

# Tracking New Coal-Fired Power Plants



**Coal's Resurgence in Electric Power Generation**



May 1, 2007



# Tracking New Coal-Fired Power Plants

This information package is intended to provide an overview of “Coal’s Resurgence in Electric Power Generation” by examining proposed new coal-fired power plants that are under consideration.

The results contained in this package are derived from information that is available from various tracking organizations and news groups. Although comprehensive, this information is not intended to represent every possible plant under consideration but is intended to illustrate the large potential that exists for new coal-fired power plants.

Proposals to build new power plants are often speculative and typically operate on “boom & bust” cycles, based upon the ever changing economic climate of power generation markets. As such, it should be noted that many of the proposed plants will not likely be built. For example, out of a total portfolio (gas, coal, etc) of 500 GW of newly planned power plant capacity announced in 2001, 91 GW have been already been scrapped or delayed<sup>1</sup>.

**The Department of Energy does not warrant the accuracy or suitability of this information.**

*Sources: 1 - Energy Central Daily & Wall Street Journal*



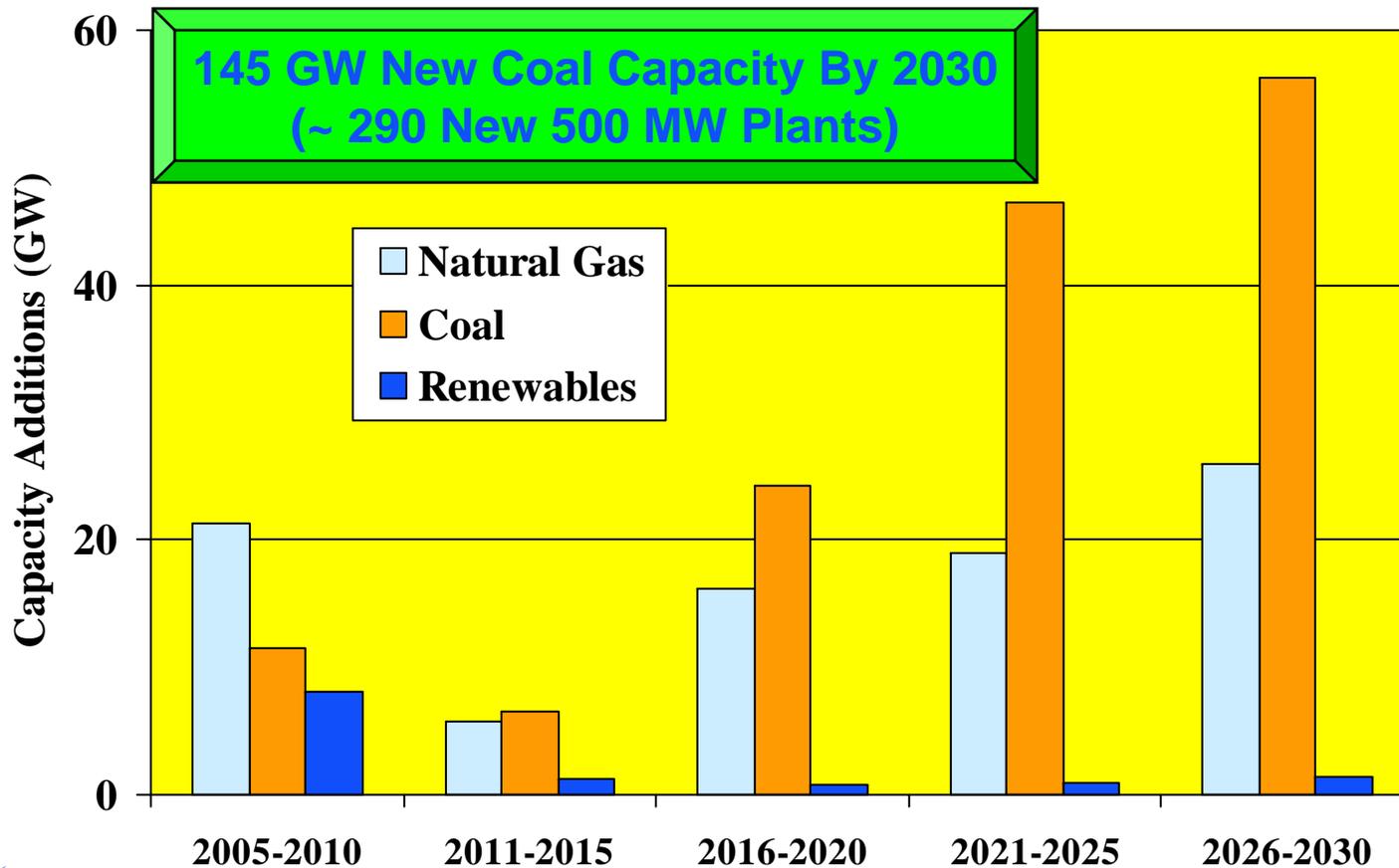
NETL Contact: Erik Shuster  
erik.shuster@netl.doe.gov

OSAP 5/1/2007

# 145 GW New Coal Capacity By 2030 (Accounts for 59% of New Capacity Additions)

## New Electricity Capacity Additions

(EIA Reference Case)

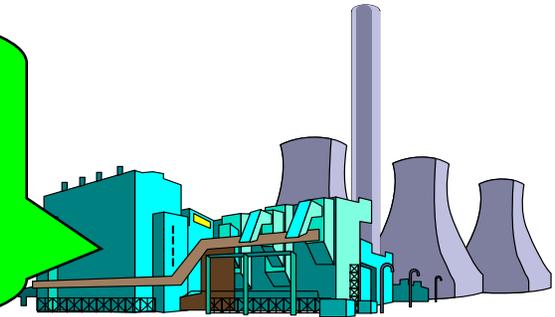


Source: Data Derived From EIA Annual Energy Outlook 2007



# Coal's Resurgence in Electric Power Generation

**151 Proposed & New (on-line) Plants**  
(Includes 9 Proposed Plants On-Hold & 10 Operating Plants)  
**90 GW Power**  
**\$ 145 Billion Investment**



**Equivalent Power**  
**for**  
**90 Million Homes**



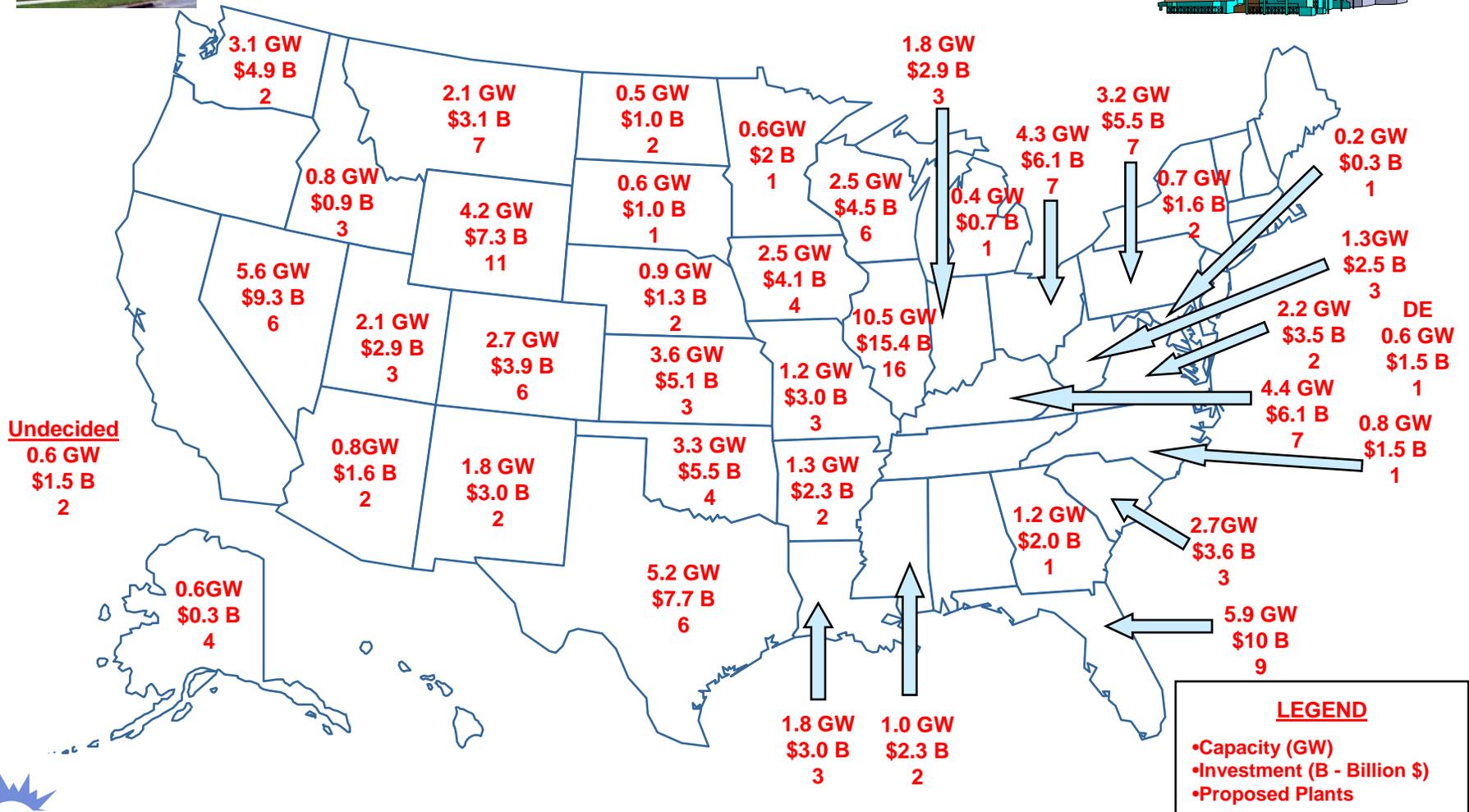
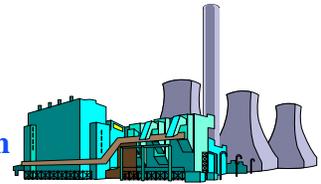
# Coal's Resurgence in Electric Power Generation



Equivalent Power  
for  
90 Million Homes

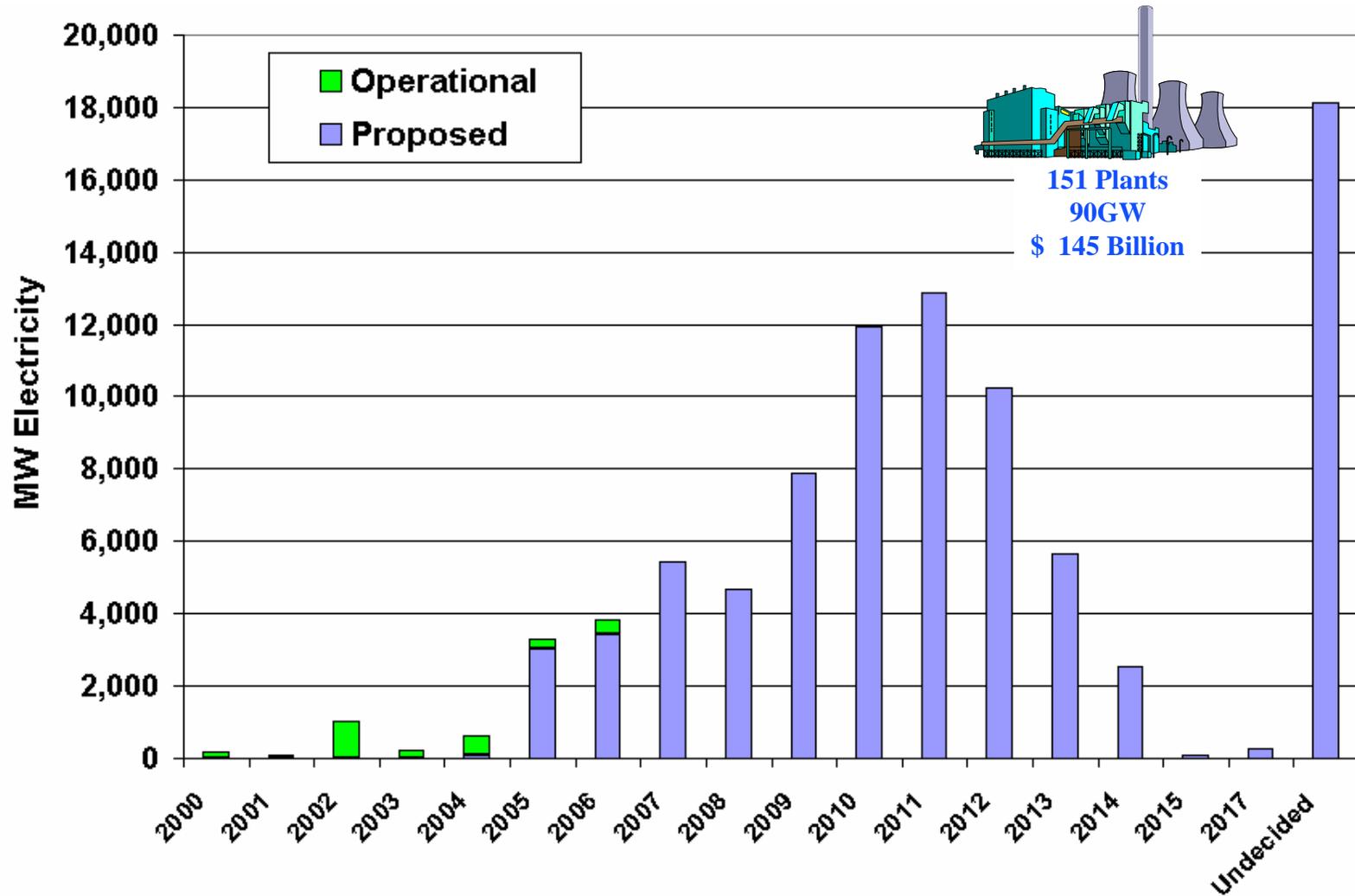
## Proposed New Plants

151 Plants  
90GW  
\$ 145 Billion

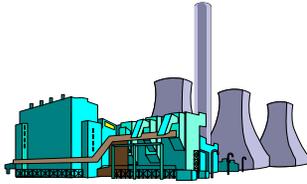


# Coal's Resurgence in Electric Power Generation

**\*\* Annual Capacity Additions New and Proposed\*\***



# Coal's Resurgence State Summary



151 Plants  
90GW  
\$ 145 Billion



Equivalent Power  
for  
90 Million Homes

State	Plants	Capacity (MW)	% Capacity	Investment (Million \$)	% Investment
Alabama	0	0	0.0	\$0	0.0
Alaska	4	600	0.7	\$341	0.2
Arizona	2	818	0.9	\$1,589	1.1
Arkansas	2	1,265	1.4	\$2,300	1.6
California	0	0	0.0	\$0	0.0
Colorado	6	2,714	3.0	\$3,904	2.7
Delaware	1	630	0.7	\$1,500	1.0
Florida	9	5,912	6.6	\$10,002	6.9
Georgia	1	1,200	1.3	\$2,000	1.4
Idaho	3	750	0.8	\$850	0.6
Illinois	16	10,509	11.7	\$15,395	10.6
Indiana	3	1,760	2.0	\$2,900	2.0
Iowa	4	2,540	2.8	\$4,124	2.9
Kansas	3	3,550	4.0	\$5,100	3.5
Kentucky	7	4,406	4.9	\$6,087	4.2
Louisiana	3	1,805	2.0	\$3,020	2.1
Maryland	1	180	0.2	\$251	0.2
Michigan	1	425	0.5	\$663	0.5
Minnesota	1	603	0.7	\$2,000	1.4
Mississippi	2	1,040	1.2	\$2,300	1.6
Missouri	3	1,150	1.3	\$2,997	2.1
Montana	7	2,078	2.3	\$3,116	2.2
Nebraska	2	880	1.0	\$1,295	0.9
Nevada	6	5,615	6.3	\$9,329	6.4
New Mexico	2	1,800	2.0	\$3,000	2.1
New York	2	720	0.8	\$1,645	1.1
North Carolina	1	800	0.9	\$1,530	1.1
North Dakota	2	540	0.6	\$957	0.7
Ohio	7	4,310	4.8	\$6,136	4.2
Oklahoma	4	3,300	3.7	\$5,500	3.8
Oregon	0	0	0.0	\$0	0.0
Pennsylvania	7	3,151	3.5	\$5,483	3.8
South Carolina	3	2,680	3.0	\$3,584	2.5
South Dakota	1	600	0.7	\$1,000	0.7
Tennessee	0	0	0.0	\$0	0.0
Texas	6	5,214	5.8	\$7,700	5.3
Utah	3	2,070	2.3	\$2,850	2.0
Virginia	2	2,200	2.5	\$3,500	2.4
Washington	2	3,100	3.5	\$4,900	3.4
West Virginia	3	1,345	1.5	\$2,455	1.7
Wisconsin	6	2,500	2.8	\$4,498	3.1
Wyoming	11	4,180	4.7	\$7,354	5.1
Undecided	2	630	0.7	\$1,500	1.0
<b>TOTALS</b>	<b>151</b>	<b>89,570</b>	<b>100</b>	<b>\$144,655</b>	<b>100</b>



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
TVA-Bellefonte Site	Alabama Jackson County	1500-MW IGCC-Texaco	Cancelled (4/2003) In Service - 2005	~ \$1.5 Billion	High-Sulfur-Coal- Illinois-Basin	8, 7, 9, 12
Matanuska Electric Association	Alaska	100 MW	Proposed (4/2007) In Service - 2015	~ \$156 Million	Coal	1
Nuvista	Alaska Bethel	100 MW	Proposed (3/2004) In Service - 2010	~ \$156 Million	Coal	11
Homer Electric Association	Alaska Healy	50 MW Restart Idled Project	Proposed (3/2007) In Service - 2014	\$29 Million	Coal	1
Usibelli Coal Mine Inc.	Alaska Healy	200-MW	Cancelled (1/2007) In Service - TBD	\$421 Million	Coal	1, 6
Agrium US	Alaska Kenai	350 MW Gasification	Feasibility study (12/2005) In Service - 2011	TBD	Coal	11
Reliant Resources Hopi Tribe	Arizona Not yet located	1,200-MW	Cancelled (5/2002) In Service - 2008	~ \$1.2 Billion	low-Sulfur-Sub- bituminous	11, 24
Tucson Electric Power	Arizona Springerville	418MW	Operational (7/2006) In Service - 2006	\$939 Million	Sub-Bituminous	2, 3, 4, 7, 12
Tucson Electric Power	Arizona Springerville	400 MW	Near Construction (7/2006) In Service - 2009	\$650 Million	PRB & local Western Coal	7
Alabama Electric	Arizona Sumter County	500-MW	Cancelled In Service - 2007	~ \$500 Million	Sub-Bituminous	9, 6
Fort Chaffee Authority	Arkansas Fort Chaffee	2 Plants 750-MW each	Cancelled In Service - 2007	\$2.5 Billion	Arkansas Coal	11
Southwestern Electric Power Company	Arkansas Hempstead County	600 MW Ultra-Supercritical	Proposed (8/2006) In Service - 2011	\$1.3 Billion	PRB Coal Wyoming	1

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
LS Power Development	Arkansas Osceola	665 MW	Construction (12/2006) In Service - 2010	\$1 Billion	Powder River Basin Coal	6, 9, 11, 1
Fernald Power	California Humboldt City	2,500 MW	Indefinitely On Hold <del>In Service - TBD</del>	~ \$2.5 Billion	Coal	11
Radar Acquisitions Corp. / Kiewit	Colorado	400 - 500 MW	Feasibility Study (10/2003) In Service - TBD	~\$702 Million	Coal	11
DOE Foster Wheeler	Colorado Colorado Springs	150 MW CFB	On Hold (12/2003) In Service - 2008	\$275 Million	Coal	1, 11
Tri-State Generation and Transmission	Colorado Front Range	1,000 MW	Proposed (10/2004) In Service - 2011	~\$1.56 Billion	Coal	1
Lamar Light & Power Ark. River Power Auth.	Colorado Lamar	39 MW increase Conversion	Near Construction (4/2006) In Service - TBD	\$67 Million	Coal to replace natural gas	2
<del>Tri-State Generation and Transmission</del>	<del>Colorado Las Animas</del>	<del>3 Units 400 MW each</del>	<del>Cancelled (4/03) In Service - 2005,06,07</del>	<del>\$1.2 Billion</del>	<del>Coal</del>	<del>11, 4, 12</del>
Xcel Energy	Colorado Pueblo	750MW Super-critical	Construction (11/2006) In Service - 2009	\$1.3 Billion	PRB Coal	1, 11
Xcel Energy	Colorado	300-350MW IGCC	Proposed (8/2006) In Service - TBD	TBD	Coal	1, 11
<del>Deseret Generation &amp; Transmission Corp.</del>	<del>Colorado Rangely</del>	<del>80 MW</del>	<del>Cancelled (1/2005) In Service - 2004</del>	<del>\$140 Million</del>	<del>Waste Coal</del>	<del>1, 3, 12</del>
NRG	Delaware Indian River	630 MW IGCC	Feasibility Study (2/2007) In Service - TBD	\$1.5 Billion	Coal	11
Florida Municipal Power Agency	Florida	500-600 MW	No Plans (8/2006) In Service - 2009	\$600 Million	Coal	11, 6

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
Florida Power & Light	Florida Crystal River	100 MW	Operational In Service - 2001	~ \$156 Million	Coal	12
Jacksonville Electric	Florida Duval	(2) 300 MW Units CFB	Operational (7/2002) In Service - 2002	~\$936 Million	Coal/Pet Coke	12, 3, 9
Florida Power & Light	Florida Glades County	(2) 980 MW Units Ultra-Supercritical	Permitting (1/2007) In Service - 2012, 13	~\$3.06 Billion	Appalachian Coal	7, 11
Orlando Utilities Comm. Southern Co, & U.S. DOE	Florida Orange County	285 MW IGCC	Proposed (4/2007) In Service - 2010	\$750 Million	Coal	1, 2
Lakeland Electric & Water	Florida Polk County	350 MW	Cancelled In Service - TBD	~ \$350 Million	Coal	12
Tampa Electric	Florida Polk County	630 MW IGCC	Proposal (11/2006) In Service - 2013	~\$1.2 Billion	Coal	1
Seminole Electric Cooperative	Florida Putnam County	750 MW	Permitting (1/2007) In Service - 2012	\$1.2 Billion	Coal	1, 11
Florida Power & Light	Florida St. Lucie County	(2) 425 MW Units Super-critical	Cancelled (11/2005) In Service - 2012, 13	~\$1 Billion	Coal	1, 11, 23
Florida Power & Light	Florida St. Lucie County	TBD IGCC	Feasibility Study (6/2006) In Service - TBD	TBD	Coal	11
JEA	Florida Taylor County	800 MW	Developing (6/2006) In Service - 2012	\$1.5 Billion	Mix of Coals	1, 2, 11
Southern Company	Florida Taylor County	787 MW Supercritical	Proposed (6/2006) In Service - 2012	~\$1.2 Billion	Coal	11
Longleaf Energy (LS Power Development)	Georgia Early County	1,200 MW 2 (600MW Units)	Permitting (11/2006) In Service - 2005	\$2.0 Billion	Coal	6, 25

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
Sempra Energy Resources	Idaho Elmore or Jerome	600 MW Super-Critical	Cancelled (3/2006) In Service - 2011	\$1 Billion	Coal PRB	21, 11
Southeast Idaho Energy LLC	Idaho Pocatello	~ 500 MW IGCC	Proposed (3/2005) In Service - 2010	\$850 Million	Coal	2
Idaho Power Company	Idaho Pocatello /Soda Springs	TBD IGCC	Proposed (11/2006) In Service - 2017	TBD	Coal	1, 11
Mountain Island Energy Holdings, LLC	Idaho Soda Springs	250 MW IGCC	Proposed (1/2007) In Service - 2013	TBD	Coal	1
Dynegy	Illinois Baldwin	2 Plants 650 MW each	Proposed (10/2001) In Service - 2007	\$1.5 Billion	Illinois Coal	1
Illinois Energy Group	Illinois Benton	2 units 750 MW each	Proposed (8/2002) In Service - TBD	\$1.7 Billion	Coal	11, 17
Secure Energy LLC	Illinois Decatur	Coal-to-Synthetic Gas	Proposed (5/2006) In Service - 2008	TBD	Coal	1, 11
Rentech Development Corp.	Illinois East Dubuque	76 MW & Fuels Gasification	Proposed (6/2006) In Service - 2009	\$810 Million	Coal	7, 11
Corn Belt Energy	Illinois Elkhart	91 MW LEBS	Development (6/2005) In Service - TBD	\$140 Million	Waste Coal	1, 2, 8, 12
Turris Coal Company	Illinois Elkhart	25 - 35 MW	Proposed (10/2001) In Service - TBD	~ \$47 Million	Coal	11
Indeck Energy Service	Illinois Elwood	600 MW CFB	On Hold (11/2005) In Service - 2007	\$1 Billion	Illinois Coal	1, 12, 8
Clean Coal Power Resources	Illinois Fayette County	2,400 MW & Fuels Gasification	Proposal (10/2002) In Service - TBD	\$2.8 Billion	Coal	11

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
EnviroPower	Illinois Franklin County	600 MW	Re-Permitting (10/2006) In Service - 2007	~ \$936 Million	Coal	8, 12
Madison Power Corp.	Illinois Marion	500 MW Gasification	Proposal (6/2005) In Service - TBD	\$2.0 Billion	Coal (Mine-Mouth)	2
Southern Illinois Power	Illinois Marion	120 MW	Operational (6/2003) In Service - 2003	\$50 Million	Bituminous Coal Fines	8, 9, 12
City Water, Light & Power	Illinois Springfield	200 MW	Development (9/2005) In Service - 2010	~\$312 Million	Coal	12, 1
Erora Group	Illinois Taylorville	777 MW IGCC / Coprod.	Development (7/2006) In Service - 2010	1.1 Billion	Illinois Coal (Mine-Mouth)	1, 19, 11
Peabody Energy / Prairie State Energy Campus	Illinois Washington City	2 units 750 MW each	Near Construction (10/2006) In Service - 2011	\$2.0 Billion	Illinois Coal High Sulfur	1, 11, 12
United Supply of America	Illinois White County	270 MW CFB	Proposal (10/2005) In Service - TBD	\$400 Million	Coal (Mine Mouth) & Waste Coal	1
Steelhead Energy Company LLC	Illinois Williamson County	545 MW IGCC	Proposal (6/2005) In Service - TBD	\$600 Million	Coal	1
Duke Energy (Cinergy)	Indiana Edwardsport	630 MW IGCC	Permitting (11/2006) In Service - TBD	\$1.3 Billion	Coal	23, 11
EnviroPower	Indiana Fayette County	525 MW	Development (7/2002) In Service 2004	~\$525 Million	Waste Coal	12, 8
EnviroPower	Indiana Pike County	500 MW	Initiate 2001 Cancelled 2002	\$600 Million	Waste Coal	2, 5, 8, 9, 12
Tondu Corp,	Indiana St. Joseph County	630 MW IGCC	Considering (9/2005) In Service - TBD	\$1 Billion	Coal	2

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING Status - (Date indicates latest reference) In Service - Planned Date	INVESTMENT	COAL TYPE	SOURCES
EnviroPower	Indiana Sullivan County	500 MW	Permitting (10/2002) In Service - TBD	\$600 Million	Waste Coal	2, 5, 8, 9, 12
Alliant Energy	Iowa-	450 MW	Development (5/2003) Cancelled - 2003	~\$450 Million	Coal	12, 1
MidAmerican Energy	Iowa Council Bluffs	790 MW Super-critical	Construction (8/2004) In Service - 2007	\$1.2 Billion	Coal	13, 1, 8, 11
Interstate Power and Light	Iowa Marshalltown	600 MW Super-Critical	Proposal (4/2007) In Service - 2013	\$1.0 Billion	Coal	11
Dairyland Power Cooperative	Iowa Mitchell or Chickasaw	400 MW	On Hold (12/2004) In Service - 2009-2014	~\$624 Million	Low Sulfur PRB and Colorado	2, 11
LS Power	Iowa Waterloo	750 MW	Proposal (1/2007) In Service - 2011	\$1.3 Billion	Coal	1
Sunflower Electric Power Corp.	Kansas Garden City (Holcomb)	3 - 700 MW Units Super-critical	Near Construct. (4/2007) In Service - 2012, 2013, Hold	2.5 Billion	Coal PRB	1, 11, 12, 7
Great Plains Energy	Kansas	850 MW	On Hold (7/2004) In Service - TBD	~ \$1.3 Billion	Coal	1,
Westar Energy Inc.	Kansas	600 MW	On Hold (12/2006) In Service - 2013	\$1.3 Billion	Coal	2
EnviroPower	Kentucky Calvert City	500 MW	On Hold (2/2003) In Service - TBD	\$600 Million	Coal & Waste Coal	1, 2, 25
Peabody Energy/ Thoroughbred Campus	Kentucky Muhlenberg	2 Units 750 MW each	Permitting (5/2006) In Service - 2007	\$2.3 Billion	Western Kentucky High Sulfur Coal	1, 3, 9, 12, 16
Estill County Energy Partners	Kentucky Estill County	110 MW CFB	Development (10/2004) In Service - 2008	\$150 Million	Waste Coal	11, 2, 18

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
Cash Creek Generation	Kentucky Henderson City	1,000 MW	Permitting (11/2001) In Service - 2006	\$1 Billion	Coal	1
Kentucky Mountain Power (EnviroPower)	Kentucky Knott County	525 MW	Suspended (4/2004) In Service - 2006	\$600 Million	Waste Coal & New Coal	1, 2, 9, 12, 18
East Kentucky Power co-op	Kentucky Maysville	268 MW CFB	Operational (3/2005) In Service - 2005	\$367 Million	Coal	15, 8, 12
East Kentucky Power co-op	Kentucky Clark County	278 MW CFB	Approved (8/2006) In Service - 2010	\$470 Million	Coal	2, 22, 7
Global Kentucky Pioneer Energy - DOE	Kentucky Clark County	540 MW IGCC	Cancelled (10/2006) In Service - 2004	~ \$540 Million	20% Coal 80% Waste	12, 1, 11, 18
LG&E Powergen	Kentucky Trimble County	750 MW Super-critical	Approved (7/2006) In Service - 2010	\$1.2 Billion	Coal Illinois Basin	11, 1, 2, 19
Cleco Power	Louisiana Boyce	600 MW 2-CFB units	Development (4/2006) In Service - 2009	\$1 Billion	Coal Pet Coke	1, 11, 19
Energy Louisiana, LLC DOE (Repowering Project)	Louisiana Montz	530 MW CFB	Proposal (4/2007) In Service - 2012	\$1.02 Billion	Pet Coke Coal	1
NRG Energy	Louisiana New Roads	675 MW Super-critical	Permitting (8/2005) In Service - 2009	\$1 Billion	Coal	11, 8
AES Corporation	Maryland Cumberland	180 MW CFB	Operational In Service - 2000	~ \$251 Million	Maryland Coal	2, 7
Manistee Saltwork Tondou Corp.	Michigan Manistee	425 MW	On Hold (11/2004) In Service - 2006	~ \$663 Million	Coal	2, 12
Great River Energy	Minnesota Dakota County	250-500 MW IGCC or CFBC	Cancelled (10/2006) In Service - 2008	~ \$500 Million	Coal	11

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
Minnesota Power	Minnesota Grand Rapids	225 MW	Cancelled (8/2002) <del>In Service - 2005</del>	~\$200 Million	Coal	8, 11
Excelsior Energy Mesaba Energy Project	Minnesota Itasca County	603 MW Gasification	Permitting (4/2007) In Service - 2011	\$2.0 Billion	Coal	11, 19
Tractebel Power	Mississippi Choctaw County	440 MW	Operational In Service - 2002	\$500 Million	Lignite	2, 11, 12, 7
Mississippi Power Co. Southern Company	Mississippi Kemper County	600 MW Gasification	Proposal (4/2007) In Service - 2013	\$1.8 Billion	Lignite	1, 11
Associated Electric Cooperative Inc.	Missouri Carroll County	TBD	Proposed (4/2005) In Service - TBD	\$1 Billion	Coal	2
Springfield City Council	Missouri Springfield	300 MW Additional	Voters Approved (6/2006) In Service - TBD	\$ 697 Million	PRB Coal	11
Great Plains Power	Missouri Weston	750 MW	Not being Considered (5/2004) <del>In Service - 2005</del>	~\$750 Million	Coal	12, 1, 8
Great Plains Energy Kansas City Power & Light	Missouri Weston	850 MW Supercritical	Near Construct. (3/2007) In Service - 2010	\$1.3 Billion	PRB Coal	1, 12
Composite Power	Montana Bear Creek	4 Plants 500 MW each	Cancelled (2/2003) <del>In Service - 2004, 6, 8</del>	\$1.5 Billion	Montana Coal	2, 8, 12
Bull Mountain Development	Montana Billings	2 Units 350 MW each	Air Permit Expired (7/2005) Project Changed to CTL	~\$700 Million	Coal	8, 12, 11
Bull Mountain Development	Montana Billings	300 MW Coal to Liquids	Proposed (7/2006) In Service - TBD	TBD	Montana (Mine-Mouth) Coal	11
Southern Montana Electric Gen & Trans	Montana Great Falls	250 MW CFB	Proposed (7/2006) In Service - 2011	\$515 Million	Powder River Basin Coal	21, 11

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
Centennial Power	Montana Hardin	116 MW	Construction (8/2004) In Service - 2005	~ \$181 Million	Coal	11, 1, 8, 12
Great Northern Power Development / Kiewit	Montana Miles City	500 MW CFB	Proposal (8/2004) In Service - 2008	\$900 Million	Lignite (Wind also)	1, 2, 11, 12
Thompson River Co-Gen LLC	Montana Thompson River	12.5 MW	Operational (11/2005) In Service - 2005	\$20 Million	Coal & Wood Waste	18
Comanche Park LLC	Montana Yellowstone City	2 Units 100 MW each	Development (7/2002) In Service - 2004-05	\$300 Million	Montana Coal	1
Bechtel / Kennecott Energy	Montana Undetermined	750 MW Phase I	Proposal (10/2003) In Service - 2010	~ \$1.2 Billion	Montana (Mine-Mouth) Coal	11
Hastings Utilities, Grand Island	Nebraska Hastings	220 MW	Board Approved (12/2004) In Service - 2012	\$445 Million	Coal	2
Omaha Public Power District	Nebraska Nebraska City	660 MW	Construction (1/2007) In Service - 2009	\$850 Million	Powder River Basin Coal	1, 11, 19
Sempra Granite Fox Power	Nevada Gerlach	2 - 725 MW Units Super-critical	Study on Hold (3/2006) In Service - 2010, 11	\$2 Billion	Powder River Basin Coal	2, 11
Newmont Mining Corp.	Nevada Elko	200 MW	Near Construction (3/2006) In Service - 2008	\$450 Million	Coal	1, 12, 25
Barrick Gold	Nevada East of Reno	115 MW	Considering (7/2004) In Service - TBD	~ \$179 Million	Coal	1
Sithe Global Power	Nevada Mesquite	750 MW	Proposal (2/2006) In Service - 2011	\$1 Billion	Coal	1
LS Power Associates White Pine Energy	Nevada White Pine County	1600 MW	Developing (4/2007) In Service - 2010	~ 2.5 Billion	Powder River Basin Coal	1, 2

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
Sierra Pacific	Nevada White Pine County	2 - 750 MW Units <b>Super-critical</b>	Proposal (4/2007) In Service - 2011, 2014	<b>\$3.2 Billion</b>	<b>Wyoming Coal</b>	11
Sithe Global Power Dine Power Authority	New Mexico Farmington	1,500 MW Supercritical	Air Prmit Approvd. (12/2006) In Service - 2010	\$2.5 Billion	Low Sulfur Sub Bit Coal, Mine Mouth	1, 2, 12
Peabody Energy / Mustang Energy	New Mexico Milan	300 MW	Permitting Stage (11/2005) In Service - 2006	\$500 Million	Coal	11, 12, 8
Jamestown Board of Public Utilities	New York Jamestown	40 MW CFB	Proposal (11/2006) In Service - 2011	\$145 Million	Coal, Petroleum coke, Wood	12
NRG (Awarded CCPI)	New York Tonawanda	680 MW Gasification	Proposal (2/2007) In Service - 2013	\$1.5 Billion	Eastern Coal Pet Coke	1, 11
Duke Energy	North Carolina Cliffside	<b>800 MW</b>	<b>Near Construction (4/2007)</b> <b>In Service - 2011</b>	<b>\$1.53 Billion</b>	Coal	7, 1
Montana-Dakota-Utility Westmoreland Power	North-Dakota Gascoyne	175-MW	Canceled (5/2006) In Service - 2010	\$300-Million	North-Dakota Lignite	2, 3, 4, 8, 12
Great River Energy	North Dakota Jamestown	40 MW Power & Heat	Development (5/2006) In Service - TBD	\$157 Million	North Dakota Lignite	11
Great River Energy	North Dakota TBD	500 MW	Canceled (1/2003) In Service - 2010	\$700 Million	North Dakota Lignite	11, 12, 1
South Heart Coal	North Dakota Stark County	500 MW CFB	Proposed (8/2005) In Service - 2008	\$800 million	North Dakota Lignite	11
Nordic Energy	Ohio Ashtabula	830 MW Cogeneration	Permitting (5/2004) In Service - 2006	\$1.2 Billion	Coal	8, 11
Dominion Energy	Ohio Conneaut	600 MW	Considering (7/2004) In Service - 2010	~ \$936 Million	Coal	11

Red text above indicates recent updates

Investment costs notated by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
CME International	Ohio Hanging Rock	600 MW IGCC	Considering (11/2005) In Service - TBD	~ \$1.1 Billion	Coal	1
American Municipal Power-Ohio	Ohio Letart	1,000 MW	Permitting (6/2006) In Service - 2012	\$1.2 Billion	Blend of Ohio & PRB Coals	11
Global Energy	Ohio Lima	600 MW IGCC	Near Construction (12/2005) In Service - 2008	\$575 Million	Coal Fines Pet Coke	1, 7, 3, 9, 11, 12
American Electric Power	Ohio Meigs County	600 MW IGCC	Proposed (1/2007) In Service - 2010	\$1.0 Billion	Coal	1, 11
Sunoco	Ohio Scioto County	80 MW Cogeneration	Proposed (9/2004) In Service - 2006	~ \$125 Million	Coal	12
SynFuel	Oklahoma Enid	600 MW & Fuels Gasification	Initiate - 2001 In Service - 2008	\$900 Million	Coal	8
Western Farmers Electric Cooperative	Oklahoma Hugo	750 MW	Proposed (3/2006) In Service - 2011	\$1.2 Billion	Coal	1
Oklahoma Gas and Electric	Oklahoma Red Rock	950 MW Ultra-Supercritical	Near Construction (2/2007) In Service - 2011	\$1.8 Billion	PRB Coal	
LS Power Development	Oklahoma Sequoyah	1,000 MW	On Hold (8/2002) In Service - TBD	~ \$1.6 Billion	Coal	6, 8
PacifiCorp	Oregon	500 MW	Cancelled (10/2006) In Service - 2004	~ \$500 Million	Coal	8, 1
AES Corporation	Pennsylvania Beaver	800 MW	Cancelled In Service - TBD	~ \$800 Million	Coal	8
River Hill Power LLC	Pennsylvania Clearfield County	290 MW CFB (Cogen.)	Proposal (8/2005) In Service - 2008	~ \$452 Million	Waste Coal	25

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
Wellington Development	Pennsylvania Greene County	525 MW CFB	Air Permit (12/2006) In Service - 2008	\$800 Million	Waste Coal	11
Reliant Energy	Pennsylvania Indiana	520 MW CFB	Operational (9/2004) In Service - 2004	\$800 Million	Waste Coal	1, 2, 8, 12
Waste Management and Processors Inc	Pennsylvania Schuylkill County	41 MW & Fuels Liquefaction	Development (1/2006) In Service - 2009	\$612 Million	Anthracite Coal Waste & Petcoke	11
EnviroPower	Pennsylvania Somerset	525 MW	Initiate - 2002 In Service - TBD	~ \$819 Million	Coal	8
PA Energy Development Corp.	Pennsylvania Southwestern region	1,000 MW	Proposed (4/2004) In Service - TBD	~ \$1.6 Billion	Coal	2
Robinson Power CO.	Pennsylvania Washington County	250 MW CFB	Proposed (4/2005) In Service - TBD	\$400 Million	Waste Coal	2, 25
Santee Cooper	South Carolina Berkeley County	2 Units 640 MW each	Construction (10/2006) In Service - 2007, 2009	\$1.4 Billion	Coal Petcoke	1, 12, 2
Santee Cooper	South Carolina S. Florence County	600 MW Ultra-Supercritical	Proposed (10/2006) In Service - 2012	\$984 Million	Coal	11, 1
LS Power Development	South Carolina Marion City	500-1,100 MW	Permitting (8/2002) In Service - 2006	~ \$1.2 Billion	Coal	6, 11
Otter Tail Power Company	South Dakota Milbank	600 MW Super-Critical	Permitting (6/2006) In Service - 2011	\$ 1 Billion	Coal	2, 11, 25
CME North America Merchant Energy	Tennessee Chattanooga	4000 MW	Cancelled (9/2006) In Service - 2007	~ \$ 1 Billion	Coal	8, 11, 12, 6
Pickwick Power TVA	Tennessee Hardin County	400 MW CFB	Cancelled (1/2003) In Service - 2004	\$400 Million	Coal	13, 11, 8, 12

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
TXU	Texas Existing Plants	<del>6,400 MW</del> 8Units @ 7Plants	Cancelled (3/2007) In Service - 2010	\$40 Billion	-Coal PRB	1, 11
Sempra Generation	Texas Bremond	600 MW	Proposal (7/2005) In Service - 2011	\$800 Million	Lignite Coal	1
City Public Service Board of San Antonio	Texas Calaveras Lake	750 MW	Construction (3/2006) In Service - 2010	\$1 Billion	Coal PRB	1, 11
TXU	Texas Milam County	600 MW CFB	Near Construction (3/2007) In Service - 2009	\$1 Billion	Coal Texas Lignite	11, 7
LS Power Development	Texas Riesel	800 MW	Permitting (5/2006) In Service - 2011	\$1 Billion	Coal PRB	12
TXU	Texas Robertson County	1,720 MW Super-critical	Permitting (2/2007) In Service - 2009	~\$2.7 Billion	Coal Texas Lignite	11, 19
NRG	Texas Limestone County	744 MW	Proposal (4/2007) In Service - 2012	\$1.2 Billion	Coal	1
San Antonio Public Service Bd.	Texas San Antonio	500 MW	Cancelled In Service - 2004	~\$500 Million	Coal	14
PacifiCorp	Utah Emery	850 MW	Development (10/2006) In Service - 2014	\$800 Million	Coal	12, 2
Intermountain Power	Utah Delta	950 MW	Development (11/2006) In Service - 2012	\$1.7 Billion	Coal	3, 4, 8, 12, 10, 20
Neveco Energy	Utah Sigurd	270 MW CFB	Proposed (6/2004) In Service - 2008	\$350 Million	Coal	11
Duke Energy North America	Virginia Isle of Wright	700 MW Gasification	Cancelled (9/2002) In Service - 2008	\$800 Million	Coal	1

Red text above indicates recent updates

Investment costs notated by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
LS Power Development	Virginia Sussex County	1,600 MW	Permitting (8/2002) In Service - 2005	~ \$2.5 Billion	Coal	6, 8, 1
Dominion, AEP, Appalachian Power	Virginia Wise County	600 MW CFB	Proposed (4/2007) In Service - 2012	\$1 Billion	Virginia Coal or Waste coal/Biomass	2, 11
Composite Power	Washington Richland	2500 MW Refurbish old site	Assessment (8/2001) In Service - TBD	~ \$3.9 Billion	Coal	11
Energy Northwest	Washington Kalama	600 MW IGCC	Proposal (6/2006) In Service - 2012	\$1 Billion	Coal, PRB, Petcoke	11, 1
U.S. Electric Power Globaltex	Washington Whatcom County	249 MW	Cancelled (4/2003) In Service - 2004	~ \$250 Million	Low Sulfur Coal Vancouver	1, 3, 4, 8, 12
GenPower LLC Longview	West Virginia Monogalia County	660 MW Super-critical	Near Construction (1/2007) In Service - 2011	\$940 Million	Coal	2, 11
Western Greenbrier CO- Generation / DOE	West Virginia Greenbrier County	85 MW Advanced CFB	DOE Approved - (1/2007) In Service - 2010	\$215 Million	Waste Coal	1, 11
Appalachian Power (American Electric Power)	West Virginia Mason County	600MW IGCC	Air Permit filed (1/2007) In Service - 2012	\$1.3Billion	Coal	1, 11
North American Power Group Ltd.	West Virginia Not yet located	300 MW	Cancelled In Service - 2005	~ \$300 Million	Coal	14
Anker Energy	West Virginia Upshur County	450 MW	Cancelled In Service - 2006	\$600 Million	Central App. Coal & Waste Coal	1, 2, 11, 12
Alliant Energy Wis. Power & Light	Wisconsin Portage	300 MW	Considering (4/2006) In Service - 2013	~ \$468 Million	Coal PRB	1, 9, 12, 11
Wisconsin Power and Light	Wisconsin Cassville	300 MW CFB	Considering (4/2006) In Service - 2013	~ \$468 Million	Coal	11

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
MidAmerican Energy	Wisconsin Cassville	200 MW	Proposal - (9/2002) In Service - TBD	~ \$312 Million	Coal	8, 12
Wisconsin Energy & Madison Gas	Wisconsin Oak Creek	2 Plants (S-critical) 600 MW each	Construction (2/2007) In Service - 2009-10	\$2.5 Billion	Powder River Basin Sub-Bituminous	11, 1, 12, 2, 7
Wisconsin Public Service Corp.	Wisconsin Wausau	500 MW	Construction (6/2005) In Service - 2008	\$750 Million	Low-Sulfur Coal	1, 2, 11
North American Power Group	Wyoming Campbell County	320 MW	Construction (6/2005) In Service - 2008	\$655 Million	Waste Coal	4, 6, 7, 12
North American Power Group	Wyoming Campbell County	750 MW Super-critical	Proposal (9/2006) In Service - TBD	TBD	Coal	Casper Star Tribune
North American Power Group	Wyoming Campbell County	500 MW	Cancelled (2/2003) In Service - 2005	\$ 750 Million	Powder River Basin Waste Coal	6, 12
Basin Electric Power Cooperative	Wyoming Gillette	375 MW	Applied Air Permit(7/2006) In Service - 2011	\$800 Million	Powder River Basin Coal	2, 7, 11
Black Hills Corp.	Wyoming Gillette	90 MW	Operational (3/2003) In Service - 2003	\$100 Million	Powder River Basin Sub-Bituminous	2, 4, 7, 12
Black Hills Corp.	Wyoming Gillette	90 MW	Construction (1/2006) In Service - 2008	\$169 Million	Powder River Basin Sub-Bituminous	2, 3, 4, 7, 12
Rentech	Wyoming Gillette	104 MW & Fuels Gasification	Proposed (10/2005) In Service - 2010	\$740 Million	Coal	11
Buffalo Energy	Wyoming Glenrock	1100 MW IGCC - 3 Units	Proposed (12/2006) In Service - 2009	TBD	Coal	11
DKRW & SNC-Lavalin	Wyoming Medicine Bow	200 MW & Fuels Gasification	Development (8/2006) In Service - 2010	\$2.5 Billion	Wyoming Coal	1, 11

Red text above indicates recent updates

Investment costs notated by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Coal's Resurgence in Electric Power Generation

**\*\* Database \*\***

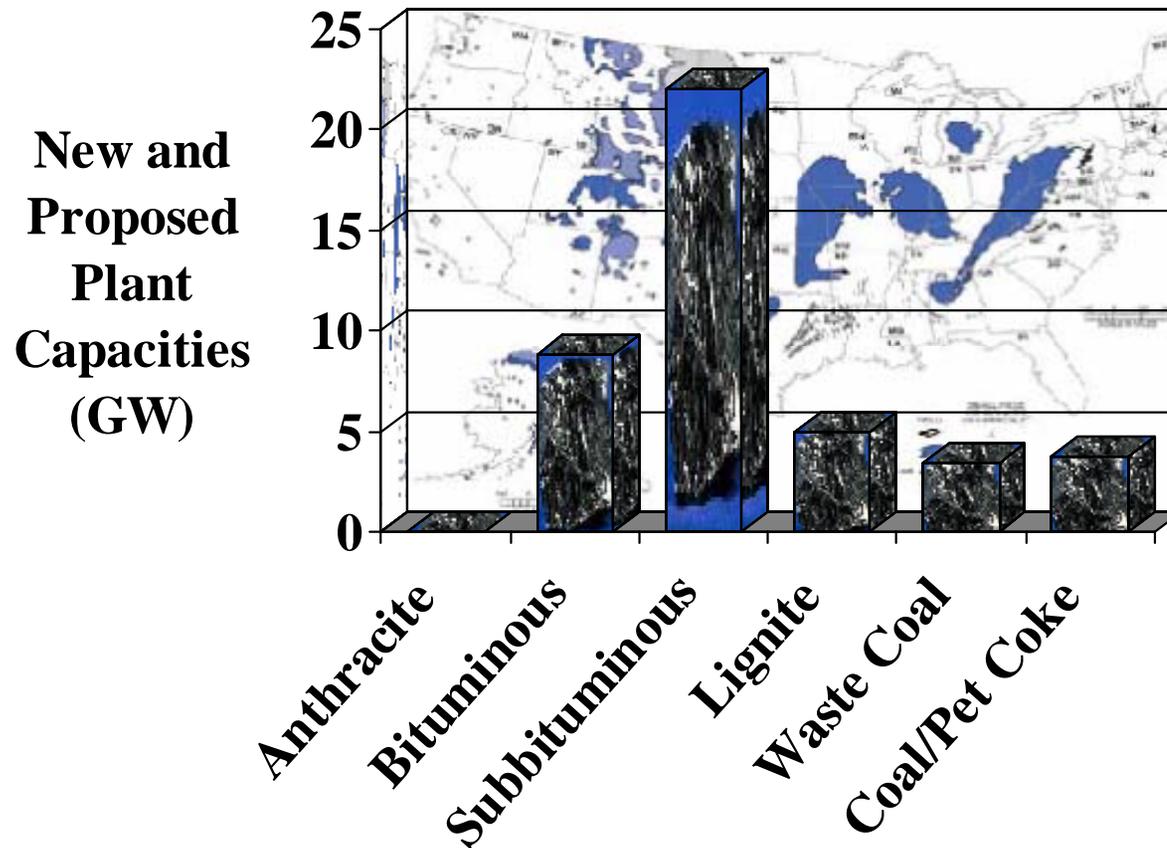
SPONSOR	PROPOSED LOCATION	SIZE TECHNOLOGY	TIMING	INVESTMENT	COAL TYPE	SOURCES
			Status - (Date indicates latest reference) In Service - Planned Date			
Idaho Power Company	Wyoming Rock Springs	250 MW	Proposed (11/2006) In Service - 2013	~ \$390 Million	Coal	11
PacifiCorp 1 of 2 WIA finalists	Wyoming Sweetwater County	450 MW IGCC	Proposed (2/2007) In Service - 2014	\$1.0 Billion	Coal	21
Energy Expeditors Inc. 1 of 2 WIA finalists	Wyoming Eastern Wyoming	450 MW IGCC	Proposed (2/2007) In Service - 2014	\$1.0 Billion	Coal	21
Basin Electric Power Cooperative	Undecided ND or SD	630 MW IGCC	Feasibility Study (8/2006) In Service - TBD	\$1.5 Billion	Powder River Basin Sub-Bituminous	11, 1
FirstEnergy/Consol	Undecided PA or OH	TBD IGCC	Considering (3/2005) In Service - TBD	TBD	Coal	19
Dominion Resources	Undecided	2 Plants 2,150 MW (total)	Initiate - TBD In Service - TBD	~ \$3.2 Billion	Coal	7, 8

Red text above indicates recent updates

Investment costs noted by "~" were unavailable and estimated by DOE at \$1,560 per kW for PC and \$1,840 per kW for IGCC



# Generating Capacity as a Function of Coal Rank/Type



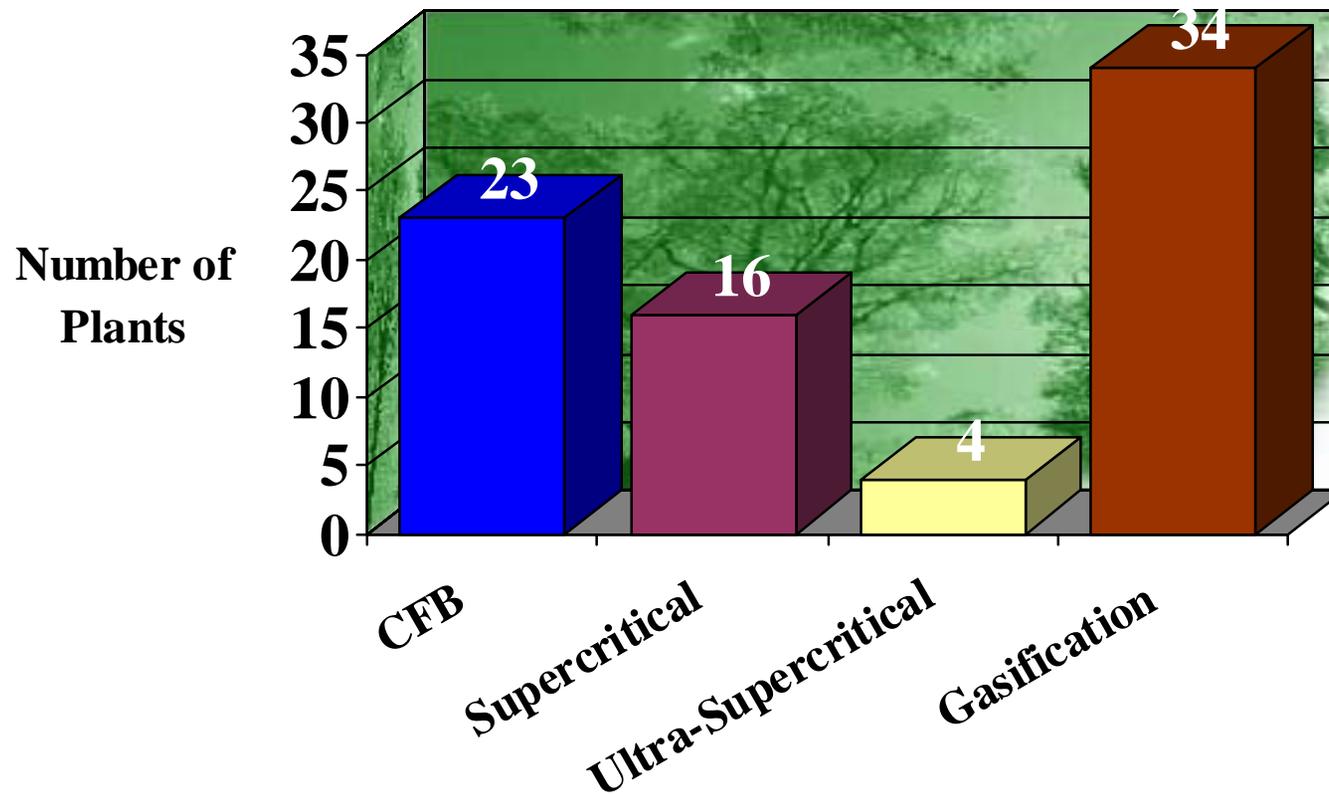
- Anthracite value is 41 MW (0.041 GW)

- For the remaining 45.7 GW of proposed and New Power Plants, coal rank not specified



# Coal's Resurgence in Electric Power Generation

## Advanced Technologies



## Notes on Summarized Data

- **Number of proposed/new plants, total power, and billions invested include all proposed plants, operational plants, and plants on-hold listed in the database section of this report**
  - Plants included in totals since the year 2000
  - Operational Plants, in green text, are included in the totals
  - Cancelled projects, in gray-strikethrough text, are NOT included in totals
- **All boiler technologies not listed are assumed to be sub critical PC boilers**
- **“Plants” may consist of one or more “units” at a specified location**
- **Estimated costs are the “total plant cost” which do NOT include:**
  - Startup and owners costs
  - Royalties
  - Time value of money
  - Charges for risks such as performance guarantees



# New Coal Fired Power Plant Projects

## References

1. Energy Central Daily Electric News Release, [www.EnergyCentral.com](http://www.EnergyCentral.com)
2. New Plant Construction Report, [www.EnergyCentral.com](http://www.EnergyCentral.com)
3. Western Governors Capacity Watch, <http://www.westgov.org/wieb/power/capacity.htm>
4. Western Regional Council, <http://www.wrcusa.com/>
5. Indiana Merchant Power Plants, <http://www.state.in.us/idem/oam/permits/powerplt/map.html>
6. Telephone/email Discussions with Company Representatives
7. Company Websites
8. McIlvaine Company - Utility Fax Alert & New Coal Fired Plants Report
9. Merrill Lynch, 6/4/01
10. Electricity Daily, 2/01/01
11. Coal Daily
12. Argus Energy New Generation Tracking Reports
13. Energy Info. Source
14. Power Jan/Feb 2002
15. Coal Age Nov/01
16. The Power Marketing Association Daily Power Report (9/5/02)
17. Coal Age Magazine Online Exclusive (8/21/02)
18. State Website
19. Power Engineering
20. [http://www.energy.ca.gov/electricity/wscs\\_proposed\\_generation.html](http://www.energy.ca.gov/electricity/wscs_proposed_generation.html)
21. Associated Press (6/28/04), (9/8/04)
22. The Courier-Journal (9/16/04)
23. Greenwire
24. Tutuveni Newspaper of the Hopi Vol. XII No.11
25. EPA's National NSR Coal-Fired Utility Spreadsheet

