Sto	Stopping the Coal Rush update on active permits from the Sierra Club site: http://www.sierraclub.org/environmentallaw/coal/plantlist.aspx				
AK	Golden Valley Electric Association/ Alaska Industrial Development Export Authority	Alaska - Healy Plant	50	Conventional Pulverized	

Background:

Nine years after being shut down, the Healy "Clean Coal" Plant entered initial stages of reopening on January 14, 2009. Alaska Industrial Development Export Authority (AIDEA) initially built the 50MW plant in 1997 for Golden Valley Electric Association (GVEA) - an Alaskan rural electric cooperative, but the plant never generated power after a testing phase because, according to GVEA, the installed clean coal technology did not work.

After nearly a decade of legal wrangling, AIDEA, GVEA, and Homer Electric Association (HEA) - another Alaskan rural electric cooperative - approved terms for a three-way deal for the sale of the power plant. Under the terms, GVEA will purchase the plant for \$50 million, AIDEA will finance the sale, and HEA will purchase half of the energy produced by the plant starting in 2014.

In response, more than 75 HEA members gathered outside of HEA's building on January 21st to oppose the cooperative's deal with AIDEA to purchase power from the plant. At the protest, HEA members expressed frustration for not being involved in the cooperative's decision-making process and were concerned that HEA entered an agreement without knowing the cost of doing so. Members were also skeptical of the cooperative's agreement to invest in "clean coal" and urged HEA to invest in more efficient, renewable energy sources.

To learn more about the Healy plant, click here and here.

Update: June 2012

Sierra Club, the Northern Alaska Environmental Center, the Denali Citizens Council, and the National Parks Conservation Association petitioned EPA to object to the Title V Permit issued for the Healy plant by the Alaska Department of Environmental Conservation on March 12, 2012.

In response to the appeal, <u>people gathered</u> to protest and voice support for repowering the plant outside the Northern Alaska Environmental Center on May 30, 2012.

Update: February 2012

The Alaska Department of Environmental Conservation issued an operating permit to Golden Valley Electric Association for the operation of the Healy Power Plant on February 3, 2012. The

permit for the 50 MW facility, which has been idled for years, is "basically a renewal for a previously issued air quality permit for the Healy Clean Coal Project." But, any person or entity who submitted comments on Healy's permit application can petition the U.S. EPA to review the state permit to either approve, reject, or seek modifications by March 2, 2012.

Hydrogen Energy International,	<u>California -</u>	390	Integrated Gasification
LLC (SCS Energy)	Hydrogen Energy		Combined Cycle (IGCC)

Background:

On July 1, 2009, the U.S. Department of Energy selected Hydrogen Energy International LLC to receive around \$308 million in funding from the American Recovery and Reinvestment Act for a proposed project that will explore carbon capture and storage in Kern County, CA. Hydrogen Energy International LLC, a joint venture owned by BP Alternative Energy and Rio Tinto, has plans to construct an integrated gasification combined cycle (IGCC) power plant that will take blends of coal and petroleum coke and convert them into hydrogen and carbon dioxide. The hydrogen gas will be used to fuel a power station, and the carbon dioxide will be transported by pipeline to nearby oil reservoirs where it will be injected for storage and used for enhanced oil recovery. The company has plans to capture an estimated 2,000,000 tons of carbon dioxide from the project per year.

Update: June 2012

According to the most recent Department of Energy Schedule of Key Environmental Impact Statements, HECA plans to submit a notice of intent to file an EIS in June 2012, with a Draft EIS to follow in August 2012. If this schedule remains in place, the Final EIS will be issued in May 2013.

Update: May 2012

HECA submitted an Amended Application for Certification to the California Energy Commission May 2, 2012 (Docket Number 08-AFC-8A). The new application incorporates changes to the project design, including integrating a Manufacturing Complex, selecting various technologies, purchasing a new parcel of land, identifying two alternatives for transferring coal to the site, and refining the routes of the natural gas pipeline. The CEC will convene public hearings and host workshops to "determine whether and under what conditions the proposed project should be approved for construction and operation." There will be a notice period of at least ten days before any hearing or workshop.

GA	Power4Georgians LLC	Georgia - Washington County Power Station	850	Supercritical	
	C			1	

Potential Transitional unit under GHG NSPS

Background

Power4Georgians L.L.C., a consortium of ten Georgia electric cooperatives, has announced plans to build a 854 MW coal-fired power plant near Sandersville, in Washington County. The participating co-ops are Jackson EMC, Cobb EMC, GreyStone Power; Snapping Shoals EMC, Diverse Power, Upson EMC, Central Georgia EMC, Pataula EMC, Excelsior EMC and Washington EMC. The plant will cost an estimated \$2 billion and will burn a mix of pulverized low-sulfur coal from the Powder River Basin and eastern U.S. coal.

Update: April 2012

Power4Georgians, a consortium of Georgia electric cooperatives developing an 850-megawatt coal-fired power plant near Sandersville, <u>announced a new financial partner</u> Thursday to finance the project's development.

Taylor Energy Fund LLC, a private investment group based in Denver, has signed a letter of understanding with Power4Georgians, according to a Power4Georgians news release.

Update: January 2012

On January 26, 2012 Plant Washington, the \$2 billion coal-fired power plant slated for Washington County, lost its biggest backer when the board of Cobb EMC voted to stop funding the project. The Marietta cooperative was providing almost 40 percent of the funding for the 850-megawatt plant.

Southeast Idaho Energy (SIE) Power
County Advanced Energy Center
(PCAEC)

<u>Idaho - Power County</u> <u>Advanced Energy Center</u> Coal to Fertilizer and Coal to Liquid

Potential Transitional unit under GHG NSPS

Background:

In June 2007, Southeast Idaho Energy announced plans to construct a \$2 billion IGCC coal gasification plant 6 miles southwest of American Falls, Idaho. The company has purchased 450 acres of farmland for the proposed plant, which is located next to the Lamb Weston potato processing plant and the Snake River, a major tributary of the Columbia River. The land is already zoned as heavy industrial as a result of a previsous plan to build a coal plant on the land.

According to the Idaho DEQ, the proposed plant will produce fertilizers, liquid fuels, and sulfuric acid products through the gasification of coal and petcoke. The plant will use a blend of Powder River Basin (PRB) coal from Wyoming, western Utah bituminous coal, and refinery petcoke and will burn between 3,000 to 4,000 tons of coal daily.

Southeast Idaho Energy submitted thier air permit application to the Idaho DEQ in July 2007. The DEQ is scheduled to release the draft air permit in February 2008, with a 30 day comment period following release of the draft permit. The company hopes to have the plant operating in 2011 or 2012.

More information on the air permit application process can be found at the DEQ's website: http://www.deq.idaho.gov/air/permits_forms/permitting/pcaec/index.cfm

Update: June 2012

Southeast Idaho Energy has not submitted any materials to the Idaho Department of Environmental Quality indicating that the company has broken ground on the PCAEC, according to the DEQ's Stationary Source Program Manager.

Update: December 2011

Southeast Idaho Energy applied for an extension for its Permit to Construct the Power County Advanced Energy Center (PCAEC) on May 1, 2011. The Idaho Department of Environmental Quality approved an extension of the permit (No. P-2009.0127) on May 19, 2011. The permit will now expire November 30, 2012 if "construction has not begun [...] or if construction is suspended for 18 months or more."

II	Chicago Clean Energy, LLC (Leucadia	Illinois - Chicago Clean Energy	Coal to
	National Corp.)	Project / Leucadia	Gas

Background:

In August 2009, Illinois Governor Quinn signed legislation providing \$10 million in state funds to study the feasibility of a proposed \$2 billion refinery waste/Illinois coal to synthetic natural gas plant. The plant is being developed by Chicago Clean Energy, LLC, a subsidiary of Leucadia National Corp., who is eyeing abandoned industrial properties along the Calumet River. As of August 2010, there are no pending regulatory approvals or permits for this plant and it is unclear when the developer will complete the study. According to Eco-Industrial Development LLC, a consultant to Leucadia on the project, if allowed to move forward, the plant could be completed in 2014, at the earliest. Please check back here for updates in the future.

Update: January 2012

In early January the Illinois Commerce Commission (ICC) voted by a margin of 3-2 to approve of the terms for selling synthetic natural gas from the proposed \$3 billion Leucadia plant. However, the projects developer's say the terms are unfavorable and could effectively kill the project.

Late in 2010 two Chicago-area gas utilities, Peoples Gas and North Shore Gas, announced that they would not do business with the plant. This left only two utilities in the picture, Nicor Inc. and Ameren Illinois. The ICC agreed that if the project were built then Nicor and Ameren would be locked into 30-year purchase agreements with the plant, and would also have to help finance its construction. But legislation initially approving the project said that no one utility would have to buy more than 42 percent of the plant's output. The ICC interprets this to mean that neither utility should have to finance more than 42 percent of the construction costs. The developer

claims that it would not be able to finance the remaining 16 percent of the plant, making it difficult for the project to move forward.

Critics of the plant argue that its synthetic natural gas product will cost substantially more than natural gas from underground wells, which has dropped in price over the last several years as new reserves become accessible. The high cost of synthetic natural gas from this project would almost surely raise rates for natural gas customers.

Update: November 2011

In mid-November, local residents from Chicago's Southeast Side publicly protested plans for a coal gasification plant in their neighborhood. Activists stated that they suffer from coal soot gathering on their homes and property, as well as already-high levels of air pollution. Residents rallied for clean, renewable energy jobs in their community in place of the fossil fuel-based project.

IL	U.S. Department of Energy/Ameren Energy	<u>Illinois -</u>	200	oxy-coal
	Resources Company/Babcock & Wilcox	FutureGen 2.0		combustion
	Company/Air Liquide			

Background:

On August 5, 2010, the U.S. Department of Energy announced that it was providing \$1 billion in federal stimulus money for the new FutureGen 2.0 project, which would revamp a mothballed 200-MW coal fired boiler at Ameren Corp.'s Meredosia plant in western Illinois. The new retrofit by the Department of Energy replaces its original FutureGen proposal, a 275-MW IGCC plant near Mattoon, IL.

The proposal calls for a new boiler using oxy-coal technology, which burns coal with a mixture of oxygen and carbon dioxide rather than air to produce a stream of concentrated carbon dioxide. It would also capture 90 percent of the estimated 1,444,000 tons per year of carbon dioxide from the new unit and transport it via 175-mile pipeline to a storage site at Mattoon. The plant would also capture most of its sulfur oxide, nitrogen oxide, mercury and particulate emissions. Assuming the project receives all necessary approvals and a cooperative agreement with the DOE, construction would begin in 2012, with the project beginning operation in third quarter 2015. The cost of the project will be covered by the \$1 billion in funds from the Recovery Act and \$247 million in private dollars.

According to Bruce Nilles, director of energy programs for Sierra Club, the revised proposal remains a "boondoggle," and, if allowed to proceed, would maintain demand for Illinois' high-sulfur coal at a time when we should be looking to smarter and cheaper ways to produce energy.

Update: December 2011

The project, originally priced at \$1.3 billion, is currently projected at \$1.65 billion. This increase will be swallowed by the FutureGen Alliance. Alliance CEO Ken Humphreys called the increase

"manageable". As of early December geologists were halfway through the Mount Simon formation where they intend to pipe carbon dioxide from the refurbished Meredosia plant.

Meanwhile, critics of the project, such as the Heartland Institute, Illinois Policy Institute, Taxpayers for Common Sense, and Friends of the Earth all said that the plant is too expensive and unproven, and could cause environmental problems. They argue that the plant should be financed with private investment exclusively and not rely on government funding. A spokesman for the Heartland Institute called the project "truly a terrible idea".

Update: November 2011

In a surprising move, Ameren has backed out of the FutureGen 2.0 project. Ameren says its withdrawal will not affect the viability of the project, although its future does remain uncertain. The coalition backing the project is still backed by \$1 billion in federal stimulus money, and is negotiating to buy portion of Ameren's Meredosia power plant in, where Carbon dioxide could be sequestered underground nearby. A spokesman for the alliance said that Ameren's withdrawal "does not change the schedule of the project" and expects the plant to be operational in 2016.

IL	Power Holdings	Illinois - Power Holdings	Coal to Gas
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Background:

In 2006, Power Holdings Company announced it plans to build a coal-to-synthetic natural gas plant just west of Waltonville, in Blissville Township IL. The plant would use local coal and convert it into pipeline-ready synthetic natural gas.

Back in March 2007, a group of Blissville Township residents met to voice their displeasure in the project, with questions ranging from environmental impacts, safety, economic impacts, and quality of life issues.

On January 16, 2009, the Illinois Environmental Protection Agency made a preliminary determination that the plant is entitled to a construction permit. This now opens up a period for public comments. There will be a public hearing on March 3, 2009 and the official comment period ends on April 2, 2009.

This plant would get its coal from local mines which would cut down costs for transportation and reduce dependence on out-of-state providers. It is estimated that this plant will use 5 million tons of coal annually.

To visit the IEPA's website for this plant, click here.

Update: June 2011

A bill which Governor Pat Quinn vetoed this past March recently passed through the General Assembly. The revised bill has incorporated consumer protections that will limit rate increases, added consumer profit sharing, and also added a consumer protection fund. The passage of this

bill and it becoming law may certainly help the developer's prospects to secure financing for this project. The project is currently shovel-ready and they have until February 2012 to begin construction before their PSD permit expires.

Update: March 2011

On March 14, 2011, Governor Pat Quinn vetoed two bills that would have paved the way for two coal-to-gas plants to be built in the state. Governor Quinn stated that he supports the use of cleaner technologies, but not at the expense of consumers. The bills would have required the state utilities to buy synthetic natural gas, which is expected to be more expensive than natural gas for the next two decades from the proposed Leucadia plant on Chicago's southeast side and from proposed plant by Power Holdings in southern Illinois. The cost increase for consumers would have come in the form of higher home heating bills; as much as \$191 dollars per year more starting in 2015 through the next two decades.

IL	Tenaska/Erora Group/ Christian	Illinois - Taylorville	770	Integrated Gasification
	County Generation	Energy Center		Combined Cycle (IGCC)

Potential Transitional unit under GHG NSPS

Background:

Christian County Generation, LLC, has submitted an application for a permit to construct the Taylorville Energy Center, a 630-megawatt electric power plant to be located just northeast of Taylorville. The plant would use Integrated Gasification Combined Cycle (IGCC) technology to burn Illinois Basin coal. The Illinois Environmental Protection Agency has prepared a draft construction permit for the proposed plant, and is holding a public comment period with a hearing to receive written and oral comments on the proposed issuance of permits and their terms and conditions. The public hearing was held in Taylorville on January 11, 2007 and the public comment period ended on February 10, 2007.

Update: January 2012

Surprisingly, the draft air permit for the Taylorville Energy Center would not be require the plant to capture its carbon dioxide emissions or to limit its CO2 emissions. The plant plans to sequester a portion of its carbon emissions through a pipeline that would not be operational when the plan opened, meaning it would fail emissions limits from the outset. Such a scenario would force the plant to close and prevent the facility's financial backers from committing to the project. The plant must capture 65 percent of its carbon eventually, or else the Tenaska company would have to repay \$417 million in federal funds. Additionally, the Illinois Attorney General has the power to file suit against the plants owners if they fail to follow through with carbon capture and storage.

Update: December 2011

In late December the Natural Resources Defense Council and Sierra Club submitted comments on the proposed permit for the Taylorville Energy Center. Both groups noted important deficiencies in the draft permit for controlling carbon dioxide and other pollutants, invoking the authority of the Clean Air Act.

Update: November 2011

In late November the Illinois Senate narrowly passed a bill, by a margin of 30-28, to authorize construction of the \$3.6 billion Taylorville coal-to-gas electric generating plant. Two previous attempts to pass the bill had fallen short of majority in the Senate. The house is unlikely to vote on the bill before February 2012. The bill includes provisions requiring major state utilities to purchase electricity from the plant for 20-30 years. If built, the plant would create billions of pounds of air pollution.

IN	Duke	Indiana - Duke Energy's	630	Integrated Gasification Combined	
	Energy	Edwardsport plant		Cycle (IGCC)	

Background:

Duke Energy and Vectren are proposing to build a 630 megawatt coal gasification electrical power plant in Edwardsport, Indiana, an area that already has one of the highest concentration of coal-fired generators in the world. Furthermore, this region has more than 15,000 megawatt of generating capacity in an area that needs less than 3,500 megawatt of power for its own use nearby. Duke Energy already operates the largest coal fired power plant in the United States, the Gibson Station, only forty miles from the proposed facility. Officials predict that the plant will have huge environmental impacts on the area, including significant increases in both CO and PM and the destruction of entire ecosystems and recreational areas from associated coal mining. Currently the air permit is in the application stage with the Indiana Department of Environmental Management and the Indiana Utility Regulatory Commission (IURC).

Indiana environmental and consumer groups filed testimony on May 16th, 2007 that shows Duke and Vectren's proposal for a new \$2 billion coal fired IGCC generating plant is not the best option to meet energy demand. The groups include Citizens Action Coalition of Indiana, Save the Valley, the Sierra Club Hoosier Chapter and Valley Watch. Evidentiary hearings are scheduled to begin on June 18, 2007, before the Indiana Utility Regulatory Commission.

Update: January 2012

The largest private construction project in Indiana history is closing in on completion. A Duke Energy spokesman told the Knox County Redevelopment Commission that its power plant near Edwardsport is 98 percent complete.

Update: November 2011

Duke Energy Corp. said today that profits declined about 30% in the third quarter as power sales fell and it incurred larger-than-estimated costs for a new power plant in Indiana.

There is currently a hearing taking place to determine who will pay the bill for the plant. It is either slotted for the public through rate hikes and other means, or by Duke Energy. As of now, this has been the most expensive plant built in the United States.

Update: October 2011

Duke Energy Corp raised the cost estimate for its Indiana coal-gasification project for the third time on Thursday. The new raise will see a 9.6% increase, taking the total cost to \$2.98 billion, excluding financing costs.

The new raise takes the total cost, as of now, to over \$1 billion more than was initially anticipated.

K	Sunflower Electric Power Corp./Tri-State	Kansas - Holcomb/	895	Supercritical
	Generation and Transmission Association	Tri-State		

Potential Transitional unit under GHG NSPS

Background:

A consortium of private companies and electrical coops are proposing to build three giant new pulverized coal power plants in rural western Kansas. The project includes three new 700 MW pulverized coal units adjacent to the east side of the existing 360 MW Holcomb 1 unit; a picture of what the new plant will look like is below. These three new coal burning plants will also be the largest new source of carbon dioxide emissions in the United States. Construction of the first unit, Holcomb East, is proposed to begin in mid-2007. The two additional units are scheduled for construction beginning in mid-2008 and 2009. Draft permits for all three units will be issued in late September 2006. Tri-State Generation and Transmission, one of the companies behind the plant, held a public meeting on October 9th, 2006 to discuss their Integrated Resource Plan. Public comments on their plan are due on November 9th, 2006. Read Kansas Sierra Club Chapter Chair Bill Griffith's statement against the plants. For detailed information about the Holcomb plants and energy in Kansas check out the Kansas Chapter's "Kansas Energy Facts" page.

Update: January 2012

Great news! Judge Sullivan in the federal district court has deemed that the permit for the Sunflower expansion project will not be considered valid until a new, thorough environmental review is finalized. The decision emphasized the significant impacts on human health that would likely arise if the project were constructed. The strengthened environmental impact statement (EIS) that is now required will include analyses of potential harm to human health as well as contribution to climate change. Also, this EIS must discuss alternatives to the proposed project, such as renewable energy and energy conservation.

This ruling is the most recent event in a lawsuit brought by Sierra Club against the Rural Utilities Service (RUS), which is an arm of the U.S. Department of Agriculture, relating to its ongoing

financial support of the Sunflower expansion. Previously, in March 2011, the court had found that RUS had failed to consider the environmental impacts of the Sunflower plant expansion, violating federal law. It turns out that the government has a financial stake in seeing this plant built because of it had made loan arrangements with the plant owners through the Rural Utilities Service. In the decision, Judge Emmett Sullivan stated that the expansion will require additional approval from the federal government resulting from changes to the project.

This comes in spite of the fact that Tri-State Generation and Transmission Associated had recently awarded an \$80million turbine contract to Tokyo-based Toshiba Corp, for delivery in July 2014. The turbine and generator combination being purchased is billed as a 971 megawatt unit, despite the fact that the permit only allows production of 895 megawatts.

Background: April 2011

On April 21, 2011, Buffalo Creek Energy, LLC applied to the Kentucky Division for Air Quality (DAQ) for an air permit for a coal-to-liquids (CTL) plant in Pike County, Kentucky. The proposed facility would use gasification technology to convert coal into syngas, which would then be used as feedstock to produce gasoline and liquefied petroleum gas (LPG).

The Kentucky DAQ has issued a draft air permit for the proposed plant, which is now available for public comment. A public hearing on the project will be held at the Chrisman Auditorium of the Armington Learning Center of Pikeville College, 228 Kentucky Ave., Pikeville, Kentucky on June 20, 2011, directly after a hearing on Chisolm Energy's proposed CTL plant.

Update: July 2011

On June 28, 2011 Buffalo Creek Energy, LLC was issued its Air Quality Permit by the Kentucky Division for Air Quality. The final permit is available in the related documents section.

Update: June 2011

On June 20, 2011, Sierra Club submitted comments to the Kentucky Division for Air Quality (DAQ) requesting that the Kentucky Division for Air Quality (DAQ) deny Buffalo Creek Energy's permit application and require it to apply for and obtain a Prevention of Significant Deterioration (PSD) permit including Best Available Control Technology (BACT) limits for greenhouse gases and ensure that the Facility will not interfere with the maintenance of National Ambient Air Quality Standards (NAAQS).

KY	Erora	Kentucky - Cash Creek	770	Integrated Gasification Combined Cycle
	Group	<u>IGCC</u>		(IGCC)

Potential Transitional unit under GHG NSPS

Background:

Erora Group, LLC has proposed a 770-megawatt (MW) integrated gasification combined cycle (IGCC) coal power plant to be located on 1,900 acres near Owensboro, KY on the Green River in eastern HendersonCounty. The proposed plant will burn coal from Western Kentucky, adding pollution to an area that has struggled to comply with U.S. Environmental Protection Agency air quality guidelines. The proposed plant could cost up to \$1.5 billion, with construction scheduled to begin in late 2007 or early 2008 and operations scheduled to begin in 2010 or 2011.

The local environmental group Valley Watch is opposed to the proposed plant. For more information, please visit: http://www.valleywatch.net/valleywatch/.

Update: September 2011

On September 19, the Cash Creek Generation project received a five-year extension on its county conditional use permit. Project sponsor Erora Group sought the extension because the project has been unable to get off the ground. Erora Group sought no changes to its 2006 permit other than changing the name of a planned ash storage area to slag storage. Board members had no questions and no members of the public spoke, the zoning board gave unanimous approval to the permit extension.

Update: July 2011

On July 1, the U.S. Court of Appeals for the D.C. Circuit upheld the District Court's dismissal of Sierra Club and Valley Watch's lawsuit against EPA (opinion available below).

Update: March 2011

On February 3, 2011, the Secretary of the Cabinet adopted the Hearing Officer's Report and affirmed the final air permit for the proposed Cash Creek coal-fired power plant. In response, on March 4, Sierra Club and Valley Watch filed a petition for review with the Henderson County Circuit Court, arguing that the final air permit fails to contain adequate emission limits for several air pollutants, and should be vacated and remanded to the Cabinet.

KY	Chisolm Energy, LLC	Kentucky - Chisolm Energy	Coal-to-Liquids
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Background: April 2011

On April 21, 2011, Chisolm Energy, LLC applied to the Kentucky Division for Air Quality (DAQ) for an air permit for a coal-to-liquids (CTL) plant in Pike County, Kentucky. The proposed facility would use gasification technology to convert coal into syngas, which would then be used as feedstock to produce gasoline and liquefied petroleum gas (LPG).

The Kentucky DAQ has issued a draft air permit for the proposed plant, which is now available for public comment. A public hearing on the project will be held at the Chrisman Auditorium of the Armington Learning Center of Pikeville College, 228 Kentucky Ave., Pikeville, Kentucky at

6pm on June 20, 2011. A public hearing on Buffalo Creek's proposed CTL plant will be held immediately after the Chisolm hearing.

Update: July 2011

On June 26, 2011 Chisolm Energy was granted its Air Quality Permit by the Kentucky Division of Air Quality. The final permit is available in the related documents section.

Update: June 2011

On June 20, 2011, Sierra Club submitted comments requesting that the Kentucky Division for Air Quality (DAQ) deny Chisolm Energy's permit application and require it to apply for and obtain a Prevention of Significant Deterioration (PSD) permit including Best Available Control Technology (BACT) limits for greenhouse gases and ensure that the Facility will not interfere with the maintenance of National Ambient Air Quality Standards (NAAQS).

KY	Secure Energy Kentucky,	Kentucky - Secure Energy Paducah	Coal-to-
	LLC	Gasification Plant	Liquids

Background: April 2011

On April 14, 2011, Secure Energy applied to the Kentucky Division for Air Quality (DAQ) for an air permit for a coal-to-liquids facility in West Paducah, Kentucky. The proposed Secure Energy Paducah Gasification Plant would use gasification technology to convert coal into syngas, which would then be used as feedstock to produce gasoline and liquefied petroleum gas (LPG).

For months, Sierra Club has worked with local residents to <u>fight</u> a proposed coal terminal near Paducah that would serve the coal-to-liquids plant. Southern Coal Handling proposed rezoning the residential area for heavy industrial use to build the coal terminal on the Ohio River. In response, hundreds of residents turned out for public hearings to oppose the rezoning, raising concerns with the project sites' close proximity to the river, a local nature reserve, and their homes. Local efforts were vindicated when, on May 23, the McCracken County Fiscal Court voted 3-1 to reject the coal industry-backed plan to rezone 490 acres of West Paducah. This decision overturns the McCracken County zoning commission's March vote to approve the rezoning.

Despite all this, the DAQ has issued a draft air permit for the coal-to-liquids plant. The draft air permit is now available for public comment, and a public hearing on the project will be held in the Heath High School Auditorium, 4330 Metropolis Lake Road, West Paducah, Kentucky at 6:30 pm on June 24, 2011.

Update: July 2011

The Kentucky Department of Environmental Protection Division for Air Quality granted the air permit for Secure Energy. Despite concerns, the state agency said the project meets all necessary

requirements for this type of permitting. The company still has to obtain full financing and several more permits. The Kentucky Industrial Development Finance Authority has voted to <u>preliminarily approve</u> up to \$85 million in incentives.

A copy of the final air permit is available in the related documents section below.

Update: June 2011

On June 28, Commonwealth of Kentucky Division of Air Quality submitted its response to public comments. The response to comments is available for viewing in the related documents section below.

On June 23, 2011, Sierra Club submitted comments requesting that the Kentucky Division for Air Quality (DAQ) deny Secure Energy LLC's permit application and require it to apply for and obtain a Prevention of Significant Deterioration (PSD) permit including Best Available Control Technology (BACT) limits for greenhouse gases and ensure that the Facility will not interfere with the maintenance of National Ambient Air Quality Standards (NAAQS). A copy of the permit comments are available in the related documents section below.

Update: April 2011

On April 14, 2011, Secure Energy applied to the Kentucky Division for Air Quality (DAQ) for an air permit for a coal-to-liquids facility in West Paducah, Kentucky. The proposed Secure Energy Paducah Gasification Plant would use gasification technology to convert coal into syngas, which would then be used as feedstock to produce gasoline and liquefied petroleum gas (LPG).

KY	Kentucky Syngas (ConocoPhillips & Peabody	Kentucky-NewGas Energy	Coal-to-
	Energy Corp.)	<u>Center</u>	syngas

Background:

On <u>December 16, 2008</u>, Kentucky Syngas, LLC (comprised of energy company ConocoPhillips and coal company Peabody Energy) filed for a state air permit to build a coal-to-natural gas facility near Central City in Muhlenberg County – the same location that Peabody Energy had wanted to build its controversial <u>Thoroughbred coal plant</u>. The plant would gasify coal and petroleum coke into natural gas.

News sources expect the Kentucky Division for Air Quality to take 12-24 months to conduct the permit review process.

To view the NewGas Energy Center project website, click here.

Update: September 2011

On August 29, Kentucky NewGas requested an extension of the current construction deadline under their Title V/PSD Permit. Construction of the NewGas Plant has been delayed due to litigation with the Sierra Club and Valley Watch, Inc. On September 19, the Kentucky Division of Air Quality agreed that the construction authority permit would be extended until April 9, 2013. Both documents are available below.

Update: July 2011

On July 1, the U.S. Court of Appeals for the D.C. Circuit upheld the District Court's dismissal of Sierra Club and Valley Watch's lawsuit against EPA (opinion available below).

On May 31, a Secretary of the Kentucky Energy and Environment Cabinet issued a final decision adopting the Hearing Officer's February 24 report and affirming the final air permit for the proposed NewGas plant. In his report, the Hearing Officer denied Sierra Club and Valley Watch's claims that the air permit underestimated particulate matter emissions, failed to contain enforceable conditions, and did not properly account for fugitive and flaring emissions during times of plant startup and shutdown. On May 18, the Hearing Officer issued a second report, recommending that the Secretary dismiss the environmental groups' claim that the Cabinet erred when it failed to hold a public comment period after modifying the Title V operating permit to address EPA concerns.

Update: January 2011

On January 10, 2011, Sierra Club and Valley Watch filed their opening brief in the appeal challenging EPA's failure to act and prevent construction of the NewGas plant that is moving forward under a defective State Implementation Plan (SIP). In their brief, the environmental groups argue that Kentucky's SIP still fails to meet two important requirements of the federal Clean Air Act's Prevention of Significant Deterioration (PSD) permitting program; it does not require companies to notify the public about a project's impacts on air quality in surrounding wilderness and national parks, and it does not require new sources to demonstrate that nitrogen oxide (NOx) emissions will not violate ozone air quality standards. The groups contend that EPA has a mandatory duty, under a provision of the Clean Air Act, to address these deficiencies before the NewGas plant can move forward. EPA's brief is due on February 9, and Sierra Club and Valley Watch's response is due on February 23. Oral argument is scheduled for April 7, 2011.

LA	Leucadia/Lake Charles	Louisiana - Lake Charles	Pet coke to
	Cogeneration	Gasification	methanol/gas

Background:

On June 22, 2009, the Louisiana Department of Environmental Quality issued a PSD/construction permit to Lake Charles Cogeneration authorizing the construction of the Lake Charles Gasification facility designed to gasify over 7000 tons per day of petroleum coke to methane/substitute natural gas and sulfuric acid. The plant, located in Calcasieu Parish, will be

owned by Leucadia Energy, which plans to capture 85 percent, or 4.5 million tons, of the carbon dioxide produced by the plant and pipe it to Texas for use in enhanced oil recovery.

Leucadia has received considerable federal financial support for the estimated \$2 billion plant, including \$1 billion in tax-exempt Gulf Opportunity Zone bonds and \$800 million from the American Recovery and Reinvestment Act through the U.S. Department of Energy (awarded in two phases). In July 2010, Leucadia asked for an additional \$400 million in Gulf Opportunity bonds.

As of July 2010, the site had been cleared, but actual construction of the proposed facility had not begun. The current PSD/construction permit expires on December 22, but according to media reports, Leucadia is considering expanding operations to produce methanol instead of natural gas, which would require a reopening of the facility's air permit.

Update: January 2012

The U.S. Department of Energy is still in the process of preparing a draft environmental impact statement (EIS) for the Leucadia/Lake Charles Cogeneration project. The draft EIS is expected in the summer of 2012.

Update: May 2011

On April 29, 2011, <u>DOE announced its intention to prepare an EIS</u> for the Leucadia/Lake Charles Cogeneration project. DOE selected this project for an award of financial assistance through a competitive process under the Industrial Carbon Capture and Sequestration (ICCS) Program.

This project has been historically tied up with numerous financial problems, but is still moving forward. The financial assistance from DOE for the Carbon Capture and Sequestration portion of this project could be a significant fix for Leucadia.

MI	Wolverine Power	Michigan - Wolverine Power	600	Circulating Fluidized
	Cooperative	<u>Plant</u>		Bed

Potential Transitional unit under GHG NSPS

Background:

Recently, Wolverine Power Cooperative announced a proposal for a 600 MW coal-fired base load power plant near Rogers City on the Lake Huron coast. The project is part of the Wolverine Clean Energy Venture, and will have two components - a base load power plant and a wind turbine farm. The proposed power plant would use Circulating Fluidized Bed (CFB) technology. So far, Wolverine has completed an initial feasibility study of the site and a land survey, and has begun an endangered species study for the site.

Update: January 2012

The legal permit challenge filed in September is ongoing before a Michigan State Court in Ingham County. An oral argument was requested by Sierra Club, Natural Resources Defense Council, and Environmental Law and Policy Center on January 17, 2012.

Update: September 2011

The Sierra Club and the Natural Resource Defense Council are suing the state of Michigan for issuing an air permit for a coal-burning power generation facility planned by the Wolverine Power Cooperative in Rogers City.

In a suit filed in Ingham County last week, the groups argue that Gov. Rick Snyder's Dept. of Environmental Quality violated the federal Clean Air Act when it reversed a previous permit denial and approved the project in June.

The Cadillac-based Wolverine Power Cooperative wants to build two 300-megawatt circulating fluidized bed boilers in a limestone quarry next to Lake Huron and first applied for a permit in 2007.

MI	Holland Board of Public	Michigan – James De Young	78	Circulating Fluidized
	Works	Station		Bed

Potential Transitional unit under GHG NSPS

Background

The Board of Holland Public Works has proposed building a 78-MW coal-fired power plant. According to officials at the Michigan Department of Environmental Quality, the draft air permit for the proposed plant is expected sometime in January 2008.

Update: January 2012

The Community Energy Advisory Group, a citizen group dedicated to informing Holland residents of the Holland Community Energy Plan, has been trying to get the word out about energy efficiency and conservation. At a Group meeting that occurred in mid-January some attendees questioned where in the process the city council was with adopting the proposed energy plan. A Board of Public Works spokesperson said an all-day charette that had been scheduled for February has been postponed until April. The delay is a result of a "sustainable return on investment analysis" that is being produce by HDR following a request by the Board of Public Works. This analysis is expected to be released in March. The representative said that "the BPW wants there to be enough time for public consumption of the information before the charette is held".

In other news, The Holland Sentinel reported in early January that of most of the readers who had written in about the proposed expansion to the James DeYoung coal-fired power plant "voiced their public opinion that the BPW should not expand output at its DeYoung Power plant with a new coal-fired generator." One reader wrote that "[t]he local cost to human health and to

our environment through increased greenhouse gases ought to disturb every Holland resident enough to realize that spending the next 40 years burning more dirty coal is morally irresponsible".

Update: December 2011

In early December Sierra Club released a new map of sulfur dioxide pollution emanating from the James DeYoung coal plant at a rate of around 3.5 times levels considered safe by the Environmental Protection Agency. Sierra Club had hired a Wisconsin-based independent environmental engineering firm to create an "air dispersion model". This model utilized emissions information, meteorological data, and details of the power plant to show how air pollution concentrations from the plant are dispersed in the area. Anne Woiwode, state director of Sierra Club Michigan, said it was important to look at sulfur dioxide emissions because they have "a greater local affect than most other pollutants like nitrogen oxide, mercury, and ozone and [are] easier to track."

The national ambient air quality standard for sulfur dioxide is set at 196.2 micrograms per cubic meter of air, the upper limit for protecting public health. Units four and five are permitted to pollute a rates resulting in concentrations of 696 micrograms of sulfur dioxide per cubic meter of air. Sulfur dioxide emissions are linked to severe respiratory problems, asthma, heart complications, and lung disease.

MN	Excelsior	Minnesota – Mesaba Energy Iron	603	Integrated Gasification
	Energy	Range Project (IGCC)		Combined Cycle (IGCC)

Background:

Excelsior Energy is proposing to build the Mesaba Energy Project power plant north of Taconite in Itasca County, MN. The \$2 billion integrated gasification combined cycle (IGCC) plant would be built in two phases, with each capable of producing approximately 600 megawatts (approximately 1,200 megawatts total), and would be the largest IGCC power plant if built. Excelsior Energy has no plans to capture the estimated 5 million tons of carbon dioxide, a major contributor to global warming, that the proposed Mesaba plant will emit.

Local Sierra Club activists want clean energy solutions – such as wind, solar, biomass, and energy efficiency – that support Minnesota's economy and help end our country's dependence on fossil fuels. Sierra Club, Clean Water Action and the MinnesotaCenter for Environmental Advocacy are opposing the proposed Mesaba Energy Project before the Minnesota Public Utility Commission, which will determine whether the plant can be built before Excelsior moves ahead with the project's environmental permit reviews. To view the docket, please visit http://energyfacilities.puc.state.mn.us/Docket.html?Id=16573.

Update: April 2011

After nearly a decade of gathering permits, public hearings, and having spent nearly \$41 million in taxpayer money, Excelsior Energy has a new plan for the Mesaba Energy Project. Rather than

building an integrated gasification coal plant, Excelsior is now moving forward with plans to build a conventional natural gas plant.

State Sen. Tomassoni and Rep. Mike Beard have introduced legislation (<u>S.F. 417</u> and <u>H.F. 618</u>) that would allow Excelsior to build the natural gas plant and retain all the perks it was previously awarded. The bill(s) would also let Excelsior keep all existing permits already issued, extend the life of those permits so they do not expire, and require regulators to issue any outstanding permits within 180 days.

Opponents of the project are viewing the move to natural gas as a 'bait-and-switch' attempt by Excelsior to salvage the project. Once permitted and built, Excelsior would have all the permits and merits in place to 'switch' Mesaba back to a coal gasification plant, exempting it from contested hearings and approval from the public utilities commission.

Update: March 2011

Minnesota State Senate and House legislators have voted in favor of lifting a four year old ban on the construction of new coal plants in the state. The 2007 Next Generation Act also prohibited the state's utilities from purchasing electricity from new coal plants outside of Minnesota.

Although this would presumably lift a significant roadblock for Excelsior Energy and the proposed plant, there has been no word on the future of the project. Excelsior has still not submitted final applications with state agencies to obtain required air and water permits.

MS	Southern	Mississippi – Mississippi	582	Integrated Gasification	
	Company/Mississippi Power	Power Ratcliffe IGCC Plant		Combined Cycle	
	Company	<u>- Kemper</u>		(IGCC)	

Background:

In December, 2006, Southern Company subsidiary Mississippi Power announced plans to construct a 600-megawatt IGCC coal fired power plant in KemperCounty in east-central Mississippi. The proposed plant would burn locally mined lignite coal, with an approximate cost of \$1.8 billion. Mississippi Power has been given millions of dollars to construct the plant in federal tax credits under the Energy Policy Act of 2005.

For more information, read the Greenwire article "Mississippi Power plans lignite-burning IGCC plant" located at

http://www.eenews.net/Greenwire/2006/12/15/archive/7/?terms=mississippi%20power.

Update: April 2012

On April 24, the Mississippi Public Service Commission voted 2-to-1 to allow Mississippi Power to continue constructing the Kemper coal plant. While Commissioner Presley wrote in a dissenting opinion that taking new testimony and evidence would be an "appropriate response" to the Supreme Court decision, the two other Commissioners issued a 133-page order in favor of moving the project forward. Sierra Club has plans to once again appeal the decision. Sierra Club

has also filed a legal action in state court, arguing that Mississippi Power, and not its customers, should assume the risk of building the dirty, expensive, and unnecessary project.

Update: March 2012

On March 30, in a closed meeting lasting less than one minute, the Mississippi Public Service Commission <u>voted</u> to issue an emergency authorization to Mississippi Power to continue spending \$3 million per day building the Kemper coal plant. Since the March 15 state Supreme Court ruling that revoked the plant's permit, Mississippi Power has scrambled to try and protect their investments in the project and burden coastal ratepayers with the expenses. The Commission's actions were met with shock, disbelief, and anger from meeting attendees; opponents of the project travelled hours to attend the hearing, but were not given a chance to voice their concerns. In response, Sierra Club <u>filed a motion</u> with the state Supreme Court, asking the Court to prevent the Commission from taking this illegal action.

ND	Great Northern Project	North Dakota - South	175	Coal-to-
	Development/South Heart Coal	Heart Coal		Hydrogen

Background:

On August 18, 2005, South Heart Coal LLC, a subsidiary of Great Northern Power Development LP, filed an application with the North Dakota Department of Health (NDDH) for an air permitto-construct for the South Heart Power Project. This project will develop a 500 megawatt, lignite-fired electric generating plant and lignite mine. The South Heart power project is scheduled to open between 2013 and 2015.

Update: September 2011

An administrative law judge has denied a request for an eastern North Dakota hearing on a proposed coal mine near the Theodore Roosevelt National Park, saying it was filed too late and would go against normal procedure.

The permit application is under review by Allen Hoberg, at the request of the North Dakota Public Service Commission

Update: March 2011

On January 12, 2011, the state Public Service Commission acknowledged South Heart's permit application for a nearly 4,600-acre strip South Heart Mine is complete. In March 2011, Neighbors United, a group of concerned homeowners delivered 3000 postcards to the PSC requesting that the PSC deny the proposed coal mine and power plant's permit application. The PSC will be holding public hearings on this project.

The <u>Dakota Resource Council's</u> state court appeal of the Stark County Commission's rezoning decision is also expected soon.

Update: January 2011

<u>Dakota Resource Council's</u> state court appeal of the Stark County Commission's rezoning decision is still ongoing. The Council filed its opening brief in late November 2010 and the Commission responded in late December 2010. It is unknown when the court will issue a decision.

On November 24, 2010, the state Public Service Commission sent a second notice of deficiency to South Heart Coal, pointing out a number of areas in which the coal mine application was still deficient. The developer sent in a second revision at the end of December, which is still under review by the commission.

PA	EmberClear (formerly Future Power PA,	Pennsylvania - Good	270	Gasification
	LLC)	<u>Spring</u>		

Potential Transitional unit under GHG NSPS

Background:

In January 2009, Future Power LLC announced plans to build a \$400 million gasification plant in Good Spring Pennsylvania (Schuylkill County). The plant would burn local anthracite coal and generate 150mw of power. Future power is currently working on obtaining the necessary permits and hopes to begin construction in 2010.

Update: November 2011

Prep work for Good Spring work continues - EmberClear files Amended Technical Report Incorporating the Initial Drilling Results: EmberClear Corp. has filed an Amended National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") compliant technical report (the "Technical Report") on its coal deposits at its Good Spring Property ("the Property" or "Tracy Slope Mine") located in Schuylkill County, Pennsylvania. EmberClear embarked on a drilling program in May 2011 and the initial results are included in this Amended Technical Report. The Technical Report indicates that there are approximately 100 - 216 million potential tons on the Property in the 23 seams evaluated in the Technical Report, as further described below. The Technical Report is available on the Company's website www.emberclear.com. Further work is ongoing to attempt to elevate the potential tons to a resource classification. Contingent on the successful estimation of coal resources Norwest will incorporate the drilling results into a scoping level study and preliminary economic assessment.

Update: February 2011

EmberClear Corp. announced its acquisition of FuturePower in December 2010. The Canadian company develops coal-gasification technology, and was recently praised by the Obama administration for its collaboration with the Chinese Clean Energy Research Institute. EmberClear purchased more land in and around Good Spring, PA in order to ensure a steady

supply of local anthracite coal for the plant. The company also stated that it picked Good Spring because of its proximity to rail and the PJM (Pennsylvania-New Jersey-Maryland) power grid. The project would generate electricity and sell it directly to the grid.

PA	Wellington	Pennsylvania - Greene Energy	580	Circulating Fluidized
	Development	Resource Recovery Project		Bed (CFB)

Background

Wellington Development has obtained a permit to construct a 580 megawatt waste coal burning facility in Cumberland Township, Pennsylvania. A group of individuals, the <u>National Parks</u> <u>Conservation Association</u>, and the <u>Group Against Smog and Pollution</u> have filed a legal challenge to the permit. The US Forest Service and the National Park Service state that the waste coal plant will cause damage to national parks and forests as far away as 60 to 100 miles. The comments of these organizations as well as many others, including the PA Chapter of the Sierra Club, can be found <u>here</u>.

Update: April 2011

On April 6, the Pennsylvania DEP released a <u>plan approval modification</u> for the Greene Energy Resource Recovery Project. The permit extension pushes the date by which Wellington must finish construction to April, 2016. Though Wellington officially commenced construction in 2006, the project has been on hold while the developer attempts to secure funding.

Update: February 2011

The Pennsylvania DEP is evaluating the comments it received regarding Wellington's request for a permit extension. In response to EPA's comments, the agency <u>requested supplemental information</u> from Wellington to confirm that it has engaged in a continuous program for construction of the entire facility and that it will be completed in a reasonable time. The agency will use this information to determine whether to extend the existing plan approval or require the developer to submit a new application.

SD	Hyperion Refining,	South Dakota - Hyperion Energy	200	IGCC / Tar sands oil
	LLC	<u>Center</u>		refinery

Background:

Hyperion Resources, Inc., a privately held international energy company based in Dallas, TX, plans to build the Hyperion Energy Center near Elk Point in Union County, South Dakota. The \$10 billion Center would include an oil refinery and adjacent IGCC power plant. Hyperion plans to refine 400,000 barrels-a-day of Alberta tar sands sour crude to low-sulfur gasoline, diesel and jet fuel and to use a by-product of refining to produce some electricity for its own processes. If the refinery is built, SD's carbon dioxide emissions would more than double, skyrocketing from

15 to 34 million tons per year. For more information, check out updates from the Sierra Club South Dakota Chapter's <u>website</u>.

January 2012

In mid-January a permit challenge to the Hyperion facility's air quality operating permit returned to the courtroom in Pierre, SD. Sierra Club, Save Union County, and Citizens Opposed to Oil Pollution had sued to vacate both the plant's original permit, issued in 2009 by the State Board of Minerals and Environment, and the revised version of the permit, issued in September 2011. Among other alterations, the reissued permit granted the facility an 18-month extension to commence construction. The permit does not do enough to cut projected air pollution from the facility due to inadequate pollution controls, and the environmental study was not extensive enough for such a massive project. Specifically, the plant's plan to limit CO2 emissions is considered deficient. A representative from the Board of Minerals countered that "there was no need to prepare a full-blown environmental impact statement".

Construction of the facility has been pushed back by legal challenges to its air quality operating permit and because securing financing became more difficult during the economic downturn. Either side would likely appeal an unfavorable decision to the South Dakota Supreme Court.

Update: November 2011

Circuit Judge Mark Barnett is scheduled to hear oral arguments on January 12, 2012 regarding a legal fight over a required environmental permit for the proposed Hyperion Energy Center. In June of 2010 Hyperion had been granted its request to reopen the permitting process, and in September of 2010 the minerals board approved a revised permit. As a result of the permit reissuance, the deadline for Hyperion to begin construction on this proposed \$10 billion facility was pushed back to March of 2013.

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TX	Chase Power/Las Brisas Energy	Texas - Las	1320	Circulating Fluidized Bed
	Center, LLC	Brisas		(CFB)

Background:

On May 19, 2008, Las Brisas Energy Center, LLC submitted an air permit application to the Texas Commission on Environmental Quality (TCEQ) for a 1200 MW petroleum coke fired power plant in Corpus Christi, TX. Las Brisas has plans to build the facility on the same site as Tondu Corporation's IGCC plant that was abandoned in 2007 - on a strip of land along the Corpus Christi Bay.

The proposed facility would be a huge emitter of carbon dioxide and other air pollutants and local environmental groups, such as the <u>Lone Star Chapter</u> of Sierra Club, are actively fighting against the plant and urging Las Brisas to invest in cleaner, more efficient energy alternatives.

Update: May 2012

Great news! On May 14, Travis County District Court Judge Stephen Yelenosky issued an opinion letter rejecting key components of the air permit for the proposed Las Brisas pet coke plant. Siding with Sierra Club and its allies, Judge Yelenosky found that the air permit fails to comply with maximum achievable control technology (MACT) standards designed to cut mercury and other hazardous air pollution, and national ambient air quality standards (NAAQS) for sulfur dioxide (SO2) and nitrogen dioxide (NO2) pollution. The District Judge also agreed that the air permit must account for secondary emissions that will occur from off-site material handling and transporting pet coke to the plant. The flawed air permit will likely be reversed or remanded to the Texas Commission on Environmental Quality (TCEQ). A copy of the opinion letter is available in the related documents below.

On another front, TCEQ has issued a draft Texas Pollutant Discharge Elimination System (TPDES) water permit for the Las Brisas plant, which is now available for public comment.

Update: January 2012

Las Brisas' greenhouse gas permit application for the proposed pet coke plant is still pending before the U.S. Environmental Protection Agency (EPA), Region VI. Currently, EPA is reviewing nine other greenhouse gas permit applications for facilities in Texas, and in November

2011, issued its first greenhouse gas permit for the Thomas C. Ferguson plant, a natural gas facility in central Texas.

TX	White Stallion Energy	Texas - White Stallion	1320	Circulating Fluidized Bed
	Center, LLC	Energy Center		(CFB)

Potential Transitional unit under GHG NSPS

Background:

On September 5, 2008 the Texas Commission on Environmental Quality (TCEQ) received a permit application for a new coal plant in Bay City, in Matagorda County, Texas. The permit was deemed administratively complete and is currently under technical review.

Update: June 2012

At the February 22 agenda meeting, the Commission declined Sierra Club and Environmental Defense Fund's (EDF) request to nullify White Stallion's air permit and remand the matter to the State Office of Administrative Hearings for further discovery and a contested case hearing. The Commission directed the parties to instead submit briefs and accompanying evidence, limiting the groups' ability to participate in the permitting process.

In light of White Stallion's changed site plan, EDF conducted new air dispersion modeling demonstrating that sulfur dioxide (SO2) emissions from the proposed plant would exceed national ambient air quality standards. This SO2 pollution poses a threat to public health, and Sierra Club is urging the Commission to consider EDF's modeling results and reopen permitting for White Stallion.

Update: February 2012

The Texas Commission on Environmental Quality will consider briefing on the proper procedure and scope for the White Stallion air permit remand at its agenda meeting on February 22. At the meeting, the Commission will not hear oral arguments but may ask questions of the parties and Administrative Law Judges involved.

On another front, on February 2, Sierra Club and its allies filed comments, urging the U.S. Environmental Protection Agency (EPA) to include Matagorda County – the location for the proposed White Stallion coal plant – in the Houston-Galveston-Brazoria nonattainment area. The Houston area has long had difficulty meeting national ambient air quality standards (NAAQS) for harmful ozone. White Stallion will only exacerbate air pollution in Matagorda County; if built, the facility will be the second largest source of nitrogen oxide (NOx) emissions – a precursor for ozone. The nonattainment designation will allow EPA to protect public health by better regulating air pollution in the county.

TX	NRG Energy	Texas – Limestone	744	Conventional Pulverized
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Potential Transitional unit under GHG NSPS

Background:

In June 2006, NRG Energy proposed plans to build a new 744 megawatt pulverized coal power plant at its existing 1,614 MW Limestone Station, located in Jewett about 120 miles northwest of Houston. The new unit, named Limestone III, would cost \$1.2 billion and enter service in 2012, if allowed to proceed. If built, Limestone III is expected to emit over 2,100 tons of SO2/year and 1,750 tons of NOx/year.

NRG filed an air permit application with the Texas Commission on Environmental Quality and a draft decision on the air permit is expected any day. For more information about the air permit, please view the <u>notice of application</u>.

Update: January 2012

There is not much to report on the proposed Limestone III coal plant. NRG has yet to secure financing for the project, and construction on the facility has not begun.

Update: September 2011

In June 2011, the Texas Commission on Environmental Quality extended the construction start date for the proposed Limestone III coal-fired power plant. NRG now has until December of 2012 to begin construction on the plant.

Update: April 2011

On March 7, the Travis County District Court issued an order in the air permit appeal, affirming the final air permit for the proposed Limestone III coal-fired power plant.

ΤΣ	South Texas Electric Cooperative/	Texas- Coleto Creek	650	Supercritical
	International Power	Expansion		

Potential Transitional unit under GHG NSPS

Background: On January 4, 2008 the South Texas Electric Cooperative, along with partner International Power, announced their plans to construct a 650 megawatt coal-fired power plant at International Power's existing Coleto Creek power station near Victoria, Texas. The companies say that the proposed plant will cost \$1.2 billion and will burn coal from the Powder River Basin in Wyoming.

Update: April 2012

The Texas Commission on Environmental Quality has extended the construction start date for the proposed Coleto Creek coal-fired power plant. Construction on the project must now begin by June 24, 2013.

Update: January 2012

There is not much to report on the proposed Coleto Creek coal plant. GDF SUEZ has yet to secure financing for the project, and construction on the facility has not begun.

Update: July 2011

In April 2011, Sierra Club, Environmental Defense Fund, and Citizens for a Clean Environment dropped their air permit appeal against the proposed Coleto Creek coal-fired power plant. Back in February, International Power merged with GDF SUEZ, making GDF SUEZ the largest utility in the world. To date, the company has not secured financing for the Coleto Creek project.

Potential Transitional unit under GHG NSPS

Background:

In June 2008, Hunton Energy submitted an air permit application to the Texas Commission on Environmental Quality (TCEQ) for a \$2.4 billion gasification plant. The proposed project was recently relocated to a site adjacent to the Dow Chemical Oyster Creek Facility in Freeport, Texas. Hunton Energy relocated the project because the new site has established access to deep water, electrical transmission and natural gas infrastructure. The Freeport plant would use a gasification process to convert petroleum coke - a refinery byproduct with properties similar to coal - into Synthetic Natural Gas (SNG). The SNG produced by the plant would be sold to Dow Chemical. The Freeport plant would also produce steam, which would primarily be used to generate power for both internal use and commercial sales. Hunton Energy plans to sell all CO2 emissions produced in the gasification process to a CO2 consolidator for sequestration in oil and gas fields. The plant is expected to go online in 2012.

Update: February 2012

Hunton Energy has not been able to finalize a deal with Dow Chemical, and will no longer pursue the proposed gasification plant in Freeport, Texas.

Update: April 2011

In August of 2010, the Texas Commission on Environmental Quality granted Hunton Energy's request to extend the construction start date for its proposed gasification plant in Freeport, Texas. (The original deadline to start construction was July 16, 2010).

Hunton Energy must now begin construction on the plant by January 16, 2012.

Update: April 2009

On March 4, 2009, the TCEQ issued a final air permit for the Freeport plant.

TX	Tenaska	Texas- Trailblazer	900	Supercritical
		Energy Center		

Potential Transitional unit under GHG NSPS

Background:

On February 19, 2008 Tenaska energy company announced their plans to construct a three billion dollar coal-fired power plant in Sweetwater, Texas. The proposed 900 megawatt plant includes plans to capture and store carbon dioxide, a technology that remains unproven.

Update: June 2012

The Texas Commission on Environmental Quality has extended the construction start date for Tenaska's proposed coal-fired Trailblazer Energy Center. Construction on the plant must now begin by December 29, 2013.

Update: May 2012

On January 20, Sierra Club's appeal was transferred to the Eleventh Court of Appeals in Eastland, Texas. On April 24, Sierra Club and Multi-County Coalition petitioned the court to consolidate their appeals and set a joint briefing schedule. The court denied the groups' request to consolidate the two cases, but agreed to a joint briefing schedule. The groups' briefs are due May 18, 2012.

Update: January 2012

On December 22, Sierra Club appealed the District Court decision to the Third Court of Appeals in Texas.

Deseret Generation and Transmission	<u>Utah - Bonanza</u>	110	Circulating Fluidized Bed (CFB)
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Potential Transitional unit under GHG NSPS

Background:

Western Resource Advocates report that if constructed, the proposed Bonanza coal-fired power plant would release 3.37 million tons of carbon dioxide, 1,038 tons of sulfur dioxide, 5,692 tons of nitrous oxides and 36 pounds of mercury per year, among other air pollutants. Located in

Eastern Utah very close to Colorado, Deseret Power's proposed 110 megawatt coal plant would join the 400 megawatt plant already existing at the site. The combined pollutants from these plants would affect almost 10,000 children, over 500 of which already have chronic asthma. In addition, the emissions from the plant would affect visibility and environmental quality at Utah's five national parks. The <u>Utah Chapter</u> of the Sierra Club is actively opposing the construction of the plant, as well as of the other three proposed coal plants in Utah, through grassroots organizing, education and involvement with the legal proceedings. This plant is currently in the permitting process; EPA Region 8 granted them a draft Prevention of Significant Deterioration (PSD) permit in July 2006.

Update: January 2010

There has been no movement from developers since the November 2008 Environmental Appeals Board ruling detailed below. Plant appears to be abandoned.

Update: September 2009

Almost a year ago, Club scored a major victory when the U.S. EPA Environmental Appeals Board remanded Deseret Power's PSD/construction permit back to U.S. EPA Region 8 for reconsideration of how best available control technology should be used to limit carbon dioxide emissions at its proposed Bonanza power plant. According to agency officials, the region is waiting for further direction from other units within the EPA before addressing the CO2 issue and moving forward with the permitting process. The agency has received no word from Deseret Power regarding the plant, but assumes the company is still moving forward with its plans.

Update: November 2008

On November 13, 2008 the Environmental Appeals Board ruled against Deseret Power Electric Cooperative in the case mentioned below. This is a huge victory for the Sierra Club and the environment since now all new and proposed coal plants are forced to take their carbon dioxide emissions into account when designing their plants. Plus, this ruling opens a number of new doors in the fight against coal. The fight is not over yet, but this is a major step in the right direction! At this point Deseret Power must go back to the beginning and start the permitting process all over again, no word yet as to whether they decide to do that or not. To read the EAB's opinion click here!

UT Viresco Energy, LLC <u>Utah - Utah Coal and Biomass Fueled Pilot Plant</u> Coal-to-Gas

Background:

Viresco Energy, LLC (Viresco) is proposing to design, construct, and test a pilot-scale coal and biomass steam hydrogasification facility in Kanab, Utah. The U.S. Department of Energy (DOE) would provide financial assistance for the project. Specifically, Viresco plans to test the conversion of coal and biomass to synthetic gas, and eventually substitute natural gas, sulfur-free Fischer-Tropsch diesel, jet fuel, dimethyl ether, and methane. This is known as a Steam Hydrogasification Reaction (SHR) process. If successful, this project plans to provide engineering and operation information to future, similar projects.

Update: January 2012

DOE released the Final Environmental Assessment for the Viresco plant December 28, 2011. The Department released a Finding of No Significant Impact and Mitigation Action Plan for the plant on December 23 and December 27, respectively. The Draft Environmental Assessment was initially released August 12, 2011 with the comment period running until September 16. Additionally, there were public meetings held locally August 30 and August 31. Sierra Club submitted comments September 16.

VA	Old Dominion Electric	Virginia - Cypress Creek Power	1500	SCPC
	Cooperative	Station		

Background:

In early December 2008, in the face of climate science and public opinion, Old Dominion Electric Cooperative (ODEC) announced plans to build a \$6 billion predominantly coal-fired power plant on 1,600 acres in Surry County. ODEC is a nonprofit utility based in Glen Allen, near Richmond.

ODEC reports that the Cypress Creek Power Station would take between 4-6 years to build and hopes to have it operational in 2016. But the project is still in preliminary stages and will require several local, state and federal permits before construction can begin. Because the plant would cross town and county jurisdictions, both governing bodies would have to vote to approve the project and officials expect to begin discussing proposal in early 2009.

To visit ODEC's project website, click <u>here</u>.

Update: March 2012

The Dendron Town Council in Virginia has unanimously reaffirmed land-use changes for Old Dominion Electric Cooperative's plan to build the \$6 billion Cypress Creek coal-fired power plant. The council was required to reconsider zoning and land-use permits for ODEC's proposed Cypress Creek Power Station after initial approvals issued in 2010 were overturned. In response to a lawsuit filed by opponents of the plant, the original vote to allow rezoning of the project was ruled to be invalid because of insufficient public notice of the hearing.

Update: May 2011

Old Dominion Electric Cooperative (ODEC) has received a state permit to conduct tests in the James River for its proposed \$6 billion coal-fired plant in Surry County. The unanimously approved permit will allow the utility to run tests to help determine what type of metal screen would best serve a cooling water pipeline to the proposed Cypress Creek Power Station. The company withdrew its air quality permit application last fall and has not yet indicated plans to reapply.

W	V TransGas Development	West Virginia - TransGas Development	N/A	Coal-to-
	Systems LLC	Systems CTL Plant		Liquids

Background:

In December 2008, TransGas Development Systems submitted an application to the West Virginia Division of Air Quality for an air permit to construct a \$3 billion coal to gasoline plant in Mingo County. The plant would annually use 3 million tonnes of locally-mined Appalachian coal to produce more than 6.5 million barrels of gasoline as well as naptha for the chemical industry and liquefied petroleum gas for heating fuel. The company expects to start construction in 2010 and to become operational in 2013.

Liquid coal is an incredibly dirty fuel source, releasing close to double the amount of global warming pollution per gallon as regular gasoline. Learn more about why <u>liquid coal is a bad deal for global warming</u>.

Update: August 2011

TransGas got a permit amendment without notice or comment that it claims brings it into compliance with the WV Air Quality Board's order.

Update: July 2011

The Sierra Club <u>responded</u> to the DEP's state court appeal, affirming that the Division of Air Quality acted correctly when it remanded TransGas's permit to the agency for modifications. The DEP filed its <u>reply</u> on July 1, 2011. The Circuit Court of Kanawha County will now consider both side's briefs before deciding whether to hold oral argument.

Update: May 2011

The West Virginia Department of Environmental Protection filed a <u>Petition for Appeal</u> with the Kanawha County Circuit Court. The DEP argues that the Air Quality Board's final decision exceeded its statutory authority when it remanded the permit with instructions for the agency to make specific modifications. The petition then argues that the Board is only empowered to affirm, modify, or vacate the permit, not send it back to the agency.

In other news, TransGas announced that they will hold a groundbreaking ceremony for the coal-to-gas plant on May 9 in Wharncliffe. The Sierra Club sent a <u>letter</u> cautioning the company against actually starting construction before the facility's permit changes are finalized.

In April, the WV Economic Development Authority approved the issuance of \$3 billion in bonds for the project. Though this is a step forward, it still remains highly questionable whether the company has the necessary funding to proceed with construction.

WY	DKRW & SNC	Wyoming - Medicine Bow	200	Coal-to-Liquids
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Background:

In August, 2006 Medicine Bow Fuel & Power LLC announced their plans to construct a 200 megawatt coal-to-liquids power plant in Medicine Bow Wyoming. This plant is the first coal-to-liquids plant planned in the US; liquid coal, or coal that has been converted to liquid fuel, is being promoted as a cure-all to our nation's energy problems. However, the truth is that liquid coal is plagued with economic and environmental downsides, including the fact that it releases almost double the global warming emissions per gallon as regular gasoline. Learn more about why liquid coal is a bad deal for global warming!

Update: March 2012

Although DKRW still awaits state approval to continue with the project, the company's Executive Chairman, Bob Kelly now expects the Medicine Bow power plant to begin construction and operation in 2015. He also stated that the project will not depend on any one source of financing. A "gravel road and a small poured concrete pad" keep the project's permits active until it is approved and financing is secured.

Update: December 2011

Vitol Inc., an independent energy trading company, entered into a fuel purchase contract with Medicine Bow Fuel & Power LLC on December 1, 2011. Vitol intends to purchase all of the gasoline produced at the gasification and liquification plant.

The same day, DKRW Advanced Fuels (owner of Medicine Bow Fuel & Power LLC) sent an email to Wyoming state legislators <u>requesting a loan of up to \$300 million</u> to help pay for the construction of the plant. The company is taking advantage of a new limit on the amount it can request, up to \$600 million from \$100 million. Policymakers are expected to address the issue when the next legislative session begins in February.

WY	North American Power Group	Wyoming - Two Elk	325	PC	
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Potential Transitional unit under GHG NSPS

Background:

The North American Power Group has plans to build two pulverized coal plants near Wright Wyoming. Known as the "Two Elk" facility, Unit 1 was issued a permit several years ago, but has not been constructed. A great deal of controversy surrounds the state's extension of permit deadlines surrounding the failure to construct.

Meanwhile, the company just announced plans to build a second unit at the same site, this one a much larger, 750- megawatt pulverized coal unit.

Update: May 2012

The California Energy Commission lists a commercial operation date of January 1, 2014 for the Two Elk Plant. The Commission previously awarded a "pre-certification" as a renewable energy resource for the facility, as it plans to burn biomass some for fuel. No further certification has been awarded since the pre-certification over two years ago.

Additionally, the Wyoming Department of Environmental Quality's Air Division recognized biomass as a viable fuel for the facility, after the company submitted a revised application. Two Elk also submitted an application to address potential emissions reductions. The WY DEQ is currently reviewing this application.

Update: October 2011

According to responsive documents to a Freedom of Information Act request submitted by WyoFile, the Two Elk carbon site characterization project will cost nearly \$10 million. The project is being funded by two Department of Energy grants that are a part of the American Recovery and Reinvestment Act of 2009. Despite reporting "no new direct jobs" created by the project, a percentage of this stimulus funding has been used to pay wages for North American Power Group employees, according to a WyoFile Special Report published on September 27, 2011.