Sikeston (MO)
City of Nielsville (MN)	City of Randall (MN)	City of Sioux Center (IA)
City of Niles (MI)	City of Rayne (LA)	City of Sioux Falls (SD)
City of Nixa (MO)	City of Red Bud (IL)	City of Slater (MO)
City of North Little Rock (AR)	City of Red Cloud (NE)	City of Snyder (NE)
City of North St Paul (MN)	City of Redding (CA)	City of Soda Springs (ID)
City of Northwood (ND)	City of Remsen (IA)	City of South Norwalk (CT)
City of Norway (MI)	City of Rensselaer (IN)	City of Spencer (NE)
City of Norwood (MA)	City of Renwick (IA)	City of Springfield (IL)
City of Oakley (KS)	City of Rich Hill (MO)	City of Springfield (OR)
City of Oberlin (KS)	City of Richland (WA)	City of Springville (UT)
City of Odessa (MO)	City of Richland (MO)	City of St Clairsville (OH)

Municipally Owned Utilities (Cont'd)

City of St George (UT)	City of Waseca (MN)	Foley Board of Utilities (AL)
City of St James (MN)	City of Washington (GA)	Fort Pierce Utilities Auth (FL)
City of St James (MO)	City of Washington (NC)	Glencoe Light & Power Comm (MN)
City of St John (KS)	City of Washington (KS)	Grafton Electric (IA)
City of St Martinville (LA)	City of Waterloo (IL)	Grand Rapids Pub Util Comm (MN)
City of St Marys (KS)	City of Watertown (NY)	Greenwood Utilities Comm (MS)
City of St Marys (OH)	City of Wathena (KS)	Groton Dept of Utilities (CT)
City of St Paul (NE)	City of Watonga (OK)	Grundy Center Mun Light & Power (IA)
City of Stanhope (IA)	City of Waynetown (IN)	Hartford Electric (WI)
City of Stanton (IA)	City of Webster City (IA)	Havana Power & Light Company (FL)
City of Staples (MN)	City of Weimar (TX)	Hawley Public Utilities Comm (MN)
City of Steelville (MO)	City of Weiser (ID)	Heber Light & Power Company (UT)
City of Stephen (MN)	City of Wellington (KS)	Henderson City Utility Comm (KY)
City of Stephenson (MI)	City of Wells (MN)	Hillsdale Board of Public Wks (MI)
City of Stockton (KS)	City of Wessington Springs (SD)	Hooversville Boro Elec Lgt Co (PA)
City of Story City (IA)	City of West Bend (IA)	Hurricane Power Committee (UT)
City of Stoughton (WI)	City of West Liberty (IA)	Hustisford Utilities (WI)
City of Strawberry Point (IA)	City of West Memphis (AR)	Hutchinson Utilities Comm (MN)
City of Stromsburg (NE)	City of West Point (NE)	Indianola Municipal Utilities (IA)
City of Stroud (OK)	City of West Point (GA)	Jacksonville Electric Authority (FL)
City of Stuart (NE)	City of Westby (WI)	Jefferson Utilities (WI)
City of Stuart (IA)	City of Westerville (OH)	Juneau Utility Comm (WI)
City of Sturgeon Bay (WI)	City of Whigham (GA)	Kaysville City Corporation (UT)
City of Sullivan (IL)	City of White (SD)	Keewatin Public Utilities (MN)
City of Sutton (NE)	City of Williamsport (IN)	Kenyon Municipal Utilities (MN)
City of Syracuse (NE)	City of Williston (FL)	Ketchikan Public Utilities (AK)
City of Tallahassee (FL)	City of Winfield (KS)	Kissimmee Utility Authority (FL)
City of Taunton (MA)	City of Winthrop (MN)	La Farge Municipal Electric Co (WI)
City of Tecumseh (NE)	City of Wisner (NE)	La Porte City Utilities (IA)
City of Thayer (MO)	City of Wood River (NE)	Lake Mills Light & Water (WI)
City of Thief River Falls (MN)	City of Worthington (MN)	Lake Placid Village, Inc (NY)
City of Thorntown (IN)	City of Wray (CO)	Lawrenceburg Municipal Utils (IN)
City of Tipton (IA)	City of Wynnewood (OK)	Lehi City Corporation (UT)
City of Toronto (KS)	City of Zeeland (MI)	Lincoln Electric System (NE)
City of Traer (IA)	City Water and Light Plant (AR)	Litchfield Public Utilities (MN)
City of Trinidad (CO)	Clarksdale Public Utilities (MS)	Manitowoc Public Utilities (WI)
City of Truth or Consequences (NM)	Clarksville Light & Water Co (AR)	Melrose Public Utilities (MN)
City of Tuskegee (AL)	Clinton Combined Utility Sys (SC)	Mohawk Municipal Comm (NY)
City of Tyler (MN)	Coldwater Board of Public Util (MI)	Monroe Water, Light & Gas Comm (GA)
City of Tyndall (SD)	Conway Corporation (AR)	Mont Alto Borough (PA)
City of Unalaska (AK)	Corbin City Utilities Comm (KY)	Moose Lake Water & Light Comm (MN)
City of Union (SC)	Cozad Board of Public Works (NE)	Nashville Electric Service (TN)
City of Unionville (MO)	Crawfordsville Elec, Lgt & Pwr (IN)	Nephi City Corporation (UT)
City of Vandalia (MO)	Delano Municipal Utilities (MN)	New Castle Municipal Serv Comm (DE)
City of Vermillion (SD)	East Bay Municipal Util Dist (CA)	New London Electric&Water Util (WI)
City of Vernon (CA)	Easton Utilities Comm (MD)	New Prague Utilities Comm (MN)
City of Vero Beach (FL)	Fairmont Public Utilities Comm (MN)	Newnan Wtr, Sewer & Light Comm (GA)
City of Vineland (NJ)	Fairview City Corporation (UT)	Nome Joint Utility Systems (AK)
City of Vinton (IA)	Fillmore City Corporation (UT)	North Branch Water & Light Comm (MN)
City of Volga (SD)	Fitzgerald Wtr Lgt&Bond Com (GA)	North Slope Borough Power & Light (AK)
City of Wadena (MN)	Flora Utilities (IN)	Norwalk Third Taxing District (CT)
City of Wamego (KS)	Florence Utility Comm (WI)	Oconomowoc Utilities (WI)

Municipally Owned Utilities (Cont'd)

Oconto Falls Water & Light Comm (WI)	Town of Concord (MA)	Town of Sterling (MA)
Orlando Utilities Comm (FL)	Town of Culpeper (VA)	Town of Stowe (VT)
Page Electric Utility (AZ)	Town of Enfield (NC)	Town of Straughn (IN)
Paragould Light & Water Comm (AR)	Town of Etna Green (IN)	Town of Summerfield (KS)
Parowan City Corporation (UT)	Town of Ferdinand (IN)	Town of Veedersburg (IN)
Payson City Corporation (UT)	Town of Fleming (CO)	Town of Wakefield (MA)
Philippi Municipal Electric (WV)	Town of Forest City (NC)	Town of Wakefield (VA)
Precinct of Woodsville (NH)	Town of Frederick (CO)	Town of Walstonburg (NC)
Princeton Public Utils Comm (MN)	Town of Front Royal (VA)	Town of Waynesville (NC)
Proctor Public Utilities Comm (MN)	Town of Groveland (MA)	Town of Welsh (LA)
Pub Wrks Comm-Fayetteville (NC)	Town of Guernsey (WY)	Town of Winamac (IN)
PUD No 1 of Asotin County (WA)	Town of Gueydan (LA)	Town of Winnsboro (SC)
Raton Public Service Com (NM)	Town of Hardwick (VT)	Turlock Irrigation District (CA)
Redwood Falls Pub Util Comm (MN)	Town of Haxtun (CO)	Two Rivers Water & Light (WI)
Reedsburg Utility Comm (WI)	Town of High Point (NC)	Van Buren Light & Power Dist (ME)
Rice Lake Utilities (WI)	Town of Hudson (MA)	Village of Andover (NY)
Rochester Public Utilities (MN)	Town of Hull (MA)	Village of Angelica (NY)
Rock Rapids Municipal Utility (IA)	Town of Huntersville (NC)	Village of Arcadia (OH)
Salem City Corporation (UT)	Town of Jamestown (IN)	Village of Arnold (NE)
Shawano Municipal Utilities (WI)	Town of Knightstown (IN)	Village of Baraga (MI)
Slinger Utilities (WI)	Town of Laverne (OK)	Village of Bartley (NE)
South Vienna Corporation (OH)	Town of Littleton (NH)	Village of Belmont (WI)
Spanish Fork City Corporation (UT)	Town of Louisburg (NC)	Village of Benton (WI)
Spring City Corporation (UT)	Town of Lusk (WY)	Village of Bergen (NY)
Spring Valley Pub Utils Comm (MN)	Town of Lyons (CO)	Village of Bethany (IL)
Stillwater Utilities Authority (OK)	Town of Madison (ME)	Village of Bethel (OH)
Sun Prairie Wtr & Light Comm (WI)	Town of Maiden (NC)	Village of Black Earth (WI)
Tatitlek Electric Utility (AK)	Town of Mannford (OK)	Village of Boonville (NY)
Terrebonne Parish Consol Gv't (LA)	Town of Mansfield (MA)	Village of Bradshaw (NE)
Texas Municipal Power Agency (TX)	Town of Massena (NY)	Village of Brocton (NY)
Tipton Municipal Electric Util (IN)	Town of McCormick (SC)	Village of Callaway (NE)
Town of Advance (IN)	Town of Merrimac (MA)	Village of Carey (OH)
Town of Apex (NC)	Town of Middleborough (MA)	Village of Castile (NY)
Town of Argos (IN)	Town of Middletown (IN)	Village of Chatham (IL)
Town of Ashburnham (MA)	Town of Middletown (DE)	Village of Chelsea (MI)
Town of Ashland (NH)	Town of Montezuma (IN)	Village of Chester (NE)
Town of Avilla (IN)	Town of North Attleborough (MA)	Village of Clinton (MI)
Town of Bainbridge (IN)	Town of Oak City (UT)	Village of Davenport (NE)
Town of Basin (WY)	Town of Oak Creek (CO)	Village of Decatur (NE)
Town of Belhaven (MD)	Town of Paragonah (UT)	Village of Deshler (OH)
Town of Belmont (MA)	Town of Pendleton (IN)	Village of Endicott (NY)
Town of Black Creek (NC)	Town of Pinetops (NC)	Village of Endicott (NE)
Town of Bostic (NC)	Town of Pineville (NC)	Village of Enosburg Falls (VT)
Town of Boyce (LA)	Town of Reading (MA)	Village of Fairport (NY)
Town of Braintree (MA)	Town of Readsboro (VT)	Village of Freeburg (IL)
Town of Braman (OK)	Town of Rowley (MA)	Village of Grafton (OH)
Town of Brooklyn (IN)	Town of Shrewsbury (MA)	Village of Greene (NY)
Town of Brookston (IN)	Town of Smyrna (DE)	Village of Greenup (IL)
Town of Centerville (IN)	Town of South Hadley (MA)	Village of Gresham (WI)
Town of Chalmers (IN)	Town of South Whitley (IN)	Village of Hamilton (NY)
Town of Chester (MA)	Town of Spiceland (IN)	Village of Hampton (NE)
Town of Coatesville (IN)	Town of Spiro (OK)	Village of Hazel Green (WI)

Municipally Owned Utilities (Cont'd)

Village of Hemingford (NE)	Village of Northfield (VT)	Village of Talmage (NE)
Village of Hildreth (NE)	Village of Orleans (VT)	Village of Tontogany (OH)
Village of Holbrook (NE)	Village of Oxford (NE)	Village of Trempealeau (WI)
Village of Holley (NY)	Village of Pardeeville (WI)	Village of Tupper Lake (NY)
Village of Hyde Park (VT)	Village of Paw Paw (MI)	Village of Versailles (OH)
Village of Jacksonville (VT)	Village of Pemberville (OH)	Village of Walthill (NE)
Village of Johnson (VT)	Village of Philadelphia (NY)	Village of Waunakee (WI)
Village of Lakeview (OH)	Village of Prairie Du Sac (WI)	Village of Wauneta (NE)
Village of L'Anse (MI)	Village of Rantoul (IL)	Village of Waynesfield (OH)
Village of Little Valley (NY)	Village of Reynolds (NE)	Village of Wellsville (NY)
Village of Lodi (OH)	Village of Richmondville (NY)	Village of Yellow Springs (OH)
Village of Ludlow (VT)	Village of Rockville Centre (NY)	Wagoner Public Works Authority (OK)
Village of Lyman (NE)	Village of Rouses Point (NY)	Waterloo Light & Water Comm (WI)
Village of Lyndonville (VT)	Village of Sauk City (WI)	Watertown Municipal Utilities (SD)
Village of Marshallville (OH)	Village of Sherburne (NY)	Waupun Utilities (WI)
Village of Mayville (NY)	Village of Shickley (NE)	Waverly Municipal Elec Utility (IA)
Village of Mazomanie (WI)	Village of Shiloh (OH)	Weatherford Mun Utility System (TX)
Village of Merrillan (WI)	Village of Silver Springs (NY)	West Point Utility System (IA)
Village of Milan (OH)	Village of Skaneateles (NY)	Whitehall Electric Utility (WI)
Village of Minster (OH)	Village of Spencerport (NY)	Williamstown Utility Comm (KY)
Village of Morrisville (VT)	Village of Springville (NY)	Winner Municipal Utility (SD)
Village of Mt Horeb (WI)	Village of Stratford (WI)	Wonewoc Electric & Water Util (WI)
Village of New Glarus (WI)	Village of Swanton (VT)	

Cooperative Utilities (537 Entities)

A & N Electric Coop (VA)	Bartlett Electric Coop, Inc (TX)	Bridger Valley Elec Assn, Inc (WY)
Adams Electric Coop (IL)	Basin Electric Power Coop (ND)	Broad River Electric Coop, Inc (SC)
Adams Electric Cooperative Inc (PA)	Bayfield Electric Coop, Inc (WI)	Brown County Rural Elec Assn (MN)
Adams Rural Elec Coop, Inc (OH)	Beartooth Electric Coop, Inc (MT)	Brown-Atchison E C A Inc (KS)
Adams-Columbia Electric Coop (WI)	Beauregard Electric Coop, Inc (LA)	Brunswick Electric Member Corp (NC)
Aiken Electric Coop Inc (SC)	Bedford Rural Elec Coop, Inc (PA)	Buckeye Power, Inc (OH)
Alabama Electric Coop Inc (AL)	Belfalls Electric Coop, Inc (TX)	Buckeye Rural Elec Coop, Inc (OH)
Alfalfa Electric Coop, Inc (OK)	Beltrami Electric Coop, Inc (MN)	Burke-Divide Electric Coop Inc (ND)
Alger-Delta Coop Electric Assn (MI)	Big Bend Electric Coop, Inc (WA)	Butler County Rural Elec Coop (IA)
Allamakee-Clayton El Coop, Inc (IA)	Big Country Electric Coop, Inc (TX)	Butler Rural El Coop Assn, Inc (KS)
Allegheny Electric Coop Inc (PA)	Big Flat Electric Coop Inc (MT)	Butler Rural Electric Coop Inc (OH)
Altamaha Elec Member Corp (GA)	Big Horn Cnty Elec Coop, Inc (MT)	Butte Electric Coop, Inc (SD)
Amicalola Elec Member Corp (GA)	Big Horn Rural Electric Co (WY)	C & L Electric Coop Corp (AR)
Anoka Electric Coop (MN)	Big Rivers Electric Corp (KY)	Caddo Electric Coop, Inc (OK)
Appalachian Electric Coop (TN)	Big Sandy REC Corp (KY)	Calhoun County Elec Coop Assn (IA)
Arizona Electric Pwr Coop Inc (AZ)	Black Hills Electric Coop, Inc (SD)	Callaway Electric Cooperative (MO)
Ark Valley Elec Coop Assn, Inc (KS)	Black River Electric Coop, Inc (SC)	Cam Wal Electric Coop, Inc (SD)
Arkansas Electric Coop Corp (AR)	Black Warrior Elec Mem Corp (AL)	Canadian Valley Elec Coop, Inc (OK)
Arkansas Valley E C Corp (AR)	Blue Grass Energy Coop Corp (KY)	Canoochee Electric Member Corp (GA)
Arrowhead Electric Coop, Inc (MN)	Blue Ridge Electric Coop Inc (SC)	Cape Hatteras Elec Member Corp (NC)
Ashley Chicot Elec Coop, Inc (AR)	Bluestem Electric Coop Inc (KS)	Capital Electric Coop, Inc (ND)
Associated Electric Coop, Inc (MO)	Boone County Rural EMC (IN)	Carbon Power & Light, Inc (WY)
Atchison-Holt Electric Coop (MO)	Boone Electric Coop (MO)	Carroll Electric Coop, Inc (OH)
Bailey County Elec Coop Assn (TX)	Bowie-Cass Electric Coop, Inc (TX)	Carroll Electric Member Corp (GA)
Bartholomew Cnty Rural E M C (IN)	Brazos Electric Power Coop Inc (TX)	Carteret-Craven El Member Corp (NC)

Cooperative Utilities (Cont'd)

Cass County Electric Coop Inc (ND)	Consumers Energy (IA)	Fairfield Electric Coop, Inc (SC)
Cass Electric Coop (IA)	Consumers Power, Inc (OR)	Fannin County Electric Coop (TX)
Central Alabama Electric Coop (AL)	Continental Divide El Coop Inc (NM)	Farmers Electric Company, Ltd (ID)
Central Electric Coop Inc (OR)	Cooke County Elec Coop Assn (TX)	Farmers Electric Coop Corp (AR)
Central Electric Coop, Inc (PA)	Cookson Hills Elec Coop, Inc (OK)	Farmers Electric Coop, Inc (IA)
Central Electric Coop, Inc (SD)	Coop L&P Assn Lake Cnty (MN)	Farmers Electric Coop, Inc (TX)
Central Electric Mem Corp (NC)	Coosa Valley Electric Coop Inc (AL)	Farmers' Electric Coop, Inc (NM)
Central Electric Power Coop (MO)	Coos-Curry Electric Coop, Inc (OR)	Farmers' Electric Coop, Inc (MO)
Central Electric Pwr Coop, Inc (SC)	Copper Valley Elec Assn, Inc (AK)	Farmers Mutual Electric Co (IL)
Central Florida Elec Coop, Inc (FL)	Cordova Electric Coop, Inc (AK)	Farmers Rural Electric Coop Corp (KY)
Central Iowa Power Cooperative (IA)	Corn Belt Energy Corporation (IL)	Federated Rural Electric Assn (MN)
Central New Mexico EC, Inc (NM)	Corn Belt Power Coop (IA)	First Electric Coop Corp (AR)
Central Rural Elec Coop, Inc (OK)	Coweta-Fayette El Mem Corp (GA)	Flathead Electric Coop Inc (MT)
Central Valley Elec Coop, Inc (NM)	Craig-Botetourt Electric Coop (VA)	Fleming-Mason Energy Coop Inc (KY)
Central Virginia Electric Coop (VA)	Crow Wing Coop Pwr&Lght Co (MN)	Flint Electric Membership Corp (GA)
Chariton Valley Elec Coop, Inc (IA)	Cuivre River Electric Coop Inc (MO)	Flint Hills Rural E C A, Inc (KS)
Charles Mix Electric Assn, Inc (SD)	Cumberland Valley Rural E C C (KY)	Florida Keys El Coop Assn, Inc (FL)
Cherryland Electric Coop Inc (MI)	Dairyland Power Coop (WI)	Fort Belknap Electric Coop Inc (TX)
Chippewa Valley Electric Coop (WI)	Dakota Electric Association (MN)	Fox Islands Electric Coop, Inc (ME)
Choctawhatche Elec Coop, Inc (FL)	Dakota Energy Coop Inc (SD)	Franklin Rural Electric Cooperative (IA)
Choptank Electric Coop, Inc (MD)	Dakota Valley Elec Coop Inc (ND)	French Broad Elec Member Corp (NC)
Chugach Electric Assn Inc (AK)	Daviess Martin County R E M C (IN)	Frontier Power Company (OH)
City of Salem (OR)	Deaf Smith Electric Coop, Inc (TX)	Fulton County Rural E M C (IN)
Clark County Rural E M C (IN)	Decatur County Rural E M C (IN)	Garkane Energy Coop, Inc (UT)
Clark Energy Coop Inc (KY)	Delaware Cnty Elec Coop Inc (NY)	Gascosage Electric Coop (MO)
Clarke Electric Coop Inc (IA)	Delaware Electric Cooperative (DE)	Georgia Transmission Corp (GA)
Claverack Rural Elec Coop Inc (PA)	Denton County Elec Coop, Inc (TX)	Glidden Rural Electric Coop (IA)
Clay County Elec Coop Corp (AR)	Deseret Gen & Tran Coop (UT)	Golden Spread Elec Coop, Inc (TX)
Clay Electric Cooperative, Inc (FL)	Diverse Power Incorporated (GA)	Golden Valley Elec Assn Inc (AK)
Clearwater Power Company (ID)	Dixie Electric Coop (AL)	Goldenwest Electric Coop, Inc (MT)
Clearwater-Polk Elec Coop Inc (MN)	Dixie Electric Power Assn (MS)	Graham County Electric Coop Inc (AZ)
Cloverland Electric Co-op (MI)	Dixie Escalante R E A, Inc (UT)	Grand Electric Coop, Inc (SD)
Coahoma Electric Power Assn (MS)	Douglas Electric Coop, Inc (SD)	Grand Valley Rrl Pwr Line, Inc (CO)
Coastal Electric Coop, Inc (SC)	Douglas Electric Coop, Inc (OR)	Grayson Rural Electric Coop Corp (KY)
Coastal Electric Member Corp (GA)	Dubois Rural Electric Coop Inc (IN)	Great Lakes Energy Coop (MI)
Cobb Electric Membership Corp (GA)	Duncan Valley Elec Coop, Inc (AZ)	Great River Energy (MN)
Codington-Clark Elec Coop, Inc (SD)	East Central OK Elec Coop Inc (OK)	GreyStone Power Corporation (GA)
Coleman County E C, Inc (TX)	East Kentucky Power Coop, Inc (KY)	Grundy County Rural Elec Coop (IA)
Coles-Moultrie Electric Coop (IL)	East River Elec Pwr Coop, Inc (SD)	Grundy Electric Coop, Inc (MO)
Colquitt Electric Mem Corp (GA)	East Texas Electric Coop, Inc (TX)	Guernsey-Muskingum El Coop Inc (OH)
Columbia Basin Elec Coop., Inc (OR)	East-Central Iowa REC (IA)	Gunnison County Elec Assn. (CO)
Columbia Power Coop Assn Inc (OR)	Eastern Illinois Elec Coop (IL)	Guthrie County Rural E C A (IA)
Columbus Electric Coop, Inc (NM)	Eastern Iowa Light & Pwr Coop (IA)	Habersham Electric Membership Corp (GA)
Comanche Cnty E C Assn (TX)	Eau Claire Electric Coop (WI)	Hamilton County Elec Coop Assn (TX)
Community Electric Coop (VA)	Edisto Electric Coop, Inc (SC)	Hancock County Rural E M C (IN)
Co-Mo Electric Coop Inc (MO)	Egyptian Electric Coop Assn (IL)	Harkers Island El Member Corp (NC)
Concho Valley Elec Coop Inc (TX)	Elmhurst Mutual Pwr&Light Co (WA)	Harrison County Rrl Elec Coop (IA)
Consolidated Electric Coop (MO)	EnergyUnited EMC (NC)	Hart Electric Member Corp (GA)
Consolidated Electric Coop Inc (OH)	Excelsior Electric Mem Corp (GA)	Haywood Electric Member Corp (NC)

Cooperative Utilities (Cont'd)

H-D Electric Coop Inc (SD)	Kotzebue Electric Assn Inc (AK)	Midwest Electric, Inc (OH)
Heartland Power Coop (IA)	L & O Power Co-operative (IA)	Midwest Energy Cooperative (MI)
Heartland Rural Elec Coop, Inc (KS)	La Plata Electric Assn, Inc (CO)	Midwest Energy Inc (KS)
Henry County Rural E M C (IN)	Laclede Electric Coop, Inc (MO)	Mid-Yellowstone Elec Coop, Inc (MT)
High Plains Power Inc (WY)	LaCreek Electric Assn, Inc (SD)	Mille Lacs Electric Coop (MN)
High West Energy, Inc (WY)	Lake Region Coop Elec Assn (MN)	Minn Valley Coop L&P Assn (MN)
Highline Electric Assn (CO)	Lake Region Electric Assn, Inc (SD)	Minnesota Valley Electric Coop (MN)
HILCO Electric Coop, Inc. (TX)	Lakeview Light & Power (WA)	Minnkota Power Coop, Inc (ND)
Hill County Electric Coop, Inc (MT)	Lamar County Elec Coop Assn (TX)	Missouri Rural Electric Coop (MO)
Holmes-Wayne Elec Coop Inc (OH)	Lamar Elec Membership Corp (GA)	Modern Electric Water Company (WA)
Hood River Electric Coop (OR)	Lane Electric Coop Inc (OR)	Monroe County Elec Coop, Inc (IL)
Hoosier Energy R E C, Inc (IN)	Lane-Scott Electric Coop, Inc (KS)	Moon Lake Electric Assn Inc (UT)
Horry Electric Coop Inc (SC)	Laurens Electric Coop, Inc (SC)	Mora-San Miguel Elec Coop, Inc (NM)
Houston County Elec Coop Inc (TX)	Lea County Electric Coop, Inc (NM)	Morgan County Rural Elec Assn (CO)
Howell-Oregon Elec Coop, Inc (MO)	Leavenworth-Jefferson E C, Inc (KS)	Mt Wheeler Power, Inc (NV)
Humboldt County R E C (IA)	Lee County Electric Coop, Inc (FL)	N W Electric Power Coop, Inc (MO)
Idaho Cnty L&P Coop Assn, Inc (ID)	Licking Rural Electric Inc (OH)	Navasota Valley Elec Coop, Inc (TX)
Illinois Rural Electric Coop (IL)	Lighthouse Electric Coop, Inc (TX)	Navopache Electric Coop, Inc (AZ)
Inland Power & Light Company (WA)	Lincoln Electric Coop, Inc (MT)	Nemaha-Marshall E C A, Inc (KS)
Inter County Energy Coop Corp (KY)	Linn County Rural E C A (IA)	Nespelem Valley Elec Coop, Inc (WA)
Intercounty Electric Coop Assn (MO)	Little Ocmulgee El Mem Corp (GA)	New Enterprise R E C, Inc (PA)
Intermountain Rural Elec Assn (CO)	Lower Yellowstone R E A, Inc (MT)	New Horizon Electric Coop, Inc (SC)
Iowa Lakes Electric Coop (IA)	Lumbee River Elec Mem Corp (NC)	Newberry Electric Coop, Inc (SC)
Irwin Electric Membership Corp (GA)	Lynches River Elec Coop, Inc (SC)	NewCorp Resources El Coop Inc (TX)
Jackson County Rural E M C (IN)	Lyon-Coffey Electric Coop, Inc (KS)	New-Mac Electric Coop, Inc (MO)
Jackson Electric Coop, Inc (WI)	Lyon-Lincoln Electric Coop Inc (MN)	Ninnescah Rural E C A Inc (KS)
Jackson Electric Member Corp (GA)	Macon Electric Coop (MO)	Niobrara Electric Assn, Inc (WY)
Jackson Energy Coop Corp (KY)	Magic Valley Electric Coop Inc (TX)	Noble County R E M C (IN)
Jackson Purchase Energy Corp (KY)	Magnolia Electric Power Assn (MS)	Nobles Cooperative Electric (MN)
Jasper County Rural E M C (IN)	Maquoketa Valley Rrl Elec Coop (IA)	Nodak Electric Coop Inc (ND)
Jasper-Newton Elec Coop, Inc (TX)	Marias River Electric Coop Inc (MT)	Nolin Rural Electric Coop Corp (KY)
Jefferson Davis Elec Coop, Inc (LA)	Marlboro Electric Coop, Inc (SC)	Norris Electric Coop (IL)
Jefferson Electric Mem Corp (GA)	McCone Electric Coop Inc (MT)	North Arkansas Elec Coop, Inc (AR)
Jemez Mountains E C, Inc (NM)	McDonough Power Coop (IL)	North Carolina El Member Corp (NC)
Johnson County Rural E M C (IN)	McKenzie Electric Coop Inc (ND)	North Central Elec Coop, Inc (ND)
Jump River Electric Coop Inc (WI)	McLean Electric Coop, Inc (ND)	North Plains Electric Coop Inc (TX)
K C Electric Association (CO)	McLeod Cooperative Pwr Assn (MN)	North Star Electric Coop, Inc (MN)
KAMO Electric Coop Inc (OK)	Meade County Rural E C C (KY)	North West Rural Electric Coop (IA)
Kansas Electric Pwr Coop Inc (KS)	Mecklenburg Electric Coop, Inc (VA)	Northeast Missouri El Pwr Coop (MO)
Karnes Electric Coop Inc (TX)	Medina Electric Coop, Inc (TX)	Northeast Oklahoma Electric Coop, Inc (OK)
Kauai Island Utility Cooperative (HI)	Menard Electric Coop (IL)	Northern Electric Coop, Inc (MT)
Kay Electric Coop (OK)	Miami-Cass County Rural EMC (IN)	Northern Neck Elec Coop, Inc (VA)
KEM Electric Coop Inc (ND)	Mid-Carolina Electric Coop Inc (SC)	Northern Rio Arriba E Coop Inc (NM)
Kenergy Corp (KY)	Middle Georgia El Mem Corp (GA)	Northern Virginia Elec Coop (VA)
Kiamichi Electric Coop, Inc (OK)	Middle Kuskokwim E C Inc (AK)	Northwest Iowa Power Coop (IA)
Kingsbury Electric Coop, Inc (SD)	Middle Tennessee E M C (TN)	Northwestern Rural E C A, Inc (PA)
Kiwash Electric Coop, Inc (OK)	Midland Power Coop (IA)	Oakdale Electric Coop (WI)
Kodiak Electric Assn Inc (AK)	Mid-Ohio Energy Coop, Inc (OH)	Ocmulgee Electric Member Corp (GA)
Kootenai Electric Coop Inc (ID)	Midstate Electric Coop, Inc (OR)	Oglethorpe Power Corporation (GA)

Cooperative Utilities (Cont'd)

Ohop Mutual Light Company, Inc (WA)	Rita Blanca Electric Coop, Inc (TX)	Sussex Rural Electric Coop Inc (NJ)
Okanogan County Elec Coop, Inc (WA)	Rolling Hills Electric Coop (KS)	Suwannee Valley E C Inc (FL)
Okefenoke Rural EI Member Corp (GA)	Roosevelt Cnty Elec Coop Inc (NM)	Swans Island Electric Coop Inc (ME)
Oklahoma Electric Coop Inc (OK)	Rosebud Electric Coop Inc (SD)	Swisher Electric Coop, Inc (TX)
Oliver-Mercer Elec Coop Inc (ND)	Runestone Electric Assn (MN)	T I P Rural Electric Coop (IA)
Oneida-Madison Elec Coop, Inc (NY)	Rusk County Electric Coop, Inc (TX)	Tallapoosa River Elec Coop Inc (AL)
Ontonagon County R E A (MI)	Sac County Rural Electric Coop (IA)	Taylor County Rural E C C (KY)
Oregon Trail EI Cons Coop, Inc (OR)	Sac-Osage Electric Coop Inc (MO)	Taylor Electric Coop (WI)
Osceola Electric Coop, Inc (IA)	Salt River Electric Coop Corp (KY)	Tex-La Electric Coop-Texas Inc (TX)
Otsego Electric Coop, Inc (NY)	Saluda River Electric Coop Inc (SC)	The Energy Cooperative (PA)
Owen Electric Coop Inc (KY)	Sam Rayburn G&T E C Inc (TX)	Three Notch Elec Member Corp (GA)
Ozark Electric Coop Inc (MO)	San Luis Valley R E C, Inc (CO)	Tipmont Rural Elec Mem Corp (IN)
Ozarks Electric Coop Corp (AR)	San Miguel Electric Coop, Inc (TX)	Traverse Electric Coop, Inc (MN)
P K M Electric Coop, Inc (MN)	San Miguel Power Assn, Inc (CO)	Trico Electric Cooperative Inc (AZ)
Park Electric Coop Inc (MT)	Sand Mountain Electric Coop (AL)	Tri-County Electric Coop (MN)
Parke County Rural E M C (IN)	Satilla Rural Elec Mem Corp (GA)	Tri-County Electric Coop Assn (MO)
Parkland Light & Water Co (WA)	SE-MA-NO Electric Coop (MO)	Tri-County Electric Coop, Inc (FL)
Peace River Electric Coop, Inc (FL)	Seminole Electric Coop, Inc (FL)	Tri-County Electric Coop, Inc (IL)
Pedernales Electric Coop, Inc (TX)	SEMO Electric Cooperative (MO)	Tri-County Electric Coop, Inc (TX)
Pee Dee Electric Coop, Inc (SC)	Shelby Electric Coop, Inc (IL)	Tri-County Rural Elec Coop Inc (PA)
Pee Dee Elec Member Corp (NC)	Shelby Energy Co-op, Inc (KY)	Twin Valley Electric Coop Inc (KS)
Pella Cooperative Elec Assn (IA)	Sheridan Electric Coop, Inc (MT)	Umatilla Electric Coop Assn (OR)
Pemiscot-Dunklin E C Inc (MO)	Sho-Me Power Electric Coop (MO)	Unalakleet Valley Elec Coop (AK)
Peninsula Light Company (WA)	Singing River Elec Pwr Assn (MS)	United Electric Coop Service Inc (TX)
People's Cooperative Services (MN)	Slash Pine Elec Member Corp (GA)	United Electric Coop, Inc (MO)
People's Electric Cooperative (OK)	Smarr EMC (GA)	United Electric Coop, Inc (PA)
Petit Jean Electric Coop Corp (AR)	Snapping Shoals EI Mem Corp (GA)	United Electric Co-op, Inc (ID)
Piedmont Elec Member Corp (NC)	Somerset Rural Elec Coop, Inc (PA)	Upper Missouri G&T EI Coop Inc (MT)
Pierce-Pepin Coop Services (WI)	South Central Ark EI Coop, Inc (AR)	Upshur Rural Elec Coop Corp (TX)
Pioneer Electric Coop, Inc (KS)	South Central Indiana REMC (IN)	Upson Elec Member Corp (GA)
Pioneer Rural Elec Coop, Inc (OH)	South Kentucky R E C Corp (KY)	Valley Electric Assn, Inc (NV)
Planters Electric Member Corp (GA)	Southeast Colorado Pwr Assn (CO)	Valley Electric Coop, Inc (MT)
Pointe Coupee Elec Mem Corp (LA)	Southeastern IL Elec Coop, Inc (IL)	Valley Rural Electric Coop Inc (PA)
Polk-Burnett Electric Coop (WI)	Southern Illinois Elec Coop (IL)	Verdigris Valley Elec Coop Inc (OK)
Poudre Valley R E A, Inc (CO)	Southern Iowa Elec Coop, Inc (IA)	Verendrye Electric Coop Inc (ND)
Powder River Energy Corp (WY)	Southern Maryland E C Inc (MD)	Vermont Electric Cooperative, Inc. (VT)
Prairie Land Electric Coop Inc (KS)	Southern Pine Elec Coop, Inc (AL)	Vigilante Electric Coop, Inc (MT)
Presque Isle Elec & Gas Coop (MI)	Southside Electric Coop, Inc (VA)	Wabash County Rural E M C (IN)
Price Electric Coop Inc (WI)	Southwest Electric Coop, Inc (MO)	Walton Electric Member Corp (GA)
Radiant Electric Coop, Inc (KS)	Southwest Louisiana E M C (LA)	Warren County Rural E M C (IN)
Ralls County Electric Coop (MO)	Southwest Texas E C, Inc (TX)	Warren Electric Coop Inc (PA)
Randolph Elec Member Corp (NC)	Southwestern Electric Coop Inc (IL)	Washington Elec Member Corp (GA)
Rappahannock Electric Coop (VA)	Southwestern Elec Coop Inc (NM)	Washington Electric Coop Inc (VT)
Ravalli County Elec Coop, Inc (MT)	Square Butte Electric Coop (ND)	Washington-St Tammany E C, Inc (LA)
Rayburn Cntry Elec Coop, Inc (TX)	Steuben Rural Elec Coop, Inc (NY)	Webster Electric Coop (MO)
REA Energy Coop Inc (PA)	Sullivan County R E C, Inc (PA)	West Central Electric Coop Inc (SD)
Redwood Electric Coop (MN)	Sumter Electric Coop, Inc (FL)	West Florida EI Coop Assn, Inc (FL)
Rich Mountain Elec Coop, Inc (AR)	Sumter Electric Member Corp (GA)	West Oregon Electric Coop Inc (OR)
Richland Electric Coop (WI)	Sun River Electric Coop, Inc (MT)	West River Electric Assn Inc (SD)

Cooperative Utilities (Cont'd)

Western Coop Electric Assn Inc (KS)	White County Rural E M C (IN)	Wolverine Pwr Supply Coop, Inc (MI)
Western Farmers Elec Coop, Inc (OK)	White River Electric Assn, Inc (CO)	Wood County Elec Coop, Inc (TX)
Western Illinois Elec Coop (IL)	White River Valley El Coop Inc (MO)	Woodruff Electric Coop Corp (AR)
Western Indiana Energy REMC (IN)	Whitewater Valley Rural EMC (IN)	Wyrulec Company (WY)
Western Iowa Power Coop (IA)	Wild Rice Electric Coop, Inc (MN)	Yazoo Valley Elec Power Assn (MS)
Wheatland Electric Coop, Inc (KS)	Willwood Light & Power Co (WY)	Yellowstone Valley Elec Co-op Inc. (MT)
Wheatland R E A, Inc (WY)	Withlacoochee River Elec Coop (FL)	York Electric Coop Inc (SC)

Investor Owned Utilities (203 Entities)

AEP Generating Company (OH)	Consolidated Water Power Co (WI)	Kansas City Power & Light Co (MO)
AEP Texas Central Company (OH)	Consumers Energy Co (MI)	Kansas Gas & Electric Co (KS)
AEP Texas North Company (OH)	Dahlberg Light & Power Co (WI)	Kentucky Power Co (OH)
AGC Division of APG Inc (IN)	Dayton Power & Light Co (OH)	Kentucky Utilities Co (KY)
Ajo Improvement Co (AZ)	Delmarva Power (DE)	KeySpan Generation LLC (NY)
Alabama Power Co (AL)	Detroit Edison Co (MI)	Kimball Light and Water Co (WV)
Alaska Electric Light&Pwr Co (AK)	Duke Power Co (NC)	Kingsport Power Co (OH)
Alaska Power Co (WA)	Duquesne Light Co (PA)	Kuiggluum Kallugvia (AK)
Allegheny Generating Co (PA)	Edison Sault Electric Co (MI)	Lockhart Power Co (SC)
Alpena Power Co (MI)	Egegik Light & Power Co (AK)	Louisville Gas & Electric Co (KY)
Amana Society Service Co (IA)	El Paso Electric Co (TX)	Madison Gas & Electric Co (WI)
Andreanof Electric Corp (AK)	Electric Energy Inc (IL)	Maine Public Service Co (ME)
Aniak Light & Power Co Inc (AK)	Elk Power Co (WV)	Manley Utility Co Inc (AK)
Appalachian Power Co (OH)	Elkhorn Public Service Co (WV)	Massachusetts Electric Co (MA)
Aquila Inc (MO)	Empire District Electric Co (MO)	Maui Electric Co Ltd (HI)
Arizona Public Service Co (AZ)	Entergy Arkansas Inc (AR)	MDU Resources Group Inc (ND)
Atlantic City Electric Co (DE)	Entergy Gulf States Inc (TX)	Metropolitan Edison Co (OH)
Avista Corp (WA)	Entergy Louisiana Inc (LA)	Miami Power Corporation (OH)
Baltimore Gas & Electric Co (MD)	Entergy Mississippi Inc (MS)	MidAmerican Energy Co (IA)
Bangor Hydro-Electric Co (ME)	Entergy New Orleans Inc (LA)	Minnesota Power Inc (MN)
Bethel Utilities Corp (AK)	Entergy Power, Inc (AR)	Mississippi Power Co (MS)
Black Diamond Power Co (WV)	Fale-Safe, Inc (OR)	Monongahela Power Co (PA)
Black Hills Power Inc (SD)	Fishers Island Utility Co Inc (NY)	Morenci Water and Electric Co (AZ)
Block Island Power Co (RI)	Fitchburg Gas & Elec Light Co (NH)	Mt Carmel Public Utility Co (IL)
Boston Edison Co (MA)	Florida Power & Light Co (FL)	Nantucket Electric Co (MA)
Cambridge Electric Light Co (MA)	Florida Public Utilities Co (FL)	Napakia Ircinraq Power Co (AK)
CenterPointEnergy HoustonElec (TX)	Georgia Power Co (GA)	Nevada Power Co (NV)
Central Electric Inc (AK)	Granite State Electric Co (NH)	New England Elec Transm'n Corp (NH)
Central Hudson G&E Corp (NY)	Green Mountain Power Corp (VT)	New England Hydro-Tran Elec Co (MA)
Central Illinois Light Co (MO)	Gulf Power Co (FL)	New England Hydro-Trans Corp (NH)
Central Illinois Pub Serv Co (IL)	Gustavus Electric Inc (AK)	New England Power Company (MA)
Central Maine Power Co (ME)	Gwitchyaa Zhee Utility Co (AK)	New York State Elec & Gas Corp (NY)
Central Vermont PubServ Corp (VT)	Hawaii Electric Light Co Inc (HI)	Niagara Mohawk Power Corp. (NY)
Chitina Electric Inc (AK)	Hawaiian Electric Co Inc (HI)	North Central Power Co Inc (WI)
Cincinnati Gas & Electric Co (OH)	Holyoke Power & Electric Co (MA)	Northern Indiana Pub Serv Co (IN)
Citizens Electric Co (PA)	Holyoke Water Power Co (MA)	Northern States Power Co (WI)
Cleco Power LLC (LA)	Idaho Power Co (ID)	Northern States Power Co (MN)
Cleveland Electric Illum Co (OH)	Illinois Power Co (MO)	NorthWestern Energy (SD)
Columbus Southern Power Co (OH)	Indiana Michigan Power Co (OH)	NorthWestern Energy LLC (MT)
Commonwealth Edison Co (IL)	Indiana-Kentucky Elec Corp (OH)	Northwestern Wisconsin Elec Co (WI)
Commonwealth Electric Co (MA)	Indianapolis Power & Light Co (IN)	Ohio Edison Co (OH)
Connecticut Light & Power Co (CT)	Interstate Power and Light Co (IA)	Ohio Power Co (OH)
Consolidated Edison Co-NYInc (NY)	Jersey Central Power & Lt Co (OH)	Ohio Valley Electric Corp (OH)

Investor Owned Utilities (Cont'd)

Oklahoma Gas & Electric Co (OK)	Rochester Gas & Electric Corp (NY)	UGI Utilities, Inc (PA)
Omya Inc (VT)	Rockland Electric Co (NY)	Union Electric Co (MO)
Orange & Rockland Utils Inc (NY)	Safe Harbor Water Power Corp (PA)	Union Light, Heat & Power Co (OH)
Otter Tail Power Co (MN)	San Diego Gas & Electric Co (CA)	Union Power Co (WV)
Pacific Gas & Electric Co (CA)	Savannah Electric & Power Co (GA)	United Illuminating Co (CT)
PacificCorp (OR)	Sharyland Utilities LP (TX)	United Light and Power Co (WV)
PECO Energy Co (PA)	Sierra Pacific Power Co (NV)	Unitil Energy Systems (NH)
Pelican Utility (AK)	South Beloit Wtr Gas & Elec (WI)	Upper Peninsula Power Co (MI)
Pennsylvania Electric Co (OH)	South Carolina Gen Co, Inc (SC)	Vermont Electric Power Co, Inc (VT)
Pennsylvania Power Co (OH)	Southern California Edison Co (CA)	Vermont Electric Trans Co Inc (VT)
Pike County Light & Power Co (PA)	Southern California Water Co (CA)	Vermont Yankee Nucl Pwr Corp (VT)
Pioneer Power and Light Co (WI)	Southern Electric Gen Co (AL)	Virginia Electric & Power Co (VA)
Portland General Electric Co (OR)	Southern Indiana Gas&Elec Co (IN)	War Light and Power Co (WV)
Potomac Electric Power Co (DC)	Southwestern Elec Power Co (OH)	Wellsborough Electric Co (PA)
PPL Electric Utilities Corp (PA)	Strawberry Water Users Assn (UT)	West Penn Power Co (PA)
Progress Energy Carolinas (NC)	Superior Water, Light & Pwr Co (WI)	Westar Energy Inc (KS)
Progress Energy Florida (FL)	System Energy Resources, Inc (MS)	Western Massachusetts Elec Co (MA)
PSI Energy Inc (IN)	Tampa Electric Co (FL)	Westfield Electric Co (WI)
Public Service Co of NH (NH)	Tanana Power Co Inc (AK)	Wheeling Power Co (OH)
Public Service Co of NM (NM)	The Narragansett Electric Co (RI)	Wisconsin Electric Power Co (WI)
PublicService Co of Oklahoma (OH)	The Potomac Edison Co (PA)	Wisconsin Power & Light Co (WI)
Public Service Elec & Gas Co (NJ)	The Toledo Edison Co (OH)	Wisconsin Public Service Corp (WI)
Puget Sound Energy Inc (WA)	TransCanadaPwr Div-Engy Ltd (CN)	Wisconsin River Power Company (WI)
Redlands Water & Power Co (CO)	Tucson Electric Power Co (AZ)	York Haven Power Company (OH)
Rochester Elec Lgt and Power (VT)	TXU Electric Delivery Company (TX)	

Power Marketers (74 Entities)

Agway Energy Services, LLC (NY)	Duke Energy Trdg & Mktg, LLC (TX)	PPM Energy Inc (OR)
Ameren Energy Marketing (MO)	Edison Mission Mktg&Trdg Inc (MA)	Quest Energy, LLC (MI)
APS Energy Services (AZ)	El Paso Merchant Energy LP (TX)	Rainbow Energy Marketing Corp (ND)
Aquila Energy Marketing Corp (MO)	Empire Natural Gas Corp (NY)	Reliant Energy Electric Solutions (TX)
Cargill Power Markets LLC (MN)	Energy Coop of New York, Inc (NY)	Reliant Energy Retail Services, Inc (TX)
CECG Maine, LLC (MD)	Energy West Resources Inc (MT)	Reliant Energy Services Inc (TX)
Cirro Corporation (TX)	Engage Energy America LLC (TX)	Reliant Energy Solutions East, LLC (TX)
CL Power Sales Eight LLC (CA)	Exelon Energy Company (IL)	Spark Energy, LP (TX)
CL Power Sales Nine LLC (CA)	First Energy Solutions Corp. (OH)	Split Rock Energy LLC (MN)
CL Power Sales Seven LLC (MA)	GEN-SYS Energy (WI)	Strategic Energy LLC (PA)
CL Power Sales Ten LLC (CA)	Granite Peak Energy (ND)	Stream Energy (TX)
CL Power Sales Two LLC (CA)	Great Bay Pwr Marketing, Inc. (NH)	Suez Enrgy Resources North America (TX)
CMS Marketing, Serv&Trd Co (MI)	Hinson Power Company LLC (WA)	Tara Energy, Inc (TX)
Competitive Engy Serv, LLC (ME)	Independence Pwr Marketing (NY)	TDX North Slope Generating Co (AK)
ConocoPhillips Company (TX)	Merrill Lynch Commodities (TX)	Texas Retail Energy, LLC (AR)
Consolidated Edison Sol Inc (NY)	Mirant Americas EnrgyMrktg LP (GA)	Tractebel Energy Marketing Inc (TX)
Constellation NewEnergy, Inc (MD)	Mpower Retail Energy LP (TX)	TransAlta Enrgy Marketing (U.S.) Inc. (CN)
Constellation Enrgy Comdities (MD)	Neumin Production Company (TX)	TXU Energy Retail Co LP (TX)
Coral Power LLC (TX)	OGE Energy Resources, Inc (OK)	TXU ET Services Co (TX)
CP Pwr Sales Seventeen LLC (MA)	People's Electric Corporation (OK)	TXU SESCO Energy Services Co (TX)
CPL Retail Energy, LP (TX)	Peoples Energy Services (IL)	UNS Electric, Inc (AZ)
Direct Energy, LP (TX)	PEPCO Energy Services (VA)	Williams Energy Mktg & Trdg Co (OK)
Dominion Energy Marketing (VA)	Pilot Power Group Inc (CA)	WPS Energy Services (WI)
Dominion Retail Inc (VA)	Powerex Corporation (CN)	WTU Energy, LP (TX)
Duke Energy Trdg&Mrktg LLC (TX)	PPL EnergyPlus LLC (PA)	

Political Subdivisions (77 Entities)

Arkansas River Power Authority (CO)	Loup River Public Power Dist (NE)	PUD No 1 of Cowlitz County (WA)
Burt County Public Power Dist (NE)	McCook Public Power District (NE)	PUD No 1 of Douglas County (WA)
Butler County Rural P P D (NE)	Merced Irrigation District (CA)	PUD No 1 of Ferry County (WA)
Central Lincoln People's Ut Dt (OR)	Midvale Irrigation District (WY)	PUD No 1 of Grays Harbor Cnty (WA)
Central Nebraska Pub P&I Dist (NE)	Modesto Irrigation District (CA)	PUD No 1 of Kittitas County (WA)
Chimney Rock Public Power Dist (NE)	Mohegan Tribal Utility Auth (CT)	PUD No 1 of Klickitat County (WA)
Clatskanie Peoples Util Dist (OR)	MSR Public Power Agency (CA)	PUD No 1 of Okanogan County (WA)
Cornhusker Public Power Dist (NE)	Municipal Enrgy Agency of NE (NE)	PUD No 1 of Pend Oreille Cnty (WA)
Crisp County Power Comm (GA)	Nebraska Public Power District (NE)	Roosevelt Public Power Dist (NE)
Cuming Cnty Public Pwr Dist (NE)	North Central Public Pwr Dist (NE)	Sacramento Municipal Util Dist (CA)
Custer Public Power District (NE)	Northern Wasco County PUD (OR)	Salt River Project (AZ)
Dawson Power District (NE)	Northwest Rural Pub Pwr Dist (NE)	Seward County Rrl Pub Pwr Dist (NE)
Electrical Dist No2 Pinal Cnty (AZ)	Oakdale & S SanJoaquin Irrign (CA)	Snohomish County PUD No 1 (WA)
Electrical Dist No4 Pinal Cnty (AZ)	Omaha Public Power District (NE)	Southern California P P A (CA)
Electrical Dist No6 Pinal Cnty (AZ)	Oroville-Wyandotte Irrig Dist (CA)	Southwest Public Power Dist (NE)
Elkhorn Rural Public Pwr Dist (NE)	Perennial Public Power Dist (NE)	Stanton County Public Pwr Dist (NE)
Emerald People's Utility Dist (OR)	Piedmont Municipal Pwr Agny (SC)	Tonopah Irrigation District (AZ)
Heartland Consumers Pwr Dist (SD)	Placer County Water Agency (CA)	Truckee Donner P U D (CA)
Hohokam Irr & Drain Dist (AZ)	Polk Cnty Rural Pub Pwr Dist (NE)	Tuolumne County Pub Power Agny (CA)
Imperial Irrigation District (CA)	PSC of Yazoo City (MS)	Twin Valleys Public Power Dist (NE)
Intermountain Power Agency (CA)	Public Utility District No 1 (WA)	Utah Associated Mun Power Sys (UT)
KBR Rural Public Power District (NE)	Public Utility District No 2 (WA)	Vermont Public Pwr Supply Auth (VT)
Kings River Conservation Dist (CA)	PUD No 1 of Benton County (WA)	Wellton-Mohawk Irr & Drain Dist (AZ)
Kokhanok Village Council (AK)	PUD No 1 of Chelan County (WA)	Western Minnesota Mun Pwr Agny (SD)
Lincoln County Pwr Dist No 1 (NV)	PUD No 1 of Clallam County (WA)	Yakutat Power Inc (AK)
Louisiana Energy & Pwr Auth (LA)	PUD No 1 of Clark County (WA)	

Municipal Marketing Authorities (11 Entities)

CT Muni Elec Enrgy Coop (CT)	Mass Mun Wholesale Elec Co (MA)	Northern Municipal Power Agency (MN)
Florida Municipal Pwr Agency (FL)	Minnesota Municipal Pwr Agny (MN)	Utah Municipal Power Agency (UT)
Illinois Municipal Elec Agency (IL)	Municipal Electric Authority (GA)	Wisconsin Public Power Inc Sys (WI)
Indiana Municipal Pwr Agency (IN)	Municipal Enrgy Agency of MS (MS)	

Curtailment Service Providers (19 Entities)

A&C Management Group LLC (NJ)	Crucible Metals (NY)	MWN Energy Group (PA)
Allied Utility Network (GA)	Downes Associates, Inc. (MD)	Onsite Energy Corporation (CA)
Baltimore Gas & Electric (MD)	ECONergy Energy Co, Inc. (NY)	State University of NY at Buffalo (NY)
Celerity Energy Partners, LLC (WA)	Enrgy Investment Sysrms, Inc. (NY)	The Legacy Energy Group (VA)
Commercial Utility Consultants, Inc. (PA)	EnerNOC, Inc (MA)	WebGen Systems (MA)
Constellation Energy Source (MA)	FirstEnergy (PA)	
Consumer Powerline Company (NY)	Galt Power (DE)	

State Utilities (20 Entities)

Ak-Chin Electric Utility Authority (AZ)	Electric Fund (CDWR) (CA)	New River Light & Power Co (NC)
Alaska Energy Authority (AK)	Energy Northwest (WA)	New York Power Authority (NY)
American Samoa Power Authority (AS)	Grand River Dam Authority (OK)	Oklahoma Municipal Power Auth (OK)
Arizona Power Authority (AZ)	Guadalupe Blanco River Auth (TX)	South Carolina Pub Serv Auth (SC)
Brazos River Authority (TX)	Long Island Power Authority (NY)	Virgin Islands Wtr&Pwr Auth (VI)
California Dept of Wtr Res (CA)	Metropolitan Water District of S CA (CA)	Virginia Tech Electric Service (VA)
Colorado River Comm of NV (NV)	Navajo Tribal Utility Authority (AZ)	

Appendix G: FERC Survey Respondents

Federal (6 Entities)

Bonneville Power Admin (OR)
Southeastern Power Admin (GA)

Southwestern Power Admin (OK)
Tennessee Valley Authority (TN)

USBIA-Mission Valley Power (MT)
Western Area Pwr Admin (CO)

RTOs/ISOs (6 Entities)

CAISO
ERCOT

ISONE
MISO

NYISO
PJM

* Commission staff received a total of 1,939 responses to the 3,366 surveys it sent out. Some respondents (1,886) completed the Demand Response section of the survey, others (1,860) completed the AMI section of the survey. The difference among the 1,886, 1,860 and 1,939 numbers stems from some respondents filling out only the general information section of the survey or otherwise reporting to Commission staff that they had no programs or activities to report.

Appendix H: Demand Response (DR) Programs and Services at Responding Utilities

Ancillary Services

TXU Energy Retail Company LP

Capacity Market Programs

Allied Utility Network
Celerity Energy Partners, LLC
City of Waseca Electric Utility
Commonwealth Edison Co.
ConEdison Solutions
Consumers Energy Co.

EnerNOC, Inc.
New York Power Authority
Northern States Power Co
Orange & Rockland Utils, Inc.
Pacific Gas & Electric Company
PacifiCorp

PECO Energy Company
Pioneer Electric Cooperative, Inc.
Portland General Electric Co
Wisconsin Public Power, Inc.

Critical Peak Pricing

Arrowhead Electric Coop, Inc.
Austin Energy
Butler Rural Electric Coop, Inc. (OH)
Cass County Elec Coop Inc. (ND)
Cherryland Electric Cooperative
Choptank Electric Cooperative, Inc.
City of Gastonia
City of Grafton
City of High Point Electric

Department
City of LaGrange
City of Laurinburg, North Carolina
Clay County Electric Coop Corp
Consumers Energy
Gulf Power Company
High Plains Power, Inc.
Idaho Power Company
Jackson Electric Membership Corporation
Oakdale Electric Cooperative

OGE Electric Services (DBA Oklahoma Gas and Electric)
Pacific Gas & Electric Co
Pioneer Rural Electric Coop, Inc. (OH)
Rappahannock Electric Coop
San Diego Gas & Electric Co
Southern California Edison Company
Wisconsin Public Service Corp

Demand Bidding

Alliant Energy
City of Lafayette Electric Department
Entergy Arkansas, Inc.
Gaffney Board of Public Works
Groton Dept of Utilities
New Braunfels Utilities
Niagara Mohawk

Otter Tail Power Company
Pacific Gas & Electric Co
Polk County Rural Public Power District
Portland General Electric Co
PSI Energy Inc
Sacramento Municipal Utility District

San Diego Gas & Electric Co
Snohomish County PUD No 1
Southern California Edison Co
Wisconsin Electric Power Co
Wisconsin Public Service Corp

Direct Load Control

A & N Electric Coop
Adams Electric Coop
Adams-Columbia Electric Cooperative
Alabama Power Company
Alaska Electric Light and Power Company
Allamakee-Clayton Electric Coop
Altamaha EMC
Anderson Municipal Light and Power
Austin Energy
Baltimore Gas & Electric Co
Barnesville Municipal Utility
Black River Electric Coop Inc.
Blue Earth Light & Water Dept
Bluestem Electric Coop, Inc.

Board of Public Works
Boone Electric Coop
Bristol Tennessee Essential Services
Buckeye Power, Inc
Butler Rural Electric Coop Ass'n Inc.
Butler Rural Electric Coop, Inc.
C & L Electric Coop Corporation
Caddo Electric Coop
Capital Electric Coop, Inc.
Cass County Electric Coop, Inc
Central Electric Membership Corp (NC)
Central Florida Electric Coop, Inc.
Central Maine Power Company

Central Rural Electric Coop
Central Vermont Public Service Corporation
City of Ames
City of Arlington
City of Aurora
City of Big Stone City
City of Bowling Green, OH
City of Camden
City of Central City
City of Detroit Lakes
City of Fort Collins Colorado
City of Gothenburg
City of Grafton
City of Groton
City of Hecla
City of Kinston

Direct Load Control (Cont'd)

City of Laurinburg (NC)	Florida Power & Light Co	Nobles Cooperative Electric
City of Milford	Frontier Power Company	Nodak Electric Cooperative, Inc.
City of Moorhead	Georgia Power Company	North Arkansas Electric Coop,
City of New Smyrna Beach	Grand Rapids Public Utilities	Inc
City of Northwood	Commission	North Central Electric Coop, Inc.
City of Parker	Great Lakes Energy Cooperative	North Central Public Power
City of Saint Peter	Grundy Electric Cooperative,	District
City of Seward	Inc.	North West Rural Electric Coop
City of Staples	Guernsey-Muskingum Electric	Northern States Power Co
City of Stromsburg	Coop, Inc.	Northern States Power
City of Waseca Electric Utility	Hart Electric Membership	Company(Wisconsin)
City of White	Corporation	Northern Virginia Electric Coop
City of Wood River	Hawaiian Electric Company, Inc.	Northwest Rural Public Power
Clay County Electric Coop Corp	Hawley Public Utilities	District
Coastal Electric Cooperative, Inc	Highline Electric Association	Oakdale Electric Cooperative
Coles-Moultrie Electric Coop	Horry Electric Coop, Inc	Oliver-Mercer Electric Coop, Inc.
Colorado Springs Utilities	Idaho Power Company	Osceola Electric Coop, Inc
Columbia Water & Light Dept	Illinois Rural Electric Coop	Otter Tail Power Company
Commonwealth Edison Co.	Indianapolis Power & Light Co	Owatonna Public Utilities
Community Electric Coop	Jackson Electric Cooperative	PacifiCorp
Con Edison	Jackson E M C	PECO Energy Company
Concord Municipal Light Plant	Jamestown (Indiana) Municipal	Pee Dee Electric Member Corp
Connexus Energy	Electric Utility	(NC)
Consolidated Electric Coop	Jefferson Energy Coop	People's Electric Coop
Continental Cooperative	Jersey Central Power & Light Co	Perennial Public Power District
Services	Kansas City Power & Light Co	Pierce Pepin Cooperative
Cooperative Light & Power	KBR Rural Public Power District	Services, Inc.
Corn Belt Energy Corp	KEM Electric Coop, Inc.	Pioneer Rural Electric Coop, INC
Cornhusker Public Power District	Kentucky Utilities Company	Polk County Rural Public Power
Coweta-Fayette EMC	Lake Region Electric Coop	District
CPS Energy	Lee County Electric Coop, Inc	Price Electric Coop, Inc.
Crowning Power	Licking Rural Electrification	Progress Energy Carolinas, Inc.
Cuivre River Electric Coop, Inc.	Lighthouse Electric Coop, Inc.	Progress Energy Florida, Inc.
Cuming County Public Power	Linton Municipal Electric Utility	PSI Energy Inc
District	Litchfield Public Utilities	Public Service Electric & Gas
Dahlberg Light & Power Co.	Long Island Power Authority	Company
Dairyland Power Coop	Louisville Gas & Electric Co	Randolph Electric Membership
Dakota Electric Association	Loup River Public Power District	Corporation
Dakota Energy Coop, Inc.	Lynches River Electric Coop, Inc	Rappahannock Electric Coop
David City Utilities	Madison Gas and Electric Co	Rice Lake Utilities
Delaware County Electric Coop,	Marshall Municipal Utilities	Richland Electric Coop
Inc.	McLean Electric Cooperative	Runestone Electric Association
Delmarva Power & Light	McLeod Cooperative Power	Sacramento Municipal Utility
Company	Assn	District
Detroit Edison Company	Mecklenburg Electric Coop	San Diego Gas and Electric
Dominion North Carolina Power	Menard Electric Coop	Seward County Public Power
Dominion Virginia Power	MidAmerican Energy Company	District
Dubois Rural Electric Coop, Inc.	Midwest Electric, Inc	Shelby Electric Coop, INC
Duke Power	Midwest Energy Coop	Sioux Center Municipal Utilities
Duquesne Light Company	Mille Lacs Electric Coop	Southeastern Electric Coop, Inc.
East River Electric Power Coop	Modesto Irrigation District	Southern California Edison
Elk River Municipal Utilities	Montana-Dakota Utilities Co.	Company
Elkhorn Rural Public Power	Moose Lake Water & Light	Southern Indiana Gas & Elec Co
District	Commission	Southern Maryland Electric
EnergyUnited EMC	Morgan County rural Electric	Coop, Inc.
Excelsior EMC	Assn	Southside Electric Cooperative
Farmers Electric Coop Corp	Municipal Commission of	Southwest Public Power District
Farmers' Electric Coop	Boonville	Southwestern Electric Coop, Inc
First Electric Cooperative Corp	Navopache Electric Coop, Inc.	Stanton County Public Power
Flint Electric Membership	Nevada Power Company	District
Corporation	New Prague Utilities Comm.	

Direct Load Control (Cont'd)

Steuben Rural Electric Coop, Inc.	Tipton Municipal Utilities Town of Maiden	Volga Municipal Utilities Waynetown Utilities
Sumter Electric Coop, Inc.	Town of Massena Electric Dept	Wells Public Utilities
Superior Water, Light & Power Co	Town of Reading Municipal Light Dept	Wild Rice Electric Coop Inc.
Taylor Electric Coop	Town of Norwood Light Dept	Wisconsin Electric Power Co
Third Taxing District Electrical Dept	Union Light, Heat & Power Co	Wisconsin Power and Light Co
Tipmont REMC	Village of Hamilton	Wisconsin Public Service Corp
	Village of Sherburne Electric	Woodruff Electric Coop Corp

Emergency Demand Response Program

A&C Management Group LLC	Con Edison	Otter Tail Power Company
AGC	Connecticut Light and Power Co	Pacific Gas & Electric Co
Anaheim Public Utilities	Eugene Water & Electric Board	Sacramento Municipal Utility District
APS Energy Services Company, Inc.	Fitchburg Gas and Electric Light Co	The Legacy Energy Group
Central Hudson Gas & Electric Corp	Long Island Power Authority	The Narragansett Electric Co
Central Vermont Public Service Corp	Mass Electric Co	Unitil Energy Systems, Inc.
City of Westerville	New York Power Authority	Western Massachusetts Electric Company
Commonwealth Edison Co.	Niagara Mohawk	Wisconsin Public Service Corporation
	NSTAR Electric	
	Orange & Rockand Utilities, Inc.	

Interruptible and Curtailable

Adams Electric Cooperative	City of Elroy	Denison Municipal Utilities
Adams-Columbia Electric Coop	City of Farmington	Detroit Edison Company
Alabama Power Company	City of Franklin	Dominion North Carolina Power
Alaska Electric Light and Power Company	City of Independence (MO)	Dominion Virginia Power
Alaska Power Company	City of McPherson	Duquesne Light Company
Alfalfa Electric Cooperative, Inc.	City of Saint Peter	East River Electric Power Coop
Allegheny Power	City of Seward	El Paso Electric Company
Bainbridge Municipal Electric Utility	Clay Electric Coop, Inc.	Elk River Municipal Utilities
Barton Village, Inc.	Cleveland Electric Illuminating Co	Elkhorn Light and Water
Bear Valley Electric	Coastal Electric Coop, Inc	Empire District Electric Company
Blue Grass Energy Cooperative Corporation	Coles-Moultrie Electric Coop	EnergyUnited Electric Membership Corp
Bluestem Electric Cooperative, Inc.	Colorado Springs Utilities	Entergy Arkansas, Inc.
Boone Electric Cooperative	Columbus Southern Company	Entergy New Orleans, Inc.
Buckeye Power, Inc	Commonwealth Edison Co.	First Electric Cooperative Corp
Butler Rural Electric Coop Ass'n, Inc.	Community Electric Coop	Flint Electric Membership Corp
Carteret-Craven Electric Coop	Con Edison	Flint Hills Rural E C A Inc.
Cavalier Municipal Utilities	Connecticut Light and Power	Florida Power & Light Co
Centerville Municipal Power & Light	Connexus Energy	Franklin Rural Electric Coop
Central Electric Membership Corp	Consolidated Electric Coop	Georgia Power Company
Central Indiana Power	Consumers Energy Co.	Glidden Rural Electric Coop
Central Valley Electric Coop, Inc.	Continental Cooperative Services	Grayson Rural Electric Coop
Central Vermont Public Service Corp	Cookson Hills Electric Coop, Inc	Harrisonburg Electric Commission
Central Virginia Electric Coop	Cooperative Light & Power	Hawaii Electric Light Company, Inc.
Cherryland Electric Coop	Corn Belt Energy Corporation	Hawaiian Electric Company, Inc.
Cincinnati Gas & Electric Co	CPS Energy	Hoory Electric Coop, Inc.
City of Ashland	Crowning Power	Indiana Michigan Power Co.
	Cuivre River Electric Cooperative, Inc.	Indianapolis Power & Light Company
	Cuming County Public Power District	Inter-County Energy Cooperative Corporation
	Dakota Electric Association	Iowa Lakes Electric Coop
	Dawson Public Power District	

Interruptible and Curtailable (Cont'd)

Jackson Energy Coop Corp
JEA
Jefferson Energy Coop
Kansas City Power & Light
Company
Kansas gas and Electric
Company
Kauai Island Utility Cooperative
Kentucky Power Co.
Kentucky Utilities Co
Kiamichi Electric Cooperative,
Inc.
Kissimmee Utility Authority
Kiwash Electric Cooperative, Inc.
Leavenworth Jefferson Electric
Coop
Lee County Electric Cooperative,
Incorporated
Lincoln Electric System
Louisville Gas & Electric
Company
Lumbree River Electric
Membership Corporation
Madison Gas and Electric
Company
Manitowoc Public Utilities
Marshall Municipal Utilities
Mass Electric Co
Maui Electric Company, Ltd
McLeod Cooperative Power
Association
Mecklenburg Electric Coop
Menard Electric Coop
Metropolitan Edison Co
MidAmerican Energy Company
Midwest Electric, Inc
Midwest Energy, Inc.
Narragansett Electric Co
Navopache Electric Cooperative,
Inc.
Nebraska Public Power District
New Prague Utilities
Commission
New York Power Authority
Ninnescah Rural Electric
Cooperative Assn., Inc.
Nobles Cooperative Electric
Nolin Rural Electric Coop Corp
North Arkansas Electric Coop,
Inc
North Central Power Co., Inc.
North Plains Electric Coop Inc.
Northern Neck Electric Coop
Northern States Power Co

Northern States Power
Company (WI)
Northern Virginia Electric Coop
Northwestern Wisconsin Electric
Company
NSTAR Electric
Oakdale Electric Cooperative
Ohio Edison Co
Ohio Power Company
Omaha Public Power District
Orlando Utilities Commission
Otter Tail Power Company
Owatonna Public Utilities
Owen Electric Cooperative
Paragould Light and Water
Commission
PECO Energy Company
Pee Dee Electric Member Corp
(NC)
Pennsylvania Electric Co
Pennsylvania Power Co
Pepco Energy Services, Inc.
Perennial Public Power District
Pioneer Electric Cooperative,
Inc.
Progress Energy Carolinas, Inc.
Progress Energy Florida, Inc.
PSI Energy Inc
Public Service Company of New
Hampshire
Public Service Company of New
Mexico
Public Service Electric & Gas
Company
Randolph Electric Membership
Corporation
Rappahannock Electric Coop
Richmond Power and Light
Roosevelt Public Power District
Runestone Electric Association
Salamanca Board of Public
Utilities
Salt River Electric Cooperative
Corporation
San Diego Gas and Electric
Satilla Rural Elec Member
Corporation
Shelby Electric Coop, Inc
Shelby Energy Cooperative
Incorporated
South Carolina Public Service
Authority
South Kentucky Rural Electric
Cooperative Corporation

Southeastern Electric Coop, Inc.
Southern California Edison Co
Southern Indiana Gas & Elec Co
Southside Electric Coop, Inc.
Southwestern Electric Coop, Inc
SRP
Sterling Municipal Light Dept
Sumter Electric Cooperative, Inc.
Superior Water, Light & Power
Company
Swanton Village, Inc.
T.I.P. Rural Electric Cooperative
Tennessee Valley Authority
Thief River Falls Municipal
Utilities
Toledo Edison Co
Town of Hardwick Electric
Department
Town of Stowe Electric
Department
Trico Electric Cooperative, Inc
Tucson Electric Power Company
Union Electric Company
Union Light, Heat & Power Co
UniSource Electric
United Electric Cooperative
Services, Inc.
Village of Enosburg
Village of Hyde Park, Inc.
Village of Jacksonville
Village of Johnson, Inc.
Village of Ludlow Electric Light
Dept.
Village of Lyndonville Electric
Dept
Village of Morrisville Water &
Light Dept.
Village of Northfield
Village of Orleans, Inc.
Waverly Light and Power
Webster Electric Coop
Westar Energy, Inc.
Wheeling Power Co.(WPCO)
White River Valley Electric Coop
Inc.
Wisconsin Electric Power
Company
Wisconsin Power and Light
Company
Wisconsin Public Power, Inc.
Wisconsin Public Service
Corporation

Real-Time Pricing

Alabama Power Company
Alpena Power Company
Atlantic City Electric Company

Baltimore Gas and Electric
Butler County Rural Electric
Cooperative

Central Hudson Gas & Electric
Corporation

Real-Time Pricing (Cont'd)

Chicopee Municipal Lighting
Plant
Cincinnati Gas & Electric Co
Cleveland Electric Illuminating
Co
Con Edison
Connecticut Light and Power
Delmarva Power & Light
Company
Dominion Virginia Power
Duquesne Light Company
Georgia Power Company
Hill County Electric Cooperative,
Inc
JEA
Jersey Central Power & Light Co
Kansas City Power & Light
Company

Maui Electric Co Ltd
MidAmerican Energy Company
New York Power Authority
Niagara Mohawk
Northern States Power Co (MN)
Northern States Power Co (WI)
Northern Rio Arriba Electric
Coop
Ohio Edison Co
Orange & Rockland Utilities, Inc.
Otter Tail Power Company
Pennsylvania Power Co
Pepco
Pepco Energy Services, Inc.
Portland General Electric
Company
Progress Energy Carolinas, Inc.
PSI Energy Inc

Public Service Electric & Gas
Company
Reliant Energy, Inc.
Seattle City Light
South Beloit Water Gas and
Electric Company
South Carolina Public Service
Authority
Tennessee Valley Authority
Toledo Edison Co
Union Light, Heat & Power Co
Vermont Electric Cooperative
Western Massachusetts Electric
Company
Wisconsin Electric Power
Company

Time-of-Use

Adams-Columbia Electric Coop
Ak-Chin Energy Services
Alabama Power Co
Alliant Energy
Arizona Public Service Co
Baltimore Gas and Electric Co
Bangor Hydro-Electric
Barron Light & Water
Big Horn Rural Electric Co
Blue Grass Energy Cooperative
Corp
Blue Ridge Electric Coop
Broad River Electric Coop
Butler County Rural Electric
Coop
Butler Rural Electric
Cooperative, Inc.
Carbon Power and Light Inc.
Carteret-Craven Electric Coop
Cedarburg Light & Water Utility
Central Alabama Electric Coop
Central Electric Membership
Corp
Central Hudson Gas & Electric
Corp
Central Illinois Light Co
Central Illinois Public Service Co
Central Maine Power Co
Central NM Electric Coop
Central Vermont Public Service
Corp
Choptank Electric Cooperative,
Inc.
Cincinnati Gas & Electric Co
City of Kiel Utilities
City of Kinston
City of Laurinburg, (NC)
City of Mountain Iron
Clark County Rural EMC
Clark Energy Coop, Inc.

Clay Electric Coop, Inc.
Cleveland Electric Illuminating
Co
Colorado Springs Utilities
Columbia Water & Light
Department
Columbus Southern Company
Columbus Water & Light
Concord Municipal Light Plant
Consumers Energy
Connecticut Light and Power
Continental Cooperative
Services
CPS Energy
Crisp County Power
Commission
Cumberland Valley Electric
Decatur County Rural E M C
Delmarva Power & Light Co
Dominion North Carolina Power
Dominion Virginia Power
Duke Power
Duquesne Light Co
East-Central Iowa Rural Electric
Coop
Econergy Energy Co, Inc.
El Paso Electric Co
Elkhorn Light and Water
Energy Investment Systems, Inc.
Entergy Arkansas, Inc.
Entergy Gulf States, Inc.
Farmers Electric Coop, Inc.
Farmers RECC
Fleming-Mason Energy Coop
Inc.
Florence Utilities
Florida Power & Light Co
Georgia Power Co
Grand Valley Rural Power Lines,
Inc.

Grayson Rural Electric Coop
Green Mountain Power Corp
Gunnison C E A Inc.
Hartford Electric
Hawaiian Electric Company, Inc.
High Plains Power, Inc.
Highline Electric Association
Idaho Power Company
Illinois Power Company
Indiana Michigan Power Co
Inter-County Energy Coop Corp
Iowa Lakes Electric Cooperative
Jackson Electric Membership
Corp
Jackson Energy Cooperative
Corp
JEA
Jefferson Utilities
Jemez Mountain Electric Coop,
Inc.
Jersey Central Power & Light Co
Johnson County REMC
Kansas City Power & Light Co
Kentucky Power Co
Kentucky Utilities Co
Kingsport Power Co
La Plata Electric Association
Laurens Electric Coop, Inc
Long Island Power Authority
Los Angeles Department of
Water and Power
Lumbee River Electric
Membership Corporation
Madison Gas and Electric
Company
Medford Electric Utility
Menasha Utilities
Metropolitan Edison Co
MidAmerican Energy Company
Montana-Dakota Utilities Co.

Time-of-Use (Cont'd)

Morgan County rural Elec Assn
Navopache Electric Cooperative, Inc.
Nevada Power Company
New Holstein Utilities
New Richmond Utilities
Niagara Mohawk
Niobrara Electric Assn Inc
North Central Power Co., Inc.
Northern Indiana Public Service Company
Northern States Power Co (MN)
Northern States Power Co (WI)
Northwest Rural Public Power District
Northwestern Wisconsin Electric Company
Northern Rio Arriba Elec Coop
NSTAR Electric
Oconomowoc Utilities
OGE Electric Services (DBA Oklahoma Gas and Electric)
Ohio Power Company (OPCO)
Oklahoma Electric Co
Orange & Rockland Utilities, Inc.
Orlando Utilities Commission
Owen Electric Cooperative
Pacific Gas & Electric Co
PacifiCorp
PECO Energy Company
Pee Dee Elect Mem Corp (NC)
Pennsylvania Electric Co
Pennsylvania Power Co
Piedmont Electric Membership Corporation
Pioneer Electric Cooperative, Inc.
Portland General Electric Company
Poudre Valley R E A, Inc.
Powder River Energy Corp
Progress Energy Carolinas, Inc.
Progress Energy Florida, Inc.
PSI Energy Inc
Public Service Co. of Oklahoma
Public Service Company of New Hampshire
Public Service Company of New Mexico
Public Service Electric & Gas Company
Randolph Electric Membership Corporation
Rice Lake Utilities
River Falls Municipal Utilities
Riverside Public Utilities
Rochester Gas & Electric Corp
Roosevelt Public Power District
Sacramento Municipal Utility District
San Diego Gas and Electric

San Luis Valley R E C
Seattle City Light
Shelby Energy Coop Inc
Sierra Pacific Power Co
Slinger Utilities
South Beloit Water Gas and Electric Co
South Carolina Public Service Authority
South Central Indiana R E M C
South Kentucky Rural Electric Coop Corp
Southeast Colorado Power Assn
Southwestern Electric Power Co
SRP
Sterling Municipal Light Department
Stoughton Utilities
Sun Prairie Water & Light
Taylor County RECC
Texas North Company
Toledo Edison Co
Town of Reading Municipal Light Department
Trico Electric Cooperative, Inc
Tucson Electric Power Company
Turlock Irrigation District
TXU Energy Retail Company LP
UGI Utilities, Inc.
UIL
Umatilla Electric Coop
Union Electric Company
Union Light, Heat & Power Co
United Electric Cooperative Services, Inc.
Unitil Energy Systems, Inc.
Vermont Electric Coop
Waverly Light and Power
Westby Utilities
Western Massachusetts Electric Co
Wheatland REA
Wheeling Power Co
Wisconsin Power and Light Co
Wisconsin Public Service Corp

Appendix I. Data and Sources for Figures

Executive Summary

Figure ES-1. Penetration of advanced metering by region

*See Figure III-7

Figure ES-2. Existing demand response resource contribution by NERC region and customer type

*See Figure V-6

Figure ES-3. Demand response resource contributions by entity type and customer class

*See Figure V-3

Chapter II

Figure II-3. Elasticity of substitution varies by customer market segment

Market Segment	Elasticity
Commercial / Retail	0.05
Gov't / Education	0.11
Health Care	0.03
Manufacturing	0.17
Public Works	0.01
All Accounts	0.11

Source: Goldman, et al., *Customer Strategies for Responding to Day-Ahead Market Hourly Electricity Pricing*: LBNL-57128, August 2005.

Chapter III

Figure III-4. United States penetration of advanced metering

Penetration Rate	Advanced Metering	Non-Advanced Metering
Total	5.9%	94.1%

Source: FERC Survey

Figure III-5. Penetration of advanced metering by customer class

Customer Class	Advanced Metering
Residential	6.0%
Commercial	5.0%
Industrial	5.7%
Transportation	8.0%
Other	2.6%

Source: FERC Survey

Figure III-6. Penetration of advanced metering by ownership

Ownership	Advanced Metering
Cooperative	12.9%
Investor Owned	5.7%
Municipal Marketing Authority	2.0%
Municipal	1.3%
Political Subdivision	1.3%
Power Marketer	0.5%
Federal	0.4%
CSP	0.3%
State	0.1%
ISO	0.0%

Source: FERC Survey

Figure III-7. Penetration of advanced metering by NERC region

Region	Advanced Metering
RFC	14.7%
SPP	14.0%
SERC	5.2%
MRO	4.2%
NPCC	2.8%
FRCC	2.5%
WECC	1.0%
Other	0.2%

Source: FERC Survey

Figure III-8. Advanced metering data interval and collection frequency penetration estimates

Total meters	Percent
Daily Collection, Interval < 15 minutes	2.10%
Daily Collection, 15 minutes < Interval <= Hourly	5.04%
Advanced Metering	5.88%
Daily Collection, TOU	2.33%
Daily Collection, Interval <= Hourly or TOU	5.89%
Daily or Monthly Collection, Interval <= Hourly or TOU	7.01%
Monthly Collection, Interval <= Hourly or TOU	4.47%
Monthly Collection, TOU	2.79%
Monthly Collection, Interval <= Hourly	2.66%
Monthly Collection, 15 minutes < Interval <= Hourly	2.39%
Monthly Collection, Interval <= 15 minutes	1.25%

Source: FERC Survey

Figure III-9. Reported uses of AMI system by entities that use AMI

Feature	Yes, Entity Uses Capability
Pricing event notification capability	3%
Interface with water or gas meters	6%
Price responsive DR	15%
Remotely change metering parameters	16%
Premise device - load control interface or capability	18%
Reduce line losses	19%
Asset mgmt, including transformer sizing	25%
Load forecasting	32%
Outage mgmt	40%
Power quality monitoring	41%
Tamper detection	52%
Enhanced customer service	73%

Source: FERC Survey

Figure III-10. Large AMI deployments

Year	Fixed RF	Power Line Comm	Broadband Over Power Lines	Pending	Grand Total
1994	450,000				450,000
1995	1,950,000				1,950,000
1996	1,900,000				1,900,000
1997	2,190,000				2,190,000
1999	2,420,000	650,000			3,070,000
2000	200,000				200,000
2001	450,000				450,000
2002	1,000,000	1,300,000			2,300,000
2004		125,000			125,000
2005	2,050,000	265,000	2,000,000		4,315,000
2006	4,100,000	5,100,000		4,300,000	13,500,000
2007				8,775,000	8,775,000
2008				4,475,000	4,475,000

Source: UtiliPoint International

Figure III-11. Total AMI capital and hardware costs per meter

Year	Hardware Per Meter	Total Capital per Meter
1996	\$99.23	
1997	\$97.78	
1998	\$100.00	
2000	\$89.10	
2001	\$86.15	\$214.49
2002	\$86.15	\$123.08
2004	\$68.18	\$136.36
2005	\$75.60	\$150.00
2005	\$73.57	\$135.48
2006	\$86.43	\$143.04

Source: UtiliPoint International

Figure III-12. AMI System Cost Breakdown

Cost Component	Cost
Endpoint Hardware	0.45
Network Hardware	0.2
Installation	0.15
Project Management	0.11
IT	0.09

Source: David Prins et. al. (CRA International), "Interval Metering Advanced Communications Study," August 2005

Figure III-14. Number of customers receiving interval usage information by customer class and source of information

Source	Residential	Commercial	Industrial	Transportation	Other	TOTAL
Via the internet	24,789	69,021	16,123	3	2,628	112,564
On their bills	75,836	24,421	3,708	4	2,914	106,883
Via the AMI network	5,641	789	249	0	35	6,714
TOTAL	106,266	94,231	20,080	7	5,577	226,161

Source: FERC Survey

Chapter IV

Figure IV-3. California CPP: Residential CPP Response by Attribute

High vs. Low User	
200% Average Use	17.2%
50% Average Use	9.8%
Income	
>\$100,000	15.1%
<\$40,000	12.1%
Single vs. Multi-Family	
Single Family	13.5%
Multi-Family	9.8%
Central AC Ownership	
YES	12.8%
NO	12.3%
Pool Ownership	
YES	19.2%
NO	12.1%
State-wide Average	12.5%

Source: Roger Levy, Joint California Workshop, "Advanced Metering Results and Issues" September 2004.

Figure IV-4. Average Residential Critical Peak Impacts by Rate Treatment

Rate Type	Peak Load Reduction
Time of Use	4.1%
CPP-Fixed	12.5%
CPP-Variable	34.5%
Hottest CPP-Variable	47.4%

Source: Roger Levy, Joint California Workshop, "Advanced Metering Results and Issues" September 2004.

Figure IV-6. Direct Load Control programs offered by region and entity type

Region	Cooperative Utilities and Political Sub-divisions	Federal and State Utilities	Investor-Owned Utilities	Municipal Entities
ERCOT				2
FRCC	3		2	1
MRO	43	1	14	33
NPCC	1	1	4	9
RFC	23		12	5
SERC	28		6	6
SPP	12		2	
WECC	5		5	2
Other		5	1	4

Source: FERC Survey

Figure IV-7. Number of customers enrolled in DLC programs

Region	Cooperative Utilities and Political Sub-divisions	Federal and State Utilities	Investor-Owned Utilities	Municipal Entities
ERCOT				48,624
FRCC	68,482		1,142,290	3,079
MRO	432,817	347,750	468,569	39,678
NPCC	1,500	31,887	93,067	4,904
RFC	129,710		841,731	1042
SERC	222,791		334,551	31,828
SPP	29,113		17,147	
WECC	204,949		231,334	2,093
Other	20,797	7,837	2,219	1,161

Source: FERC Survey

Figure IV-8. Number of entities offering interruptible/curtailable tariffs by region and entity type

Region	Cooperative Utilities and Political Sub-divisions	Federal and State Utilities	Investor-Owned Utilities	Municipal Entities
ERCOT	1			1
FRCC	3		2	3
MRO	24	1	15	17
NPCC		1	7	16
RFC	15		22	2
SERC	31	2	8	2
SPP	16	2	2	4
WECC	2		7	2
Other	3	1	3	

Source: FERC Survey

Figure IV-9. Number of entities offering capacity, demand bidding, and emergency programs by region

Region	Capacity Programs	Demand Bidding	Emergency
ERCOT	0	1	0
FRCC	0	0	0
MRO	3	4	4
NPCC	4	2	15
RFC	3	1	3
SERC	0	3	0
SPP	1	0	0
WECC	5	7	5
Other	0	0	0

Source: FERC Survey

Figure IV-10. TOU tariffs offered to residential customers by entity type

Region	Cooperative Utilities and Political Sub-Divisions	Federal and State Utilities	Investor-Owned Utilities	Municipal Entities
ERCOT	1		1	1
FRCC	1		2	2
MRO	7		12	21
NPCC	1		15	3
RFC	6		15	
SERC	23	1	12	2
SPP	4		5	
WECC	19	1	10	3
Other		1		

Source: FERC Survey

Figure IV-11. Residential customers on TOU tariffs by region and entity type

Region	Cooperative Utilities and Political Sub-divisions	Federal and State Utilities	Investor-Owned Utilities	Municipal Entities
ERCOT			60	1
FRCC			250	2
MRO	736		44003	215
NPCC		10818	55827	104
RFC	2424		681317	
SERC	5777	4	8107	58
SPP	6091		143870	
WECC	157483	3	447745	1845
Other		148		

Source: FERC Survey

Figure IV-12. RTP tariffs offered by region and entity type

Region	Cooperative Utilities and Political Sub-divisions	Federal and State Utilities	Investor-Owned Utilities	Municipal Entities
ERCOT	0	0	0	0
FRCC	0	0	0	1
MRO	1	0	8	0
NPCC	1	1	9	1
RFC	0	0	11	0
SERC	0	2	4	0
SPP	1	0	1	0
WECC	1	0	1	1
Other	0	0	1	0

Source: FERC Survey

Figure IV-13. Drivers for developing or expanding demand response programs

Drivers	Percentage
Less Pollution	18%
Generation Shortage	22%
Add'l Power to Sell	22%
Reduce Local Congestion	26%
Fewer Brownouts/Blackouts	28%
Reduce Energy Costs	30%
Lower Energy Bills for Participants	36%
Reliability	52%
Regulatory	55%
Reduce Utility Costs	55%

Source: FERC Survey

Chapter V

Figure V-2. Demand response potential peak reduction by region and customer class

Region	Residential	Commercial	Industrial	Other (Agriculture)	Wholesale
ERCOT	53	9	315	0	1,485
FRCC	1,513	616	251	0	244
MRO	1,307	317	2,804	176	275
NPCC	236	822	591	33	1,618
RFC	1,033	1,502	660	8	3,962
SERC	758	243	3,586	51	248
SPP	84	168	99	17	635
WECC	807	1,054	1,251	304	431
Other	12	71	3	0	1

Source: FERC Survey

Notes: Other reliability region includes Alaska and Hawaii

Figure V-3. Demand response potential peak load reduction by type of entity and customer class

Utility Type	Residential	Commercial	Industrial	Other (Agriculture)	Wholesale
Investor-Owned Utility	3,927	3,377	5,158	246	395
Cooperative Utility and Political Sub-division	1,232	406	930	306	941
Municipal Utility and Municipal Marketing Authority	227	333	538	3	61
Curtailment Service Provider and Power Marketer	0	162	387	0	0
Federal and State Utilities	416	517	2,541	33	367
ISO/RTO	0	0	0	0	7,134

Source: FERC Survey

Figure V-4. Resource potential of various types of demand response programs and time-based tariffs

Program	Residential	Commercial	Industrial	Other (Agriculture)	ISO/RTO
Interruptible	82	1,103	6,266	58	
Direct Load Control	5,541	768	62	257	
Emergency Demand Response	62	892	252	12	1760
Capacity		350	150		2,091
Ancillary Services			10		1,547
Demand Bidding		104	250		2,414
Multiple	35	1,218	1,358	25	
Other	6	162	439	236	
Real-Time Pricing	0	445	659		
Critical Peak Pricing	16	39	57	0	
Time-of-Use	63	10	95		

Source: FERC Survey

Figure V-5. Demand response resource potential versus actual deployed demand response resources by region

Region	Potential Peak Reduction	Actual Peak Reduction
ERCOT	1,862	62
FRCC	2,624	1,297
MRO	4,878	2,227
NPCC	3,301	447
RFC	7,165	1,212
SERC	4,887	1,606
SPP	1,003	136
WECC	3,847	1,675
Other	88	55

Source: FERC Survey

Notes: Other reliability region includes Alaska and Hawaii

Figure V-6. FERC staff estimate of existing demand response resource contribution

Region	Residential	Commercial	Industrial	Other (Agriculture)	Wholesale
ERCOT	55	24	327	0	1,485
FRCC	1,681	635	277	0	244
MRO	1,722	577	3,441	176	275
NPCC	267	859	690	33	1618
RFC	1,170	1,586	1,664	8	3,962
SERC	1,417	537	5,567	51	248
SPP	134	265	590	17	635
WECC	962	1,106	2,384	304	431
Other	12	72	41	0	1

Source: FERC Survey

Notes: Other reliability region includes Alaska and Hawaii

Figure V-7. FERC estimate of existing demand response resource contribution using old NERC region definitions

Region	Residential	Commercial	Industrial	Other (Agriculture)	Wholesale
ERCOT	55	24	327	0	1,485
FRCC	1,666	635	256	0	244
MAPP	1,200	408	1,691	149	143
NPCC	226	814	680	33	1,619
MAIN	294	609	1,720	5	2,147
ECAR	819	272	2,174	28	745
MAAC	678	934	158	0	1,370
SERC	1,377	558	4,967	55	81
SPP	123	221	578	11	635
WECC	971	1,121	2,391	307	431
Other	11	66	38	0	0

Source: FERC Survey

Notes: Other reliability region includes Alaska and Hawaii

Figure V-8. FERC staff estimate of existing demand response resource contribution by entity type and customer class

Utility Type	Residential	Commercial	Industrial	Other (Agriculture)	Wholesale
Investor-Owned Utility	4,235	3,626	9,029	246	395
Cooperative Utility and Political Sub-division	2,360	915	1,899	306	941
Municipal Utility and Municipal Marketing Authority	338	433	903	3	61
Curtailment Service Provider and Power Marketer	0	162	387	0	0
Federal and State Utilities	486	518	2,757	33	367
ISO/RTO					7,134

Source: FERC Survey

Chapter VII

Figure VII-1. Regulator treatment of AMI and Demand Response

Regulator Response	Percent
Yes - some recovery of prudent expenses	39%
Yes - full recovery of prudent expenses	35%
No	17%
No reply	9%

Source: Patti Harper-Slaboszewicz, UtiliPoint, "Regulator Interest in AMI and Demand Response," written remarks submitted as panelist, FERC Technical Conference, 5

Appendix J: Acknowledgements

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Appendix J: Acknowledgements



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