an E.ON company

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July 13, 2009

RE: *In the Matter of: The Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2009 Compliance Plan for Recovery by Environmental Surcharge*
Case No. 2009-00197

Dear Mr. DeRouen:

Enclosed please find an original and ten (10) copies of Kentucky Utilities Company's ("KU") Exhibit JNV-2 to Mr. Voyles's testimony, which was inadvertently omitted from the original filing in the above referenced docket and in some of the filed copies of KU's documents.

Should you have any questions concerning the enclosed, please do not hesitate to contact me. If you receive any requests for copies of the attached document(s), please refer the same to me directly; I will promptly provide such copies upon request.

Sincerely,

Robert M. Conroy

cc: Hon. Dennis G. Howard
Hon. Michael L. Kurtz
Hon. Kendrick R. Riggs
Hon. Allyson K. Sturgeon

Comprehensive Strategy For Management of Coal Combustion Byproducts For

Subsidiaries Kentucky Utilities and Louisville Gas and Electric

June 2009

E.ON U.S. Regulated Generation
Comprehensive Strategy for
Management of Coal Combustion Byproducts

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Executive Summary

Over 98% of Kentucky Utilities ("KU") and Louisville Gas and Electric ("LG&E") 2008's annual energy production was sourced from coal-fired generation. KU and LG&E (the "Companies" or "E.ON U.S.") anticipate coal-fired generation to be the primary source of energy for the foreseeable future. The coal combustion process produces various byproducts. Combustion of coal at the seven KU/LG&E generating stations is projected to increase coal combustion byproducts ("CCP") to over 4.7 million cubic yards by year-end 2011- the first full year of operation of the new coal-fired unit at Trimble County. With the existing fleet of generating units aging and Trimble County 2 scheduled to be placed in-service in 2010, the existing on-site disposal facilities are nearing maximum desired capacity. Complex issues associated with the comprehensive management of CCP for KU and LG&E have short and long-term operational and cost implications for all generating stations. As such, the Companies, in conjunction with qualified professional engineering firms, evaluate alternatives for CCP disposal to ensure continued operation of the low-cost units. Alternatives typically include on-site disposal and beneficial reuse. Opportunities for beneficial reuse of coal combustion byproducts have shifted from a net revenue position to a net cost position. Ultimately, the Companies select only the best CCP management plan based on economic and environmental criteria.

The Companies have been managing CCP at all of the coal-fired power plants for several decades. Currently, the Companies have identified a need for additional CCP storage capacity at four generating stations (E.W. Brown, Cane Run, Ghent and Trimble County) by the year 2014. The Companies currently are pursuing five beneficial reuse options. Four off-site options are: Holcim Cement and Synthetic Materials, Louisville Underground, and Trans Ash at Trimble County, Cane Run, and Ghent respectively. Additionally, gypsum is being used on-site at the E.W. Brown station. Execution of these options reduces the near-term on-site storage capacity requirement and the present value of the revenue requirements ("PVRR"). A summary of these options follows:

Station	Company	Approximate Amount of CCP	PVRR Benefit
Ghent	Trans Ash, Inc	1.5 million tons of gypsum	$ 2.4 million
Trimble County	Holcim (US) Inc	5.8 million tons of fly ash	$ 6.9 million
Trimble County	Synthetic Materials	6.0 million tons of gypsum	$ 72.3 million
Cane Run	Louisville Underground, LLC	6.0 million tons of spent scrubber material	$ 22.7 million

Even considering the reuse alternatives identified in the above table, presently, economic and environmentally responsible beneficial reuse projects can not satisfy the full need for additional storage requirements at all stations. As a result, the Companies must begin, or in the case of E.W. Brown, continue construction of on-site CCP management facilities in conjunction with the identified beneficial reuse opportunities.

Working with external experts, the Companies performed engineering studies at each of the four stations to identify alternatives. The studies contain various site reviews and detailed economic analyses of the various alternatives. As a result, the Companies have identified the phased construction of three new landfills (at Ghent, Trimble County and Cane Run generating stations) and continued construction of the second phase of the

E.W. Brown impoundments as the appropriate next steps for long-term, cost effective, and environmentally responsible management of CCP. Also identified were the expansion of the existing ash impoundment and the relining/commissioning of a gypsum impoundment, both located at the Trimble County station. The Companies' total costs of the next phase of these on-site facilities are shown below:

Station	Alternative	Phase	Cost of Phase ($million)[1]
Ghent	Landfill	1	203.97
Trimble County[2]	Impoundments	n/a	24.71
Trimble County[2]	Landfill	1	70.53
Cane Run[3]	Landfill	1	4.60
E.W. Brown	Impoundments	2	24.86
			328.66

1. Capital cost only

2. Costs exclude any barge loadout costs associated with Holcim and IMEA/IMPA associated captial

3. In absence of Louisville Underground the capital cost of Phase I is projected to be $18.5 M

Background

When coal is burned for power generation (reference *Figure 5*) the residues that remain are referred to as ash. There are, primarily, three types of ash: fly ash, boiler slag and bottom ash. Fly ash (*Figure 1*) is a fine, powdery material that can be removed from exhaust gases primarily by electrostatic precipitators. Boiler slag (*Figure 2*) is a molten ash, typically collected from cyclone type boilers[1] while bottom ash (*Figure 3*) refers to the heavier ash particles too large or heavy to be carried by the exhaust gases and either adhere to the walls of the boiler or fall to the bottom of the boiler where they are collected in bins or hoppers.

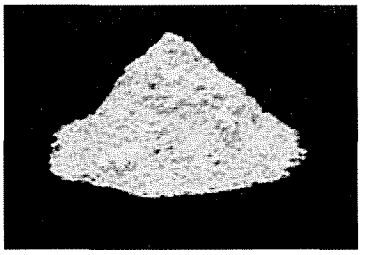

Figure 1: Fly Ash

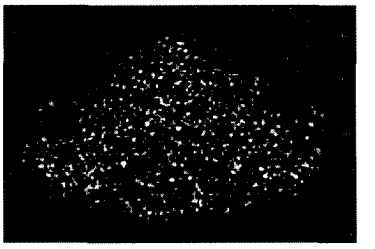

Figure 2: Boiler Slag

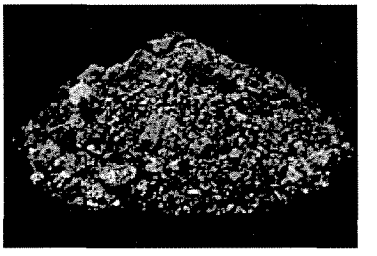

Figure 3: Bottom Ash

The capture of certain chemical components in boiler exhaust gases for environmental compliance (such as SO_2), depending on the specific flue gas desulfurization (or "FGD") technology used, forms a variety of materials with physical properties ranging from a wet sludge to a dry powdered material (*Figures 4 and 5*). For example, gypsum (calcium sulfate) is a wet product formed by a limestone based reagent in a wet scrubbing process. Dry scrubbers, and some wet scrubbing processes, produce a calcium sulfite material that can be blended with fly ash to create a fixated form of calcium sulfite.

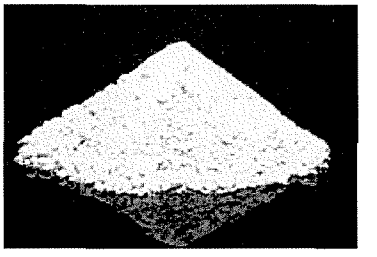

Figure 4: FGD Material

Each of these materials, collectively referenced as coal combustion-by products ("CCP"), must be managed in a cost effective and environmentally responsible manner to support continued long-term station operation. This document intends to summarize recently completed evaluations in this area[2].

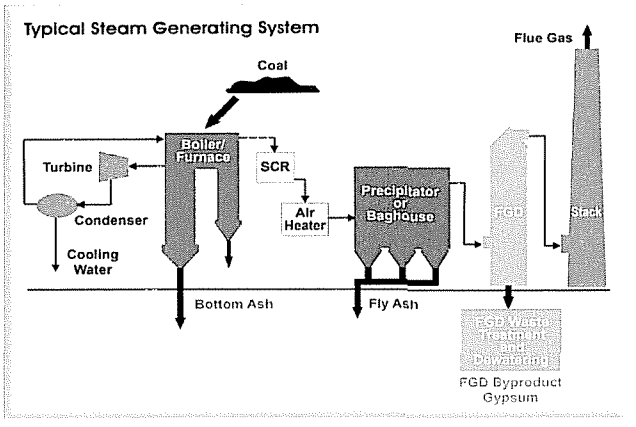

Figure 5: Typical Coal-Fired Steam Generation System

All Figures Used by Permission of the American Coal Ash Association

[1] As a point of fact, the Companies do not own or operate any cyclone type boilers.

[2] See References for a list of reports detailing the CCP management needs, available alternatives, associated evaluation and resulting tactical plan for each station identified in Table 2.

Historical CCP Management

Kentucky Utilities and Louisville Gas and Electric (the "Companies" " or "E.ON U.S.") have over 50 years of experience in the operation and maintenance of landfills and impoundments. With seven coal–fired generation facilities (approximately 95% of the Companies annual energy production is sourced from coal) resulting in about 3.6 million cubic yards (see *Figure 6*) of CCP formation in 2009, the Companies have had to periodically increase the size of existing on-site facilities to manage CCP (see *Table 1*). For example, E.W. Brown generating station's the main ash pond was originally commissioned in 1957 and was expanded in 1964, 1973, and 1990 to accommodate the CCP associated with continued operation of the unit. Additional impoundment expansions have been completed at Cane Run (1977), Ghent (1977, 1995, and 2003) and Mill Creek (1978) and expansions are in progress at the Cane Run and Mill Creek landfills. Each time the expansion was designed and conducted with sound engineering principles. The Companies have safely and competently managed all CCP facilities, performing frequent self-inspections (often utilizing external engineering companies proficient in impoundment design or inspection) and state inspections as required and the Companies remain committed to continuing to do so.

	Power Station	Facility Name	Year Commissioned	Materials Contained
1	E W Brown (KU)	Ash Pond	1957, Expanded 1964, 1973, 1990	Bottom Ash, Fly Ash, Other (Coal Fines, Process Water Drainage, Pyrites)
2	E W Brown (KU)	Auxiliary Pond	2008	Bottom Ash, Fly Ash, Other (Coal Fines, Process Water Drainage, Pyrites)
3	Ghent (KU)	Ash Pond Basin 1	1972, Expanded 1977	Bottom Ash, Fly Ash, Other (Coal Fines, Process Water Drainage, Pyrites, Treated Sanitary Wastewater)
4	Ghent (KU)	Secondary Ash Treatment Basin	1972	Bottom Ash, Fly Ash
5	Ghent (KU)	Ash Pond Basin 2	1995, Expanded 2003	Bottom Ash, Fly Ash, Other (Pyrites)
6	Ghent (KU)	Gypsum Stacking Facility	1995	Flue Gas Emission Controls Residual
7	Ghent (KU)	Gypsum Stack Surge/Reclaim Pond	1995	Flue Gas Emission Controls Residual
8	Green River (KU)	Main Ash Pond	1977	Bottom Ash, Fly Ash, Other (Coal Fines, Pyrites)
9	Green River (KU)	Scrubber Pond	1975	Flue Gas Emission Controls Residual
10	Green River (KU)	Ash Pond Number 2	1949	Bottom Ash, Fly Ash, Other (Coal Fines)
11	Green River (KU)	Finishing Pond Number 3	1949	Bottom Ash, Fly Ash
12	Green River (KU)	Former Ash Pond (current Coal Run-Off Pond)	1949	Bottom Ash, Fly Ash, Other (Coal Fines, Process Water Drainage, Pyrites, Treated Sanitary Wastewater)
13	Pineville (KU)	Ash Pond	1977	Bottom Ash, Fly Ash, Other (Coal Fines, Process Water Drainage, Pyrites)
14	Tyrone (KU)	Ash Pond	1977	Bottom Ash, Fly Ash, Other (Coal Fines, Process Water Drainage, Pyrites, Treated Sanitary Wastewater)
15	Tyrone (KU)	Finishing Pond	1977 (Estimated)	Bottom Ash, Fly Ash
16	Cane Run (LG&E)	Ash Pond	1972, Expanded 1977	Bottom Ash, Fly Ash, Other (Coal Fines, Process Water Drainage, Pyrites, Treated Sanitary Wastewater)
17	Cane Run (LG&E)	Clearwell Pond	1976, Expanded 1982	Flue Gas Emission Controls Residual
18	Cane Run (LG&E)	Dead Storage Pond	1976, Expanded 1982	Flue Gas Emission Controls Residual
19	Cane Run (LG&E)	Emergency Pond	1977	Flue Gas Emission Controls Residual, Other (Process Water Drainage)
20	Cane Run (LG&E)	Basin Pond	1976	Flue Gas Emission Controls Residual, Other (Process Water Drainage)
21	Mill Creek (LG&E)	Ash Pond	1972, Expanded 1978	Bottom Ash, Fly Ash, Flue Gas Emission Controls Residual, Other (Coal Fines, Process Water Drainage, Pyrites)
22	Mill Creek (LG&E)	Emergency Pond	1981	Flue Gas Emission Controls Residual
23	Mill Creek (LG&E)	Dead Storage Pond	1978	Flue Gas Emission Controls Residual
24	Mill Creek (LG&E)	Clearwell Pond	1978	Flue Gas Emission Controls Residual
25	Mill Creek (LG&E)	Construction Run Off Pond	1978	Flue Gas Emission Controls Residual
26	Trimble County (LG&E)	Ash Pond	1990	Bottom Ash, Fly Ash, Flue Gas Emission Controls Residual, Other (Coal Fines, Process Water Drainage, Pyrites, Treated Sanitary Wastewater)
27	Cane Run (LG&E)	Landfill	1982, Expansion in progress	Bottom Ash, Fly Ash, Poz-O-Tec, Flue Gas Emission Controls Residual
28	Mill Creek (LG&E)	Landfill	1982, Expansion in progress	Bottom Ash, Fly Ash, Poz-O-Tec, Flue Gas Emission Controls Residual

Table 1: Existing E.ON U.S. Impoundments/Landfills Containing CCP

In addition to the normal inspection processes described above, on December 22, 2008, the Tennessee Valley Authority ("TVA") experienced a breach in a CCP containment dike at its Kingston coal-fired generating station and released about 5.4 million cubic yards of coal ash. In response to this event E.ON U.S., and many other companies, stepped up the focus on ensuring the integrity of all their impoundments. By the week of January 12, 2009, less than one month after the breach at TVA, personnel within the Companies' Generation Engineering Department had completed visual inspections of all the Companies' state-regulated CCP impoundment structures utilizing the Kentucky Division of Water's, "Guidelines for Maintenance and Inspection of Dams in Kentucky," as a guideline[3]. The Kentucky Division of Water classifies dam structures as high, moderate or low hazard[4] structures based on the potential for damage that might occur to existing/future downstream developments resulting from a sudden breach of the dam. The hazard classification is based on the amount of potential damage in the event of failure and is not associated with current or past structural integrity.

Also in January 2009, the Companies updated the communications portion of each generating station's emergency action plan and retained ATC Associates ("ATC") to perform an independent third-party visual assessment of all CCP impoundment facilities classified by the Kentucky Department of Environmental Protection ("KDEP") as high- or moderate hazard dams. Consistent with the state inspections and internal inspections (performed by E.ON U.S. personnel), ATC's visual assessment of the high- and moderate- hazard structures did not indicate any dam safety deficiencies for normal loading conditions with any of the KDEP classified CCP impoundments. In February 2009, the Companies engaged ATC to perform the same inspections at the CCP impoundments that the KDEP classifies as low-hazard facilities. Once again, ATC did not detect any dam safety deficiencies under normal loading conditions with any of the CCP impoundments classified by the KDEP as low-hazard.

Furthermore, the Companies have non-classified impoundments that do not meet KDEP's criteria for classification.[5] The Companies believe that these facilities require the same level of diligence as classified impoundments and labor to ensure their continued safe and environmentally responsible history of operation continues. To that end, the Companies asked ATC to assess the Companies' non-classified facilities, which ATC did in April 2009. ATC's final report on the non-classified facilities is expected to be completed in July of 2009.

In 2009 the Companies will be conducting more robust inspections on all KDEP classified impoundments, as well performing dam breach analyses with inundation mapping.

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[3] For "Guidelines for Maintenance and Inspection of Dams in Kentucky" see http://www.water.ky.gov/NR/rdonlyres/0FA1460E-9E9C-4F7E-8DB6-B8D1A354AA34/0/WRInsp_Guidelines_Dams.pdf

[4] Excluding the Dix Dam hydro generation facility, the Companies have 6 impoundments classified as "high hazard", 2 classified as "moderate hazard" and 4 classified as "low hazard" by the Kentucky Division of Water.

[5] Non-classified impoundments are impoundments whose dams are lower than the 25' and impound less than 80,667 cubic yards (50 acre-feet). The Companies have 16 non-classified CCP impoundments.

Future Needs

The Companies anticipate coal-fired generation to be the primary source of energy for the foreseeable future with total annual CCP production projected to increase to over 4.7 million cubic yards by year-end 2011- the first full year of operation of the new coal-fired unit at Trimble County (see *Figure 6*) and completion of the KU FGD installations. To allow continued low-cost coal-fired generation to be realized, additional alternatives to managing CCP have been identified and acted upon. Each of the Companies' generating stations is positioned slightly differently for having adequate on-site volume remaining in landfills or impoundments. *Table 2* summarizes each station's need for additional CCP management capacity. Seven of the Companies' active impoundments or landfills will reach their maximum desired capacity (or minimum desired remaining capacity) levels within 5 years. The maximum desired capacity is site specific based on unique characteristics of each facility (such as production, fuel quality, impoundment/landfill operations, etc).

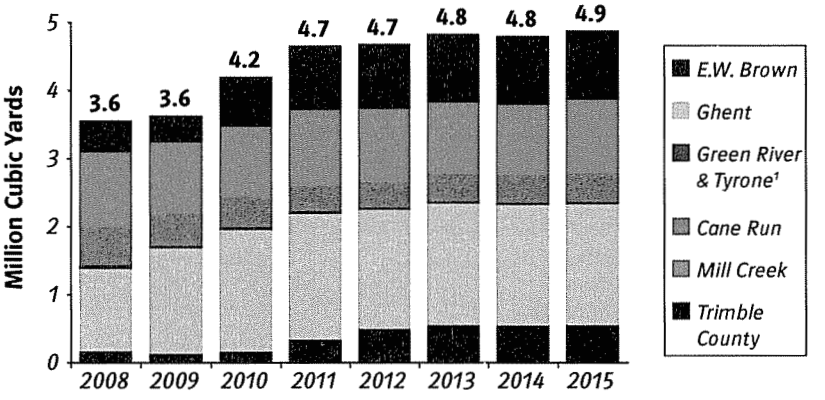


Figure 6: Recent and Forecasted KU/LG&E CCP Production

A detailed discussion of the Companies' needs, available alternatives, construction and operational costs, offsite disposal alternatives and beneficial reuse opportunities is beyond the intended scope of this summary document. That information, however, can be found in detailed individual reports associated with each generating station[6].

Station	Landfill or Impoundment	Year Need Identified
E.W. Brown	Ash Pond	2012
	Auxilary Pond	2014
Ghent	Gypsum Stacking	2012
	Ash Pond 1	Full
	Ash Pond 2	2012
Trimble County	Ash Pond	2010
Cane Run	Ash Pond	2011
	Landfill	2012
Green River	Ash Pond	2038
Mill Creek	Ash Pond	2025
	Landfill	2024
Tyrone*	Ash Pond	Inactive Reserve

** Tyrone station is on "inactive reserve", however, beneficial reuse opportunities are stil possible*

Table 2: Year of Identified Need for E.ON U.S. Impoundments/ Landfills

Remaining storage capacity is typically included to allow for variability in forecasting CCP production, potential permitting issues associated with future on-site construction alternatives or weather/scheduling related construction delays. The site specific CCP management plan is reviewed in conjunction with the projected CCP production forecast and the remaining

[6] See References (attached) for a list of reports detailing the CCP management needs, available alternatives, associated evaluation and resulting tactical plan for each station identified in Table 2.

capacity. The current site specific CCP management plan is then validated or revised accordingly.

Alternatives for Management of CCP

Though additional federal and state regulations and public sentiment resulting from the TVA incident could have a material impact on the short- and long-term methods of managing CCP from coal-fired generating stations, at the present time expansion of existing facilities or new construction of the following general options exists[7]. For reference, the basic definitions of CCP management alternatives are:

1. ***Landfill-*** a disposal facility where waste is placed in or on land; a facility where "dry" (actually moistened for fugitive dust control) coal combustion or flue gas cleaning byproducts are placed for disposal in or on land. Coal combustion or flue gas cleaning byproducts are transported to this facility directly from the coal-fired plant after they are produced or after they are dredged from storage impoundments that are used as interim facilities. The disposed materials remain in the landfill after closure. Also as these materials are dry and have the consistency of soil, dams or dikes are not required to provide stability. Most large landfills are divided into sections or cells and the coal combustion or flue gas cleaning byproducts are placed in layers that are referred to as lifts that can vary in thickness. Typically captive landfills designed and permitted to receive only coal combustion or flue gas cleaning byproducts are classified as mono-fills.
2. ***Surface Impoundment-*** a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) which is designed to hold an accumulation of liquid wastes or materials containing free liquids and which is not an injection well; a type of waste management facility consisting of an excavated, a dammed or diked reservoir in which coal combustion and flue gas cleaning wastes are disposed of as a slurry or sludge.
    a. *Ash Pond-* an impoundment or surface impoundment used to store or dispose of ash primarily from the combustion of coal. A type of waste management facility consisting of an excavated, a dammed or diked reservoir in which coal ashes are stored for future removal or disposed of as a slurry or sludge. The coal ash solids settle out and leave relatively clear water at the surface that is discharged through a designed and managed outlet structure to a nearby stream, surface water or plant process water system. Ash pond designs reflect local site conditions, federal and state regulations, and whether fly ash, bottom ash, boiler slag or a combination of coal ashes are disposed in the ash pond. Though some electric utility generating power companies combine the ashes during storage or disposal, other power companies use separate ash ponds for fly ash, bottom ash and boiler slag. The ash pond is referred to as a bottom ash pond, fly ash pond, boiler slag pond when it receives one type of ash.

[7] The definitions that follow are based on American Coal Ash Association , Inc's Glossary of Terms Concerning The Management and Use of Coal Combustion Products (CCPs) Effective: April 2003. The ACAA website currently limits access to this document to ACAA members.

Also a large ash pond is referred to as an ash impoundment, ash reservoir, or surface impoundment.

b. *Gypsum Ponding/Stacking-* Gypsum is typically handled in sluice streams from FGD blowdown of hyrodroclone dewatering operations. This stream can be directed to an impoundment for simple settling of the solids or the solids can be managed in a stacking operation within the impoundment. The method used in the phosphate fertilizer industry and applied to the power industry for stacking the wet FGD byproduct (material) that is predominantly calcium sulfate (gypsum). It involves placement of the FGD byproduct slurry in an impoundment and stacking of the reclaimed settled solid in two operations. The primary operation accepts the FGD byproduct slurry directly from the scrubber in a diked or bermed ponding area (settling ponds). These settling ponds provide for primary settling of the FGD solids. The effluent from the ponds is decanted from the pond and either recycled back to the scrubber operation or sent to treatment and discharge. The solids that are settled in the primary/ponding operation are periodically excavated and placed into piles or stacks typically adjoining the ponds to minimize the distance for transporting the dewatered material. Draining/excavating and stacking/drying operations alternate between diked areas to enable continuous storage and excavated material is used to raise dikes and to increase the site capacity.

3. **Beneficial Reuse-** the use of or substitution of the coal combustion byproduct for another product based on performance criteria. For purposes of this definition, beneficial use includes, but is not restricted to, raw feed for cement clinker, concrete, grout, flowable fill, controlled low strength material; structural fill; road base/sub-base; soil- modification; mineral filler; snow and ice traction control; blasting grit and abrasives; roofing granules; mining applications; wallboard; waste stabilization/solidification; soil amendment and agriculture.

E.ON U.S. burns coal and utilizes specific flue gas cleaning technologies in the production of energy and makes every effort to make use of all environmentally responsible and economically prudent beneficial reuse alternatives as a way to manage the resulting CCP. In absence of a location to place CCP or a market in which to reuse CCP, the Companies' low-cost coal-fired generating units could no longer operate. The Companies continually seek economical and environmentally sound beneficial reuse opportunities and have a history of utilizing beneficial reuse CCP (see *Figure 7*). Historically, the Companies have successfully identified and negotiated beneficial reuse contracts for wall board gypsum production, cement feed, and fill or backfill. Efforts are underway to expand the Companies' presence in other reuse areas.

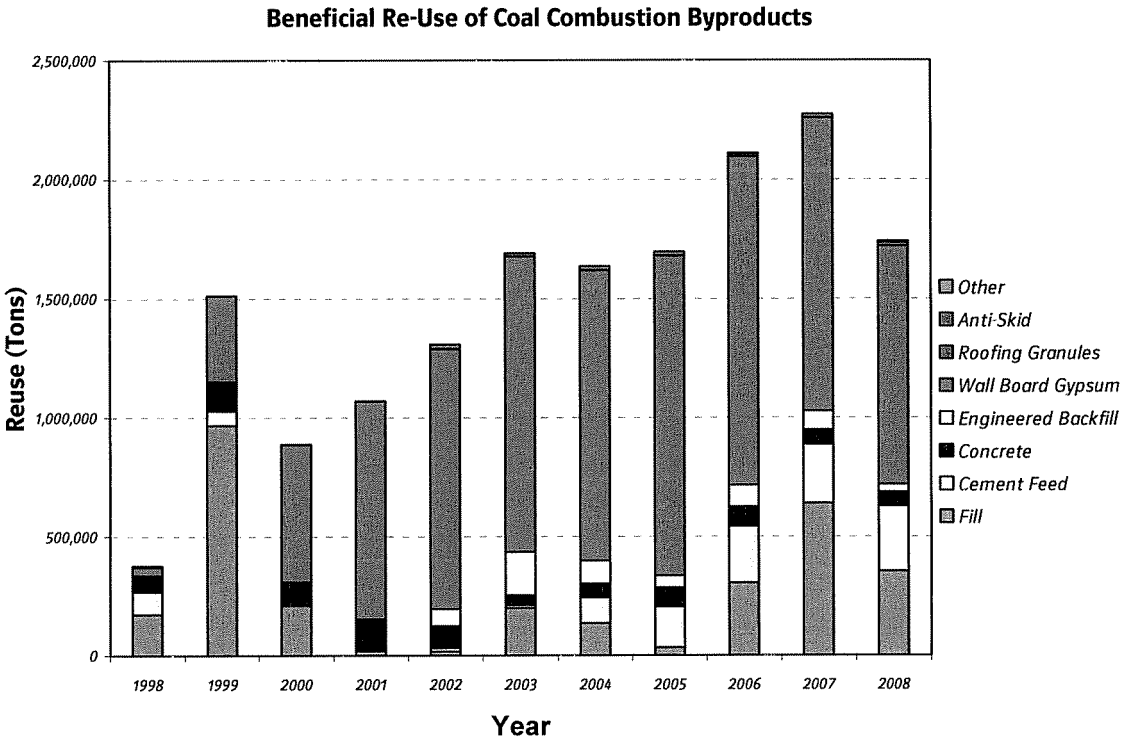


Figure 7: Historical Beneficial Reuse

Reuse of CCP has several interrelated benefits. First, it is environmentally friendly by conserving resources; for example, using synthetic gypsum from CCP to make wallboards displaces gypsum that would have to be produced by other means. Second, it alleviates the difficulty managing physical space constraints at the Companies' generating stations posed by the continuing production of, and the need to store, CCP. Third, because the Companies pursue only economical beneficial reuse opportunities, the Companies and their customers benefit from the cost-sayings associated with such beneficial reuse. The cost savings associated with beneficial reuse come primarily in the form of avoided CCP disposal costs, such as delaying the construction of new or expanded impoundments or landfills. The Companies experience has indicated that in order to maximize the amount of reuse and realize the above stated benefits in a rapidly changing beneficial reuse environment it is imperative that each reuse opportunity be expeditiously evaluated (from environmental assessment and rigorous evaluation to finalization of contract) as most reuse opportunities are rapidly changing and have temporary nature as other companies vie for access to the same opportunity.

However, it has been the experience of E.ON U.S. that insufficient amounts of economical and environmentally responsible beneficial reuse projects exist and, in order to maintain assurance that sufficient storage capacity exists, construction of on-site, special waste landfills (or impoundments) or utilization of municipally owned special waste landfills is inevitably required, even with an aggressive CCP reuse program. The Companies have significant experience with each alternative for managing CCP and subject each alternative to a thorough evaluation process to identify the short and long term plans for managing CCP at each station.

Regardless of whether landfills or impoundments are constructed, the phased approach to their construction is the approach the Companies are taking in regard to all of the proposed CCP projects. Phased construction consists of dividing a single project into multiple, but smaller individual projects. Permitting, engineering and design is completed for the entire project, and only the construction is phased. Utilizing the phased approach provides flexibility to react to unanticipated circumstances (a new reuse opportunity for example) and minimizes the cost impact associated with the project by better timing of the need for the project and the annual cost (or spend) associated with the project. For example, KU is currently utilizing the phased approach in the ash pond construction work in progress at E.W. Brown. The phased approach to landfill or ash pond construction allows any beneficial reuse opportunities that were unknown (or uneconomical) at the start of the project to be re-considered and, if cost effect, acted upon – which could further delay or even eliminate subsequent phases of the project.

Evaluation Process

The cost and operational exposure associated with not having a plan to manage CCP production in place at a specific generating station well in advance of the need is significant. To help minimize this risk, the Companies have developed a process for the identification of the necessary steps to cost effectively manage projected CCP volumes. Many of the components occur in parallel but, for simplicity, are briefly discussed individually below. Those steps are:

- identification of alternatives
- evaluation of alternatives,
- documentation of the analysis and
- identification of necessary refinements to the Companies implementation plan or CCP management strategy.

This CCP Evaluation Process helps to ensure that consistent and timely assessments are conducted and leverages the expertise in many areas within the Companies. As is currently the practice, the Companies are committed to continually reviewing their tactical plans in accordance with the CCP Management Strategy to ensure adequate on-site CCP storage capacity exists and to confirm the plans for future on-site storage are on schedule and continue to be cost effective. As such the CCP Evaluation Process is expected to be refined as additional experience in evaluating CCP evaluations is gained, as new environmental laws and regulations are promulgated, and as the CCP beneficial reuse market develops.

Identify Need for Additional Storage

Identification of the quantity of physical resources[8] needed to manage CCP production is a logical component of the process and comprises periodic reviews of each station's CCP production forecast to project when the existing on-site storage facilities and existing reuse contracts are no longer sufficient. Any timing or CCP capacity shortfall issues

[8] Physical resources are the "tools" currently in place to mange CCP production (including existing on site or off site reuse opportunities) and remaining on-site CCP storage capacity.

noted in the assessment which require a revision to the CCP Management Strategy are discussed.

The assessment of need begins with a determination of the remaining storage capacity of existing on-site facilities. The remaining storage capacity is quantified through engineering surveys of the storage facilities. Capacity is typically included to allow for variability in forecasting CCP production, potential permitting issues associated with future on-site construction alternatives or weather/scheduling related construction delays. The site specific CCP management plan is reviewed in conjunction with the projected CCP production forecast and the remaining capacity. The current site specific CCP management plan is validated or revised accordingly.

Identify Alternatives

With the timing of the need for additional storage known, a list of alternatives that could potentially provide the required additional storage capacity is formulated. This compilation of alternatives includes the current site specific CCP Management Plan, any new on-site construction alternatives, off-site options or any beneficial reuse alternatives that currently is (or is reasonably expected to be) available at the time of need. E.ON U.S. typically develops the list of alternatives and their associated projected capital construction and operational cost in conjunction with experienced external consultants.

Opportunities for beneficial reuse arise much more frequently than impoundments/ landfills reach capacity. Stated another way, reuse opportunities can come at any time, not just when a plan to meet a CCP disposal need is being developed. All beneficial reuse opportunities will be screened, discussed, evaluated and documented (in conjunction with the current plan) when their availability first becomes known- not solely when a need for additional storage capacity has been identified as the evaluation of each prudent reuse opportunity could provide a delay of the next phase of construction.

Opportunities for beneficial reuse of coal combustion byproducts are shifting from a net revenue position to a net cost position. Opportunities to move coal combustion byproducts off-site at little to no cost have been virtually eliminated due to

- increased competition in the market associated with the increased number of utility FGD retrofits producing high quality synthetic gypsum,
- NO_x compliance having a negative impact on (or deteriorating) ash quality and
- Utilities willing to pay to move their coal combustion byproducts off-site as a preferred alternative.

The CCP evaluation methodology allows for the impacts of each potential beneficial reuse to be understood, evaluated and supported with analytics, in a timely manner, so that short-lived cost effective, environmentally responsible options can be acted upon.

To confirm each of the alternatives on the list is viable, each is subjected to an environmental and operational impact assessment. Those alternatives that pass are then evaluated, quantified and documented and, if necessary, a revision is made to the site

specific CCP Management plan (which serves as the starting point for the next evaluation).

Evaluation, Documentation and Validation

While many factors impact decisions on how to proceed (such as safety, ability to acquire needed permit(s), etc.) present value of revenue requirements is used as the primary economic decision metric. In some instances, additional cost metrics (such as cost per cubic yard or cost per ton) may also be quantified. Documentation for the evaluation is typically produced in close proximity to completing the evaluation. Often the supporting documentation is the source from which many internal and external presentations or business cases discussing the issue are developed. As previously stated, documentation regarding the alternatives is typically developed in coordination with consultants, however, the economic evaluation and associated documentation summarizing the economic evaluation is developed within E.ON U.S. At each decision point (such as formulation of alternatives, evaluation of options, development of documentation), oversight is built into the process to serve as a check. The function of this validation step is to subject the alternatives, evaluation or documentation to extensive "what ifs" and to confirm that a better alternative or solution does not possibly exist. For example, is it possible that more favorable economics could not be achieved by selecting an alternative site or location?

Implementation

The final component of the evaluation process involves bring the identified strategy into reality and finalizing all remaining contractual issues and obtaining all necessary approvals (internal and external) to implement the contract. Internal approvals necessitate the development of a business case and presentation to senior management. Some projects may require a Certificate of Convenience and Necessity be obtained from the Kentucky Public Service Commission prior to beginning site construction. Additionally new permits (or permit modifications) are often required.

Site Specific CCP Management Plan

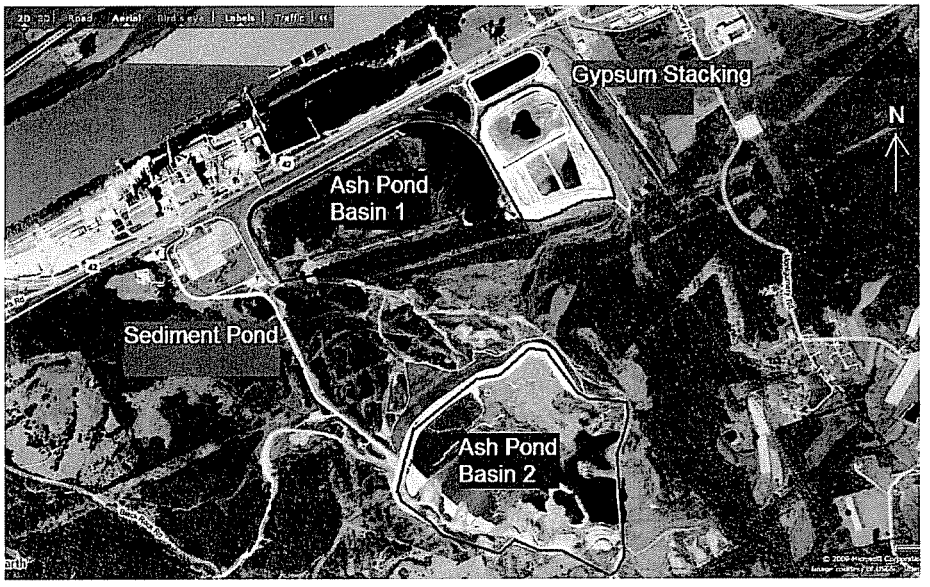
The following is a brief overview of the four generating stations within *Table 2* that are projected to have a need for additional CCP storage capacity by the end of 2014. Included for each station is a "Fact Box" which is a quick reference to CCP production, reuse and CCP management facilities (impoundments or landfills) currently in use at the station as well as the associated capital cost and in-service date of future CCP management facilities. An aerial photograph provides a point of reference and the current plan for CCP management is briefly noted. The information on each station is intended to provide a condensed summary of the detailed evaluations listed in the reference section of this document.

Ghent Generating Station

Ghent generating station is located in Carroll and Gallatin Counties, Kentucky and is comprised of four coal-fired generating units. Each unit is approximately 525 MW for a total station capacity of approximately 2,100 MW. The production of energy at the station produces three primary coal combustion byproducts: bottom ash, fly ash and gypsum and has three existing on-site storage basins for CCP: Ash Treatment Basins 1 and 2 and the Gypsum stacking facility. The site also includes a sediment pond which is a non-process pond receiving only rainfall runoff.

Ghent CCP Fact Box and Overview

Produced		Fly Ash	Bottom Ash	Gypsum	Fixated Calcium Sulfite
	CCP Produced	☑	☑	☑	☐
	2010 Total CCP Forecasted Production (tons)				*1,797,836*
Reuse	Any CCP Reused?	☑ Yes	☑ No		
	Predominant Historical Beneficial Reuse Application				*Wall Board*
	Annual Reuse Amount-(approx tons)	2005	2006	2007	2008
		430,607	*403,598*	*263,114*	*374,682*
CCP Facilities			Ash Pond 1	Ash Pond 2	Gypsum Stacking
	In-Service Date		*1972*	*1995*	*1994*
	Surface Area (acres)		*125*	*146*	*75*
	CCP Stored		*Ash*	*Ash*	*Gypsum*
	End of Life		*Full*	*2013*	*2013*
	Future CCP Management Plans				*Landfill (Phase I) + Reuse*
	In-Service Year/Capital Construction Cost (M$)				*2013/ $203.97 million*



As detailed in the report titled "*Coal Combustion Byproduct Plan for Ghent Station*" the existing on site CCP management facilities are projected to obtain their maximum desired capacity in early 2013. In preparation for this the Companies have evaluated numerous alternatives to allow Ghent Station to continue to provide low cost reliable energy into the future.

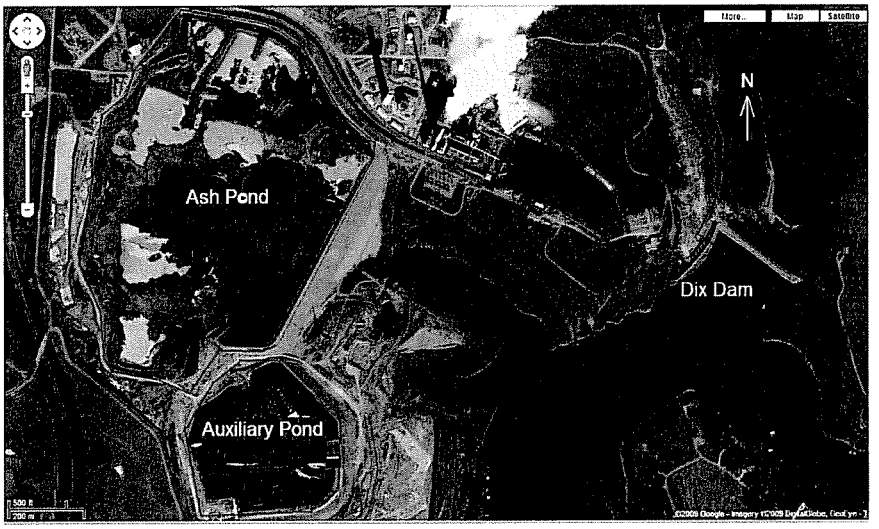
Ghent Station's CCP management plans includes the short-term proposal for beneficial reuse of 1.5 million tons of gypsum by Trans Ash, Inc. at total cost of $8.9 million (operating and maintenance cost only, reuse opportunity requires no capital) and building the first phase of an on-site landfill (to store both ash and gypsum) to be in-service in 2013 at a total capital cost of $203.97 million and a total operating and maintenance cost of $132.94 million (2010-2018).

E.W. Brown Generating Station

E.W. Brown generating station is located on Lake Herrington in Mercer County near Harrodsburg Kentucky and is comprised of three coal-fired generating units totaling approximately 697 MW. Presently, the production of energy at the station produces two primary coal combustion byproducts: bottom ash and fly ash. However, an FGD system, currently under construction for a summer 2010 commissioning, will control SO_2 emissions from the three units. The gypsum will be beneficially reused in the construction of the embankment for both ash treatment basins.

E.W. Brown CCP Fact Box and Overview

Produced		Fly Ash	Bottom Ash	Gypsum	Fixated Calcium Sulfite
	CCP Produced	☑	☑	☑ in 2010	☐
	2011 Total CCP Forecasted Production (tons)				*337,243*
Reuse	Any CCP Reused?	☑ Yes	☐ No		
	Predominant Historical Beneficial Reuse Application				*Fill*
	Annual Reuse Amount-(approx tons)	2005	2006	2007	2008
		0	*0*	*56,400*	*35,688*
CCP Facilities				Main Pond	Auxiliary Pond 2
	In-Service Date			*1990*	*2008*
	Surface Area (acres)			*126*	*35*
	CCP Stored			*Ash, Gypsum ('10)*	*Ash*
	End of Life			*2012*	*2012*
	Future CCP Management Plans			*Impoundment Expansions (Ph II) + Reuse*	
	In-Service Year/Capital Construction Cost (M$)			*2012/ $24.86 million*	



As detailed in the report titled "*Coal Combustion Byproduct Plan for E.W. Brown Station*" the existing on site CCP management facilities are projected to obtain their maximum desired capacity in 2012. In preparation for this the Companies have evaluated numerous alternatives to allow E.W. Brown Station to continue to provide low cost reliable energy into the future.

The current CCP production schedule identifies a need for the Phase 2 expansion at both the Auxiliary impoundment to an elevation of 900' (at a capital cost of $13.4 million) and the main Ash Treatment Basin to an elevation of 912' (at a capital cost of $9.82 million). Additional capital of $1.63 million associated with gypsum dewatering facilitates on-site beneficial reuse of approximately 3.9 million tons of gypsum in construction of the embankments. Total capital costs associated with this project total $24.86 million with no incremental operation and maintenance costs. These needs, and the proposed construction plan, remain consistent with the 2006 update to the Companies' 2004 ECR filing.

Cane Run Generating Station

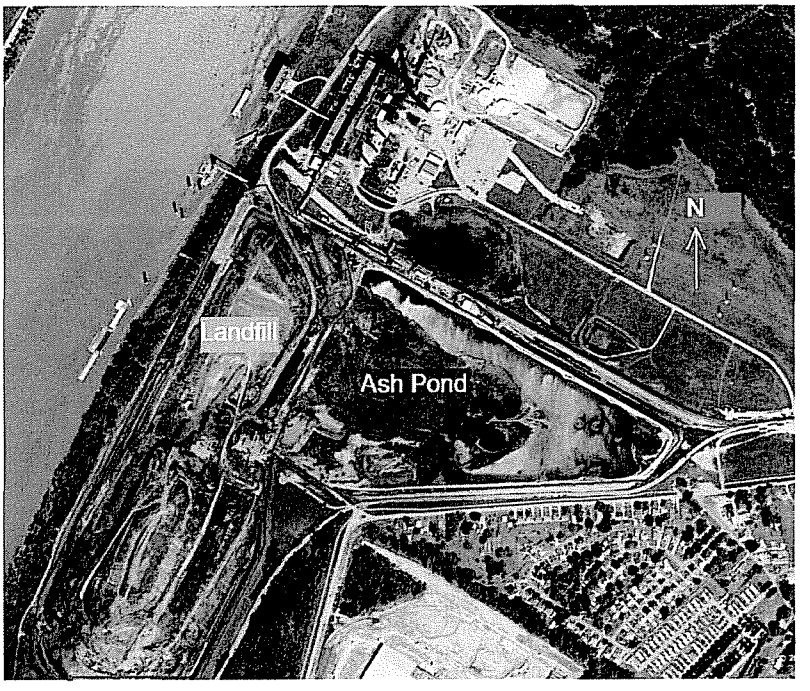
The Cane Run generating station is located in southwestern Jefferson County in Louisville, Kentucky and is comprised of three coal-fired generating units totaling approximately 563MW. The station produces three primary coal combustion byproducts: bottom ash, fly ash and fixated calcium sulfite and has two existing on-site storage basins for CCP: an Ash Treatment Pond and a landfill. The Cane Run station is the only generating station within E.ON U.S. that manages fixated calcium sulfite. Fixated calcium sulfite is a stabilized material that can be placed in a landfill.

Cane Run CCP Fact Box and Overview

		Fly Ash	Bottom Ash	Gypsum	Fixated Calcium Sulfite
Produced	CCP Produced	☑	☑	☐	☑
	2010 Total CCP Forecasted Production (tons)				*321,531*
Reuse	Any CCP Reused?	☑ Yes	☐ No		
	Predominant Historical Beneficial Reuse Application				*Fill*
	Annual Reuse Amount-(approx tons)	2005	2006	2007	2008
		5,310	*11,296*	*23,854*	*7,347*

		Ash Pond	Landfill
CCP Facilities	In-Service Date	*1972*	*1982*
	Surface Area (acres)	*40*	*110*
	CCP Stored	*Ash*	*Fixated Calcium Sulfite, Ash, FGD sludge*
	End of Life	*2011*	*2012*
	Future CCP Management Plans	*Landfill (Phase I) or Reuse*	
	In-Service Yr/Cap Constr Cost (M$)	*2015 @ $18.5 or 2010 @ $4.6 million*	

As detailed in the report titled "*Coal Combustion Byproduct Plan for Cane Run Station*" the existing on site CCP management facilities are projected to obtain their maximum desired capacity in 2011 and 2012. In preparation for this the Companies have evaluated numerous alternatives to allow Cane Run Station to continue to provide low cost reliable energy into the future.



While the on-site alternatives to manage Cane Run's CCP are well documented, a significant volume, economical beneficial reuse opportunity is currently under negotiations (Louisville Underground, LLC).

Engineering, design, permitting, construction and operation of Phase I of the Cane Run special waste landfill are projected to cost $18.52 million (capital) and $24.88 million (O&M through 2018). The cost for engineering, design and permitting (included in the

total capital cost above) is $4.60 million. To ensure sufficient on-site storage is available (long-term) should the reuse opportunity not be finalized or terminate unexpectedly, it is prudent execute the lower cost reuse alternative while moving forward with only the engineering, designing and permitting cost associated with Phase I ($4.6 million). Therefore, the Cane Run CCP management plan is to complete the engineering, designing and permitting of Phase I of the on-site landfill and execute the Louisville Underground contract at a capital cost of $4.60 million and an operating and maintenance cost (through 2018) of $44.60 million, respectively. In absence of the Louisville Underground opportunity the total capital cost of Phase I is projected to be $18.5 million.

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Trimble County Generating Station

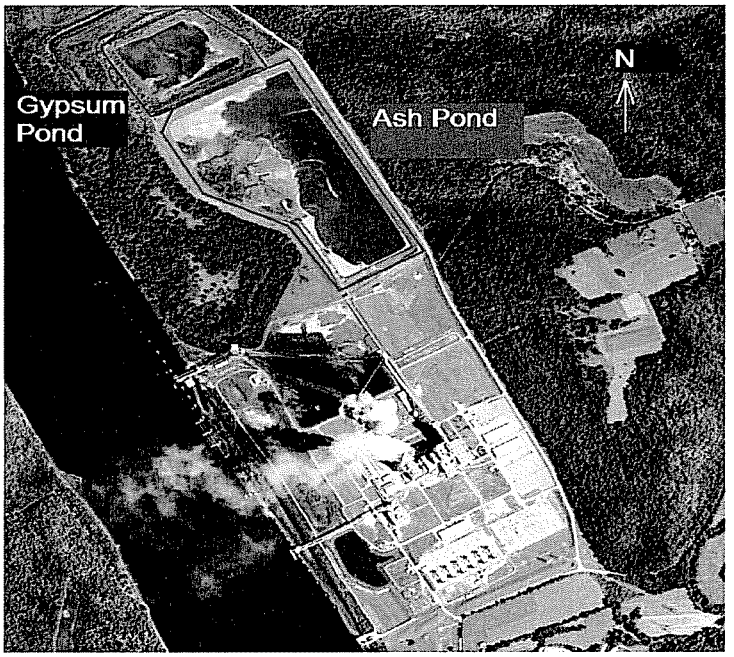
The Trimble County generating station is located in Trimble County Kentucky and is comprised of one 514 MW coal-fired generating unit. A second coal-fired generating unit (760 MW) is currently under construction with an expected in-service date of mid-2010. The station produces three primary coal combustion byproducts: bottom ash, fly ash and gypsum. The station has one active impoundment that receives all CCP managed on site. A second impoundment (originally an Emergency Fly Ash Pond) was constructed at the same time as Unit 1 was being constructed but has never been placed into service. The company suspects that the original clay liner is in need of repair.

Trimble County CCP Fact Box and Overview

Produced		Fly Ash	Bottom Ash	Gypsum	Fixated Calcium Sulfite
	CCP Produced	☑	☑	☑	☐
	2011 Total CCP Forecasted Production (tons)				*1,093,390*
Reuse	Any CCP Reused?	☑ Yes	☐ No		
	Predominant Historical Beneficial Reuse Application				*Wall Board*
	Annual Reuse Amount-(approx tons)	2005	2006	2007	2008
		279,327	*288,835*	*238,706*	*224,642*
CCP Facilities					Ash Pond
	In-Service Date				*1991*
	Surface Area (acres)				*82*
	CCP Stored				*Ash & Gypsum Fines*
	End of Life				*2010*
	Future CCP Management Plans				*Impoundments/Landfill (Ph I) + Reuse*
	In-Service Year/Capital Construction Cost (M$)				
	CCP Treatment Basins				*2010/ $32.9 mill (100%), $24.7 mill (75%)*
	Reuse Capital (Barge Loadout)				*2010/ $11.6 million (100%), $8.7 million (75%)*
	Landfill				*2013/ $94.0 million (100%), $70.5 million (75%)*

Note: IMEA and IMPA have 25% ownership share. KU/LGE's costs correspond to 75%

As detailed in the report titled "*Coal Combustion Byproduct Plan for Trimble County Station*" the existing ash pond is projected to obtain maximum desired capacity in 2010. In preparation for this the Companies have evaluated numerous alternatives to allow Trimble County to continue to provide low cost reliable energy into the future. A significant low-cost, long-term beneficial reuse opportunity utilizing more 350,000 tons of gypsum each year has been executed with Synthetic Materials. The associated costs are based on minimum take of 350,000 at 2.00 $/ton and utilized a barge load-out facility to be constructed, owned and operated by Synthetic Materials by March 2010. As mentioned, this contract has been executed, however, per the contract; no expenses will be incurred by the Companies until the barge load-out facility is completed.



Additionally, a second significant long-term beneficial reuse alternative that reuses approximately 95% of Trimble County's fly ash is currently in final stages of negotiations. This second opportunity requires a total capital investment of $11.57 million and approximately $8.74 million in O&M (through 2018). These opportunities are discussed in the report titled "*Coal Combustion Byproduct Plan for Trimble County Station for E.ON U.S. Subsidiaries Kentucky Utilities and Louisville Gas and Elec*tric" and have allowed significant long-term cost saving to be realized associated with CCP management at the Trimble County station.

Trimble County's short term CCP management plan includes vertical expansion of the dikes of the BAP (at a total capital cost of $25.36 million[9]) and, after completing the liner repair within the gypsum pond (formerly named the emergency fly ash pond), placing the gypsum pond into service (at a total capital cost of $7.58 million[10]).

Even with the significant reuse opportunities a long-term need exists to complete Phase I of the special waste landfill at Trimble County by 2013 at a total capital cost of $94.0 million[11] and an O&M cost of $20.3 million[12].

Therefore, Trimble County's CCP management plan currently is to move forward with the negotiations of the fly ash reuse opportunity, vertically expand the existing CCP treatment basin, place the gypsum storage basin into operation and complete Phase I of the special waste landfill.

Summary

The Companies have identified a need for additional CCP storage capacity at four generating stations (E.W. Brown, Cane Run, Ghent and Trimble County) by the year 2014. The Companies currently are pursuing five beneficial reuse options. Four off-site options are: Holcim Cement and Synthetic Materials, Louisville Underground, and Trans Ash at Trimble County, Cane Run, and Ghent respectively. Additionally, gypsum is being used on-site at the E.W. Brown station. Execution of these options reduces the near-term on-site storage capacity requirement and the present value of the revenue requirements ("PVRR"). A summary of these options follows:

Station	Company	Approximate Amount of CCP	PVRR Benefit
Ghent	Trans Ash, Inc	1.5 million tons of gypsum	$ 2.4 million
Trimble County	Holcim (US) Inc	5.8 million tons of fly ash	$ 6.9 million
Trimble County	Synthetic Materials	6.0 million tons of gypsum	$ 72.3 million
Cane Run	Louisville Underground, LLC	6.0 million tons of spent scrubber material	$ 22.7 million

Table 3: Future Beneficial Reuse Plans

Even considering the reuse alternatives identified in the above table, presently, economic and environmentally responsible beneficial reuse projects can not satisfy the full need for additional storage requirements at all stations. As a result, the Companies must begin, or

[9] Includes IMEA/IMPA cost allocation.
[10] Includes IMEA/IMPA cost allocation.
[11] Includes IMEA/IMPA cost allocation.
[12] Includes IMEA/IMPA cost allocation.

in the case of E.W. Brown, continue construction of on-site CCP management facilities in conjunction with the identified beneficial reuse opportunities.

Working with external experts, the Companies performed engineering studies at each of the four stations to identify alternatives. The studies contain various site reviews and detailed economic analyses of the various alternatives. As a result, the Companies have identified the phased construction of three new landfills (at Ghent, Trimble County and Cane Run generating stations) and continued construction of the second phase of the E.W. Brown impoundments as the appropriate next steps for long-term, cost effective, and environmentally responsible management of CCP. Also identified were the expansion of the existing ash impoundment and the relining/commissioning of a gypsum impoundment, both located at the Trimble County station. The Companies' total capital costs of the next phase of these on-site facilities are shown below:

Station	Alternative	Phase	Cost of Phase ($million)[1]
Ghent	Landfill	1	203.97
Trimble County[2]	Impoundments	n/a	24.71
Trimble County[2]	Landfill	1	70.53
Cane Run[3]	Landfill	1	4.60
E.W. Brown	Impoundments	2	24.86
			328.66

1. Capital cost only.

2. Costs exclude any barge loadout costs associated with Holcim and IMEA/IMPA associated captial

3. In absence of Louisville Underground the capital cost of Phase I is projected to be $18.5 M.

Table 4: Future On-Site CCP Related Construction Plans

List of Reference Documents

1. Coal Combustion Byproduct Plan for Ghent Station for E.ON U.S. Subsidiaries Kentucky Utilities and Louisville Gas and Electric (June 2009)
2. Coal Combustion Byproduct Plan for E.W. Brown Station for E.ON U.S. Subsidiaries Kentucky Utilities and Louisville Gas and Electric (June 2009)
3. Coal Combustion Byproduct Plan for Cane Run Station for E.ON U.S. Subsidiaries Kentucky Utilities and Louisville Gas and Electric (June 2009)
4. Coal Combustion Byproduct Plan for Trimble County Station for E.ON U.S. Subsidiaries Kentucky Utilities and Louisville Gas and Electric (June 2009)