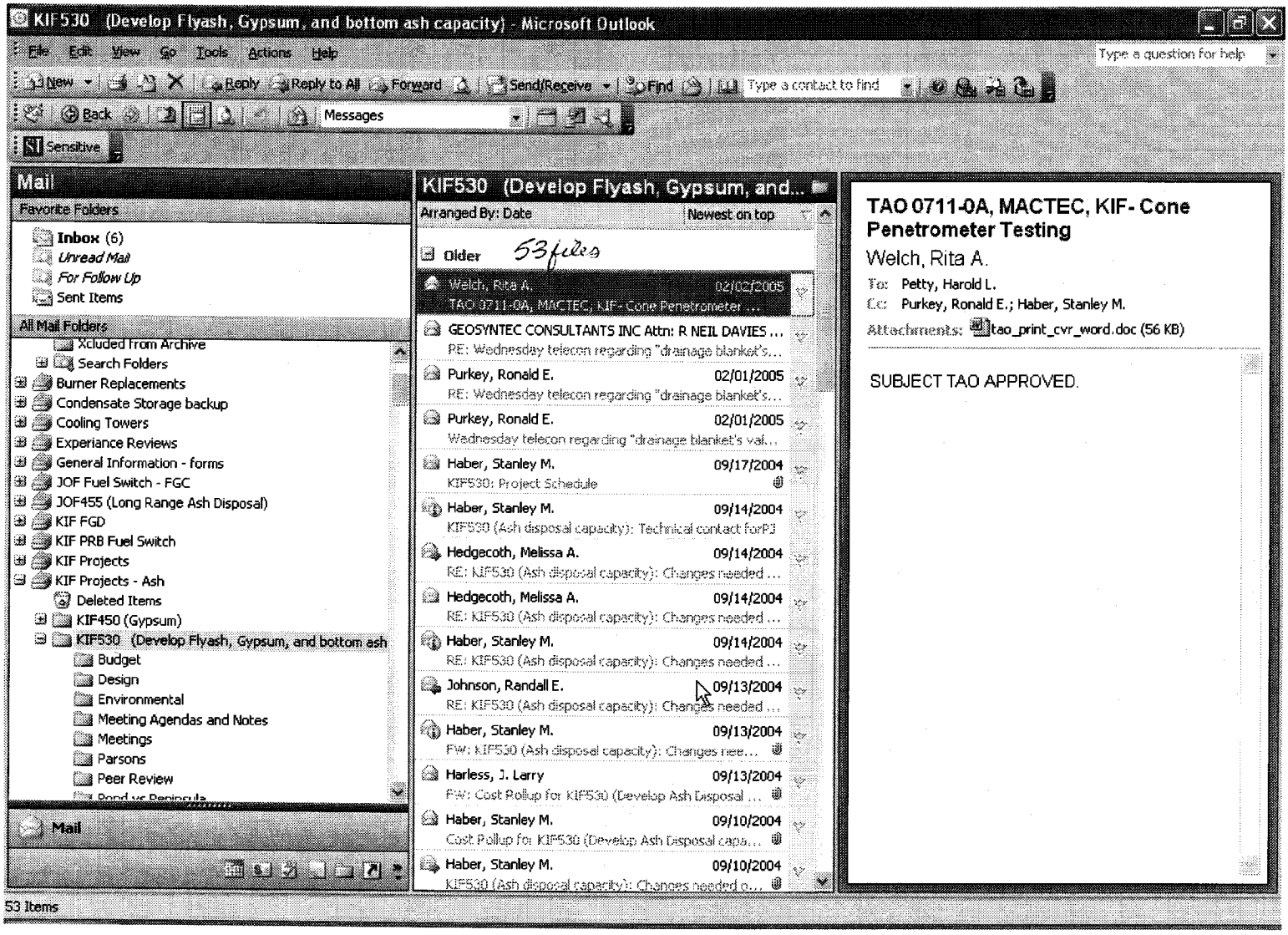
KIF530 (Develop Flyash, Gypsum, and bottom ash capacity) - Microsoft Outlook
File Edit View Go Tools Actions Help
Type a question for help
New Reply Reply to All Forward Send/Receive Find Type a contact to find
Back Messages
Sensitive
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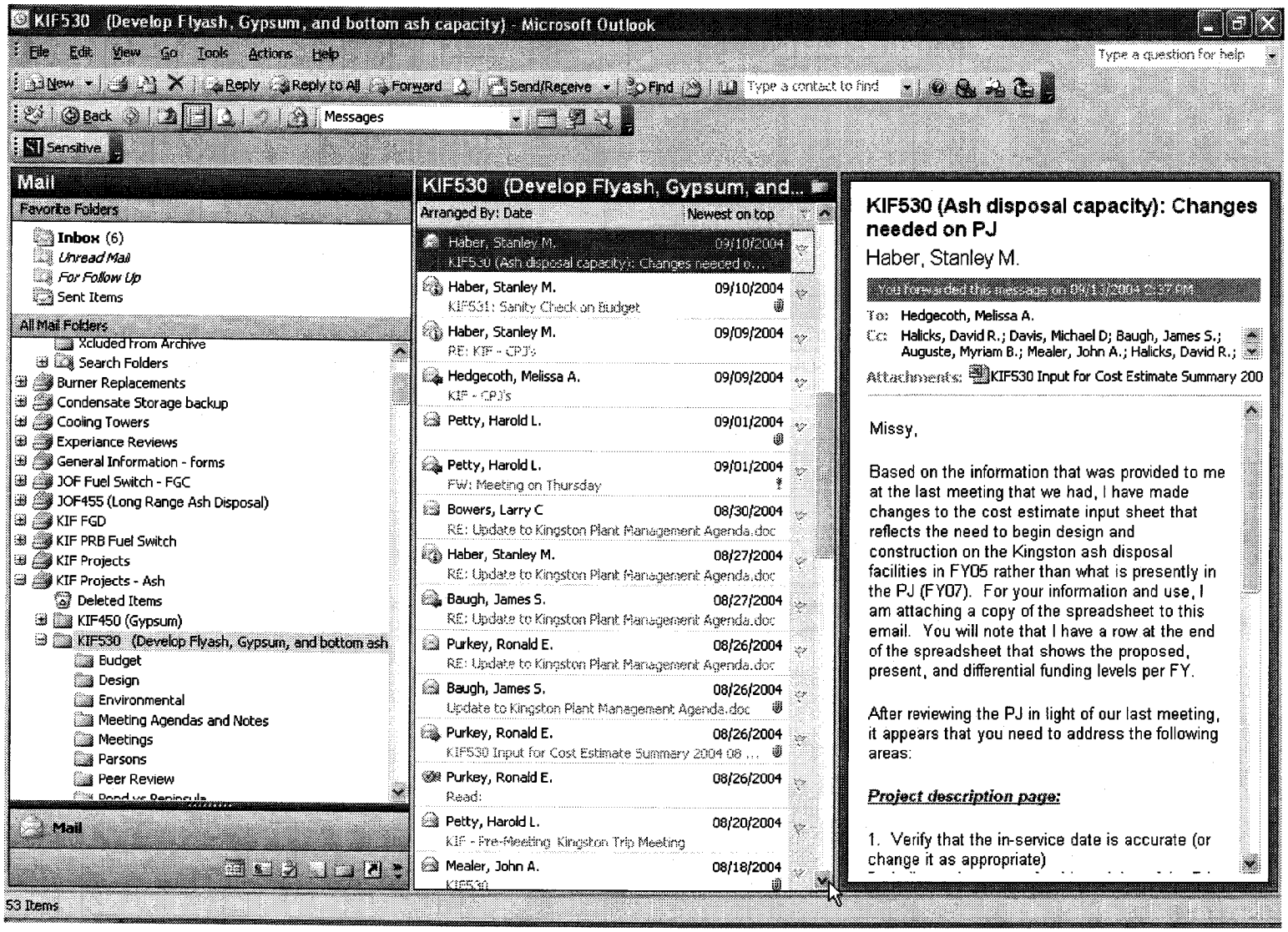
Favorite Folders
Inbox (6)
Unread Mail
For Follow Up
Sent Items
All Mail Folders
Xcluded from Archive
Search Folders
Burner Replacements
Condensate Storage backup
Cooling Towers
Experiance Reviews
General Information - forms
JOF Fuel Switch - FGC
JOF455 (Long Range Ash Disposal)
KIF FGD
KIF PRB Fuel Switch
KIF Projects
KIF Projects - Ash
Deleted Items
KIF450 (Gypsum)
KIF530 (Develop Flyash, Gypsum, and bottom ash
Budget
Design
Environmental
Meeting Agendas and Notes
Meetings
Parsons
Peer Review
Mail
KIF530 (Develop Flyash, Gypsum, and...
Arranged By: Date
Newest on top
Older
53 files
Welch, Rita A. 02/02/2005
TAO 0711-0A, MACTEC, KIF- Cone Penetrometer ...
GEOSYNTEC CONSULTANTS INC Attn: R NEIL DAVIES ...
RE: Wednesday telecon regarding "drainage blanket's...
Purkey, Ronald E. 02/01/2005
RE: Wednesday telecon regarding "drainage blanket's...
Purkey, Ronald E. 02/01/2005
Wednesday telecon regarding "drainage blanket's val...
Haber, Stanley M. 09/17/2004
KIF530: Project Schedule
Haber, Stanley M. 09/14/2004
KIF530 (Ash disposal capacity): Technical contact forPJ
Hedgecoth, Melissa A. 09/14/2004
RE: KIF530 (Ash disposal capacity): Changes needed ...
Hedgecoth, Melissa A. 09/14/2004
RE: KIF530 (Ash disposal capacity): Changes needed ...
Haber, Stanley M. 09/14/2004
RE: KIF530 (Ash disposal capacity): Changes needed ...
Johnson, Randall E. 09/13/2004
RE: KIF530 (Ash disposal capacity): Changes needed ...
Haber, Stanley M. 09/13/2004
FW: KIF530 (Ash disposal capacity): Changes nee...
Harless, J. Larry 09/13/2004
FW: Cost Rollup for KIF530 (Develop Ash Disposal ...
Haber, Stanley M. 09/10/2004
Cost Rollup for KIF530 (Develop Ash Disposal capa...
Haber, Stanley M. 09/10/2004
KIF530 (Ash disposal capacity): Changes needed o...
TAO 0711-0A, MACTEC, KIF- Cone Penetrometer Testing
Welch, Rita A.
To: Petty, Harold L.
Cc: Purkey, Ronald E.; Haber, Stanley M.
Attachments: tao_print_cvr_word.doc (56 KB)
SUBJECT TAO APPROVED.
53 Items


KIF530 (Develop Flyash, Gypsum, and bottom ash capacity) - Microsoft Outlook
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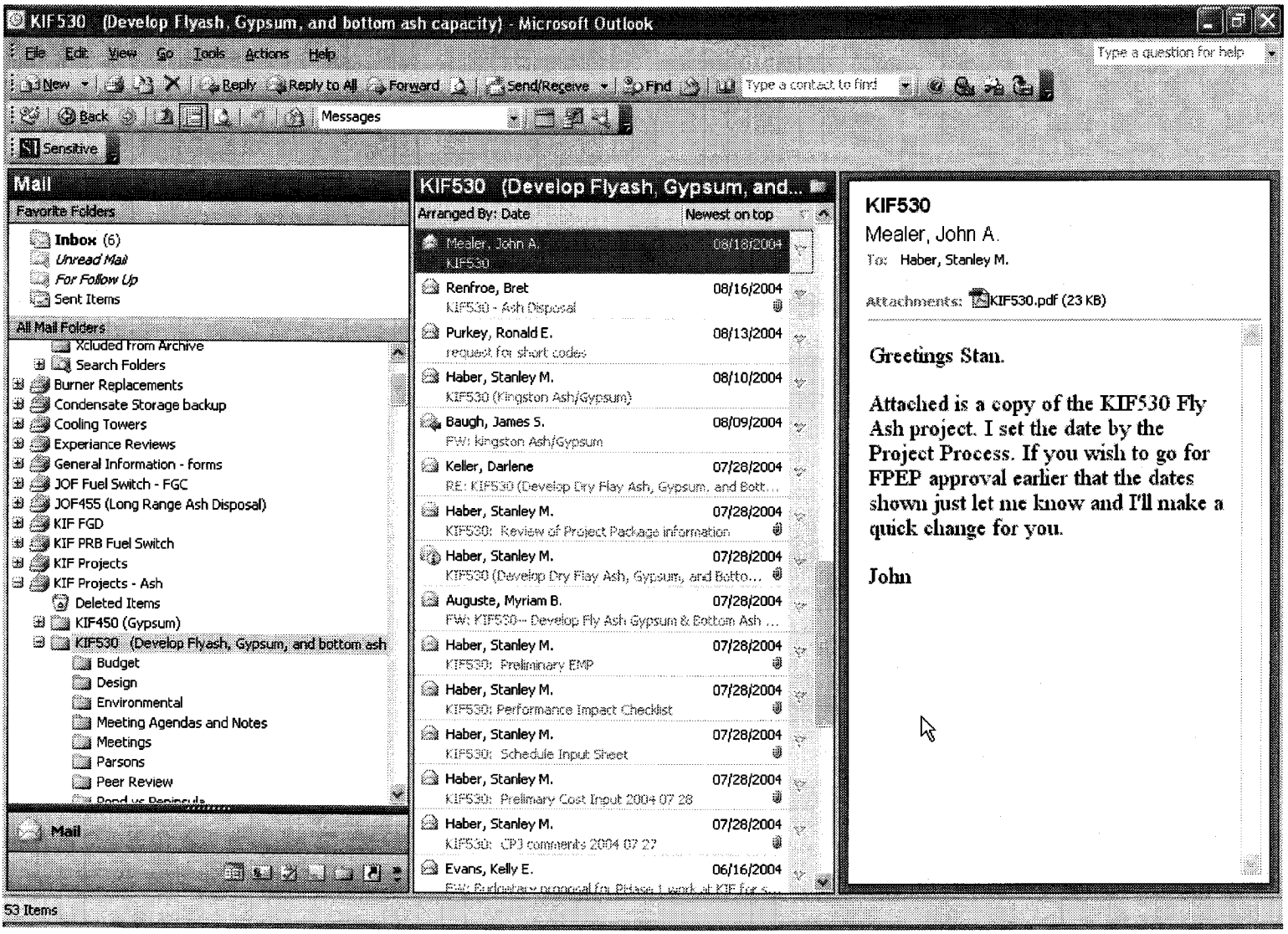
KIF530 (Develop Flyash, Gypsum, and...
Arranged By: Date
Newest on top
Haber, Stanley M. 09/10/2004
KIF530 (Ash disposal capacity): Changes needed o...
Haber, Stanley M. 09/10/2004
KIF531: Sanity Check on Budget
Haber, Stanley M. 09/09/2004
RE: KIF - CPJ's
Hedgecoth, Melissa A. 09/09/2004
KIF - CPJ's
Petty, Harold L. 09/01/2004
Petty, Harold L. 09/01/2004
FW: Meeting on Thursday
Bowers, Larry C 08/30/2004
RE: Update to Kingston Plant Management Agenda.doc
Haber, Stanley M. 08/27/2004
RE: Update to Kingston Plant Management Agenda.doc
Baugh, James S. 08/27/2004
RE: Update to Kingston Plant Management Agenda.doc
Purkey, Ronald E. 08/26/2004
RE: Update to Kingston Plant Management Agenda.doc
Baugh, James S. 08/26/2004
Update to Kingston Plant Management Agenda.doc
Purkey, Ronald E. 08/26/2004
KIF530 Input for Cost Estimate Summary 2004 08 ...
Purkey, Ronald E. 08/26/2004
Read:
Petty, Harold L. 08/20/2004
KIF - Pre-Meeting Kingston Trip Meeting
Mealer, John A. 08/18/2004
KIF530
KIF530 (Ash disposal capacity): Changes needed on PJ
Haber, Stanley M.
You forwarded this message on 9/01/2004 2:37 PM
To: Hedgecoth, Melissa A.
Cc: Halicks, David R.; Davis, Michael D; Baugh, James S.; Auguste, Myriam B.; Mealer, John A.; Halicks, David R.;
Attachments: KIF530 Input for Cost Estimate Summary 200
Missy,
Based on the information that was provided to me at the last meeting that we had, I have made changes to the cost estimate input sheet that reflects the need to begin design and construction on the Kingston ash disposal facilities in FY05 rather than what is presently in the PJ (FY07). For your information and use, I am attaching a copy of the spreadsheet to this email. You will note that I have a row at the end of the spreadsheet that shows the proposed, present, and differential funding levels per FY.
After reviewing the PJ in light of our last meeting, it appears that you need to address the following areas:
Project description page:
1. Verify that the in-service date is accurate (or change it as appropriate)
53 Items


KIF530 (Develop Flyash, Gypsum, and bottom ash capacity) - Microsoft Outlook
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KIF FGD
KIF PRB Fuel Switch
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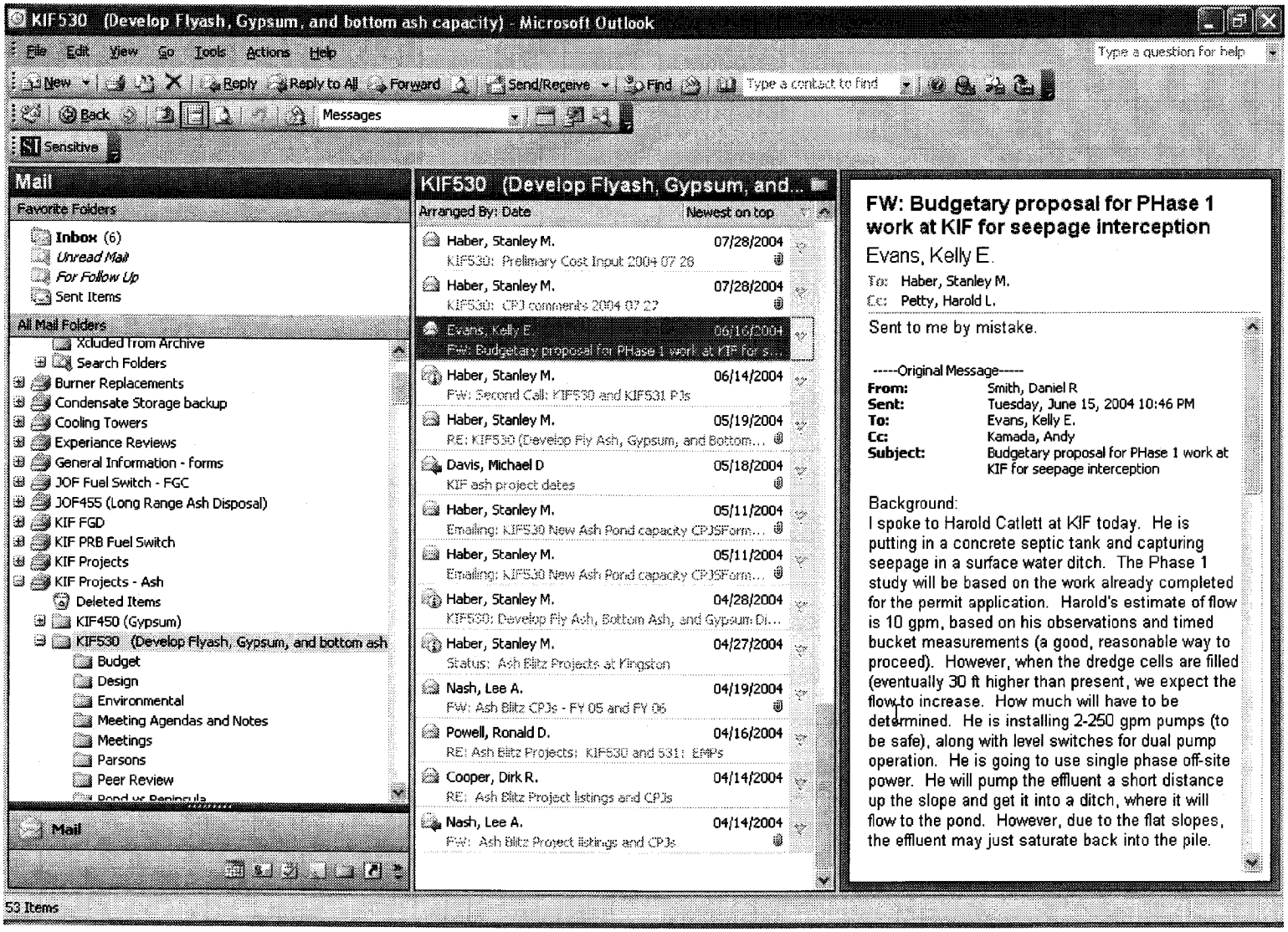
KIF Projects - Ash
Deleted Items
KIF450 (Gypsum)
KIF530 (Develop Flyash, Gypsum, and bottom ash
Budget
Design
Environmental
Meeting Agendas and Notes
Meetings
Parsons
Peer Review
Mail
KIF530 (Develop Flyash, Gypsum, and...
Arranged By: Date
Newest on top
Mealer, John A. 08/18/2004
KIF530
Renfroe, Bret 08/16/2004
KIF530 - Ash Disposal
Purkey, Ronald E. 08/13/2004
request for short codes
Haber, Stanley M. 08/10/2004
KIF530 (Kingston Ash/Gypsum)
Baugh, James S. 08/09/2004
FW: kingston Ash/Gypsum
Keller, Darlene 07/28/2004
RE: KIF530 (Develop Dry Flay Ash, Gypsum, and Bott...
Haber, Stanley M. 07/28/2004
KIF530: Review of Project Package information
Haber, Stanley M. 07/28/2004
KIF530 (Develop Dry Flay Ash, Gypsum, and Botto...
Auguste, Myriam B. 07/28/2004
FW: KIF530-- Develop Fly Ash Gypsum & Bottom Ash ...
Haber, Stanley M. 07/28/2004
KIF530: Preliminary EMP
Haber, Stanley M. 07/28/2004
KIF530: Performance Impact Checklist
Haber, Stanley M. 07/28/2004
KIF530: Schedule Input Sheet
Haber, Stanley M. 07/28/2004
KIF530: Prelimary Cost Input 2004 07 28
Haber, Stanley M. 07/28/2004
KIF530: CPJ comments 2004 07 27
Evans, Kelly E. 06/16/2004
KIF530
Mealer, John A.
To: Haber, Stanley M.
Attachments: KIF530.pdf (23 KB)
Greetings Stan.
Attached is a copy of the KIF530 Fly Ash project. I set the date by the Project Process. If you wish to go for FPEP approval earlier that the dates shown just let me know and I'll make a quick change for you.
John
53 Items


KIF530 (Develop Flyash, Gypsum, and bottom ash capacity) - Microsoft Outlook
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Unread Mail
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Sent Items
All Mail Folders
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KIF Projects - Ash
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KIF450 (Gypsum)
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Budget
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Meetings
Parsons
Peer Review
Mail
KIF530 (Develop Flyash, Gypsum, and...
Arranged By: Date
Newest on top
Haber, Stanley M. 07/28/2004
KIF530: Preliminary Cost Input 2004 07 28
Haber, Stanley M. 07/28/2004
KIF530: CPJ comments 2004 07 27
Evans, Kelly E 06/16/2004
FW: Budgetary proposal for PHase 1 work at KIF for s...
Haber, Stanley M. 06/14/2004
FW: Second Call: KIF530 and KIF531 PJs
Haber, Stanley M. 05/19/2004
RE: KIF530 (Develop Fly Ash, Gypsum, and Bottom...
Davis, Michael D 05/18/2004
KIF ash project dates
Haber, Stanley M. 05/11/2004
Emailing: KIF530 New Ash Pond capacity CPJSForm...
Haber, Stanley M. 05/11/2004
Emailing: KIF530 New Ash Pond capacity CPJSForm...
Haber, Stanley M. 04/28/2004
KIF530: Develop Fly Ash, Bottom Ash, and Gypsum Di...
Haber, Stanley M. 04/27/2004
Status: Ash Blitz Projects at Kingston
Nash, Lee A. 04/19/2004
FW: Ash Blitz CPJs - FY 05 and FY 06
Powell, Ronald D. 04/16/2004
RE: Ash Blitz Projects: KIF530 and 531: EMPs
Cooper, Dirk R. 04/14/2004
RE: Ash Blitz Project listings and CPJs
Nash, Lee A. 04/14/2004
FW: Ash Blitz Project listings and CPJs
FW: Budgetary proposal for PHase 1 work at KIF for seepage interception
Evans, Kelly E.
To: Haber, Stanley M.
Cc: Petty, Harold L.
Sent to me by mistake.
-----Original Message-----
From: Smith, Daniel R
Sent: Tuesday, June 15, 2004 10:46 PM
To: Evans, Kelly E.
Cc: Kamada, Andy
Subject: Budgetary proposal for PHase 1 work at KIF for seepage interception
Background:
I spoke to Harold Catlett at KIF today. He is putting in a concrete septic tank and capturing seepage in a surface water ditch. The Phase 1 study will be based on the work already completed for the permit application. Harold's estimate of flow is 10 gpm, based on his observations and timed bucket measurements (a good, reasonable way to proceed). However, when the dredge cells are filled (eventually 30 ft higher than present, we expect the flow to increase. How much will have to be determined. He is installing 2-250 gpm pumps (to be safe), along with level switches for dual pump operation. He is going to use single phase off-site power. He will pump the effluent a short distance up the slope and get it into a ditch, where it will flow to the pond. However, due to the flat slopes, the effluent may just saturate back into the pile.
53 Items

Project Title: Develop Ash Storage
PCN Number: KIF530

	Hours	Dollars
Phase I		
Project Engr	220	$9,240
Mech Engr	100	$4,200
Elec Engr	100	$4,200
Civil Engr	240	$10,080
Systems Engr	0	$0
Non-TVA Engr	2570	$185,040
Project Controls	40	$1,680
Cost Estimating	24	$1,008
Sub Total	3294	$ 215,448
Phase II		
Project Engr	200	$8,400
Mech Engr	200	$8,400
Elec Engr	200	$8,400
Civil Engr	300	$12,600
Systems Engr	0	$0
Non-TVA Engr	6000	$432,000
Project Controls	80	$3,360
Cost Estimating	24	$1,008
Engr Records	16	$672
Sub Total	7,020	$ 474,840
Phase III		
Project Engr	220	$9,240
Mech Engr	200	$8,400
Elec Engr	200	$8,400
Civil Engr	300	$12,600
Systems Engr	0	$0
Non-TVA Engr	5750	$414,000
Project Controls	40	$1,680
Engr Records	24	$1,008
Sub Total	6,734	$ 455,328
Total	17,048	$ 1,145,616

Avg. TVA Engr Hourly Rate	$42
Avg. Non TVA Engr Hourly Rate	$72

Haber, Stanley M

From: Haber, Stanley M.
Sent: Friday, September 10, 2004 1:52 PM
To: Hedgecoth, Melissa A.
Cc: Halicks, David R.; Davis, Michael D; Baugh, James S.; Auguste, Myriam B.; Mealer, John A.; Halicks, David R.; Long, S. Scott; Purkey, Ronald E.; Petty, Harold L.; Bowers, Larry C; Rehberg, Robert L.; Holmes, James B.; Tolliver, Sherry D.; Kimsey, Barry A.; Davis, Victor W.; Waldrep, Roger T.; Harless, J. Larry; Chattin, Mike E.; Catlett, James H
Subject: KIF530 (Ash disposal capacity): Changes needed on PJ
Attachments: KIF530 Input for Cost Estimate Summary 2004 09 09 R0.xls

Missy,

Based on the information that was provided to me at the last meeting that we had, I have made changes to the cost estimate input sheet that reflects the need to begin design and construction on the Kingston ash disposal facilities in FY05 rather than what is presently in the PJ (FY07). For your information and use, I am attaching a copy of the spreadsheet to this email. You will note that I have a row at the end of the spreadsheet that shows the proposed, present, and differential funding levels per FY.

After reviewing the PJ in light of our last meeting, it appears that you need to address the following areas:

Project description page:

1. Verify that the in-service date is accurate (or change it as appropriate)
2. Indicate the reason for this revision of the PJ in the "Reason for Change" box

Project economic evaluation pages

1. Change the cash flows to match the new numbers that are needed to support the proposed changes to the implementation plan (shown on my attached spreadsheet as "total, all phases").
2. Under cost assumptions, the risks for assumptions 1 and 2 need to be updated. Cost assumption 2 also needs to be updated (this project is no longer based on a turnkey DFA system; worse case basis is wet ash in pond, gypsum in pond as noted in my spreadsheet). Cost assumption 1 needs to be updated to reflect project totals for each major org/item (Engineering, implementation, plant support, long lead material, GUBMK support) as shown on the attached cost estimate input sheet.

Please confirm that you can make these changes by Monday, September 13th.

Thanks.

Stan

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**								
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**Totals**	**Prv Yrs**	
3									
4									
5	**Phase 1**								
6	Engineering	200	195				395		
7	PE/PC/PS		12				12		
8	Plant Support		5				5		
9	PSS - Inspection						0		
10									
11	**Total Phase 1**	**200**	**212**	**0**	**0**	**0**	**412**		
12									
13	**Phase 2**								
14									
15	Engineering (Systems and EDS)	0	30	70	300	0	400		
16									
17	PE/PC/PS	0	20	25	30	0	75		
18									
19	GUBMK/HED (estimate)	0	15	0	0	0	15		
20	Plant Support	0	3	0	0	0	3		
21									
22	Long Lead Material (LLM)								
23	*blank*	0	200	200		0	400		
24	*blank*	0	0		2500	4000	6500		
25	*total LLM*	0	200	200	2500	4000	6900		
26									
27	**Total Phase 2**	**0**	**268**	**295**	**2830**	**4000**	**7393**		
28									

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**								
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**		**Totals**	**Prv Yrs**
29	**Phase 3**								
30									
31	Engineering	0	25	30	200	200		455	
32									
33	PE/PC/PS	0	25	25	15	35		100	
34									
35	Plant Support	0	20	20	20	20		80	
36									
37	Installation **(x)**								
38	*GUBMK*	0	0	0	20	20		40	
39	*blank*	0	0	0	0	0		0	
40	*Total GUBMK*	0	0	0	20	20		40	
41									
42	*Turnkey Installation*	0	1075	1,135	1960	3725		7895	
43	*blank*	0	0	0	0	0		0	
44	*Total*	0	1075	1135	1960	3725		7895	
45									
46	*Asbestos abatement (GUBMK)*	0	0	0	0	0		0	
47									
48	*Total Installation*	0	1075	1135	1980	3745		7935	
49									
50	**Total Phase 3**	**0**	**1145**	**1210**	**2215**	**4000**		**8570**	
51									
52	**Total: All Phases**	**200**	**1625**	**1505**	**5045**	**8000**		**16375**	
	Current funding	200	75	100	8000	8000		16375	
	Differential	**0**	**1550**	**1405**	**-2955**	**0**		**0**	
	Assumptions:								
	1. Original project PJ was for a DFA system; Design and installation of system was to be by turnkey contractor; scope similar to CUF dry fly ash system.								
	2. Design of BOP interfaces will be by FE&TS								
	3. FE&TS Lead will be Civil Department								
	4. An outage will be required for some BOP interface tie-ins								
	5. Ph 1 eng includes Peer review ($50k), study of deep french drains ($70k), answering permit questions ($75k)								

Haber, Stanley M

From: Haber, Stanley M.

Sent: Friday, September 10, 2004 11:10 AM

To: Purkey, Ronald E.; Petty, Harold L.

Subject: KIF531: Sanity Check on Budget

Attachments: KIF530 Input for Cost Estimate Summary 2004 09 09 R0.xls; KIF530 Engineering Cost Spreadsheet 2004 09 10.xls

Tracking:

Recipient	Delivery
Purkey, Ronald E.	Delivered: 09/10/2004 11:10 AM
Petty, Harold L.	Delivered: 09/10/2004 11:10 AM

Ron and Lynn,

I haver tried to incorporate what I have heard in our last team meetings. Please look over the input sheets that are attached and give me you final comments before they hit the street for distribution.

Thanks.

Stan

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**									
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**		**Totals**	**Prv Yrs**	
3										
4										
5	**Phase 1**									
6	Engineering	200	195					395		
7	PE/PC/PS		12					12		
8	Plant Support		5					5		
9	PSS - Inspection							0		
10										
11	**Total Phase 1**	**200**	**212**	**0**	**0**	**0**		**412**		
12										
13	**Phase 2**									
14										
15	Engineering (Systems and EDS)	0	30	70	300	0		400		
16										
17	PE/PC/PS	0	20	25	30	0		75		
18										
19	GUBMK/HED (estimate)	0	15	0	0	0		15		
20	Plant Support	0	3	0	0	0		3		
21										
22	Long Lead Material (LLM)									
23	*blank*	0	200	200		0		400		
24	*blank*	0	0		2500	4000		6500		
25	*total LLM*	0	200	200	2500	4000		6900		
26										
27	**Total Phase 2**	**0**	**268**	**295**	**2830**	**4000**		**7393**		
28										

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**									
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**		**Totals**	**Prv Yrs**	
29	**Phase 3**									
30										
31	Engineering	0	25	30	200	200		455		
32										
33	PE/PC/PS	0	25	25	15	35		100		
34										
35	Plant Support	0	20	20	20	20		80		
36										
37	Installation (x)									
38	*GUBMK*	0	0	0	20	20		40		
39	*blank*	0	0	0	0	0		0		
40	*Total GUBMK*	0	0	0	20	20		40		
41										
42	*Turnkey Installation*	0	1075	1,135	1960	3725		7895		
43	*blank*	0	0	0	0	0		0		
44	*Total*	0	1075	1135	1960	3725		7895		
45										
46	*Asbestos abatement (GUBMK)*	0	0	0	0	0		0		
47										
48	*Total Installation*	0	1075	1135	1980	3745		7935		
49										
50	**Total Phase 3**	**0**	**1145**	**1210**	**2215**	**4000**		**8570**		
51										
52	**Total: All Phases**	**200**	**1625**	**1505**	**5045**	**8000**		**16375**		
	Current funding	200	75	100	8000	8000		16375		
	Differential	**0**	**1550**	**1405**	**-2955**	**0**		**0**		
	Assumptions:									
	1. Original project PJ was for a DFA system; Design and installation of system was to be by turnkey contractor; scope similar to CUF dry fly ash system.									
	2. Design of BOP interfaces will be by FE&TS									
	3. FE&TS Lead will be Civil Department									
	4. An outage will be required for some BOP interface tie-ins									
	5. Ph 1 eng includes Peer review ($50k), study of deep french drains ($70k), answering permit questions ($75k)									

Project Title: Develop Ash Storage
PCN Number: KIF530

	Hours	Dollars
Phase I		
Project Engr	220	$9,240
Mech Engr	154	$6,468
Elec Engr	500	$21,000
Civil Engr	4000	$168,000
Systems Engr	0	$0
Non-TVA Engr	0	$0
Project Controls	40	$1,680
Cost Estimating	24	$1,008
Sub Total	4938	$ 207,396
Phase II		
Project Engr	200	$8,400
Mech Engr	200	$8,400
Elec Engr	200	$8,400
Civil Engr	300	$12,600
Systems Engr	0	$0
Non-TVA Engr	6000	$432,000
Project Controls	80	$3,360
Cost Estimating	24	$1,008
Engr Records	16	$672
Sub Total	7,020	$ 474,840
Phase III		
Project Engr	220	$9,240
Mech Engr	200	$8,400
Elec Engr	200	$8,400
Civil Engr	300	$12,600
Systems Engr	0	$0
Non-TVA Engr	5750	$414,000
Project Controls	40	$1,680
Engr Records	24	$1,008
Sub Total	6,734	$ 455,328
Total	18,692	$ 1,137,564

Avg. TVA Engr Hourly Rate	$42
Avg. Non TVA Engr Hourly Rate	$72

Haber, Stanley M

From: Haber, Stanley M.
Sent: Thursday, September 09, 2004 1:25 PM
To: Hedgecoth, Melissa A.
Cc: Baugh, James S.; Davis, Michael D; Petty, Harold L.; Auguste, Myriam B.
Subject: RE: KIF - CPJ's

Tracking:

Recipient	Delivery
Hedgecoth, Melissa A.	Delivered: 09/09/2004 1:25 PM
Baugh, James S.	Delivered: 09/09/2004 1:25 PM
Davis, Michael D	Delivered: 09/09/2004 1:25 PM
Petty, Harold L.	Delivered: 09/09/2004 1:25 PM
Auguste, Myriam B.	Delivered: 09/09/2004 1:25 PM

Missy,

I don't think that anything on KIF531 needs to change right now. I will be forwarding the updated cost information to you shortly for KIF530 so that you can adjust the PJ appropriately.

Stan

-----Original Message-----
From: Hedgecoth, Melissa A.
Sent: Thursday, September 09, 2004 11:59 AM
To: Haber, Stanley M.
Cc: Baugh, James S.
Subject: KIF - CPJ's

Stan,
Did you get everything you need from engineering on the KIF CPJ's? Are you waiting on anything from me?
Thanks,
Missy

Haber, Stanley M

From: Hedgecoth, Melissa A.
Sent: Thursday, September 09, 2004 11:59 AM
To: Haber, Stanley M.
Cc: Baugh, James S.
Subject: KIF - CPJ's

Stan,
Did you get everything you need from engineering on the KIF CPJ's? Are you waiting on anything from me?
Thanks,
Missy

Haber, Stanley M

From: Petty, Harold L.
Sent: Wednesday, September 01, 2004 5:47 PM
To: Haber, Stanley M.
Attachments: KIF Waste Dispsoal Update to Plant Management Team.ppt

Stan:

fyi

Lynn

KINGSTON FOSSIL PLANT
Waste Management Update

September 2, 2004

Plant Manager's Conference Room

2:00 PM-3:30 PM.

KINGSTON FOSSIL PLANT
Waste Management Update

1. Interim Dredge Cell & FWV
2. Permanent Dredge Cell
3. Dry Fly Ash Conversion
4. Permit Package
5. Long Term – Pond or Peninsula

Interim Dredge Cell and FWV

Current Status - Hedgecoth

- Phase 1 (of 3) is complete and filled with dredged ash
- Phase 2 is being constructed
  - Construction Complete by end of September
  - Capacity and Timeline
  - Construction Technique

Next Steps - Hedgecoth

- Phase 3 –Capacity and Timeline
- FWV graph – Current and Projected

Permanent Dredge Cell

Current Status

- Status of Water Seepage
  - Surface - Catlett
  - Potential Groundwater Offsite Source - Petty
- Temporary Pumping System
  - Plant Concerns - Catlett

Proposed Permanent Fix

- Alternatives Considered - Petty
  - HDPE Liner
  - Rip Rap/Rock Face
  - Vibratory Wall
  - Conversion to Dry Fly Ash
  - Deep French Drain
- Status of Engineering Study - Petty

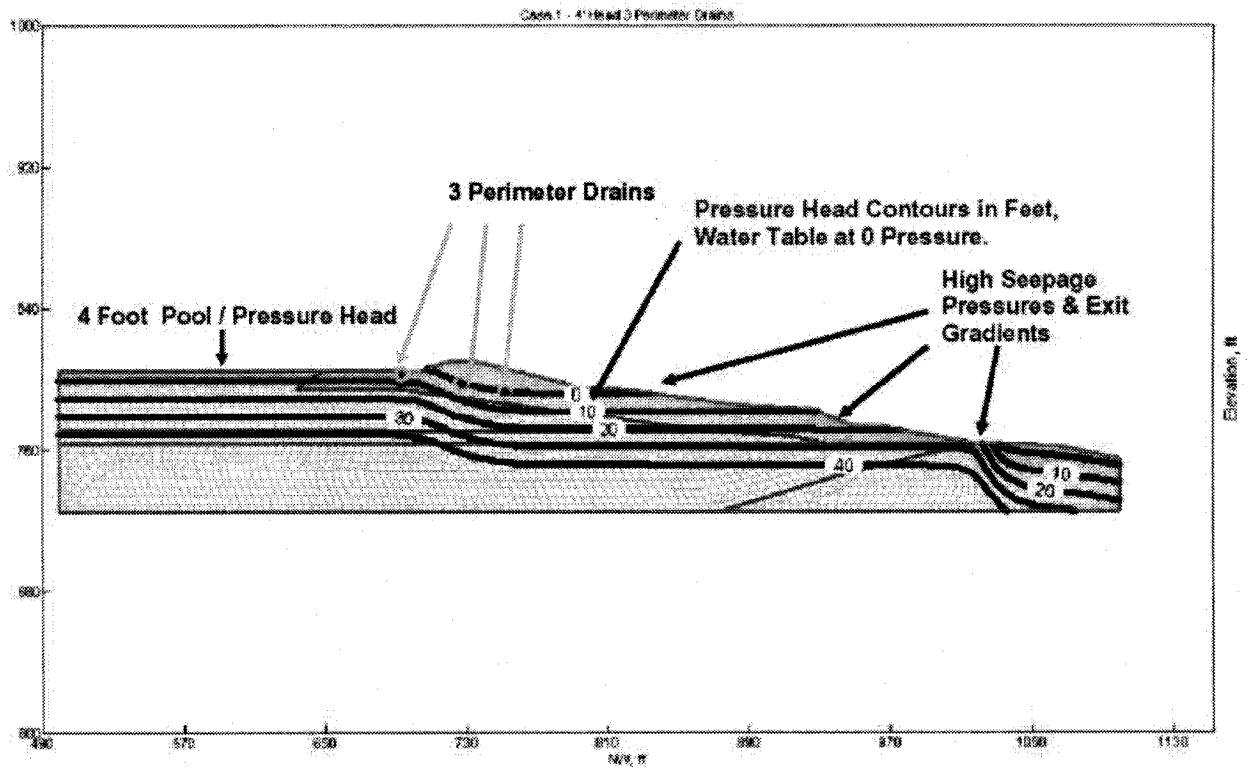


Figure 4. Case 1. Perimeter Drains for Stage C (Stage 1) Still Produce Large Exit Gradients At Steady State.

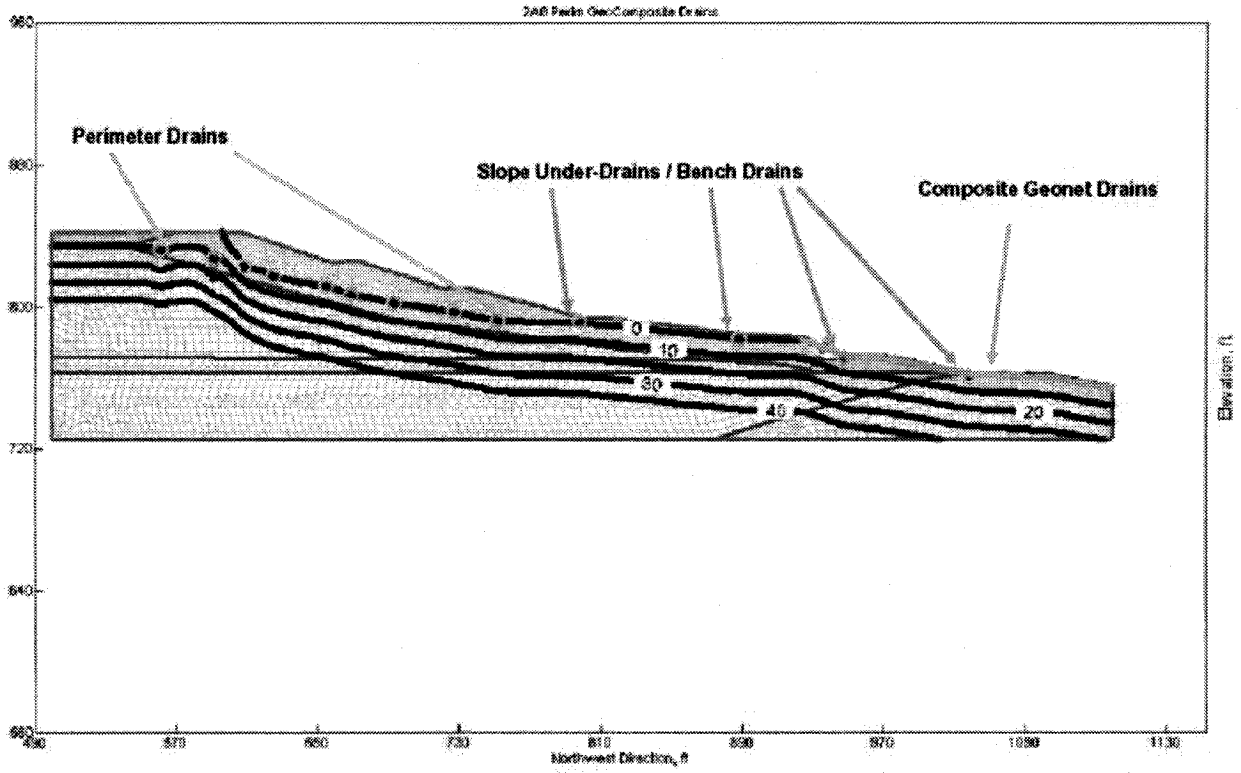
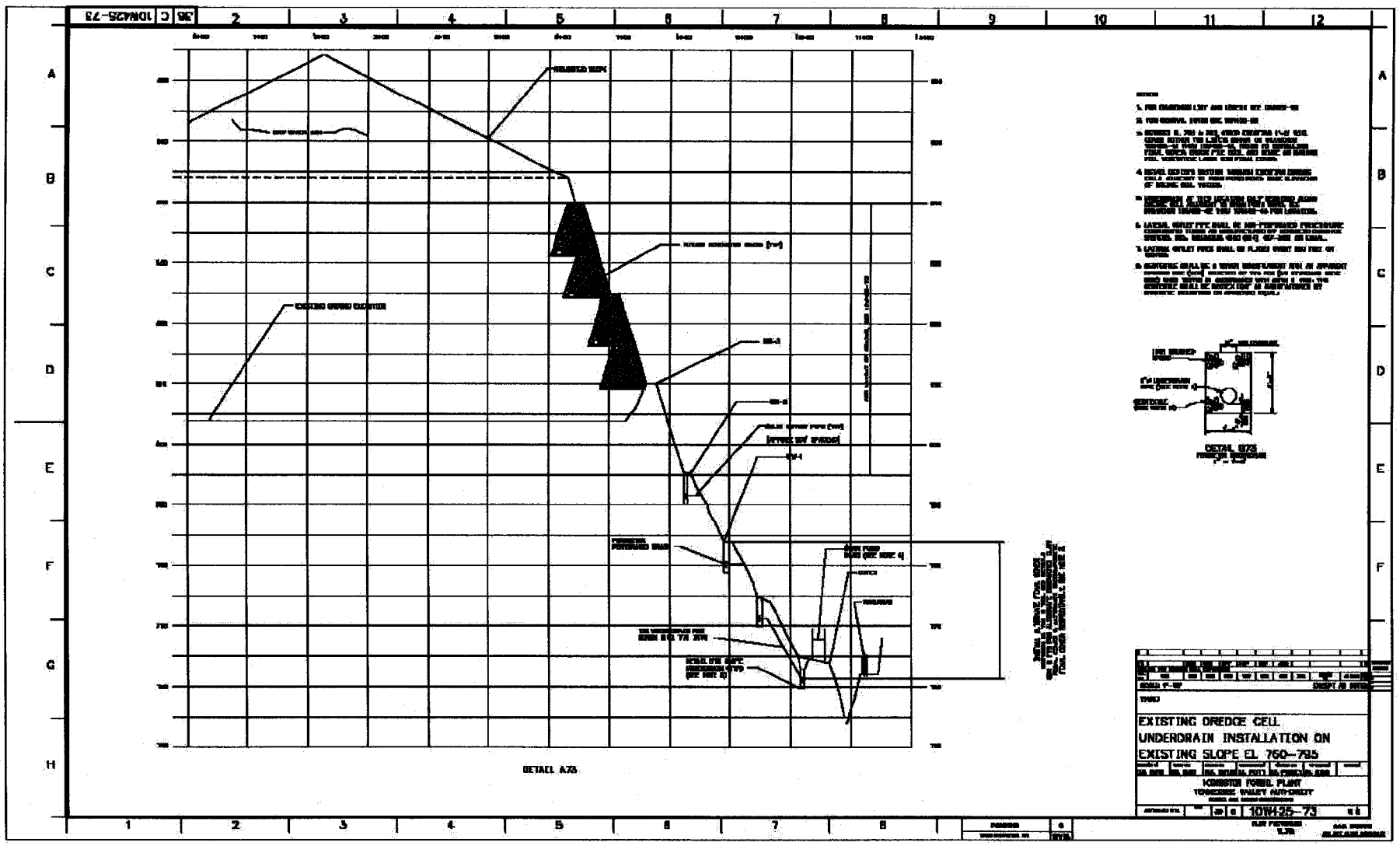


Figure 7. Case 2. Perimeter, Bench, and Composite Geonet Drains for Stage E (Stage E) Control Exit Gradients.



Permanent Dredge Cell

- (KIF530) Capital Project Submittal - Haber
  - Answer Permit Questions
  - Phase 1 study for dredge cell fix
  - Next Steps – Timeline for Fix
    - FY05

Dry Fly Ash Conversion

- **Preliminary Cost Estimate Developed $ 25,000K**
  – Purkey

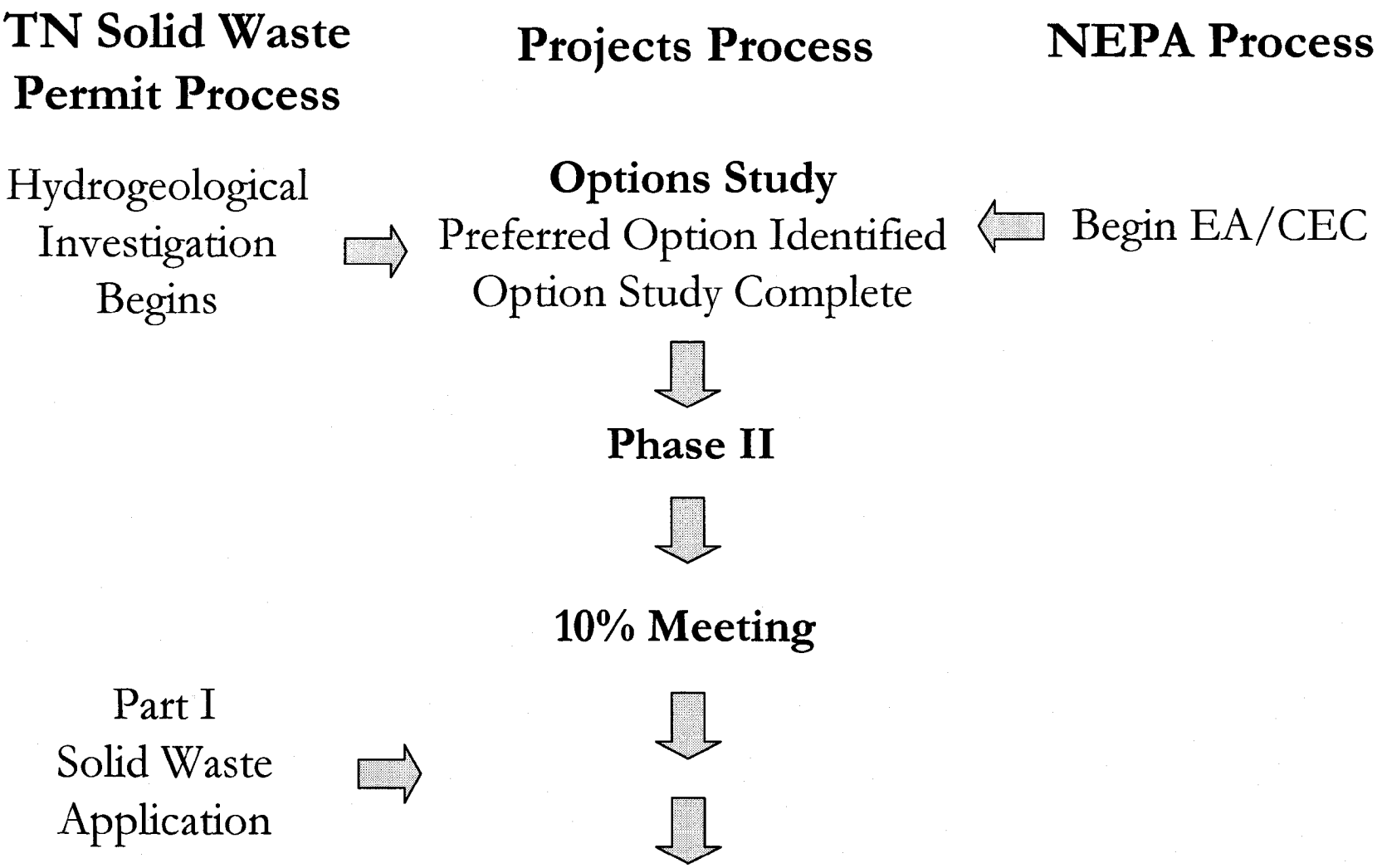
- **Advantages**
  - Handling
  - Marketing
  - Other
- **Disadvantages**
  - NH3 concerns likely will require liner in existing dredge cell
- **Next Steps ?**

Permit Package

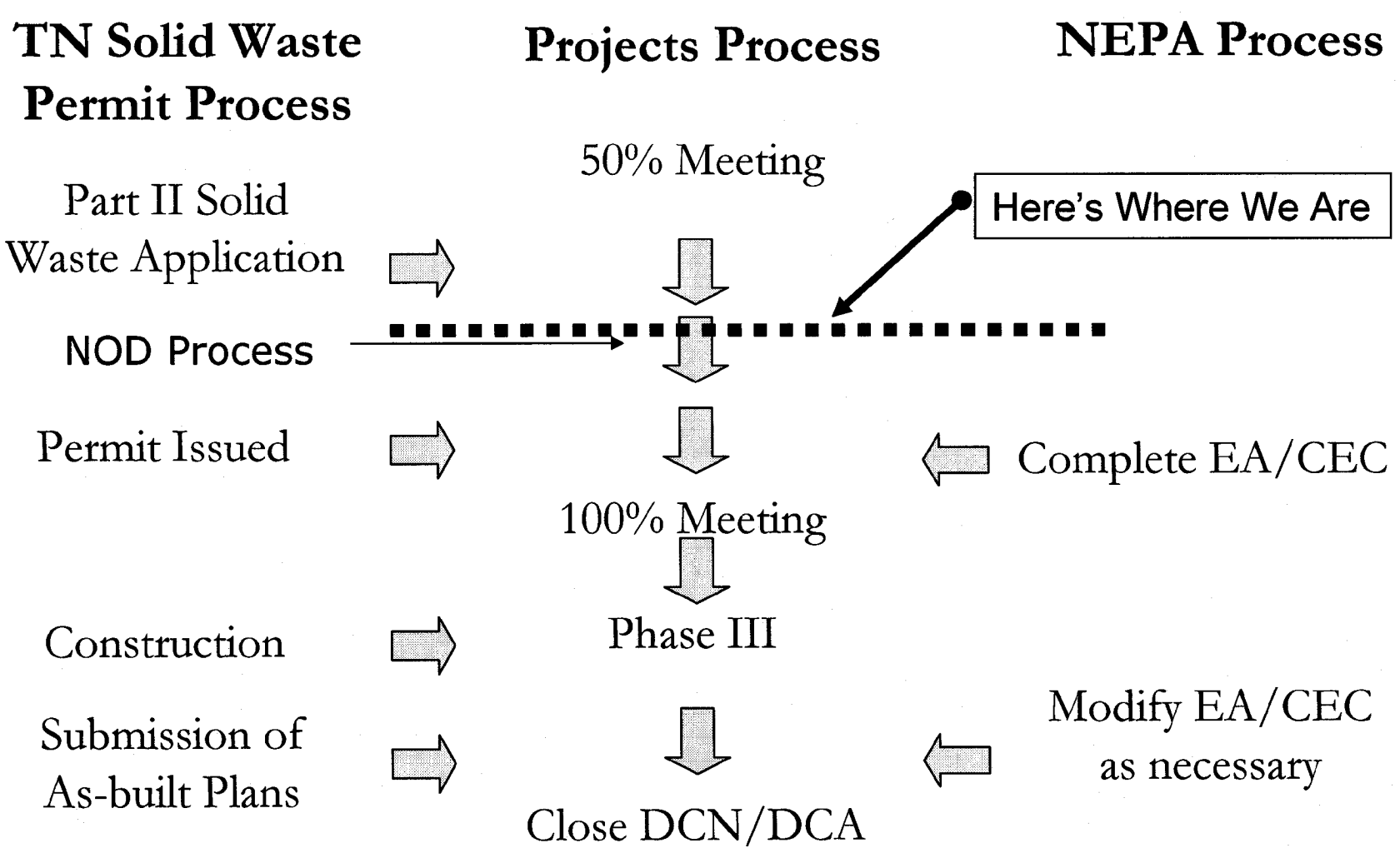
Current Status - Bowers

- Permit package has been submitted to TDEC

Kingston Current Status



Kingston Current Status



Permit Package

Issues

- NH3 Impact from Dry Fly Ash has been a Major Issue during the HydroGeo Preparation
- Permitting Dry Fly Ash and/or Gypsum in the Pond Complex without a liner will be a challenge based on initial conversations with TDEC

Next Steps

- A site visit/meeting with TDEC to review the permit area is anticipated.
- Draft HydroGeo is being reviewed prior to submittal to the state. (September)

Long Term – Pond or Peninsula

Pond/Peninsula options

- **Review of Project History** - Bowers
  - Phase I Study – (May 2003) Peninsula & Pond Initial Costs
    - Peninsula: $9,400K
    - Pond: $25,000K - Initial Cost Estimate based on CUF
    - Drainage Layer Cost was a significant issue/viability of alternate drainage layer unknown at this point
    - Commitment to Plant (Earl's Request) to re-examine costs at a later date however refinement of in-pond cost difficult without significant engineering effort and site investigation

Long Term – Pond or Peninsula

Pond/Peninsula options

- **Review of Project History (Continued)** - Bowers
  - Dredge Cell Problem
  - TDEC requires permit for interim dredge cell
  - Decision is made in meeting at KIF to pursue permit for all waste/all options
  - Part II Package Developed that included alternative Drainage Blanket to reduce costs.
  - Package also included a proposed fix for the Dredge Cell Leak
  - Design Complexity
  - Operational Complexity

Long Term – Pond or Peninsula (continued)

- Either option can be likely permitted per Environmental Affairs; however, to ensure that adequate time is available for permitting the peninsula, a project commitment must be made by January 1, 2005. Engineering will present a recommendation to the FGD JPT based on lowest NPV, Dec. 01, 2004.

- To arrive at this recommendation by that date the following steps will be taken: -Petty

Long Term – Pond or Peninsula (continued)

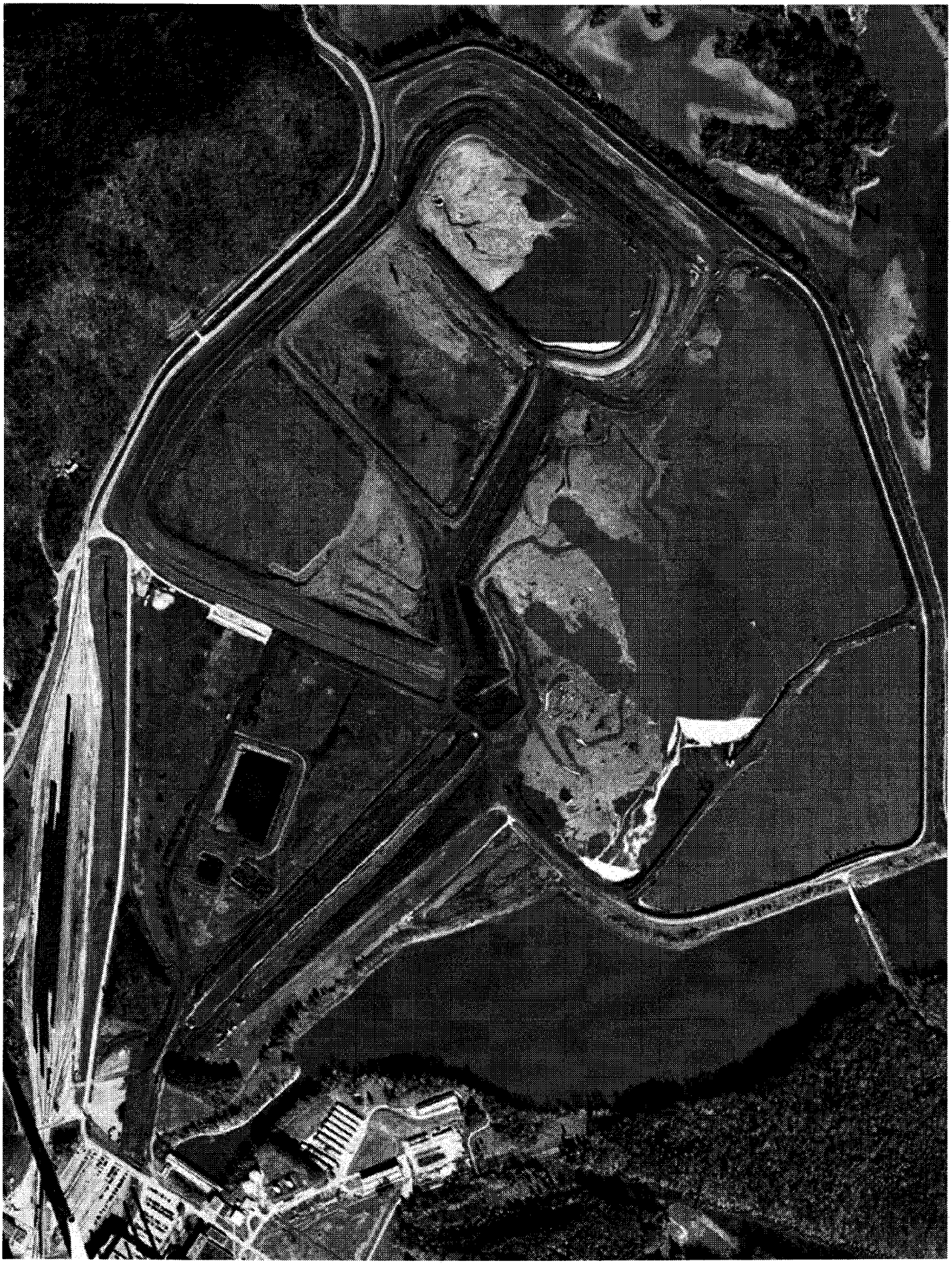
- A firm, GeoSyntec, has been selected for Peer review as requested by Earl Deskins. Peer Review of Design/Permit Package Completed by Oct 31. (Purpose is to resolve question of difficulty of operation and constructability.)
- Pond Option will be estimated with no buffer requirement and with liner (Capital Installation cost). (Calvin Toney (Complete Oct 15))
- The HydroGeo will be submitted in September and after which discussions will be held with TDEC to obtain a better feel for likely answer to the buffer question. (by Nov 1.)
- Revisit the cost estimate on the peninsula option (Calvin Toney Oct. 15) Include assumed cost for Karst mitigation and wetland mitigation.
- Set up table of total cost based on NPV for wet and dry ash
  1. Gypsum and Ash in Pond Option
  2. Ash in Pond, Gypsum on Peninsula Option
- Set up a decision matrix with cost, risks, advantages and disadvantages stated.
- Present to the FGD JPT at the December meeting.

Kingston Scope Packages

Wet Ash Only in Pond – Gyp On Peninsula	Dry Ash Only in Pond – Gyp on Peninsula	Wet ash in Pond – Gyp in Pond	Dry ash in Pond – Gyp in Pond
KIF530 (5/21/04) Scope is for Waste Storage Facility $16,375k Capital (conceptual value – no cost estimate)	KIF530 (5/21/04) Scope is for Waste Storage Facility $16,375k Capital (conceptual value – no cost estimate)	KIF530 (5/21/04) Scope is for Waste Storage Facility $16,375k Capital (conceptual value – no cost estimate)	KIF530 (5/21/04) Scope is for Waste Storage Facility $16,375k Capital (conceptual value – no cost estimate)
	(less the French drain cost) Plus the liner		(less the French drain cost) Plus the liner
	12/03 Cost Estimate Scope is for Dry Fly Ash Conversion $25,000k Capital Cost		12/03 Cost Estimate Scope is for Dry Fly Ash Conversion $25,000k Capital Cost
FGD Project pay for Gyp Transportation System (TBD) and Site Development. (initial est. at 9,400K) Cost to Refined	FGD Project pay for Gyp Transportation System (TBD) and Site Development. (initial est. at 9,400K) Cost to Refined	FGD Project pays for Prorated portion of Development of Pond Area and Gyp Transport System TBD	FGD Project pays for Prorated portion of Development of Pond Area and Gyp Transport System TBD
O&M TBD	O&M TBD	O&M TBD	O&M TBD
Total Cost (NPV) TBD	**Total Cost (NPV) TBD**	**Total Cost (NPV) TBD**	**Total Cost (NPV) TBD**

Kingston Decision Matrix

Factors	Wet Ash Only in Pond – Gyp On Peninsula	Dry Ash Only in Pond – Gyp on Peninsula	Wet ash in Pond – Gyp in Pond	Dry ash in Pond – Gyp in Pond
Capacity (CY)				
Facility Life Expectancy (Years)				
Total Costs NPV (From Chart)				
Time Required for Implementation				
Risk/Other Factors				
Advantages				
Disadvantages				
The Bottom Line				



Haber, Stanley M

From: Petty, Harold L.
Sent: Wednesday, September 01, 2004 8:52 AM
To: Haber, Stanley M.
Cc: Purkey, Ronald E.
Subject: FW: Meeting on Thursday
Importance: High

Stan:

fyi

Lynn

-----Original Message-----
From: Baugh, James S.
Sent: Tuesday, August 31, 2004 8:25 AM
To: Petty, Harold L.; Purkey, Ronald E.
Cc: Hedgecoth, Melissa A.
Subject: FW: Meeting on Thursday
Importance: High

In response to an e mail I got from Earl Deskins last week, I send him a copy of the draft meeting agenda we jointly developed for his review. Earl is asking for agenda additions (see below).

I can handle the status of gypsum marketing. Can we address the status of dry fly ash and projected O&M cost of the different scenarios? If so, who will take the lead?

Thanks.

Steve

-----Original Message-----
From: Deskins, Earl L
Sent: Monday, August 30, 2004 7:08 PM
To: Baugh, James S.
Cc: Campbell, Linda F.; Catlett, James H
Subject: Meeting on Thursday

Hi Steve,

Thanks for setting up the meeting to review Kingston's status.

A couple of additions , if you have time:

> Status of Dry Fly Ash
> Status of gypsum market
> Projected O & M cost of the different scenarios

Thanks,

Earl

Haber, Stanley M

From: Bowers, Larry C
Sent: Monday, August 30, 2004 9:18 AM
To: Haber, Stanley M.
Cc: Petty, Harold L.
Subject: RE: Update to Kingston Plant Management Agenda.doc

As he should be

-----Original Message-----
From: Haber, Stanley M.
Sent: Friday, August 27, 2004 1:00 PM
To: Baugh, James S.; Purkey, Ronald E.; Petty, Harold L.; Bowers, Larry C; Powell, Ronald D.; Smith, Amos L; Hedgecoth, Melissa A.
Subject: RE: Update to Kingston Plant Management Agenda.doc

Team,

I had a chance today to hear some input from Earl on the goals of this meeting. It would appear that he is highly interested in the timeline, among other things that we are planning on discussing.

Stan

-----Original Message-----
From: Baugh, James S.
Sent: Friday, August 27, 2004 8:59 AM
To: Purkey, Ronald E.; Petty, Harold L.; Bowers, Larry C; Powell, Ronald D.; Smith, Amos L; Haber, Stanley M.; Hedgecoth, Melissa A.
Subject: RE: Update to Kingston Plant Management Agenda.doc

I wouldn't postpone the meeting - please send out the presentation when it is finished.

Thanks.

-----Original Message-----
From: Purkey, Ronald E.
Sent: Thursday, August 26, 2004 4:37 PM
To: Baugh, James S.; Petty, Harold L.; Bowers, Larry C; Powell, Ronald D.; Smith, Amos L; Haber, Stanley M.; Hedgecoth, Melissa A.
Subject: RE: Update to Kingston Plant Management Agenda.doc

We will not have ready until early Thursday am so I am doubtful of having time for a review cycle. do we want to postphone the meeting?

-----Original Message-----
From: Baugh, James S.
Sent: Thursday, August 26, 2004 2:02 PM
To: Petty, Harold L.; Bowers, Larry C; Purkey, Ronald E.; Powell, Ronald D.; Smith, Amos L; Haber, Stanley M.; Hedgecoth, Melissa A.
Subject: Update to Kingston Plant Management Agenda.doc

My version from our meeting this morning....

Ron - can you send the powerpoint presentation around a day or so before the meeting for review and comment?

Thanks

Haber, Stanley M

From: Haber, Stanley M.

Sent: Friday, August 27, 2004 1:00 PM

To: Baugh, James S.; Purkey, Ronald E.; Petty, Harold L.; Bowers, Larry C; Powell, Ronald D.; Smith, Amos L; Hedgecoth, Melissa A.

Subject: RE: Update to Kingston Plant Management Agenda.doc

Tracking:

Recipient	Delivery	Read
Baugh, James S.	Delivered: 08/27/2004 1:00 PM	Read: 08/27/2004 1:00 PM
Purkey, Ronald E.	Delivered: 08/27/2004 1:00 PM	
Petty, Harold L.	Delivered: 08/27/2004 1:00 PM	
Bowers, Larry C	Delivered: 08/27/2004 1:00 PM	
Powell, Ronald D.	Delivered: 08/27/2004 1:00 PM	
Smith, Amos L	Delivered: 08/27/2004 1:00 PM	
Hedgecoth, Melissa A.	Delivered: 08/27/2004 1:00 PM	

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> **Subject:** RE: Update to Kingston Plant Management Agenda.doc
>
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> > **From:** Purkey, Ronald E.
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> > **To:** Baugh, James S.; Petty, Harold L.; Bowers, Larry C; Powell, Ronald D.; Smith, Amos L; Haber, Stanley M.; Hedgecoth, Melissa A.
> > **Subject:** RE: Update to Kingston Plant Management Agenda.doc
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> > > **Sent:** Thursday, August 26, 2004 2:02 PM
> > > **To:** Petty, Harold L.; Bowers, Larry C; Purkey, Ronald E.; Powell, Ronald D.; Smith, Amos L; Haber, Stanley M.; Hedgecoth, Melissa A.
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To: Baugh, James S.; Petty, Harold L.; Bowers, Larry C; Powell, Ronald D.; Smith, Amos L; Haber, Stanley M.; Hedgecoth, Melissa A.

Subject: RE: Update to Kingston Plant Management Agenda.doc

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To: Petty, Harold L.; Bowers, Larry C; Purkey, Ronald E.; Powell, Ronald D.; Smith, Amos L; Haber, Stanley M.; Hedgecoth, Melissa A.
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To: Petty, Harold L.; Bowers, Larry C; Purkey, Ronald E.; Powell, Ronald D.; Smith, Amos L; Haber, Stanley M.; Hedgecoth, Melissa A.

Subject: Update to Kingston Plant Management Agenda.doc

Attachments: Update to Kingston Plant Management Agenda.doc

My version from our meeting this morning....

Ron - can you send the powerpoint presentation around a day or so before the meeting for review and comment?

Thanks

Haber, Stanley M

From: Purkey, Ronald E.
Sent: Thursday, August 26, 2004 1:10 PM
To: Haber, Stanley M.; Hedgecoth, Melissa A.
Cc: Petty, Harold L.; Powell, Ronald D.
Subject: KIF530 Input for Cost Estimate Summary 2004 08 26 R0.xls
Attachments: KIF530 Input for Cost Estimate Summary 2004 08 26 R0.xls

My revisions in bold. Call Lynn if you wish to discuss logic

Ron

Haber, Stanley M

From: Purkey, Ronald E.
To: Haber, Stanley M.
Sent: Thursday, August 26, 2004 1:03 PM
Subject: Read:

Your message

To: Purkey, Ronald E.
Cc: Petty, Harold L.; Powell, Ronald D.
Subject:
Sent: 08/26/2004 12:00 PM

was read on 08/26/2004 1:03 PM.

Haber, Stanley M

From: Petty, Harold L.

Sent: Friday, August 20, 2004 1:38 PM

To: Purkey, Ronald E.; Baugh, James S.; Haber, Stanley M.; Hedgecoth, Melissa A.; Bowers, Larry C; Davis, Michael D

Subject: KIF - Pre-Meeting Kingston Trip Meeting

One of my "go dos" from the meeting Tuesday was to schedule a pre-meeting to the meeting with KIF to discuss the peer review of the KIF combined waste storage permit and other issues relating to KIF waste disposal..

I have reserved LP 4S A03 at 10:00 AM for this coming Thursday, August 26..

Thanks.
Lynn Petty

Haber, Stanley M

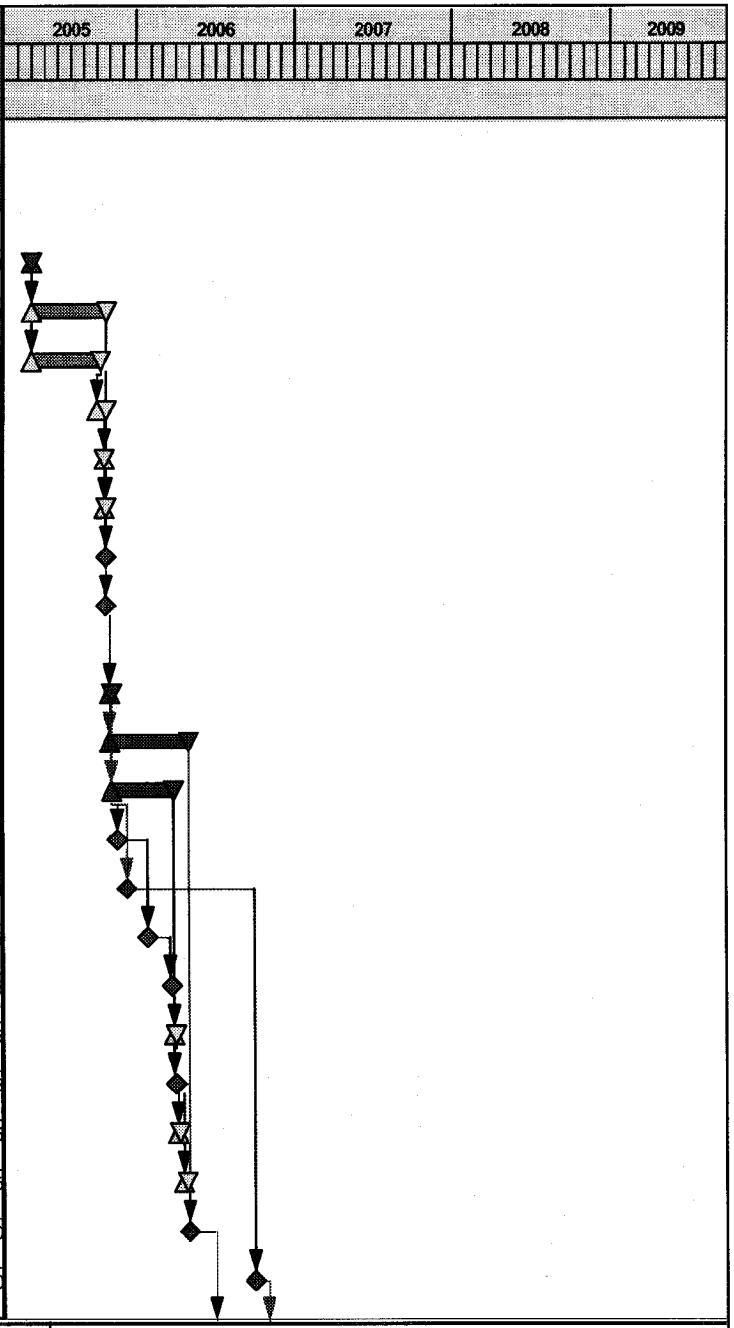
From: Mealer, John A.
Sent: Wednesday, August 18, 2004 10:20 AM
To: Haber, Stanley M.
Subject: KIF530
Attachments: KIF530.pdf

Greetings Stan.

Attached is a copy of the KIF530 Fly Ash project. I set the date by the Project Process. If you wish to go for FPEP approval earlier that the dates shown just let me know and I'll make a quick change for you.

John

SEC	MILE	Activity ID	Activity Description	Forecast Start	Forecast Finish	Finish Target	Total Float
Stanley M. Haber (751-3838)							
KIF530 DEVELOP FLY ASH/BOTTOM ASH CAPACITY							
Preliminary Engg (Phase 1)							
30	1	LDKAK530PA	KIF530 Phase 1 - Prelim Engr Approved	01MAY05*	01MAY05		0
30		LDKAK530PS	KIF530 Ph 1 - Project Support Mhrs Hammock	01MAY05	22OCT05		9
35		LDKAK530X1	KIF530 Conduct Study	02MAY05	08OCT05		9
30		LDKAK530X3	KIF530 Prepare Ph 2 FPEP Pkg	02OCT05	22OCT05		9
15		LDKAK530X4	KIF530 Estimators Prepare Total Package Estimate	16OCT05	18OCT05		12
30	A	LDKAK530R0	KIF530 Prelim Engr Project Review Meeting	19OCT05	19OCT05		12
30	3	LDKAK530PC	Preliminary Engr Complete		22OCT05		9
30		LDKAK530X5	KIF530 Submit Phase 2 FPEP Package for Approval		22OCT05		9
Final Engineering (Phase 2)							
30	2	LDKBK530PA	KIF530 Receive Phase 2 FPEP Approval	01NOV06*	01NOV05		0
30		LDKBK530PS	KIF530 Ph 2 - Project Support Mhrs (Hammock)	01NOV05	01MAY06		0
35		LDKBK530AP	KIF530 Prepare DCN KIF-0X-XXX	02NOV05	28MAR06		0
35		LDKBK530DR	KIF530 10% DCN Design Review		15NOV05		5
35	H	LDKBK530M4	KIF530 Award Contract For Long Lead Material		06DEC05		0
35		LDKBK530R5	KIF530 50% DCN Design Review		24JAN06		5
35		LDKBK530R9	KIF530 100% DCN Design Review		20MAR06		5
T2		LDKBK530RU	KIF530 ERU ASSEMBLE AND DISTRIBUTE KIF-0X-XXX	28MAR06	29MAR06		5
35	N	LDKBK530NN	KIF530 DCN KIF-0X-XXX Issued		29MAR06		5
15		LDKBK530X2	Review Const Estimate & Prepare Total Proj Estim	06APR06	08APR06		5
30		LDKBK530X3	KIF530 Prepare Ph 3 FPEP Pkg	16APR06	25APR06		5
30	B	LDKBK530PC	KIF530 Final Engineering Complete		01MAY06*		0
35	C	LDKBK530M7	KIF530 LL Mail Delivery		01OCT06*		0



Start Date 18AUG04
Finish Date 24JAN09
Data Date 18AUG04

Early Bar
Progress Bar
Critical Activity

FHEM - K530 Sheet 1 of 2

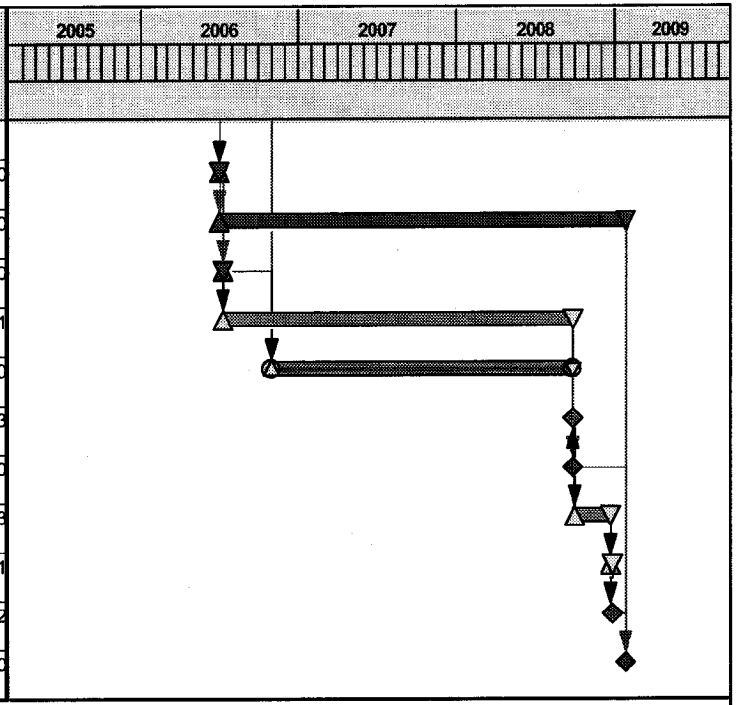
TENNESSEE VALLEY AUTHORITY

KINGSTON FOSSIL PLANT

Date	Revision	Checked	Approved

Implementation (Phase 3)

SEC	MILE	Activity ID	Activity Description	Forecast Start	Forecast Finish	Finish Target	Total Float
30	3	LDKCK530PA	KIF530 Receive Phase 3 FPEP Approval	01JUL06*	01JUL06		0
30		LDKCK530PS	KIF530 Phase 3 - Project Support Mhrs (Hammock)	01JUL06	24JAN09		0
35	S	LDKCK530X1	KIF530 Issue Partner PA	09JUL06	09JUL06		0
99	8	LDKCK530NS	KIF530 Implementation Field Support	09JUL06	25SEP08		1
35	7	LDKCK530PO	Implementation And Construction Period	01NOV06*	26SEP08		0
35		LDKCK530NO	KIF530 DCN KIF-0X-XXX RTO		26SEP08		3
35	D	LDKCK530PT	KIF530 Project Turnover		26SEP08		0
35		LDKCK530ND	KIF530 Closure Process of DCN KIF-0X-XXX	28SEP08	19DEC08		3
T2		LDKCK530RU	ERU ASSEMBLE AND DISTRIBUTE KIF-0X-XXX	22DEC08	23DEC08		1
35	F	LDKCK530NC	KIF530 DCN KIF-0X-XXX Closed		23DEC08		2
30	R	LDKCK530PC	KIF530 Verify Benefits & Close Project		24JAN09		0



Start Date 18AUG04
Finish Date 24JAN09
Data Date 18AUG04

Early Bar
Progress Bar
Critical Activity

FHEM - K530 Sheet 2 of 2

TENNESSEE VALLEY AUTHORITY

KINGSTON FOSSIL PLANT

Date	Revision	Checked	Approved

Haber, Stanley M

From: Renfroe, Bret
Sent: Monday, August 16, 2004 9:37 AM
To: Haber, Stanley M.
Subject: KIF530 - Ash Disposal
Attachments: Project Summary Sheet(04513).rtf; Estimate(04513).pdf

Stan,

Attached is the project summary sheet and the estimate roll-up.

Bret Renfroe
Cost Estimating
Ph: 423-751-7684
Fx: 423-751-4295

Kingston Fossil Plant
Develop Fly Ash, Gypsum & Bottom Ash Disposal Capacity
Development of a waste stack for fly ash, bottom ash

Estimate Number:	04513	**Option:**	0	**PCN Number:**	KIF530
Plant:	KIF	**Revision:**	0	**Estimate Type:**	Conceptual
Cost Engineer:	Sys. Eng.	**Unit #:**		**Estimate Accuracy:**	+/- 30%
Requesting Engr:	S. M. Haber	**Phase:**	1	**Estimate Issue Date:**	08/16/2004

	Hours	Dollars
Phase I		
Engineering		$270,000
Partner (Non-Manual)		
Other / Other Organizations		$5,000
Total Phase I		***$275,000***
Phase II		
Engineering		$425,000
Long Lead Procurement		$8,000,000
Partner (Non-Manual)		$35,000
Other / Other Organizations		$25,000
Total Phase II		***$8,485,000***
Phase III		
Construction (Partner)		
Permanent Material		$0
Labor (T&L)		$40,000
Labor (Non-Manual)		
Equipment		$0
Subcontracts		$7,085,000
Partner Fee		$0
Partner Insurance		$0
Escalation		$0
Construction Risk Dollars		$0
Other		$0
Total Construction Cost		$7,125,000
Engineering		$450,000
Direct plant support + TVA Other Costs		$40,000
Project Risk Dollars		$0
Other / Other Organizations		$0
Total Phase III		***$7,615,000***
All Phases		
Construction Partner		$7,160,000
Long Lead Procurement		$8,000,000
Engineering		$1,145,000
Other / Other Organizations		$70,000
Total Risk Dollars		$0
Total Project Costs		**$16,375,000**
For Information only Total Environmental		**$0**
For Information only Total Demolition Costs		**$0**

Kingston Fossil Plant
Develop Fly Ash, Gypsum & Bottom Ash Disposal Capacity
Development of a waste stack for flyash, bottom ash & gypsum.

Project name	Ash Disposal
Estimator	Sys. Eng.
Plant	KIF
Estimate #	04513
PCN #	KIF530
Requesting Engr	S. M. Haber
Option	0
Revision	0
Phase	1
Estimate Type	Conceptual
Estimate Accuracy	+/- 30%
Est. Issue Date	08/16/2004
Funding Type	Capital
Report format	Sorted by 'Location/Activity' 'Detail' summary

Location	Activity	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Amount
KIF									
	Ash System								
		Material (Blank)	1.00 ls		8,000,000	-	-	-	8,000,000
		Craft Labor (GUMBK)	1.00 ls	40,000		-	-	-	40,000
		GUMBK (Ph II)	1.00 ls			-	-	35,000	35,000
		Plant Support (Ph III)	1.00 ls			-	-	40,000	40,000
		Turnkey Installation	1.00 ls			7,085,000	-	-	7,085,000

Estimate Totals

Labor	40,000		1,086.366 hrs		
Material	8,000,000				
Subcontract	7,085,000				
Other	75,000				
	15,200,000	15,200,000			
Engineered Materials - Ph 2	8,000,000		100.000 %	C	
Adjustment - Engr Materials	(8,000,000)		(100.000) %	C	
		15,200,000			
Environmental Costs			100.000 %	C	
Adjustment Environmental			(100.000) %	C	
		15,200,000			
Demolition Costs			100.000 %	C	
Adjustment Demolition			(100.000) %	C	
		15,200,000			
FPG Engineering - Phase 1	250,000		547.917 % @	42.00 A	5,952
FPG Proj Engr - Phase 1	17,312		37.942 % @	42.00 A	412
FPG Estimating - Phase 1	1,008		2.209 % @	42.00 A	24
FPG Proj Contrl - Phase 1	1,680		3.682 % @	42.00 A	40
Plant Support - Phase 1	5,000			L	
	275,000	15,475,000			
FPG Engineering - Phase 2	370,000		810.917 % @	42.00 A	8,810
FPG Proj Engr - Phase 2	49,960		109.496 % @	42.00 A	1,190
FPG Estimating Phase 2	1,008		2.209 % @	42.00 A	24
FPG Proj Contrl - Phase 2	3,360		7.364 % @	42.00 A	80
FPG Records - Phase 2	672		1.473 % @	42.00 A	16
Plant Support - Phase 2	25,000			L	
	450,000	15,925,000			
FPG Engineering - Phase 3	400,000		876.667 % @	42.00 A	9,524
FPG Proj Engr - Phase 3	47,312		103.692 % @	42.00 A	1,126
FPG Proj Contrl - Phase 3	1,680		3.682 % @	42.00 A	40
FPG Records - Phase 3	1,008		2.209 % @	42.00 A	24
	450,000	16,375,000			
	Total	***16,375,000***			

Haber, Stanley M

From: Purkey, Ronald E.
Sent: Friday, August 13, 2004 2:56 PM
To: Elder, B. Keith; Haber, Stanley M.; Johnston, Jesse J.; Mason, Michael E.
Cc: Petty, Harold L.; Baugh, James S.; Lundy, Dennis L.
Subject: request for short codes

As you may know, I am getting additional Geotechnical support on the additional ash or ash/gypsum storage for your plant to insure we are on the right path for successful and economical solutions to our long range ash storage. Please supply a short code for me to charge to from the capital project. I anticipate the charges to be as follows:

KIF - $40,000
JSF; JOF; AND ALF - $25,000 each

Most, if not all of you, do not have the project approved and the short code set up now. Please supply me with the date you will have the short code so I can plan accordingly.

Ronald E. Purkey
Manager of Civil Engineering
LP 2G-C
Phone 423-751-4820
Cell 423-322-2740
Fax 423-751-7094

Haber, Stanley M

From: Haber, Stanley M.
Sent: Tuesday, August 10, 2004 11:14 AM
To: Baugh, James S.
Cc: Davis, Michael D
Subject: KIF530 (Kingston Ash/Gypsum)

Steve,

Based on the information that I was provided in our meeting last Friday, I am planning on having the short code for phase 1 engineering by 8/17 (next Tuesday).

Stan

-----Original Message-----
From: Baugh, James S.
Sent: Monday, August 09, 2004 4:45 PM
To: Haber, Stanley M.; Davis, Michael D
Subject: FW: kingston Ash/Gypsum

fyi - based on our current plans, when do we think the Kingston additional ash disposal project will be approved and a short code available?

Thanks,

Steve

-----Original Message-----
From: Agee, Janice L.
Sent: Monday, August 09, 2004 4:42 PM
To: Baugh, James S.
Cc: Petty, Harold L.
Subject: kingston Ash/Gypsum

Steve,

I had heard a couple of months ago, that you were going to provide some funding for this effort. Could you give me a call, or provide me a short code ;)

thanks. Jan

@3035

Haber, Stanley M

From: Baugh, James S.
Sent: Monday, August 09, 2004 4:45 PM
To: Haber, Stanley M.; Davis, Michael D
Subject: FW: kingston Ash/Gypsum

fyi - based on our current plans, when do we think the Kingston additional ash disposal project will be approved and a short code available?

Thanks,

Steve

-----Original Message-----
From: Agee, Janice L.
Sent: Monday, August 09, 2004 4:42 PM
To: Baugh, James S.
Cc: Petty, Harold L.
Subject: kingston Ash/Gypsum

Steve,

I had heard a couple of months ago, that you were going to provide some funding for this effort. Could you give me a call, or provide me a short code ;)

thanks. Jan

@3035

Haber, Stanley M

From: Keller, Darlene
Sent: Wednesday, July 28, 2004 3:00 PM
To: Haber, Stanley M.
Cc: Hedgecoth, Melissa A.; Campbell, Linda F.; Webb, Cynthia O.
Subject: RE: KIF530 (Develop Dry Flay Ash, Gypsum, and Bottom Ash): Review of Project Package Information

The EMP isn't applicable since a CEC has been completed. Reference CEC 5718 in the project package.

J. Darlene Keller
SR Regulatory Specialist,
NEPA & Remediation
FPG - Environmental Affairs
423-751-6640

-----Original Message-----
From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 10:26 AM
To: Hedgecoth, Melissa A.
Cc: Davis, Michael D; Johnson, Randall E.; Purkey, Ronald E.; Petty, Harold L.; Bowers, Larry C; Mealer, John A.; Auguste, Myriam B.; Long, S. Scott; Rehberg, Robert L.; Holmes, James B.; Coffman, Lewis A.; Baugh, James S.; Keller, Darlene; Campbell, Linda F.
Subject: KIF530 (Develop Dry Flay Ash, Gypsum, and Bottom Ash): Review of Project Package Information

Missy,

Please review the attached documents in preparation for our meeting next week (on August 5th) and provide your comments back to me by 7/30/04. In addition to your general review, please address the following items based on your understanding of the scopes and your assumptions used in developing the PJ:

CPJ
1. (page 1) Please provide your best assessment of an outage date for any required BOP interface tie-ins, based on your assumptions and the similar projects on which your input is based.
2. (page 1) Please revisit the performance measurement; it is my understanding that all permitting will be provided at the same time.
3. (page 4) Please address the use of two different units of measure (cubic yards in cost assumption #3 and tons-per-year in benefit assumption #1)
4. (page 4) Cost assumption #1 refers to similar projects; please provide me the backup information and any study/proposal information that you used for this cash flow

Preliminary Cost Input
Please review the cash flow spread as I have entered it. Please specifically indicate your understanding of the scope and deliverables associated with the FY05 cash flow of $75k.

Schedule Input Sheet
Please provide me your best assessment of these dates for any required BOP interface tie-ins, based on your assumptions and the similar projects on which your input is based.

Performance Impact Checklist
Please provide me your best assessment of this information based on your assumptions and the similar projects on which your input is based.

Preliminary EMP
You have previously reviewed this form; however, please review it again and verify that it is accurate based on your assumptions and the similar projects on which your input is based.

Your response by Friday, July 30th is requested. If you can not support this date, please contact me prior to July 30th to make arrangements for providing this information.

Stan

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 10:41 AM
To: Petty, Harold L.
Cc: Purkey, Ronald E.; Auguste, Myriam B.; Mealer, John A.; Bowers, Larry C
Subject: KIF530: Review of Project Package information
Attachments: KIF530: Preliminary EMP; KIF530: Performance Impact Checklist; KIF530: Schedule Input Sheet; KIF530: Prelimary Cost Input 2004 07 28; KIF530: CPJ comments 2004 07 27

Lynn,

I will be participating in a review of yard projects next week. Please review the attached documents in preparation for my meeting next week (on August 5th) and provide your comments back to me by 7/30/04. In addition to your general review, please address the following items based on your understanding of the scopes:

Preliminary Cost Input
Please review the cash flow spread as I have entered it. Please specifically indicate your understanding of the scope and deliverables associated with the FY05 cash flow of $75k.

Schedule Input Sheet
Please provide me your best assessment of these dates for any required BOP interface tie-ins, based on your understanding of the project.

Performance Impact Checklist
Please provide me your best assessment of this information based on your understanding of the project.

Preliminary EMP
You have previously reviewed this form; however, please review it again and verify that it is accurate based on your understanding of the project.

Your response by Friday, July 30th is requested. If you can not support this date, please contact me prior to July 30th to make arrangements for providing this information.

Thanks.

Stan

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:56 AM
To: Haber, Stanley M.
Subject: KIF530: Preliminary EMP
Attachments: ~MAP0028.PDF

Appendix A

Project Environmental Management Plan Outline

Prepared by: S.M. Haber/R. D. Powell Date: 4/24/04

1. Detail Description of Project:

KIF530 - Develop Fly Ash, Gypsum, and Bottom Ash Disposal Capacity : Scope will include expansion of dredge cell adjacent to existing dredge cell by construction of a new dike (CEC #5718). Scope also includes development of a waste stack for flyash, bottom ash, and gypsum within the existing perimeter dikes of the active ash disposal area (involving a future environmental assessment.)

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
2. Potential environmental issues				
A.	**Air**			
1.	Fugitive Emissions:	☒	☐	control of dusting
2.	Open Burning:	☐	☒	____
3.	New Source Review:	☐	☒	____
4.	Other: ____	☐	☒	____
B.	**Water**			
1.	Site / Erosion Control:	☒	☐	for waste stacks and dike slopes
2.	Sewage:	☐	☒	____
3.	Contaminated Runoff:	☐	☒	runoff will be controlled within diked area
4.	Process Wastewater (adding pollutants or rerouting flows):	☐	☒	____
5.	Potentially affect:			
5a.	Surface Water:	☐	☒	____
5b.	Groundwater:	☐	☒	stack will have less impact than existing ash pond
5c.	Drinking Water Supply or Potable Water:	☐	☒	____

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
5d.	Wild or Scenic Rivers or Their Tributaries:	☐	☒	____
5e.	Stream on the Nationwide Rivers Inventory:	☐	☒	____
5f.	Wetlands, Waterflow, Stream Channels, ditches or Stream Banks:	☐	☒	____
5g.	100-Year Floodplain:	☐	☒	____
5h.	Unique or Aquatic Habitat:	☐	☒	____
6.	Other: ____	☐	☒	____
C.	**Solid Waste**			
1.	Garbage:	☐	☒	____
2.	Construction/Demolition Waste:	☐	☒	____
3.	Clearing Waste:	☐	☒	____
4.	Sandblasting Waste:	☐	☒	____
5.	Oil Contaminated Waste:	☐	☒	____
6.	Other (e.g., sand, glass, etc.): ____	☐	☒	____
D.	**Hazardous Waste**			
1.	Painting Waste (solvents, etc.):	☐	☒	____
2.	Sandblasting Waste (Hazardous):	☐	☒	____
3.	Degreasing Solvents:	☐	☒	____
4.	Corrosive Wastes (acids, caustics):	☐	☒	____
5.	Pesticides:	☐	☒	____
6.	Other: ____	☐	☒	____
E.	**Asbestos**			
1.	Insulation Waste:	☐	☒	____

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
2.	Roofing Waste:	☐	☒	____
3.	Floor Tile Waste:	☐	☒	____
4.	Other: ____	☐	☒	____
F.	**PCB**			
1.	Handling & Storage:	☐	☒	____
2.	Liquid Waste Disposal:	☐	☒	____
3.	Equipment Disposal:	☐	☒	____
4.	Contaminated Debris Disposal:	☐	☒	____
5.	Other (capacitors, transformers, etc.): ____	☐	☒	____
G.	**SPCC/BMP**			
1.	Fuel/Lube/Insulating oil Storage:	☐	☒	____
2.	Oil Transfer (Procedure):	☐	☒	____
3.	Other: ____	☐	☒	____
H.	**Underground Storage Tanks (UST's)**			
1.	Contaminated Soil:	☐	☒	____
2.	Tank Disposal:	☐	☒	____
3.	Other: ____	☐	☒	____
I.	**Above-ground Storage Tanks (AST's)**			
1.	Contaminated Soil:	☐	☒	____
2.	Tank Disposal:	☐	☒	____
3.	Other: ____	☐	☒	____
J.	**Plant or Animal**			
1.	Potentially affect:			

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
	Endangered, threatened ,or Special Status Species:	☐	☒	____
	Migratory bird populations:	☐	☒	____
	Unique or important terrestrial habitat:	☐	☒	____
2.	Potentially take prime or unique farmland out of production:	☐	☒	____
3.	Contribute to the spread of exotic or invasive species:	☐	☒	____
K.	**Other:**			
1.	Potentially affect:			
	Ecologically critical areas, federal, state, or local park lands, national or state forests, wilderness areas, scenic areas, management wildlife areas, recreational areas, greenways, or trails:	☐		____
	Historic structures, historic sites, Native American religious or Cultural properties, or archaeological sites:	☐		____

Project Environmental Management Plan Outline

3.		Environmental Permits/Notifications	Permit Received? Y	Permit Received? N	Type	Date of Notification
	A.	Air:	☐	☒	____	____
	B.	Water:	☒	☐	NPDES	Verify no impact to discharge permits
	C.	Hazardous Waste:	☐	☒	____	____
	D.	Asbestos:	☐	☒	____	____
	E.	PCB:	☐	☒	____	____
	F.	UST's / AST's:	☐	☒	____	____
	G.	Solid Waste:	☒	☐	____	Going from wet pond to dry stack
	H.	Other (i.e., Spill Notification): ____	☐	☒	____	____

4.		Employee Training	Required? Y	Required? N	Provided / Verified
	A.	Hazardous Waste	☐	☒	____
	B.	Asbestos Competent Person	☐	☒	____
	C.	Emergency Spill/ Prevention	☐	☒	____
	D.	OSHA 1910.120	☐	☒	____
	E.	Other (e.g., Ammonia Awareness): ____	☐	☒	____

5. Emergency Response

Is the Site Emergency Response Plan adequate for this project? If not, a copy of any required additions must be attached to this plan.	Yes ☒	No ☐
Are all environmental concerns addressed in a generic CEC (see Appendix E)? If not, prepare a project-specific CEC.	Yes ☐	No ☒
Do project activities result in environmental concerns?	Yes ☒	No ☐
Are all Appendix E?	Yes ☐	No ☒

Project Environmental Management Plan Outline

If not, prepare a project-specific CEC.

Is a CEC required for this project? Yes ☒ No ☐

	Signatures	**Date**
Project Initiator/Manager:	_____	_____
Site PA(E):	_____	_____
Other Signatures: (as appropriate)	_____	_____
Filed in EDMS	_____	_____

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:52 AM
To: Haber, Stanley M.
Subject: KIF530: Performance Impact Checklist
Attachments: ~MAP0027.PDF

Project Review - Performance Impact Checklist

Project Name: Develop Fly Ash, Gypsum, & Bottom Ash Disposal Capacity

Location: Kingston PCN KIF530

PERFORMANCE PARAMETERS	Improve	No Impact	Degrade	COMMENTS
Reliability				
Frequency of failure (MTBF)	☐	☐	☐	
Frequency of deratings	☐	☐	☐	
Availability				
Planned outage durations	☐	☐	☐	
Forced outage durations	☐	☐	☐	
Unit deratings (MW and duration)	☐	☐	☐	
Repair/replacement time (MTTR)	☐	☐	☐	
Frequency of corrective/preventive maintenance	☐	☐	☐	
MW output (unit capability)	☐	☐	☐	
Thermal				
Net heat rate (Btu/kWh) – Identify in the Comments the specific Heat Rate Parameter(s) or process indicator(s) that is(are) affected	☐	☐	☐	
Station service usage	☐	☐	☐	
Customer Requirements				
On-line time (+/- 30 minutes)	☐	☐	☐	
AGC availability	☐	☐	☐	
Net dependable capacity	☐	☐	☐	
Voltage control	☐	☐	☐	
Minimum load	☐	☐	☐	
Unit ramp time	☐	☐	☐	
Cost				
Fuel costs (coal, limestone, chemicals)	☐	☐	☐	
Fuel handling costs	☐	☐	☐	
Operations labor costs	☐	☐	☐	
Maintenance labor costs	☐	☐	☐	
Waste disposal costs (solid or hazardous)	☐	☐	☐	
Inventory costs	☐	☐	☐	
Other costs (identify in Comments)	☐	☐	☐	
Safety				
Public safety	☐	☐	☐	
Employee Safety	☐	☐	☐	
Equipment Safety	☐	☐	☐	
Other Performance Impacts				
Water chemistry specifications	☐	☐	☐	
LIST OTHER IMPACTS BELOW				
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	

Project Review - Performance Impact Checklist

Project Name:

Location: PCN

PERFORMANCE PARAMETERS	Improve	No Impact	Degrade	COMMENTS
Environmental				
NOTE: Initiate the project EMP and evaluate the following environmental impacts in conjunction with completing the first column of the EMP.				
Air emissions	☐	☐	☐	
SO_2	☐	☐	☐	
NO_X	☐	☐	☐	
Particulate	☐	☐	☐	
Hg	☐	☐	☐	
Quantity of fuel burned	☐	☐	☐	
Ash pond toxicity	☐	☐	☐	
CEMS /COMS availability	☐	☐	☐	
NPDES (Water) discharges	☐	☐	☐	
Shoreline/river impacts	☐	☐	☐	
SPCC/IPP impacts (Fuel, oil, chemical storage)	☐	☐	☐	
EMP Initiated	----------	----------	----------	YES ☐ NO ☐
Permitting/Notifications Identified	----------	----------	----------	YES ☐ NO ☐

PROCEDURE CHANGES	Revisions	No Change	IDENTIFY PROCEDURES
Operations	☐	☐	
Maintenance	☐	☐	
Environmental	☐	☐	
Safety	☐	☐	

PEOPLE PARAMETERS	Needed	No Impact	COMMENTS
People			
Operations Training	☐	☐	
Maintenance Training	☐	☐	
Environmental Training	☐	☐	
Manpower availability	☐	☐	

Project Engineer: Date:

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:50 AM
To: Haber, Stanley M.
Subject: KIF530: Schedule Input Sheet
Attachments: ~MAP0026.PDF

Attachment 1
(Page 1 of 1)

Project Milestone Schedule

Project Name: Develop Fly Ash, Gypsum, & Bottom Ash Disposal Capacity

Location: Kingston PCN K1F530

Use this table to record the schedule for milestones and major activities to be included in the project schedule. This schedule is developed during the project scoping meeting and is to be included in the project approval package.

MILESTONE OR ACTIVITY		PROPOSED DATES
* Project Approved by FPEP (Process Indicator P1) (P1 is 18 months prior to the implementation Start Date).		5/21/04
Preliminary Engineering Authorized		
Preliminary Engineering start and finish dates	start finish	
* Final Engineering Authorized (Process Indicator P2) (P2 is 12 months prior to the implementation Start Date).		
Final Engineering start and finish dates *	start finish	
* Final Engineering finished, all DCN's issued (Process Indicator P3) (P3 is 6 months prior to the implementation Start Date).		
Implementation Authorized (SET for 120 days prior to the implementation Start Date).		
Implementation start and finish dates and outage number (if applicable) (* outage for BOP interface tie-ins) *	start finish Outage	
Return to operation		
* Project closed (Process Indicator P4) (P4 is 120 days after the return–to–operation date).		

Project Engineer: _____ Date: _____

* NOTE: The dates associated with the process indicators P1, P2, P3, and P4 set the standard durations for project activities. Projects needing longer design durations, or that have long lead procurements that require more time than the standard, or that will require an EA or EIS (NEPA documentation), or have any other special design considerations, will require the standard schedule times be revised. Expedited projects may require shortening the standard durations.

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:47 AM
To: Haber, Stanley M.
Subject: KIF530: Prelimary Cost Input 2004 07 28
Attachments: ~MAP0025.PDF

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**								
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**Totals**	**Prv Yrs**	
3									
4	[redacted]								
5	**Phase 1**								
6	Engineering	200	50				250		
7	PE/PC/PS		20				20		
8	Plant Support		5				5		
9	PSS - Inspection						0		
10									
11	Total Phase 1	200	75	0	0	0	275		
12	[redacted]								
13	**Phase 2**								
14									
15	Engineering	0	0	70	300	0	370		
16									
17	PE/PC/PS	0	0	25	30	0	55		
18									
19	GUBMK (estimate)	0	0		35	0	35		
20	Plant Support	0	0	5	20	0	25		
21									
22	Long Lead Material (LLM)								
23	*Turbine Materials and PSS Rehab*	0	0			0	0		
24	*blank*	0	0		4000	4000	8000		
25	*total LLM*	0	0	0	4000	4000	8000		
26									
27	Total Phase 2	0	0	100	4385	4000	8485		
28	[redacted]								

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**								
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**Totals**	**Prv Yrs**	
29	**Phase 3**								
30									
31	Engineering	0	0	0	200	200	400		
32									
33	PE/PC/PS	0	0	0	15	35	50		
34									
35	Plant Support	0	0	0	20	20	40		
36									
37	Installation (x)								
38	*GUBMK*	0	0	0	20	20	40		
39	*blank*	0	0	0	0	0	0		
40	*Total GUBMK*	0	0	0	20	20	40		
41									
42	*Turnkey Installation*	0	0	0	3360	0	3360		
43	*blank*	0	0	0	0	0	0		
44	*Total*	0	0	0	3360	3725	7085		
45									
46	*Asbestos abatement (GUBMK)*	0	0	0	0	0	0		
47									
48	*Total Installation*	0	0	0	3380	3745	7125		
49									
50	Total Phase 3	0	0	0	3615	4000	7615		
51	[redacted]								
52	**Total: All Phases**	200	75	100	8000	8000	16375		
	Assumptions:								
	1. Design and installation of system will be by turnkey contractor; scope similar to CUF dry fly ash system.								
	2. Design of BOP interfaces will be by FE&TS								
	3. FE&TS Lead will be Civil Department								
	4. An outage will be required for some BOP interface tie-ins								

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:45 AM
To: Haber, Stanley M.
Subject: KIF530: CPJ comments 2004 07 27
Attachments: ~MAP0024.PDF

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: KIF

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	07/30/2003	
In-Srvc Date:	09/30/2008	
Outage Date:	———	

(outage needed for BOP interface tie-ins)

Problem Description
Analysis of recent dike failure in the existing dredge cells has raised uncertainties regarding the current long-term disposal plans for fly ash and bottom ash. An emergency cell was developed (O&M) which will provide a maximum of three years of fly ash and bottom ash capacity. In addition, planned scrubbers for Kingston will produce an additional high-volume by-product which may be co-disposed with fly ash and bottom ash beginning in FY 2009.

Project Scope
Expansion of dredge cell adjacent to existing dredge cell by construction of a new dike. Scope will also include development of a waste stack for flyash, bottom ash and gypsum within the existing perimeter dikes of the active ash disposal area.

Perform detailed analysis to determine the overall structural, environmental, and operational viability of continuing to raise and dredge to the existing dredge cells, considering the recent failure along Swan Pond road and the saturation of the lower dikes along the backwaters of the Emory river.

Perform engineering analysis and collect field data as required to develop a detailed design for maximizing the disposal capacity of fly ash, bottom ash and gypsum on the existing ash pond complex at the Kingston Fossil Plant while maintaining the required Free Water Volume. The detailed design should consider economic, structural, environmental and operational issues and impacts associated with long term ash disposal. The engineering suitability of ash currently produced at Kingston for storage in an engineered stack should be verified through testing (if this has not already been satisfactorily completed). A part II permit package is to be submitted to Environmental Affairs.

Scope will also include the design, materials procurement, and installation as necessary to support the engineering study findings.

Performance Measurement
Permitted disposal capacity for fly ash and bottom ash by FY 2007. Permitted disposal capacity for gypsum by FY 2009.

Other Options/Alternatives
Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Kingston's ash there.

Reason For Change
New project.

[redacted]

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

News Release

N/A

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$8,799.0
SUNK O&M PROJECTS:	$0	**PI:**	1.865
REMAINING COST:	$16,375	**IRR:**	52.0
TOTAL COST:	$16,375	**SIMPLE PAYBACK:**	6
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	200	0	0	0	0
2005	75	0	0	0	0
2006	100	0	0	0	0
2007	8,000	0	5,000	0	0
2008	8,000	0	5,000	0	0
2009	0	0	5,000	0	0
2010	0	0	5,000	0	0
2011	0	0	5,000	0	0
2012	0	0	5,000	0	0
2013	0	0	5,000	0	0
2014	0	0	5,000	0	0
2015	0	0	5,000	0	0
2016	0	0	5,000	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY
CSF: Achieve excellence in the Asset optimization and production processes.

Project ID KIF530 **Rev#** 0

II. Project Economic Evaluation

Cost Assumptions

		Risks
1.	Engineering = $200k in FY 04, $75k in FY 05, $100k in FY 06.	Based on similar projects.
2.	Implementation (Develop by-product handling system.)= $8,000k in FY 07; $8,000k in FY 08.	Conceptual estimate for turn-key system.
3.	No significant marketing or utilization of ash or gypsum will take place. Waste production (cubic yards per year): Fly Ash = 410,000 Bottom Ash = 90,000 Gypsum = 750,000	Based on historical data (ash) and similar projects (gypsum).
4.	The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.	Support of plant business plan.

Benefit Assumptions

		Risks
1.	Haul fly ash and bottom ash offsite to an existing permitted disposal site @ $10/ton for 500,000 tons per year = $5,000k per year for ten years.	Assumes a disposal site can be found within 30 miles of the plant which could handle 500,000 tons per year.

Haber, Stanley M

From: Haber, Stanley M.

Sent: Wednesday, July 28, 2004 10:26 AM

To: Hedgecoth, Melissa A.

Cc: Davis, Michael D; Johnson, Randall E.; Purkey, Ronald E.; Petty, Harold L.; Bowers, Larry C; Mealer, John A.; Auguste, Myriam B.; Long, S. Scott; Rehberg, Robert L.; Holmes, James B.; Coffman, Lewis A.; Baugh, James S.; Keller, Darlene; Campbell, Linda F.

Subject: KIF530 (Develop Dry Flay Ash, Gypsum, and Bottom Ash): Review of Project Package Information

Attachments: KIF530: Preliminary EMP; KIF530: Performance Impact Checklist; KIF530: Schedule Input Sheet; KIF530: Prelimary Cost Input 2004 07 28; KIF530: CPJ comments 2004 07 27

Tracking:

Recipient	Delivery
Hedgecoth, Melissa A.	Delivered: 07/28/2004 10:26 AM
Davis, Michael D	Delivered: 07/28/2004 10:26 AM
Johnson, Randall E.	Delivered: 07/28/2004 10:26 AM
Purkey, Ronald E.	Delivered: 07/28/2004 10:26 AM
Petty, Harold L.	Delivered: 07/28/2004 10:26 AM
Bowers, Larry C	Delivered: 07/28/2004 10:26 AM
Mealer, John A.	Delivered: 07/28/2004 10:26 AM
Auguste, Myriam B.	Delivered: 07/28/2004 10:26 AM
Long, S. Scott	Delivered: 07/28/2004 10:26 AM
Rehberg, Robert L.	Delivered: 07/28/2004 10:26 AM
Holmes, James B.	Delivered: 07/28/2004 10:26 AM
Coffman, Lewis A.	Delivered: 07/28/2004 10:26 AM
Baugh, James S.	Delivered: 07/28/2004 10:26 AM
Keller, Darlene	Delivered: 07/28/2004 10:26 AM
Campbell, Linda F.	Delivered: 07/28/2004 10:26 AM

Missy,

Please review the attached documents in preparation for our meeting next week (on August 5th) and provide your comments back to me by 7/30/04. In addition to your general review, please address the following items based on your understanding of the scopes and your assumptions used in developing the PJ:

CPJ

1. (page 1) Please provide your best assessment of an outage date for any required BOP interface tie-ins, based on your assumptions and the similar projects on which your input is based.
2. (page 1) Please revisit the performance measurement; it is my understanding that all permitting will be provided at the same time.
3. (page 4) Please address the use of two different units of measure (cubic yards in cost assumption #3 and tons-per-year in benefit assumption #1)
4. (page 4) Cost assumption #1 refers to similar projects; please provide me the backup information and any study/proposal information that you used for this cash flow

Preliminary Cost Input

Please review the cash flow spread as I have entered it. Please specifically indicate your understanding of the scope and deliverables associated with the FY05 cash flow of $75k.

Schedule Input Sheet

Please provide me your best assessment of these dates for any required BOP interface tie-ins, based on your assumptions and the similar projects on which your input is based.

Performance Impact Checklist
Please provide me your best assessment of this information based on your assumptions and the similar projects on which your input is based.

Preliminary EMP
You have previously reviewed this form; however, please review it again and verify that it is accurate based on your assumptions and the similar projects on which your input is based.

Your response by Friday, July 30th is requested. If you can not support this date, please contact me prior to July 30th to make arrangements for providing this information.

Stan

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:56 AM
To: Haber, Stanley M.
Subject: KIF530: Preliminary EMP
Attachments: ~MAP0028.PDF

Appendix A

Project Environmental Management Plan Outline

Prepared by: S.M. Haber/R. D. Powell Date: 4/24/04

1. Detail Description of Project:

KIF530 - Develop Fly Ash, Gypsum, and Bottom Ash Disposal Capacity : Scope will include expansion of dredge cell adjacent to existing dredge cell by construction of a new dike (CEC #5718). Scope also includes development of a waste stack for flyash, bottom ash, and gypsum within the existing perimeter dikes of the active ash disposal area (involving a future environmental assessment.)

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
2. Potential environmental issues				
A.	**Air**			
1.	Fugitive Emissions:	☒	☐	control of dusting
2.	Open Burning:	☐	☒	_____
3.	New Source Review:	☐	☒	_____
4.	Other: _____	☐	☒	_____
B.	**Water**			
1.	Site / Erosion Control:	☒	☐	for waste stacks and dike slopes
2.	Sewage:	☐	☒	_____
3.	Contaminated Runoff:	☐	☒	runoff will be controlled within diked area
4.	Process Wastewater (adding pollutants or rerouting flows):	☐	☒	_____
5.	Potentially affect:			
5a.	Surface Water:	☐	☒	_____
5b.	Groundwater:	☐	☒	stack will have less impact than existing ash pond
5c.	Drinking Water Supply or Potable Water:	☐	☒	_____

Appendix A

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
5d.	Wild or Scenic Rivers or Their Tributaries:	☐	☒	____
5e.	Stream on the Nationwide Rivers Inventory:	☐	☒	____
5f.	Wetlands, Waterflow, Stream Channels, ditches or Stream Banks:	☐	☒	____
5g.	100-Year Floodplain:	☐	☒	____
5h.	Unique or Aquatic Habitat:	☐	☒	____
6.	Other: ____	☐	☒	____
C.	**Solid Waste**			
1.	Garbage:	☐	☒	____
2.	Construction/Demolition Waste:	☐	☒	____
3.	Clearing Waste:	☐	☒	____
4.	Sandblasting Waste:	☐	☒	____
5.	Oil Contaminated Waste:	☐	☒	____
6.	Other (e.g., sand, glass, etc.): ____	☐	☒	____
D.	**Hazardous Waste**			
1.	Painting Waste (solvents, etc.):	☐	☒	____
2.	Sandblasting Waste (Hazardous):	☐	☒	____
3.	Degreasing Solvents:	☐	☒	____
4.	Corrosive Wastes (acids, caustics):	☐	☒	____
5.	Pesticides:	☐	☒	____
6.	Other: ____	☐	☒	____
E.	**Asbestos**			
1.	Insulation Waste:	☐	☒	____

Appendix A

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
2.	Roofing Waste:	☐	☒	_____
3.	Floor Tile Waste:	☐	☒	_____
4.	Other: _____	☐	☒	_____
F.	**PCB**			
1.	Handling & Storage:	☐	☒	_____
2.	Liquid Waste Disposal:	☐	☒	_____
3.	Equipment Disposal:	☐	☒	_____
4.	Contaminated Debris Disposal:	☐	☒	_____
5.	Other (capacitors, transformers, etc.): _____	☐	☒	_____
G.	**SPCC/BMP**			
1.	Fuel/Lube/Insulating oil Storage:	☐	☒	_____
2.	Oil Transfer (Procedure):	☐	☒	_____
3.	Other: _____	☐	☒	_____
H.	**Underground Storage Tanks (UST's)**			
1.	Contaminated Soil:	☐	☒	_____
2.	Tank Disposal:	☐	☒	_____
3.	Other: _____	☐	☒	_____
I.	**Above-ground Storage Tanks (AST's)**			
1.	Contaminated Soil:	☐	☒	_____
2.	Tank Disposal:	☐	☒	_____
3.	Other: _____	☐	☒	_____
J.	**Plant or Animal**			
1.	Potentially affect:			

Appendix A

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
	Endangered, threatened ,or Special Status Species:	☐	☒	_____
	Migratory bird populations:	☐	☒	_____
	Unique or important terrestrial habitat:	☐	☒	_____
2.	Potentially take prime or unique farmland out of production:	☐	☒	_____
3.	Contribute to the spread of exotic or invasive species:	☐	☒	_____
K.	**Other:**			
1.	Potentially affect:			
	Ecologically critical areas, federal, state, or local park lands, national or state forests, wilderness areas, scenic areas, management wildlife areas, recreational areas, greenways, or trails:	☐		_____
	Historic structures, historic sites, Native American religious or Cultural properties, or archaeological sites:	☐		_____

Appendix A

Project Environmental Management Plan Outline

3.		Environmental Permits/Notifications	Permit Received? Y	Permit Received? N	Type	Date of Notification
	A.	Air:	☐	☒	____	____
	B.	Water:	☒	☐	NPDES	Verify no impact to discharge permits
	C.	Hazardous Waste:	☐	☒	____	____
	D.	Asbestos:	☐	☒	____	____
	E.	PCB:	☐	☒	____	____
	F.	UST's / AST's:	☐	☒	____	____
	G.	Solid Waste:	☒	☐	____	Going from wet pond to dry stack
	H.	Other (i.e., Spill Notification): ____	☐	☒	____	____

4.		Employee Training	Required? Y	Required? N	Provided / Verified
	A.	Hazardous Waste	☐	☒	____
	B.	Asbestos Competent Person	☐	☒	____
	C.	Emergency Spill/ Prevention	☐	☒	____
	D.	OSHA 1910.120	☐	☒	____
	E.	Other (e.g., Ammonia Awareness): ____	☐	☒	____

5. Emergency Response

Is the Site Emergency Response Plan adequate for this project? If not, a copy of any required additions must be attached to this plan.	Yes ☒	No ☐
Are all environmental concerns addressed in a generic CEC (see Appendix E)? If not, prepare a project-specific CEC.	Yes ☐	No ☒
Do project activities result in environmental concerns?	Yes ☒	No ☐
Are all Appendix E?	Yes ☐	No ☒

Appendix A

Project Environmental Management Plan Outline

If not, prepare a project-specific CEC.

Is a CEC required for this project? Yes ☒ No ☐

	Signatures	**Date**
Project Initiator/Manager:	_____	_____
Site PA(E):	_____	_____
Other Signatures: (as appropriate)	_____	_____
Filed in EDMS	_____	_____

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:52 AM
To: Haber, Stanley M.
Subject: KIF530: Performance Impact Checklist
Attachments: ~MAP0027.PDF

Project Review - Performance Impact Checklist

Project Name: Develop Fly Ash, Gypsum, & Bottom Ash Disposal Capacity

Location: Kingston PCN KIF530

PERFORMANCE PARAMETERS	Improve	No Impact	Degrade	COMMENTS
Reliability				
Frequency of failure (MTBF)	☐	☐	☐	
Frequency of deratings	☐	☐	☐	
Availability				
Planned outage durations	☐	☐	☐	
Forced outage durations	☐	☐	☐	
Unit deratings (MW and duration)	☐	☐	☐	
Repair/replacement time (MTTR)	☐	☐	☐	
Frequency of corrective/preventive maintenance	☐	☐	☐	
MW output (unit capability)	☐	☐	☐	
Thermal				
Net heat rate (Btu/kWh) – Identify in the Comments the specific Heat Rate Parameter(s) or process indicator(s) that is(are) affected	☐	☐	☐	
Station service usage	☐	☐	☐	
Customer Requirements				
On-line time (+/- 30 minutes)	☐	☐	☐	
AGC availability	☐	☐	☐	
Net dependable capacity	☐	☐	☐	
Voltage control	☐	☐	☐	
Minimum load	☐	☐	☐	
Unit ramp time	☐	☐	☐	
Cost				
Fuel costs (coal, limestone, chemicals)	☐	☐	☐	
Fuel handling costs	☐	☐	☐	
Operations labor costs	☐	☐	☐	
Maintenance labor costs	☐	☐	☐	
Waste disposal costs (solid or hazardous)	☐	☐	☐	
Inventory costs	☐	☐	☐	
Other costs (identify in Comments)	☐	☐	☐	
Safety				
Public safety	☐	☐	☐	
Employee Safety	☐	☐	☐	
Equipment Safety	☐	☐	☐	
Other Performance Impacts				
Water chemistry specifications	☐	☐	☐	
LIST OTHER IMPACTS BELOW				
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	

Project Review - Performance Impact Checklist

Project Name:

Location: PCN

PERFORMANCE PARAMETERS	Improve	No Impact	Degrade	COMMENTS
Environmental				
NOTE: Initiate the project EMP and evaluate the following environmental impacts in conjunction with completing the first column of the EMP.				
Air emissions	☐	☐	☐	
SO_2	☐	☐	☐	
NO_x	☐	☐	☐	
Particulate	☐	☐	☐	
Hg	☐	☐	☐	
Quantity of fuel burned	☐	☐	☐	
Ash pond toxicity	☐	☐	☐	
CEMS /COMS availability	☐	☐	☐	
NPDES (Water) discharges	☐	☐	☐	
Shoreline/river impacts	☐	☐	☐	
SPCC/IPP impacts (Fuel, oil, chemical storage)	☐	☐	☐	
EMP Initiated	----------	----------	----------	YES ☐ NO ☐
Permitting/Notifications Identified	----------	----------	----------	YES ☐ NO ☐

PROCEDURE CHANGES	Revisions	No Change	IDENTIFY PROCEDURES
Operations	☐	☐	
Maintenance	☐	☐	
Environmental	☐	☐	
Safety	☐	☐	

PEOPLE PARAMETERS	Needed	No Impact	COMMENTS
People			
Operations Training	☐	☐	
Maintenance Training	☐	☐	
Environmental Training	☐	☐	
Manpower availability	☐	☐	

Project Engineer: Date:

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:50 AM
To: Haber, Stanley M.
Subject: KIF530: Schedule Input Sheet
Attachments: ~MAP0026.PDF

Attachment 1
(Page 1 of 1)

Project Milestone Schedule

Project Name: Develop Fly Ash, Gypsum, & Bottom Ash Disposal Capacity

Location: Kingston PCN KIF530

Use this table to record the schedule for milestones and major activities to be included in the project schedule. This schedule is developed during the project scoping meeting and is to be included in the project approval package.

MILESTONE OR ACTIVITY		PROPOSED DATES
* Project Approved by FPEP (Process Indicator P1) (P1 is 18 months prior to the implementation Start Date).		5/21/04
Preliminary Engineering Authorized		
Preliminary Engineering start and finish dates	start finish	
* Final Engineering Authorized (Process Indicator P2) (P2 is 12 months prior to the implementation Start Date).		
Final Engineering start and finish dates *	start finish	
* Final Engineering finished, all DCN's issued (Process Indicator P3) (P3 is 6 months prior to the implementation Start Date).		
Implementation Authorized (SET for 120 days prior to the implementation Start Date).		
Implementation start and finish dates and outage number (if applicable) (* outage for BOP interface tie-ins) *	start finish Outage	
Return to operation		
* Project closed (Process Indicator P4) (P4 is 120 days after the return-to-operation date).		

Project Engineer: _____ Date: _____

* NOTE: The dates associated with the process indicators P1, P2, P3, and P4 set the standard durations for project activities. Projects needing longer design durations, or that have long lead procurements that require more time than the standard, or that will require an EA or EIS (NEPA documentation), or have any other special design considerations, will require the standard schedule times be revised. Expedited projects may require shortening the standard durations.

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:47 AM
To: Haber, Stanley M.
Subject: KIF530: Prelimary Cost Input 2004 07 28
Attachments: ~MAP0025.PDF

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**									
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**		**Totals**	**Prv Yrs**	
3										
4	[redacted]									
5	**Phase 1**									
6	Engineering	200	50					250		
7	PE/PC/PS		20					20		
8	Plant Support		5					5		
9	PSS - Inspection							0		
10										
11	Total Phase 1	200	75	0	0	0		275		
12	[redacted]									
13	**Phase 2**									
14										
15	Engineering	0	0	70	300	0		370		
16										
17	PE/PC/PS	0	0	25	30	0		55		
18										
19	GUBMK (estimate)	0	0		35	0		35		
20	Plant Support	0	0	5	20	0		25		
21										
22	Long Lead Material (LLM)									
23	*Turbine Materials and PSS Rehab*	0	0			0		0		
24	*blank*	0	0		4000	4000		8000		
25	*total LLM*	0	0	0	4000	4000		8000		
26										
27	Total Phase 2	0	0	100	4385	4000		8485		
28	[redacted]									

1	KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage									
2	Phase/Activity	FY04	FY05	FY06	FY07	FY08		Totals	Prv Yrs	
29	**Phase 3**									
30										
31	Engineering	0	0	0	200	200		400		
32										
33	PE/PC/PS	0	0	0	15	35		50		
34										
35	Plant Support	0	0	0	20	20		40		
36										
37	Installation (x)									
38	*GUBMK*	0	0	0	20	20		40		
39	*blank*	0	0	0	0	0		0		
40	*Total GUBMK*	0	0	0	20	20		40		
41										
42	*Turnkey Installation*	0	0	0	3360	0		3360		
43	*blank*	0	0	0	0	0		0		
44	*Total*	0	0	0	3360	3725		7085		
45										
46	*Asbestos abatement (GUBMK)*	0	0	0	0	0		0		
47										
48	*Total Installation*	0	0	0	3380	3745		7125		
49										
50	Total Phase 3	0	0	0	3615	4000		7615		
51	[redacted]									
52	**Total: All Phases**	200	75	100	8000	8000		16375		
	Assumptions:									
	1. Design and installation of system will be by turnkey contractor; scope similar to CUF dry fly ash system.									
	2. Design of BOP interfaces will be by FE&TS									
	3. FE&TS Lead will be Civil Department									
	4. An outage will be required for some BOP interface tie-ins									

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:45 AM
To: Haber, Stanley M.
Subject: KIF530: CPJ comments 2004 07 27
Attachments: ~MAP0024.PDF

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: KIF

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	07/30/2003	
In-Srvc Date:	09/30/2008	
Outage Date:		

(outage needed for BSP interface tie-ins)

Problem Description

Analysis of recent dike failure in the existing dredge cells has raised uncertainties regarding the current long-term disposal plans for fly ash and bottom ash. An emergency cell was developed (O&M) which will provide a maximum of three years of fly ash and bottom ash capacity. In addition, planned scrubbers for Kingston will produce an additional high-volume by-product which may be co-disposed with fly ash and bottom ash beginning in FY 2009.

Project Scope

Expansion of dredge cell adjacent to existing dredge cell by construction of a new dike. Scope will also include development of a waste stack for flyash, bottom ash and gypsum within the existing perimeter dikes of the active ash disposal area.

Perform detailed analysis to determine the overall structural, environmental, and operational viability of continuing to raise and dredge to the existing dredge cells, considering the recent failure along Swan Pond road and the saturation of the lower dikes along the backwaters of the Emory river.

Perform engineering analysis and collect field data as required to develop a detailed design for maximizing the disposal capacity of fly ash, bottom ash and gypsum on the existing ash pond complex at the Kingston Fossil Plant while maintaining the required Free Water Volume. The detailed design should consider economic, structural, environmental and operational issues and impacts associated with long term ash disposal. The engineering suitability of ash currently produced at Kingston for storage in an engineered stack should be verified through testing (if this has not already been satisfactorily completed). A part II permit package is to be submitted to Environmental Affairs.

Scope will also include the design, materials procurement, and installation as necessary to support the engineering study findings.

Performance Measurement

Permitted disposal capacity for fly ash and bottom ash by FY 2007. Permitted disposal capacity for gypsum by FY 2009.

Other Options/Alternatives

Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Kingston's ash there.

Reason For Change

New project.

[redacted]

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

News Release

N/A

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY
CSF: Achieve excellence in the Asset optimization and production processes.

Project ID KIF530 **Rev#** 0

II. Project Economic Evaluation

COST

SUNK CAPITAL PROJECTS: $0
SUNK O&M PROJECTS: $0
REMAINING COST: $16,375
TOTAL COST: $16,375
ESTIMATE TYPE: Order of Magnitude

ECONOMIC INDICATORS

NPV: $8,799.0
PI: 1.865
IRR: 52.0
SIMPLE PAYBACK: 6
BASE YEAR: 2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	200	0	0	0	0
2005	75	0	0	0	0
2006	100	0	0	0	0
2007	8,000	0	5,000	0	0
2008	8,000	0	5,000	0	0
2009	0	0	5,000	0	0
2010	0	0	5,000	0	0
2011	0	0	5,000	0	0
2012	0	0	5,000	0	0
2013	0	0	5,000	0	0
2014	0	0	5,000	0	0
2015	0	0	5,000	0	0
2016	0	0	5,000	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY
CSF: Achieve excellence in the Asset optimization and production processes.

Project ID KIF530 **Rev#** 0

II. Project Economic Evaluation

	Cost Assumptions	Risks
1.	Engineering = $200k in FY 04, $75k in FY 05, $100k in FY 06.	Based on similar projects.
2.	Implementation (Develop by-product handling system.)= $8,000k in FY 07; $8,000k in FY 08.	Conceptual estimate for turn-key system.
3.	No significant marketing or utilization of ash or gypsum will take place. Waste production (cubic yards per year): Fly Ash = 410,000 Bottom Ash = 90,000 Gypsum = 750,000	Based on historical data (ash) and similar projects (gypsum).
4.	The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.	Support of plant business plan.

	Benefit Assumptions	Risks
1.	Haul fly ash and bottom ash offsite to an existing permitted disposal site @ $10/ton for 500,000 tons per year = $5,000k per year for ten years.	Assumes a disposal site can be found within 30 miles of the plant which could handle 500,000 tons per year.

Haber, Stanley M

From: Auguste, Myriam B.
Sent: Wednesday, July 28, 2004 10:25 AM
To: Mealer, John A.
Cc: Haber, Stanley M.
Subject: FW: KIF530-- Develop Fly Ash Gypsum & Bottom Ash Disposal Capacity

FYI.
-----Original Message-----
From: Burrell, Kimberly D.
Sent: Wednesday, July 28, 2004 10:09 AM
To: Auguste, Myriam B.
Subject: RE: KIF530-- Develop Fly Ash Gypsum & Bottom Ash Disposal Capacity

001D9VR

Kim Burrell
FPG Business Services
(423) 751-3096

-----Original Message-----
From: Auguste, Myriam B.
Sent: Wednesday, July 28, 2004 9:51 AM
To: Burrell, Kimberly D.
Subject: KIF530-- Develop Fly Ash Gypsum & Bottom Ash Disposal Capacity
Importance: High

Please assign a short code to KIF530A-01 FE & Project Control. Thanks.

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:56 AM
To: Haber, Stanley M.
Subject: KIF530: Preliminary EMP
Attachments: ~MAP0028.PDF

Appendix A

Project Environmental Management Plan Outline

Prepared by: S.M. Haber/R. D. Powell Date: 4/24/04

1. **Detail Description of Project:**

KIF530 - Develop Fly Ash, Gypsum, and Bottom Ash Disposal Capacity : Scope will include expansion of dredge cell adjacent to existing dredge cell by construction of a new dike (CEC #5718). Scope also includes development of a waste stack for flyash, bottom ash, and gypsum within the existing perimeter dikes of the active ash disposal area (involving a future environmental assessment.)

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
2. Potential environmental issues				
A.	**Air**			
1.	Fugitive Emissions:	☒	☐	control of dusting
2.	Open Burning:	☐	☒	____
3.	New Source Review:	☐	☒	____
4.	Other: ____	☐	☒	____
B.	**Water**			
1.	Site / Erosion Control:	☒	☐	for waste stacks and dike slopes
2.	Sewage:	☐	☒	____
3.	Contaminated Runoff:	☐	☒	runoff will be controlled within diked area
4.	Process Wastewater (adding pollutants or rerouting flows):	☐	☒	____
5.	Potentially affect:			
5a.	Surface Water:	☐	☒	____
5b.	Groundwater:	☐	☒	stack will have less impact than existing ash pond
5c.	Drinking Water Supply or Potable Water:	☐	☒	____

Appendix A

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
5d.	Wild or Scenic Rivers or Their Tributaries:	☐	☒	____
5e.	Stream on the Nationwide Rivers Inventory:	☐	☒	____
5f.	Wetlands, Waterflow, Stream Channels, ditches or Stream Banks:	☐	☒	____
5g.	100-Year Floodplain:	☐	☒	____
5h.	Unique or Aquatic Habitat:	☐	☒	____
6.	Other: ____	☐	☒	____
C.	**Solid Waste**			
1.	Garbage:	☐	☒	____
2.	Construction/Demolition Waste:	☐	☒	____
3.	Clearing Waste:	☐	☒	____
4.	Sandblasting Waste:	☐	☒	____
5.	Oil Contaminated Waste:	☐	☒	____
6.	Other (e.g., sand, glass, etc.): ____	☐	☒	____
D.	**Hazardous Waste**			
1.	Painting Waste (solvents, etc.):	☐	☒	____
2.	Sandblasting Waste (Hazardous):	☐	☒	____
3.	Degreasing Solvents:	☐	☒	____
4.	Corrosive Wastes (acids, caustics):	☐	☒	____
5.	Pesticides:	☐	☒	____
6.	Other: ____	☐	☒	____
E.	**Asbestos**			
1.	Insulation Waste:	☐	☒	____

Appendix A

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
2.	Roofing Waste:	☐	☒	____
3.	Floor Tile Waste:	☐	☒	____
4.	Other: ____	☐	☒	____
F.	**PCB**			
1.	Handling & Storage:	☐	☒	____
2.	Liquid Waste Disposal:	☐	☒	____
3.	Equipment Disposal:	☐	☒	____
4.	Contaminated Debris Disposal:	☐	☒	____
5.	Other (capacitors, transformers, etc.): ____	☐	☒	____
G.	**SPCC/BMP**			
1.	Fuel/Lube/Insulating oil Storage:	☐	☒	____
2.	Oil Transfer (Procedure):	☐	☒	____
3.	Other: ____	☐	☒	____
H.	**Underground Storage Tanks (UST's)**			
1.	Contaminated Soil:	☐	☒	____
2.	Tank Disposal:	☐	☒	____
3.	Other: ____	☐	☒	____
I.	**Above-ground Storage Tanks (AST's)**			
1.	Contaminated Soil:	☐	☒	____
2.	Tank Disposal:	☐	☒	____
3.	Other: ____	☐	☒	____
J.	**Plant or Animal**			
1.	Potentially affect:			

Appendix A

Project Environmental Management Plan Outline

		Environmental Concern? YES	Environmental Concern? NO	Control Measures to be used
	Endangered, threatened ,or Special Status Species:	☐	☒	____
	Migratory bird populations:	☐	☒	____
	Unique or important terrestrial habitat:	☐	☒	____
2.	Potentially take prime or unique farmland out of production:	☐	☒	____
3.	Contribute to the spread of exotic or invasive species:	☐	☒	____
K.	**Other:**			
1.	Potentially affect:			
	Ecologically critical areas, federal, state, or local park lands, national or state forests, wilderness areas, scenic areas, management wildlife areas, recreational areas, greenways, or trails:	☐		____
	Historic structures, historic sites, Native American religious or Cultural properties, or archaeological sites:	☐		____

Appendix A

Project Environmental Management Plan Outline

3.		Environmental Permits/Notifications	Permit Received? Y	Permit Received? N	Type	Date of Notification
	A.	Air:	☐	☒	____	____
	B.	Water:	☒	☐	NPDES	Verify no impact to discharge permits
	C.	Hazardous Waste:	☐	☒	____	____
	D.	Asbestos:	☐	☒	____	____
	E.	PCB:	☐	☒	____	____
	F.	UST's / AST's:	☐	☒	____	____
	G.	Solid Waste:	☒	☐	____	Going from wet pond to dry stack
	H.	Other (i.e., Spill Notification): ____	☐	☒	____	____

4.		Employee Training	Required? Y	Required? N	Provided / Verified
	A.	Hazardous Waste	☐	☒	____
	B.	Asbestos Competent Person	☐	☒	____
	C.	Emergency Spill/ Prevention	☐	☒	____
	D.	OSHA 1910.120	☐	☒	____
	E.	Other (e.g., Ammonia Awareness): ____	☐	☒	____

5. Emergency Response

Is the Site Emergency Response Plan adequate for this project? If not, a copy of any required additions must be attached to this plan.	Yes ☒	No ☐
Are all environmental concerns addressed in a generic CEC (see Appendix E)? If not, prepare a project-specific CEC.	Yes ☐	No ☒
Do project activities result in environmental concerns?	Yes ☒	No ☐
Are all Appendix E?	Yes ☐	No ☒

Appendix A

Project Environmental Management Plan Outline

If not, prepare a project-specific CEC.

Is a CEC required for this project? Yes ☒ No ☐

	Signatures	**Date**
Project Initiator/Manager:	_____	_____
Site PA(E):	_____	_____
Other Signatures: (as appropriate)	_____	_____
Filed in EDMS	_____	_____

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:52 AM
To: Haber, Stanley M.
Subject: KIF530: Performance Impact Checklist
Attachments: ~MAP0027.PDF

Project Review - Performance Impact Checklist

Project Name: Develop Fly Ash, Gypsum, & Bottom Ash Disposal Capacity

Location: Kingston PCN KIF530

PERFORMANCE PARAMETERS	Improve	No Impact	Degrade	COMMENTS
Reliability				
Frequency of failure (MTBF)	☐	☐	☐	
Frequency of deratings	☐	☐	☐	
Availability				
Planned outage durations	☐	☐	☐	
Forced outage durations	☐	☐	☐	
Unit deratings (MW and duration)	☐	☐	☐	
Repair/replacement time (MTTR)	☐	☐	☐	
Frequency of corrective/preventive maintenance	☐	☐	☐	
MW output (unit capability)	☐	☐	☐	
Thermal				
Net heat rate (Btu/kWh) – Identify in the Comments the specific Heat Rate Parameter(s) or process indicator(s) that is(are) affected	☐	☐	☐	
Station service usage	☐	☐	☐	
Customer Requirements				
On-line time (+/- 30 minutes)	☐	☐	☐	
AGC availability	☐	☐	☐	
Net dependable capacity	☐	☐	☐	
Voltage control	☐	☐	☐	
Minimum load	☐	☐	☐	
Unit ramp time	☐	☐	☐	
Cost				
Fuel costs (coal, limestone, chemicals)	☐	☐	☐	
Fuel handling costs	☐	☐	☐	
Operations labor costs	☐	☐	☐	
Maintenance labor costs	☐	☐	☐	
Waste disposal costs (solid or hazardous)	☐	☐	☐	
Inventory costs	☐	☐	☐	
Other costs (identify in Comments)	☐	☐	☐	
Safety				
Public safety	☐	☐	☐	
Employee Safety	☐	☐	☐	
Equipment Safety	☐	☐	☐	
Other Performance Impacts				
Water chemistry specifications	☐	☐	☐	
LIST OTHER IMPACTS BELOW				
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	

Project Review - Performance Impact Checklist

Project Name:

Location: PCN

PERFORMANCE PARAMETERS	Improve	No Impact	Degrade	COMMENTS
Environmental				
NOTE: Initiate the project EMP and evaluate the following environmental impacts in conjunction with completing the first column of the EMP.				
Air emissions	☐	☐	☐	
SO_2	☐	☐	☐	
NO_x	☐	☐	☐	
Particulate	☐	☐	☐	
Hg	☐	☐	☐	
Quantity of fuel burned	☐	☐	☐	
Ash pond toxicity	☐	☐	☐	
CEMS /COMS availability	☐	☐	☐	
NPDES (Water) discharges	☐	☐	☐	
Shoreline/river impacts	☐	☐	☐	
SPCC/IPP impacts (Fuel, oil, chemical storage)	☐	☐	☐	
EMP Initiated	----------	----------	----------	YES ☐ NO ☐
Permitting/Notifications Identified	----------	----------	----------	YES ☐ NO ☐

PROCEDURE CHANGES	Revisions	No Change	IDENTIFY PROCEDURES
Operations	☐	☐	
Maintenance	☐	☐	
Environmental	☐	☐	
Safety	☐	☐	

PEOPLE PARAMETERS	Needed	No Impact	COMMENTS
People			
Operations Training	☐	☐	
Maintenance Training	☐	☐	
Environmental Training	☐	☐	
Manpower availability	☐	☐	

Project Engineer: Date:

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:50 AM
To: Haber, Stanley M.
Subject: KIF530: Schedule Input Sheet
Attachments: ~MAP0026.PDF

Attachment 1
(Page 1 of 1)

Project Milestone Schedule

Project Name: Develop Fly Ash, Gypsum, & Bottom Ash Disposal Capacity

Location: Kingston PCN K1F530

Use this table to record the schedule for milestones and major activities to be included in the project schedule. This schedule is developed during the project scoping meeting and is to be included in the project approval package.

MILESTONE OR ACTIVITY		PROPOSED DATES
* Project Approved by FPEP (Process Indicator P1) (P1 is 18 months prior to the implementation Start Date).		5/21/04
Preliminary Engineering Authorized		
Preliminary Engineering start and finish dates	start finish	
* Final Engineering Authorized (Process Indicator P2) (P2 is 12 months prior to the implementation Start Date).		
Final Engineering start and finish dates *	start finish	
* Final Engineering finished, all DCN's issued (Process Indicator P3) (P3 is 6 months prior to the implementation Start Date).		
Implementation Authorized (SET for 120 days prior to the implementation Start Date).		
Implementation start and finish dates and outage number (if applicable) (* outage for BOP interface tie-ins) *	start finish Outage	
Return to operation		
* Project closed (Process Indicator P4) (P4 is 120 days after the return–to–operation date).		

Project Engineer: _____ Date: _____

* NOTE: The dates associated with the process indicators P1, P2, P3, and P4 set the standard durations for project activities. Projects needing longer design durations, or that have long lead procurements that require more time than the standard, or that will require an EA or EIS (NEPA documentation), or have any other special design considerations, will require the standard schedule times be revised. Expedited projects may require shortening the standard durations.

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:47 AM
To: Haber, Stanley M.
Subject: KIF530: Prelimary Cost Input 2004 07 28
Attachments: ~MAP0025.PDF

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**								
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**Totals**	**Prv Yrs**	
3									
4	[redacted]								
5	**Phase 1**								
6	Engineering	200	50				250		
7	PE/PC/PS		20				20		
8	Plant Support		5				5		
9	PSS - Inspection						0		
10									
11	Total Phase 1	200	75	0	0	0	275		
12	[redacted]								
13	**Phase 2**								
14									
15	Engineering	0	0	70	300	0	370		
16									
17	PE/PC/PS	0	0	25	30	0	55		
18									
19	GUBMK (estimate)	0	0		35	0	35		
20	Plant Support	0	0	5	20	0	25		
21									
22	Long Lead Material (LLM)								
23	*Turbine Materials and PSS Rehab*	0	0			0	0		
24	*blank*	0	0		4000	4000	8000		
25	*total LLM*	0	0	0	4000	4000	8000		
26									
27	Total Phase 2	0	0	100	4385	4000	8485		
28	[redacted]								

1	KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage									
2	Phase/Activity	FY04	FY05	FY06	FY07	FY08		Totals	Prv Yrs	
29	Phase 3									
30										
31	Engineering	0	0	0	200	200		400		
32										
33	PE/PC/PS	0	0	0	15	35		50		
34										
35	Plant Support	0	0	0	20	20		40		
36										
37	Installation (x)									
38	*GUBMK*	0	0	0	20	20		40		
39	*blank*	0	0	0	0	0		0		
40	*Total GUBMK*	0	0	0	20	20		40		
41										
42	*Turnkey Installation*	0	0	0	3360	0		3360		
43	*blank*	0	0	0	0	0		0		
44	*Total*	0	0	0	3360	3725		7085		
45										
46	*Asbestos abatement (GUBMK)*	0	0	0	0	0		0		
47										
48	*Total Installation*	0	0	0	3380	3745		7125		
49										
50	Total Phase 3	0	0	0	3615	4000		7615		
51	[redacted]									
52	**Total: All Phases**	200	75	100	8000	8000		16375		
	Assumptions:									
	1. Design and installation of system will be by turnkey contractor; scope similar to CUF dry fly ash system.									
	2. Design of BOP interfaces will be by FE&TS									
	3. FE&TS Lead will be Civil Department									
	4. An outage will be required for some BOP interface tie-ins									

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, July 28, 2004 9:45 AM
To: Haber, Stanley M.
Subject: KIF530: CPJ comments 2004 07 27
Attachments: ~MAP0024.PDF

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY
CSF: Achieve excellence in the Asset optimization and production processes.

Project ID KIF530 **Rev#** 0

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: KIF

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	07/30/2003	
In-Srvc Date:	09/30/2008	
Outage Date:	———	

(outage needed for BOP interface tie-ins)

Problem Description
Analysis of recent dike failure in the existing dredge cells has raised uncertainties regarding the current long-term disposal plans for fly ash and bottom ash. An emergency cell was developed (O&M) which will provide a maximum of three years of fly ash and bottom ash capacity. In addition, planned scrubbers for Kingston will produce an additional high-volume by-product which may be co-disposed with fly ash and bottom ash beginning in FY 2009.

Project Scope
Expansion of dredge cell adjacent to existing dredge cell by construction of a new dike. Scope will also include development of a waste stack for flyash, bottom ash and gypsum within the existing perimeter dikes of the active ash disposal area.

Perform detailed analysis to determine the overall structural, environmental, and operational viability of continuing to raise and dredge to the existing dredge cells, considering the recent failure along Swan Pond road and the saturation of the lower dikes along the backwaters of the Emory river.

Perform engineering analysis and collect field data as required to develop a detailed design for maximizing the disposal capacity of fly ash, bottom ash and gypsum on the existing ash pond complex at the Kingston Fossil Plant while maintaining the required Free Water Volume. The detailed design should consider economic, structural, environmental and operational issues and impacts associated with long term ash disposal. The engineering suitability of ash currently produced at Kingston for storage in an engineered stack should be verified through testing (if this has not already been satisfactorily completed). A part II permit package is to be submitted to Environmental Affairs.

Scope will also include the design, materials procurement, and installation as necessary to support the engineering study findings.

Performance Measurement
Permitted disposal capacity for fly ash and bottom ash by FY 2007. Permitted disposal capacity for gypsum by FY 2009.

Other Options/Alternatives
Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Kingston's ash there.

Reason For Change
New project.

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

News Release

N/A

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$8,799.0
SUNK O&M PROJECTS:	$0	**PI:**	1.865
REMAINING COST:	$16,375	**IRR:**	52.0
TOTAL COST:	$16,375	**SIMPLE PAYBACK:**	6
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	200	0	0	0	0
2005	75	0	0	0	0
2006	100	0	0	0	0
2007	8,000	0	5,000	0	0
2008	8,000	0	5,000	0	0
2009	0	0	5,000	0	0
2010	0	0	5,000	0	0
2011	0	0	5,000	0	0
2012	0	0	5,000	0	0
2013	0	0	5,000	0	0
2014	0	0	5,000	0	0
2015	0	0	5,000	0	0
2016	0	0	5,000	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

	Cost Assumptions	Risks
1.	Engineering = $200k in FY 04. $75k in FY 05, $100k in FY 06.	Based on similar projects.
2.	Implementation (Develop by-product handling system.)= $8,000k in FY 07; $8,000k in FY 08.	Conceptual estimate for turn-key system.
3.	No significant marketing or utilization of ash or gypsum will take place. Waste production (cubic yards per year): Fly Ash = 410,000 Bottom Ash = 90,000 Gypsum = 750,000	Based on historical data (ash) and similar projects (gypsum).
4.	The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.	Support of plant business plan.

	Benefit Assumptions	Risks
1.	Haul fly ash and bottom ash offsite to an existing permitted disposal site @ $10/ton for 500,000 tons per year = $5,000k per year for ten years.	Assumes a disposal site can be found within 30 miles of the plant which could handle 500,000 tons per year.

Haber, Stanley M

From: Evans, Kelly E.
Sent: Wednesday, June 16, 2004 8:09 AM
To: Haber, Stanley M.
Cc: Petty, Harold L.
Subject: FW: Budgetary proposal for PHase 1 work at KIF for seepage interception

Sent to me by mistake.

-----Original Message-----
From: Smith, Daniel R
Sent: Tuesday, June 15, 2004 10:46 PM
To: Evans, Kelly E.
Cc: Kamada, Andy
Subject: Budgetary proposal for PHase 1 work at KIF for seepage interception

Background:
I spoke to Harold Catlett at KIF today. He is putting in a concrete septic tank and capturing seepage in a surface water ditch. The Phase 1 study will be based on the work already completed for the permit application. Harold's estimate of flow is 10 gpm, based on his observations and timed bucket measurements (a good, reasonable way to proceed). However, when the dredge cells are filled (eventually 30 ft higher than present, we expect the flow to increase. How much will have to be determined. He is installing 2-250 gpm pumps (to be safe), along with level switches for dual pump operation. He is going to use single phase off-site power. He will pump the effluent a short distance up the slope and get it into a ditch, where it will flow to the pond. However, due to the flat slopes, the effluent may just saturate back into the pile.

We are planning on attempting to try our best to utilize single phase power. That would utilize the available supply that Harold is setting up now. The flow calcs will to a large extent determine the flow rate to the toe drain. If we are able to utilize the soon to exist single phase offsite power, and his pumps, we could save a great deal of money. Adding some additional pumps will increase the costs, but if we can stick with single phase power the cost increase is not much.

Going to 3 phase power is more difficult, however. Harold thinks that the closest source of 3 phase power is miles away, although he cannot confirm this exactly (no one from Harriman Utilities called back). Running power from the plant may be expensive (I'm not sure the new substation out by the ammonia facility has anything left - We would have to check). Still, that will be expensive running it down to the ash pond.

Therefore we recommend the following:

Approach 1 - Phase 1 study for single phase power - $20K

Civil:
calcs for flow, for pipe size, manhole size, pump size, pump spec.
Drawings that would embellish the permit dwgs somewhat, but not full PHase 2 dwgs. Estimate about 4 civil dwgs

Electrical:
single line, support for civil in selecting the appropriate size pump.

Approach 2 - Phase 2 study for 3- phase power - $27K
Civil: Same as Approach 1

Electrical:
Enhanced study to cost out how much 3-phase power would be from plant. A quick phone call to Harriman Utility Board would confirm the feasibility of 3-phase off-site power.

Hope this is what you need.

Please contact me if you have any questions. I will be at ALF tomorrow with HLP and I will give him a copy of this.

Daniel R. (Dan) Smith, P.E.
Parsons E & C Phone: (423) 757-8088

633 Chestnut St, Suite 400 Fax: (423) 266-0922
Chattanooga, TN 37932 Cell: (423) 364-1679 Email: Daniel.R.Smith@parsonsec.com
Please note my new email address: Daniel.R.Smith@parsonsec.com

Haber, Stanley M

From: Haber, Stanley M.
Sent: Monday, June 14, 2004 9:31 AM
To: Petty, Harold L.
Subject: FW: Second Call: KIF530 and KIF531 PJs

Tracking:

Recipient	Delivery
Petty, Harold L.	Delivered: 06/14/2004 9:31 AM

Lynn,

Please refer to the trailing email fron Steve Baugh. Steve is enquiring as to how much of an effort you think you will be expending in FY05 on support of KIF530 (the permiting process). Do you feel that your support will fall below the $50k level?

Stan
-----Original Message-----
From: Baugh, James S.
Sent: Monday, June 14, 2004 6:50 AM
To: Haber, Stanley M.
Cc: Preslar, Jacky D.; Hedgecoth, Melissa A.; Davis, Michael D
Subject: RE: Second Call: KIF530 and KIF531 PJs

Stan,

Thanks for the opportunity to review these CPJs.

In our meeting with Jacky last week, Lynn Petty brought up the need for FY 05 funding for completion of analysis of dredge cell repairs and for responses to TDEC questions on the permit application. Our original project planning assumed that engineering for the dredge cell repairs would be completed in FY 04 and any funding for responses to TDEC in FY 05 would come from the FGD project. My only concern about adding FY 05 funding to this project is the impact on the overall FY 05 capital needs in Yard Operations. Will you get with Lynn Petty to verify the level of funding he needs for this work in FY 05? If the amount is small ($50K or less), we can probably cover this from FY 05 "Bliz" captial funding requests. If the amount is greater, we need to involve Mike Davis to discuss where this funding would come from out of overall FY 05 Yard Ops capital.

Call or e mail me if you have questions. I am out of the office most of this week, but will be checking voice and e mail.

Thanks,

Steve

> -----Original Message-----
> **From:** Haber, Stanley M.
> **Sent:** Thursday, June 10, 2004 2:24 PM
> **To:** Baugh, James S.
> **Cc:** Preslar, Jacky D.
> **Subject:** Second Call: KIF530 and KIF531 PJs
>
> Steve,
>
> I have not heard from you regarding the email that I sent you yesterday. I need to have your changes to

these projects by Monday. They need to be part of the FPG package that is presented in the June PRC meeting.

Thanks.

Stan
-----Original Message-----
From: Haber, Stanley M.
Sent: Wednesday, June 09, 2004 1:10 PM
To: Baugh, James S.
Cc: Bowers, Larry C; Petty, Harold L.; Hedgecoth, Melissa A.; Davis, Michael D; Rehberg, Robert L.; Holmes, James B.; Tolliver, Sherry D.
Subject: KIF530 and KIF531 PJs

Steve,

The attached files are the Kingston ash blitz project PJs that were provided to me and that were subsequently submitted for SVP approval at the Kingston project review meeting of 5/21. Please let me know if you have any changes that you will be making to either of them.

Stan

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, May 19, 2004 10:27 AM
To: Auguste, Myriam B.
Cc: Rehberg, Robert L.; Campbell, Linda F.; Chattin, Mike E.; Holmes, James B.; Tolliver, Sherry D.; Hedgecoth, Melissa A.; Davis, Michael D; Halicks, David R.; Long, S. Scott; Deskins, Earl L; Gray, Deming
Subject: RE: KIF530 (Develop Fly Ash, Gypsum, and Bottom Ash Disposal Capacity): Request for PA
Attachments: KIF530 CPJSForm. 2004 05 19pdf.pdf

Myriam,

Please generate a PA for the attached PJ in suppport of our FPEP review of FY06 projects on 5/21/04.

Thanks.

Stan
751.3838

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: KIF

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	07/30/2003	
In-Srvc Date:	09/30/2008	
Outage Date:		

Problem Description

Analysis of recent dike failure in the existing dredge cells has raised uncertainties regarding the current long-term disposal plans for fly ash and bottom ash. An emergency cell was developed (O&M) which will provide a maximum of three years of fly ash and bottom ash capacity. In addition, planned scrubbers for Kingston will produce an additional high-volume by-product which may be co-disposed with fly ash and bottom ash beginning in FY 2009.

Project Scope

Expansion of dredge cell adjacent to existing dredge cell by construction of a new dike. Scope will also include development of a waste stack for flyash, bottom ash and gypsum within the existing perimeter dikes of the active ash disposal area.

Perform detailed analysis to determine the overall structural, environmental, and operational viability of continuing to raise and dredge to the existing dredge cells, considering the recent failure along Swan Pond road and the saturation of the lower dikes along the backwaters of the Emory river.

Perform engineering analysis and collect field data as required to develop a detailed design for maximizing the disposal capacity of fly ash, bottom ash and gypsum on the existing ash pond complex at the Kingston Fossil Plant while maintaining the required Free Water Volume. The detailed design should consider economic, structural, environmental and operational issues and impacts associated with long term ash disposal. The engineering suitability of ash currently produced at Kingston for storage in an engineered stack should be verified through testing (if this has not already been satisfactorily completed). A part II permit package is to be submitted to Environmental Affairs.

Scope will also include the design, materials procurement, and installation as necessary to support the engineering study findings.

Performance Measurement

Permitted disposal capacity for fly ash and bottom ash by FY 2007. Permitted disposal capacity for gypsum by FY 2009.

Other Options/Alternatives

Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Kingston's ash there.

Reason For Change

New project.

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

News Release

N/A

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$8,864.0
SUNK O&M PROJECTS:	$0	**PI:**	1.877
REMAINING COST:	$16,300	**IRR:**	53.0
TOTAL COST:	$16,300	**SIMPLE PAYBACK:**	6
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	200	0	0	0	0
2005	0	0	0	0	0
2006	100	0	0	0	0
2007	8,000	0	5,000	0	0
2008	8,000	0	5,000	0	0
2009	0	0	5,000	0	0
2010	0	0	5,000	0	0
2011	0	0	5,000	0	0
2012	0	0	5,000	0	0
2013	0	0	5,000	0	0
2014	0	0	5,000	0	0
2015	0	0	5,000	0	0
2016	0	0	5,000	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

	Cost Assumptions	Risks
1.	Engineering = $200k in FY 04; $100k in FY 06.	Based on similar projects.
2.	Implementation (Develop by-product handling system.)= $8,000k in FY 07; $8,000k in FY 08.	Conceptual estimate for turn-key system.
3.	No significant marketing or utilization of ash or gypsum will take place. Waste production (cubic yards per year): Fly Ash = 410,000 Bottom Ash = 90,000 Gypsum = 750,000	Based on historical data (ash) and similar projects (gypsum).
4.	The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.	Support of plant business plan.

	Benefit Assumptions	Risks
1.	Haul fly ash and bottom ash offsite to an existing permitted disposal site @ $10/ton for 500,000 tons per year = $5,000k per year for ten years.	Assumes a disposal site can be found within 30 miles of the plant which could handle 500,000 tons per year.

Haber, Stanley M

From: Davis, Michael D
Sent: Tuesday, May 18, 2004 11:03 AM
To: Haber, Stanley M.
Cc: Hedgecoth, Melissa A.
Subject: KIF ash project dates
Attachments: Project Keydate schedules FY 2004 r10.xls; FW: Ash Permitting Milestone Schedule

Here are the two files which show the dates we are shooting for.

Missy asked me to send this to you so you may see them as she talks with you.. She is at home with her child today.

Michael D. Davis
Manager Yard Operations - Projects & Engineering
Office (423) 751 - 7864
Mobile (423) 240 - 7909
FAX (423) 751 -6701

Haber, Stanley M

From: Baugh, James S.
Sent: Monday, May 17, 2004 3:49 PM
To: Hedgecoth, Melissa A.; Davis, Michael D
Subject: Project Keydate schedules FY 2004 r10.xls

Attachments: Project Keydate schedules FY 2004 r10.xls

Project Keydate schedules FY 2...

FY 2004 Potential Impacts from the "By-Products Blitz"

Plant		Work Item	Engr. Cost	HED Cost	Yard Cost	Total	Status	Comments	CPJ?	April	May	June	July	August	Sep
ALF	1	Repair main pond spillway	10			10		Plant has $50 to repair							
	2	Fabricate and install stoplogs	15		50	65									
	3	Engineering study for emergency and long term ash storage capacity	200			200		Worst case: Port Authority negotiations result in loss of ash pond footprint; 50 in FY 05	Yes						
GAF	1	Engineering study for short and long term ash storage capacity	130			130			Yes						
JOF	1	DuPont dredge cell repairs	30	500		530		300 in FY 05	Yes						
	5	Dike repair at active discharge structures	10	250		260	In Progress								
	7	Phragmites control		50		50									
	8	Additional Trans Ash			1,116	1,116									
KIF	1	Upgrade pump in perimiter ditch on Swan Pond Road	30	55		85									
	2	Cover ash in Swan Pond Road ditch and vegetate		25		25									
	3	Permit fly ash, gypsum, bottom ash capacity	200			200			Yes						
	4	Develop new interim dredge cell	10	620		630		Phase 1 & 2 Construction							
	5	Additional dipping and hauling during emergency dredge cell construction		640		640	Complete 3/19/2004								
	6	Improve reliability of dredge		100		100									
	7	General maintenance, cleanout of underdrains, washes				0		Cut $35							
	8	Clean ash off of berms and replace earth cover on berms and washes, seed, fertilize		65		65									
	10	Address fugitive dusting: build finger dikes for water cannon, spray soil cement			90	90	Contractor coming in on March 29 to spray	Reduced from $100							
PAF	1	Remediate coal fines/slag in Daniel Run Creek	100	75		175									
	4	Remediate Redwater 1 (slope stability)			100	100		In addition to 250 already budgeted for project							
	5	Clean out Redwater 2, 3, 4 (dredge 2, 3; unplug pipe in 4)	5	750		755									
	6	Cleanout Jacobs Creek channel/uncover pipes	5		40	45									
	9	Regain freeboard in fines pond		10		10									
	10	Evaluate vacuum truck dumping and develop procedure for managing waste	5			5									
	11	Modify Jacobs Creek discharge channel to allow calibration.	10		50	60									
SHF	3	Perform engineering study of longterm capacity/permitting for dry ash	150			150		150 in FY 05	Yes						
	4	Reline discharge structures for calibration	5		20	25		One-year fix plus evaluation							
WCF	1	Perform engineering study for water that drains into ash pond dike	5		10	15									
	4	Perform engineering study to determine adequacy of perimeter ditch around raised dikes	10			10									
	6	Additional work - building dredge cell on old scrubber pond		400		400			Yes						
	7	Dredge gypsum stilling pond		135		135									
	8	Perform engineering study to remediate gypsum stack and implement (including underdrains)	150	100		250		Bulk of remediation (~$500K additional) will be needed in FY 05 - $300 budgeted in FY 05	Yes						
	9	Modify ash pond discharge channel to allow calibration of outflow			50	50									
System	5	Perform engineering study: How to deal with phragmites				10		Reduced from $20							
	2	Develop policy for seep mitigation and develop scope for engineering study	25			25		Reduced from $50							
	3	Perform fugitive dusting Environmental Assessment	10			10		Reduced from $25							
BRF, COF, JSF, CUF			250	750		1,000									
Total Capital			**730**	**900**	**630**	**1,610**									
Total O&M			**520**	**3,060**	**870**	**5,816**									
								John Sevier Additional Ash	Yes						

Capital Dollars

ALF - Raise Ash and Stilling Pond Levels

		Item	Responsible	Complete	Status
1	ALF Raise Pond	Stoplogs fabricated and delivered to plant	Taylor	04-Mar-04	Complete 04-Mar-04
2	ALF Raise Pond	Engineering design, sketches, and material specifications			
	ALF Raise Pond	a. Modifications to internal divider dike	Albright	19-Mar-04	
	ALF Raise Pond	1. Talk to Reed about loading ash on HED trucks (not fine material)	Frank	26-Mar-04	
	ALF Raise Pond	2. Send longreach Track Hoe and tandem axle dump truck to ALF	Radford	29-Mar-04	
	ALF Raise Pond	3. Repair sloughs on internal dike	Pulley	02-Apr-04	
	ALF Raise Pond	b. Determine if bollards extruding from dike can be cut off	Albright	19-Mar-04	
	ALF Raise Pond	c. Determine preliminary cost and schedule for contracting repairs to horizontal run of McKeller Lake discharge piping	Albright	19-Mar-04	
	ALF Raise Pond	d. Establish contract for discharge piping repairs	Albright/Taylor	24-Mar-04	
	ALF Raise Pond	e. Call HED to request Nodwell to be sent to Allen	Pulley	17-Mar-04	
	ALF Raise Pond	f. Deliver Nodwell to Allen	HED	23-Mar-04	
	ALF Raise Pond	g. Follow up with TPS on information for lift plan (crane capacity & radius)	Pulley	23-Mar-04	
	ALF Raise Pond	h. Verify that dike is at least 21' wide at all points	Pulley	19-Mar-04	
3	ALF Raise Pond	Develop written sequence of events for raising pond elevations			
	ALF Raise Pond	a. Prepare first draft of sequence	Albright	12-Mar-04	Complete 12-Mar-04
	ALF Raise Pond	b. Agree on material staging and removal sequence	Team	19-Mar-04	
	ALF Raise Pond	c. Arrange for crane pads	Taylor	19-Mar-04	
	ALF Raise Pond	d. Check into LGP vehicle for moving stoplogs on dike	Radford	19-Mar-04	Complete 17-Mar-04
	ALF Raise Pond	e. Verify that a vehicle can make the turn onto the internal ash dike	Pulley	19-Mar-04	Complete 17-Mar-04
	ALF Raise Pond	f. Arrange for contract with divers (divers bring underwater camera)	Pulley	19-Mar-04	Divers scheduled for 23-Mar-04
	ALF Raise Pond	g. Initiate CEC based on internal dike modifications (if needed)	Albright/Wells	19-Mar-04	Fill out EMP
	ALF Raise Pond	h. Complete EMP for dike raising	Dominioni	26-Mar-04	
4	ALF Raise Pond	Make notifications to Corp of Engineers and City of Memphis on use of Horn Lake cutoff	Dominioni	19-Mar-04	
5	ALF Raise Pond	Notify state about raising dikes and routing discharge to Horn Lake Cutoff	Wells	19-Mar-04	
6	ALF Raise Pond	Inspect discharge to Horn Lake Cutoff (run discharge over pipe)	Dominioni, Pulley	19-Mar-04	Complete 17-Mar-04
7	ALF Raise Pond	Develop detailed work packages for project implementation	Taylor	26-Mar-04	
8	ALF Raise Pond	Review detailed work packages with plant	Taylor/Ash Team	29-Mar-04	
9	ALF Raise Pond	Complete NEPA review	Albright/Wells	01-Apr-04	See item 3h
10	ALF Raise Pond	Modify internal ash divider dike for setting stoplogs	Taylor	02-Apr-04	
11	ALF Raise Pond	Clean debris out of Horn Lake cutoff including Beaver Dam	Taylor	02-Apr-04	
12	ALF Raise Pond	Raise ash pond and route discharge to Horn Lake cutoff			
	ALF Raise Pond	a. Begin installation of stoplogs	Taylor	05-Apr-04	
	ALF Raise Pond	b. Begin pumping to Horn Lake cutoff	Taylor	05-Apr-04	
	ALF Raise Pond	c. Complete stoplog installation	Taylor	05-Apr-04	
	ALF Raise Pond	d. Complete pumping to Horn Lake cutoff	Taylor	07-Apr-04	
13	ALF Raise Pond	Raise stilling pond and re-route discharge to McKellar Lake	Taylor	07-May-04	

ALF - Repair Levee at Ash Pond Discharge

		Item	Responsible	Complete	Status
1	ALF Levee	Engineering design, drawings, and material specifications; AA DCN	Albright	19-Mar-04	
2	ALF Levee	Develop detailed work scope for project implementation	Radford	24-Mar-04	
3	ALF Levee	Determine how to pump pond to Horn Lake discharge	Dominioni/Pulley	19-Mar-04	Complete
4	ALF Levee	Prepare detailed work package for implementation	Taylor	29-Mar-04	
5	ALF Levee	Review detailed work packages with plant	Radford/Ash Team	31-Mar-04	
6	ALF Levee	Complete NEPA review, obtain any permits required to perform implementation	Albright/Wells	09-Apr-04	
	ALF Levee	a. Preparing notification package for Corps and State	Wells	23-Mar-04	
	ALF Levee	b. Sign and issue package	Lee/Dominioni	24-Mar-04	
7	ALF Levee	Request state concurrence with monitoring plan for Horn Lake cutoff (e-mail)	Wells	19-Mar-04	
8	ALF Levee	Develop sampling requirements if state does not concur with proposed plan	Wells/Dominioni	26-Mar-04	
9	ALF Levee	Begin implementation	Radford	12-Apr-04	
10	ALF Levee	Complete implementation	Radford	10-May-04	

Allen Fossil Plant

Project: Phase 1A Engineering studies for long term ash disposal; develop contingency plan for emergency ash disposal

		Item	Responsible	Complete	Status
1	ALF LT Disposal	Initial meeting with Memphis Port Authority to brainstorm utilization or disposal options	Baugh	11-Mar-04	
2	ALF LT Disposal	Perform high level comparison of options	Ash Team	09-Apr-04	
3	ALF LT Disposal	Phase 1A study of most viable options:			
	ALF LT Disposal	a. Meet with Port Authority to review most viable options	Baugh	16-Apr-04	
	ALF LT Disposal	b. Perform negotiations with Port Authority and select viable options	Team	15-May-04	
	ALF LT Disposal	c. Perform flyover and develop topographical maps	Huber	31-May-04	
	ALF LT Disposal	d. Develop conceptual plan for viable options & perform initial screening	Petty	31-Jul-04	
	ALF LT Disposal	e. Obtain permissions for off site data collection - viable options	Petty/Realty Services	15-Aug-04	
	ALF LT Disposal	f. Complete off site data collection	Petty/Smith	15-Sep-04	
	ALF LT Disposal	g. Initiate NEPA for study	Petty/Bowers	31-May-04	
	ALF LT Disposal	h. Analyze off site data	Petty/Smith/Bowers	15-Nov-04	
	ALF LT Disposal	i. Develop cost estimates for alternatives (30% accuracy)	Petty	15-Sep-04	
	ALF LT Disposal	j. Perform economic and fatal flaw analysis of alternatives	Ash Team	30-Sep-04	
	ALF LT Disposal	k. Initiate appropriate level of NEPA review for preferred alternative	Petty/Bowers	05-Oct-04	
	ALF LT Disposal	l. Complete Phase 1A	Petty	01-Dec-04	
3	ALF LT Disposal	Contingency plan for emergency ash disposal			
	ALF LT Disposal	a. Determine available storage volume in inactive ash pond	Huber	30-May-04	
	ALF LT Disposal	b. Prepare detailed plans, including equipment and manpower needs, and cost for removing ash from the active ash pond and placement in the inactive ash pond at a rate that exceeds plant ash production	Radford	31-Aug-04	
	ALF LT Disposal	c. Complete CEC for emergency ash diposal in the inactive pond	Petty/Bowers	31-Aug-04	

Gallatin Fossil Plant

Project: Phase 1 Engineering studies for long term ash disposal

		Item	Responsible	Complete	Status
1	GAF LT Disposal	PDE kick-off meeting	Petty	30-Apr-04	
2	GAF LT Disposal	Prepare package for Phase 1 approval	Ash Team	21-May-04	
3	GAF LT Disposal	Obtain Phase 1 approval	Ash Team/Davis	28-May-04	
4	GAF LT Disposal	Begin Phase 1 study	Petty/FE	01-Jun-04	
5	GAF LT Disposal	Determine how to collect survey data for Pond E	Ash Team	15-Apr-04	
6	GAF LT Disposal	Perform site work required to support survey	Radford	15-May-04	
7	GAF LT Disposal	Develop topographical maps	Huber	01-Jun-04	
8	GAF LT Disposal	Collect ash samples and perform analysis	Petty	16-Jul-04	
9	GAF LT Disposal	Develop conceptual layout of raised pond E (with associated storage volumes)	Petty	30-Jun-04	
10	GAF LT Disposal	Perform dike stability analysis	Petty	13-Aug-04	
11	GAF LT Disposal	Perform runoff and pumping studies	Petty/FE	30-Jul-04	
12	GAF LT Disposal	Perform power supply study	FE	01-Sep-04	
13	GAF LT Disposal	Develop conceptual cost estimates	FE	17-Sep-04	
14	GAF LT Disposal	Determine if Pond E remains the most viable option for LT ash disposal	Petty/Ash Team	17-Sep-04	
15	GAF LT Disposal	Rescope and reschedule project if Pond E is not viable	Petty/Ash Team	30-Sep-04	
16	GAF LT Disposal	Initiate NEPA studies (focusing on Pond E)	Petty/Ash Team	16-Jul-04	
17	GAF LT Disposal	Finalize FY 05 scope and schedule	Petty/Ash Team	30-Sep-04	

Gallatin Fossil Plant

Project: Short Term Ash Disposal

1	GAF ST Disposal	Prepare scope and schedule for data collection to support NEPA review for Pond A dike raising	Ash Team	16-Apr-04
2	GAF ST Disposal	Develop topographical maps	Huber	01-Jun-04
3	GAF ST Disposal	Initiate NEPA review for final Pond A dike raising	Ash Team	30-Sep-04
4	GAF ST Disposal	Confirm that Pond A dikes are structurally adequate (including reactivation of railroad)	Petty	30-Aug-04
5	GAF ST Disposal	Confirm remaining life of Pond A	Ash Team	30-Aug-04
6	GAF ST Disposal	Determine scope, material quantities and specs for raising Pond A spillway	Petty	30-Sep-04
7	GAF ST Disposal	Provide sketches for dike modifications to support raising Pond A spillway	Petty	30-Sep-04

Kingston Fossil Plant

Project: Phase 2 Engineering design for long term ash disposal

		Item	Responsible	Complete	Status
1	KIF LT Disposal	Perform site investigation	MacTec	26-Mar-04	
2	KIF LT Disposal	Develop detailed project schedule	Petty	16-Apr-04	
3	KIF LT Disposal	10% design review meeting and coordination with plant	Petty	12-Mar-04	
4	KIF LT Disposal	50% design review meeting and coordination with plant (including repairs to elevated dredge cell)	Petty	21-May-04	
5	KIF LT Disposal	Prepare Part 2 Permit Application	Petty	01-Jun-04	
6	KIF LT Disposal	Develop cost estimates and detailed schedules for implementation (including NEPA)	Ash Team	31-Jul-04	
7	KIF LT Disposal	Respond to TDEC Notice of Deficiencies	Petty/Bowers	As needed	

Kingston Fossil Plant

Project: Develop Interim Dredge Cell

1	KIF Interim Cell	Complete construction of emergency dredge cell, Lift A	Radford	16-Apr-04
2	KIF Interim Cell	Complete DCN AA (R1) for Lift A	Petty	16-Mar-04
3	KIF Interim Cell	Survey new dredge cell	Huber	19-Mar-04
4	KIF Interim Cell	Begin dredging	Radford	22-Mar-04
5	KIF Interim Cell	Determine reason for error in dike fill quantities and actions to prevent recurrence	Ash Team	30-Apr-04
6	KIF Interim Cell	Complete DCN for Lifts B and C	Petty	30-Jun-04
7	KIF Interim Cell	Prepare detailed schedule for dredging and lifts	Ash Team	30-May-04
8	KIF Interim Cell	Determine if bottom ash dredge cell dikes need to be covered with earth or soil cement	Ash Team	30-May-04
9	KIF Interim Cell	Modify CEC (if needed)	Petty	30-Jun-04
10	KIF Interim Cell	Complete construction of Lift B	Radford	01-Sep-04

Kingston Fossil Plant

Project: Cover ash in Swan Pond road perimeter ditch/vegetate; perform maint - exterior of dredge cells

		Item	Responsible	Complete	Status
1	KIF ditches	Meet with plant & HED to clarify work scopes; Identify washes on exterior side slopes to be repaired	Ash Team	15-Apr-04	
2	KIF ditches	Repair washes and vegetate	Radford	15-May-04	
3	KIF ditches	Remove ash from top of berms and place on top of cells	Radford	15-May-04	
4	KIF ditches	Cover ash on exterior slopes, seed, and fertilize	Radford	15-May-04	
5	KIF ditches	Clean out existing underdrains	Radford	30-Jun-04	
6	KIF ditches	Remove or cover ash in perimeter ditch along Swan Pond road; seed & vegitate (or cover with rock)	Radford	15-Jul-04	
7	KIF ditches	Regrade perimeter roads around ash pond to allow proper drainage and place crushed stone as needed	Radford	30-Jun-04	
8	KIF ditches	Cleanout drainage pipes that drain the perimeter ditch	Radford	15-Aug-04	

Kingston Fossil Plant
Project: Improve Reliability of Dredge

		Item	Responsible	Complete	Status
1	KIF Dredge	Identify short lead time parts needed for improving dredge reliability	Radford	29-Feb-04	Complete
2	KIF Dredge	Procure and install short lead time parts	Radford	30-Mar-04	Complete
3	KIF Dredge	Identify long lead time parts needed for improving dredge reliability	Radford	18-Mar-04	Complete
4	KIF Dredge	Procure long lead time parts and set up in stock	Radford	14-May-04	

Kingston Fossil Plant

Project: Upgrade pump in Swan Pond Road

		Item	Responsible	Complete	Status
1	KIF Pump	Calculate storm water run off (10 year, 24 hour event); select impeller materials (for pumping red water)	Petty	30-Apr-04	
2	KIF Pump	Compare economics of electric and diesel pumps (including power supply)	Catlett/Ash Team	07-May-04	
3	KIF Pump	Develop sketches for installation and material specifications	Petty	21-May-04	
4	KIF Pump	Complete NEPA review (if required)	Petty/EA	15-Jun-04	
5	KIF Pump	Procure materials	Catlett	18-Jun-04	Including power (if required)
6	KIF Pump	Develop work package for project	Catlett/Ash Team	28-May-04	
7	KIF Pump	Perform installation	Catlett	02-Jul-2004	

Johnsonville Fossil Plant
Project: Remove Phragmites

		Item	Responsible	Complete	Status
1	JOF Phragmites	Determine cost/capacity of Phragmite removal with amphibious trackhoe	Radford	19-Mar-04	
2	JOF Phragmites	Determine volume of Phragmites to be removed	Huber	31-Mar-04	
3	JOF Phragmites	Make contractual arrangements	Radford	15-Apr-04	
4	JOF Phragmites	Complete NEPA review	Ash Recovery Team	15-Apr-04	
5	JOF Phragmites	Begin work	Radford	19-Apr-04	
6	JOF Phragmites	Complete work	Radford	31-May-04	

Johnsonville Creek Fossil Plant
Project: Du Pont Dredge Cell repairs

		Item	Responsible	Complete	Status
1	JOF Du Pont	Determine scope of Outfall 009 pond clean out	Lynn/Harned	26-Mar-04	
2	JOF Du Pont	Determine volume of material to be removed from Outfall 009 and where material is to be placed	Lynn/Harned/Petty/ Bowers	26-Mar-04	
3	JOF Du Pont	Determine required volume for Outfall 009 pond	Petty/Steifel	16-Apr-04	
4	JOF Du Pont	Determine how to lower water level in Outfall 009	Lynn/Harned/Stiefel	26-Mar-04	
5	JOF Du Pont	Obtain NPDES permit for Outfall 011 (formerly 009)	Stiefel	01-Jul-04	Dependent on TDEC
6	JOF Du Pont	Contracter to remove cenospheres from outfall	Miller	01-Jul-04	
7	JOF Du Pont	Clean out Outfall 009 pond (including cenospheres) and repair outfalls	Radford	31-Jul-04	
8	JOF Du Pont	Perform retention time study for pond	Quinn/Petty	15-Aug-04	
9	JOF Du Pont	Complete NEPA for cleaning out Outfall 009 pond	Petty/Stiefel/Harned	15-Jun-05	
10	JOF Du Pont	Finalize design for Du Pont Dredge Cell repairs	Petty	16-Apr-04	
11	JOF Du Pont	Complete NEPA for Du Pont Dredge Cell repairs			
	JOF Du Pont	a. CEC	Petty/Bowers	30-Apr-04	
	JOF Du Pont	b. SWPPP	Petty/Stiefel	23-Apr-04	
12	JOF Du Pont	Obtain permits for Du Pont Dredge Cell repairs			
	JOF Du Pont	a. Review overall plan with TDEC	Bowers/Petty/Stiefel	30-Apr-04	
	JOF Du Pont	b. Prepare permit modification			
	JOF Du Pont	1. Solid waste	Petty/Bowers	15-May-04	
	JOF Du Pont	2. NPDES	Petty/Stiefel	15-May-04	
	JOF Du Pont	c. Prepare and submit construction SW NOI	Stiefel/Petty	07-May-04	
	JOF Du Pont	d. Receive solid waste and NPDES permit modification (assume minor modification)	Bowers/Stiefel	01-Jul-04	Dependent on TDEC
	JOF Du Pont	e. Receive NOC	Stiefel	01-Jul-04	Dependent on TDEC
13	JOF Du Pont	Procure materials for construction	Radford	15-Jul-04	
14	JOF Du Pont	Borrow Area			
	JOF Du Pont	a. Locate borrow sites	Petty/Radford	15-May-04	
	JOF Du Pont	b. Check borrow sites for suitability	Petty	01-Jun-04	
	JOF Du Pont	c. Perform NEPA review for borrow site and permit (if required)	Petty/Stiefel	01-Jul-04	
	JOF Du Pont	d. Investigate feasibility of a Trans Ash backhaul from borrow site	Sutton	15-Jun-04	
	JOF Du Pont	e. Finalize contract for borrow site	Radford	15-Jul-04	
15	JOF Du Pont	Prepare work package(s) including detailed schedule and cost	Radford	15-Jul-04	
16	JOF Du Pont	Begin construction	Radford	15-Jul-04	
17	JOF Du Pont	Complete FY 04 portion of work scope	Radford	30-Sep-04	
18	JOF Du Pont	Complete FY 05 portion of work scope	Radford	15-Dec-04	
19	JOF Du Pont	Reseed in the spring	Radford	15-Apr-05	

Johnsonville Fossil Plant

Project: Trans Ash - Clean out active ash pond

		Item	Responsible	Complete	Status
1	JOF Trans Ash	Clean out Cell 2	Trans Ash	19-Mar-04	
2	JOF Trans Ash	Complete dikes - Supercell 1 & 2	Trans Ash	19-Mar-04	
3	JOF Trans Ash	Begin dredging into Supercell 1 & 2 (200,000 cubic yards)	Radford	22-Mar-04	
4	JOF Trans Ash	Complete dredging into Supercell 1 & 2	Radford	31-May-04	
5	JOF Trans Ash	Reroute sluice water into perimeter ditch	Trans Ash	19-Mar-04	
6	JOF Trans Ash	Begin clean out of Supercell 3A & 3B	Trans Ash	01-Apr-04	
7	JOF Trans Ash	Complete clean out of Supercell 3A & 3B	Trans Ash	31-Jul-04	
8	JOF Trans Ash	Begin dredging into Supercell 3A & 3B (132,000 cubic yards)	Radford	01-Aug-04	
9	JOF Trans Ash	Complete dredging into Supercell 3A & 3B	Radford	31-Oct-04	
10	JOF Trans Ash	Begin Prep of Supercell 1 & 2	Trans Ash	01-Jul-04	
11	JOF Trans Ash	Complete Prep of Supercell 1 & 2	Trans Ash	31-Jul-04	
12	JOF Trans Ash	Begin clean out of Supercell 1 & 2	Trans Ash	01-Aug-04	
13	JOF Trans Ash	Complete clean out of Supercell 1 & 2	Trans Ash	30-Nov-04	
14	JOF Trans Ash	Begin dredging into Supercell 1 & 2 (150,000 cubic yards)	Radford	01-Dec-04	
15	JOF Trans Ash	Complete dredging into Supercell 1 & 2	Radford	28-Feb-05	
16	JOF Trans Ash	Begin Prep of Supercell 3A & 3B	Trans Ash	01-Mar-05	
17	JOF Trans Ash	Complete Prep of Supercell 3A & 3B	Trans Ash	31-Mar-05	
18	JOF Trans Ash	Begin clean out of Supercell 3A & 3B	Trans Ash	01-Apr-05	
19	JOF Trans Ash	Complete clean out of Supercell 3A & 3B	Trans Ash	31-Jul-05	
20	JOF Trans Ash	Begin dredging into Supercell 3A & 3B (132,000 cubic yards)	Radford	01-Aug-05	
21	JOF Trans Ash	Complete dredging into Supercell 3A & 3B	Radford	31-Oct-05	
22	JOF Trans Ash	Begin Prep of Supercell 1 & 2	Trans Ash	01-Jun-05	
23	JOF Trans Ash	Complete Prep of Supercell 1 & 2	Trans Ash	30-Jun-05	
24	JOF Trans Ash	Begin clean out of Supercell 1 & 2	Trans Ash	01-Jul-05	
25	JOF Trans Ash	Complete clean out of Supercell 1 & 2	Trans Ash	30-Nov-05	

Paradise Fossil Plant

Project: Remediate Red Water #1 and Dredge

		Item	Responsible	Complete	Status
1	PAF RW One	Review and comment on PAF administrative controls for prevention of Red Water Pond #1 overflow to river	Purkey	16-Mar-04	
2	PAF RW One	Modify administrative controls per comments received in item 1 (following reaching consensus with Yard Ops and plant)	Raley/Dukes	26-Mar-04	
3	PAF RW One	Estimate project cost following completion of engineering	Radford	08-Jun-04	
4	PAF RW One	Complete CEC for project	Albright	Complete	
5	PAF RW One	Clean out RW #1 Main Supply piping			
	PAF RW One	a. Arrange for inspections via camera	Albright	01-Jun-04	
	PAF RW One	b. Second inspection with camera	Radford/Raley	26-Jul-04	
	PAF RW One	c. Clean out pipe as indicated by inspections	Radford	06-Aug-04	
5	PAF RW One	Pump down level in RW #1			
	PAF RW One	a. Size temporary pumps	Albright	12-Mar-04	
	PAF RW One	b. Develop a design for pond access for setting pumps (and future clean out)	Albright	01-Jun-04	
	PAF RW One	c. Construct access for setting pumps and pond access			
	PAF RW One	1. Begin work	Radford	25-Jun-04	
	PAF RW One	2. Complete work	Radford	09-Jul-04	
	PAF RW One	d. Eliminate excess discharges into RW #1			
	PAF RW One	1. Repair leakage - Bottom Ash sluice lines	Raley	31-Mar-04	
	PAF RW One	2. Reroute RO reject line	Raley	30-Apr-04	
	PAF RW One	3. Reroute new line	Nuyt	30-Apr-04	
	PAF RW One	e. Set temporary pumps			
	PAF RW One	1. Begin work	Radford	12-Jul-04	
	PAF RW One	2. Complete work	Radford	16-Jul-04	
	PAF RW One	f. Begin pumping down pond	Radford	19-Jul-04	
	PAF RW One	g. Pump down pond sufficiently to begin clean out	Radford	25-Jul-04	
	PAF RW One	h. Run temporary pumps continually	Radford	Duration of job	
	PAF RW One	i. Remove temporary pumps	Radford	30-Sep-04	
6	PAF RW One	Extend 84" storm drain into Red Water Pond 1			
	PAF RW One	a. Complete design drawings	Albright	01-Jun-04	
	PAF RW One	b. Purchase pipe	Radford	12-Jul-04	
	PAF RW One	c. Begin installation of pipe	Radford	26-Jul-04	
	PAF RW One	d. Complete installation of pipe	Radford	31-Jul-04	
7	PAF RW One	Repair slopes			
	PAF RW One	a. Complete design, material specifications, and quantities	Albright	01-Jun-04	
	PAF RW One	b. Purchase materials	Radford	23-Jul-04	
	PAF RW One	c. Begin repair of slopes	Radford	26-Jul-04	
	PAF RW One	d. Complete repair of slopes	Radford	30-Sep-04	
8	PAF RW One	Clean out bottom of pond			
	PAF RW One	a. Determine quantity of material to be removed	Huber	01-Jun-04	
	PAF RW One	b. Determine where material cleaned out is to be placed	Bowers	Complete	
	PAF RW One	c. Begin clean out of pond	Radford	26-Jul-04	
	PAF RW One	d. Complete clean out of pond	Radford	30-Sep-04	

Paradise Fossil Plant

Project: Clean out Red Water Ponds 2, 3, and 4; restore design conditions for pond to pond flow

		Item	Responsible	Complete	Status
1	PAF RW Ponds	Determine volume of material to be removed from each pond	Huber	15-Apr-04	
2	PAF RW Ponds	Determine where material removed from ponds can be disposed of	Wells	19-Mar-04	
3	PAF RW Ponds	Develop methodology for dewatering ponds (Ponds 3 and 4)			
	PAF RW Ponds	a. Provide Radford with drawings showing location of pond drain piping	Petty	19-Mar-04	
	PAF RW Ponds	b. Locate area of pipe pluggage	Radford	02-Apr-04	
	PAF RW Ponds	c. Size pumps (if needed) for dewatering	Petty	16-Apr-04	
	PAF RW Ponds	d. Procure pumps	Radford	29-Apr-04	
	PAF RW Ponds	e. Develop methodology for bypassing ponds during dewatering/cleanout	Petty	26-Apr-04	
4	PAF RW Ponds	Complete NEPA review	Petty/Bowers	02-May-04	
5	PAF RW Ponds	Pond 4			
	PAF RW Ponds	a. Reroute inflow and begin dewatering	Radford	03-May-04	
	PAF RW Ponds	b. Complete dewatering	Radford	17-May-04	
	PAF RW Ponds	c. Begin material removal	Radford	17-May-04	
	PAF RW Ponds	d. Complete material removal	Radford	14-Jun-04	Based on assumed quantity of 50,000 cubic yards maximum
	PAF RW Ponds	e. Determine repairs needed for valves and piping	Radford/Petty	21-Jun-04	
	PAF RW Ponds	f. Procure materials for valves and piping repairs	Radford	05-Jul-04	
	PAF RW Ponds	g. Make repairs to valves and piping	Radford	26-Jul-04	
6	PAF RW Ponds	Pond 3			
	PAF RW Ponds	a. Manage inflow and begin dewatering	Radford	14-Jun-04	
	PAF RW Ponds	b. Complete dewatering	Radford	28-Jun-04	
	PAF RW Ponds	c. Begin material removal	Radford	28-Jun-04	
	PAF RW Ponds	d. Complete material removal	Radford	06-Sep-04	Based on assumed quantity of 175,000 cubic yards maximum
	PAF RW Ponds	e. Determine repairs needed for valves and piping	Radford/Petty	13-Sep-04	
	PAF RW Ponds	f. Procure materials for valves and piping repairs	Radford	20-Sep-04	
	PAF RW Ponds	g. Make repairs to valves and piping	Radford	30-Sep-04	
7	PAF RW Ponds	Pond 2			
	PAF RW Ponds	a. Begin dewatering (using existing pumps)	Radford	03-May-04	
	PAF RW Ponds	b. Complete dewatering	Radford	17-May-04	
	PAF RW Ponds	c. Begin material removal	Radford	17-May-04	
	PAF RW Ponds	d. Complete material removal	Radford	14-Jun-04	Based on assumed quantity of 50,000 cubic yards maximum
	PAF RW Ponds	e. Determine repairs needed for valves and piping (if needed)	Radford/Petty	21-Jun-04	
	PAF RW Ponds	f. Procure materials for valves and piping repairs (if needed)	Radford	05-Jul-04	
	PAF RW Ponds	g. Make repairs to valves and piping (if needed)	Radford	26-Jul-04	

Paradise Fossil Plant

Project: Clean out supply channel for Jacobs Creek Ash Pond

		Item	Responsible	Complete	Status
1	PAF Ash Channel	Evaluate channel elevations to determine if water level can be dropped	Huber	15-Apr-04	
2	PAF Ash Channel	Determine where material removed from ponds can be disposed of	Wells	19-Mar-04	
3	PAF Ash Channel	Determine volume to be removed	Huber	15-Apr-04	
4	PAF Ash Channel	Develop work package for project	Yard Operations	23-Apr-04	
5	PAF Ash Channel	Clean out channel	Yard Operations	30-Apr-04	

Paradise Fossil Plant

Project: Procedure for disposal of waste from vacuum truck

		Item	Responsible	Complete	Status
1	PAF Vacuum Truck	Determine volume of vacuum truck waste to be disposed of annually	Bowers/PAF PAEs	15-Jul-04	
2	PAF Vacuum Truck	Determine where waste is to be placed	Bowers/PAF PAEs	15-Jul-04	
3	PAF Vacuum Truck	Issue instructions on how to deal with existing vacuum truck dumping piles	Bowers/PAF PAEs	31-Aug-04	
4	PAF Vacuum Truck	Complete NEPA review for placement of waste (if required)	Bowers/PAF PAEs	31-Aug-04	
5	PAF Vacuum Truck	Prepare sketch showing location for vacuum truck dumping	Petty	15-Aug-04	
6	PAF Vacuum Truck	Develop procedure for vacuum truck dumping	Bowers/PAF PAEs	31-Aug-04	
7	PAF Vacuum Truck	Conduct training at PAF on new procedure	Bowers/PAF PAEs	30-Sep-04	

Paradise Fossil Plant

Project: Modify ash pond discharge to allow calibration

		Item	Responsible	Complete	Status
1	PAF Calibration	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
2	PAF Calibration	Engineering design, sketches, and material specifications for modifications	Petty/Ash Team	30-Jun-04	
3	PAF Calibration	Procure materials for implementation	Radford/Ash Team	15-Aug-04	
4	PAF Calibration	Prepare detailed work package for implementation	Radford/Ash Team	15-Aug-04	
5	PAF Calibration	Complete NEPA review, obtain any permits required to perform implementation	Petty/Wells	31-Jul-04	
6	PAF Calibration	Begin implementation	Radford	15-Aug-04	
7	PAF Calibration	Complete implementation	Radford	31-Aug-04	

Paradise Creek Fossil Plant

Project: Remediate coal fines/slag in Daniel Run Creek

		Item	Responsible	Complete	Status
1	PAF Fines in Creek	Prepare sketch of road regrading (x-section with silt fence(s) EMP per Kidd memo dated 2/19/04)	Knox/Petty	24-Mar-04	
2	PAF Fines in Creek	Measure area to cover and establish vegetation	Knox	24-Mar-04	
3	PAF Fines in Creek	Begin Work on BMPs (road grading, silt fence)	Radford	19-Apr-04	
4	PAF Fines in Creek	Complete work	Radford	1-May-04	
5	PAF Fines in Creek	Begin Work on (floodplain reclaim grassing)	Radford	02-May-04	
6	PAF Fines in Creek	Complete work	Radford	15-May-04	
7	PAF Fines in Creek	Document work with photos	Dukes	18-May-04	
8	PAF Fines in Creek	Prepare letter to Kidd (draft)	Wells	24-May-04	
9	PAF Fines in Creek	Filnallize and submit letter to Kidd	Dukes	7-Jun-04	

Shawnee Fossil Plant

Project: Phase 1A Engineering studies for long term ash disposal

		Item	Responsible	Complete	Status
1	SHF LT Disposal	PDE kick-off meeting	Petty	5-Apr-04	
2	SHF LT Disposal	Prepare package for Phase 1 approval	Ash Team	30-Apr-04	
3	SHF LT Disposal	Obtain Phase 1 approval	Ash Team/Davis	07-May-04	
4	SHF LT Disposal	Begin Phase 1 study	Petty/FE	14-May-04	
7	SHF LT Disposal	Develop topographical maps	Huber	14-May-04	
8	SHF LT Disposal	Meet with state to discuss project requirements	Petty/Bowers	04-Jun-04	
8	SHF LT Disposal	Collect ash samples and perform analysis	Petty	16-Jul-04	
9	SHF LT Disposal	Develop conceptual layout (with associated storage volumes)	Petty	30-Jun-04	
10	SHF LT Disposal	Perform stability analysis	Petty	30-Aug-04	
11	SHF LT Disposal	Perform runoff and pumping studies	Petty/FE	30-Jul-04	
12	SHF LT Disposal	Perform power supply study	FE	01-Sep-04	
13	SHF LT Disposal	Develop conceptual cost estimates	FE	17-Sep-04	
16	SHF LT Disposal	Initiate NEPA studies	Petty/Ash Team	16-Jul-04	
17	SHF LT Disposal	Finalize FY 05 scope and schedule	Petty/Ash Team	30-Sep-04	

Shawnee Fossil Plant

Project: Modify ash pond discharge to allow calibration

		Item	Responsible	Complete	Status
1	SHF Calibration	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
2	SHF Calibration	Investigate the use of an improved material for packing joints on discharge weir	Petty/Ash Team	30-Jun-04	
3	SHF Calibration	Develop methodology for lowering stilling pond water level for repairs	Ash Team	30-Jun-04	
4	SHF Calibration	Procure materials for implementation	Radford/Ash Team	15-Aug-04	
5	SHF Calibration	Prepare detailed work scope for implementation	Radford/Ash Team	15-Aug-04	
6	SHF Calibration	Complete NEPA review, obtain any permits required to perform implementation	Petty/Barnes	31-Jul-04	
7	SHF Calibration	Begin implementation	Radford	15-Aug-04	
8	SHF Calibration	Complete implementation	Radford	31-Aug-04	

Widows Creek Fossil Plant

Project: Remediate Gypsum Stack; dredge gypsum stilling pond

		Item	Responsible	Complete	Status
1	WCF FGD Stack	Project scoping meeting with Ardeman & Associates	Petty	23-Mar-04	
2	WCF FGD Stack	Obtain preliminary instructions from Ardeman for near term operational changes in preparation of stack remediation and stilling pond clean out	Team	23-Mar-04	
3	WCF FGD Stack	Work with HED on implementation of operational changes recommended by Ardeman	Hedgecoth	02-Apr-04	
3	WCF FGD Stack	Determine quantity of material to be removed from stilling pond	Huber	30-Mar-04	
4	WCF FGD Stack	Determine where material removed from stilling pond is to be placed	Bowers	19-Mar-04	
5	WCF FGD Stack	Obtain NEPA clearance & permits for dredging/cleaning out stilling pond	Petty/Bowers	11-Apr-04	
6	WCF FGD Stack	Clean out stilling pond			
	WCF FGD Stack	a. Develop methodology for isolating fuel oil in stack, pond, and from underdrains	Hedgecoth	31-Mar-04	
	WCF FGD Stack	b. Implement methodology for isolating fuel oil in stack, pond and from underdrains	Radford	11-Apr-04	
	WCF FGD Stack	c. Establish contract for removal and disposal of fuel oil & cenospheres on stilling pond	Radford	11-Apr-04	
	WCF FGD Stack	d. Initial removal of fuel oil & cenospheres from stilling pond	Radford	23-Apr-04	
	WCF FGD Stack	e. Begin dredging stilling pond	Radford	28-May-04	
	WCF FGD Stack	f. Complete dredging of stilling pond	Radford	16-Jul-04	Assuming 140,000 cubic yards of material
	WCF FGD Stack	g. Final removal of fuel oil & cenospheres from stilling pond	Radford	15-Sep-04	
8	WCF FGD Stack	Receive and evaluate Ardeman proposal based on March 23 meeting	Petty	06-Apr-04	
9	WCF FGD Stack	Finalize Ardeman scope and award contract	Petty	16-Apr-04	
10	WCF FGD Stack	10% Kick Off meeting with Ardeman	Petty	23-Apr-04	
11	WCF FGD Stack	Tentative Ardeman Milestone schedule			
	WCF FGD Stack	a. Determine if field testing is required (during scoping effort)	Ardeman	06-Apr-04	
	WCF FGD Stack	b. Begin collection of field data	Ardeman/MacTec	03-May-04	
	WCF FGD Stack	c. Complete field data collection	Ardeman/MacTec	10-May-04	
	WCF FGD Stack	d. Complete analysis of field data	Ardeman	21-Jun-04	7-10 days for Proctors, 6 weeks for Tri-Axial test
	WCF FGD Stack	e. Issue initial instructions for cutting back slopes, installing underdrains, and interim operations	Ardeman	30-Jun-04	
	WCF FGD Stack	f. Establish overall configuration (slopes, drainage, etc) considering original design and current configuration; provide a draft CBMPP. THIS IS THE 50% DESIGN REVIEW	Ardeman	31-Jul-04	
	WCF FGD Stack	g. Begin implementation of initial Ardeman instructions	Radford	01-Jul-04	
	WCF FGD Stack	h. Complete design and drawings THIS IS THE 100% DESIGN REVIEW	Ardeman	31-Aug-04	
12	WCF FGD Stack	Initial NEPA review based on known scope	Petty/Bowers	30-Apr-04	Investigate need/existing NEPA
13	WCF FGD Stack	Perform additional NEPA review if needed per Ardeman initial instructions	Petty/Bowers	15-Jul-04	
14	WCF FGD Stack	Complete additional NEPA review if needed based on 50% design review	Petty/Bowers	15-Aug-04	
16	WCF FGD Stack	Prepare initial CBMPP			
	WCF FGD Stack	a. Begin work	Petty	14-Apr-04	
	WCF FGD Stack	b. Complete work	Petty	14-May-04	
17	WCF FGD Stack	Obtain approval of initial CBMPP			
	WCF FGD Stack	a. Submit to state	Stiefel	15-May-04	
	WCF FGD Stack	b. Approval by state	Stiefel	01-Jun-04	
18	WCF FGD Stack	Stack Cover Material			
	WCF FGD Stack	a. Determine engineering requirements for cover material (volume/quality)	Ardeman	31-Jul-04	
	WCF FGD Stack	b. Locate a borrow site that meets engineering requirements	Petty/Realty Services	31-Aug-04	
	WCF FGD Stack	c. Establish a contract for borrow material or purchasing site	Petty/Radford	30-Sep-04	
19	WCF FGD Stack	Fuel Oil Management (Preliminary Engineering Study)			
	WCF FGD Stack	a. Option 1: Fuel oil collection facility	Petty/FES	31-Aug-04	
	WCF FGD Stack	b. Option 2: Correction of unit burner ignition system problems	FES	31-Aug-04	
	WCF FGD Stack	c. Perform an economic analysis of options 1 and 2	FES	30-Sep-04	
	WCF FGD Stack	d. Pursue most economical/environmentally sound option	FES	FY 2005	
	WCF FGD Stack	e. Develop an interim plan for fuel oil management at the FGD stack pending implementation of final solution	Ash Recovery Team	31-Aug-04	
	WCF FGD Stack	f. Implement interim fuel oil management plan for FGD stack	Radford	30-Sep-04	

Widows Creek Fossil Plant

Project: Engineering studies to evaluate impacts to dike stability from perimeter ditch flow into toe of dike

		Item	Responsible	Complete	Status
1	WCF hole in dike	Perform drawing search for concrete drop box	Petty	31-Jul-04	
2	WCF hole in dike	Develop sketches for ditch bypass during exploration; prepare EMP	Petty	14-Aug-04	
3	WCF hole in dike	Perform exploratory excavation of dike at influent of water from ditch with Engineering observation.	Petty/Radford	16-Aug-04	
4	WCF hole in dike	Fill hole with DGA or flowable fill (depending on size)	Radford	18-Aug-04	
5	WCF hole in dike	Clean out ditch to restore proper flow	Radford	30-Sep-04	

Widows Creek Fossil Plant

Project: Perform engineering studies to verify the adequacy of the perimeter ditch at the base of the old scrubber pond dredge cell dikes

		Item	Responsible	Complete	Status
1	WCF Per ditch	Determine if the perimeter ditch is designed for a 10 year, 24 hour rainfall event	Petty	30-Mar-04	
2	WCF Per ditch	Determine if the perimeter ditch can contain a 12 hour gypsum pipe leakage situation	Petty	14-Apr-04	
3	WCF Per ditch	Develop a plan to insure that ditches are cleaned on a routine basis, and for additional monitoring prior to and during precipitation events	Ward	30-Mar-04	
4	WCF Per ditch	Determine cost of applying earth or other permanent cover to dredge cell	Petty	15-Apr-04	
6	WCF Per ditch	Investigate use of "Soil-Sement" binder on exterior slope of dredge cell	Davis	30-Mar-04	
7	WCF Per ditch	Perform economic analysis of options	Davis	14-Apr-04	
8	WCF Per ditch	Complete CEC for Use of "Soil-Sement" (System wide use)	Davis/Bowers	15-Apr-04	
9	WCF Per ditch	Apply "Soil-Sement" if Investigation and economics are Positive	Ward	30-Apr-04	
10	WCF Per ditch	If earth cover is the preferred option:			
	WCF Per ditch	a. Locate and determine price of cover material	Petty/Realty Services	31-Aug-04	
	WCF Per ditch	b. Acquire additional project funding	Baugh	03-Sep-04	
	WCF Per ditch	c. Procure and place earth cover.	Radford	30-Sep-04	
	WCF Per ditch	d. Complete CEC for borrow area and placement	Petty/Bowers	03-Sep-04	

Widows Creek Fossil Plant

Project: Additional Work - Build dredge cell on old scrubber pond

		Item	Responsible	Complete	Status
1	WCF Dredge Cell	Resolve issues associated with closing breeches			
	WCF Dredge Cell	a. Re-install breech in Pond 1 & Pond 2 divider dike (drop Pond 1 water level)	Radford	18-Mar-04	Complete
	WCF Dredge Cell	b. Monitor water level in Pond 1 to insure level drops and maintains a consistent level	Radford	Ongoing	
2	WCF Dredge Cell	Determine quantities needed to complete dikes	Ash Team	26-Mar-04	
	WCF Dredge Cell	a. Provide Ash Team with fill volumes used to build dikes in various locations	Yogi	19-Mar-04	
	WCF Dredge Cell	b. Based on Item a, project volume to complete dikes (and schedule)	Powell/Ash Team	24-Mar-04	
3	WCF Dredge Cell	Determine schedule and cost for completing dikes	Radford/Ash Team	26-Mar-04	
4	WCF Dredge Cell	Determine why actual and design dike quantities differ so much and what to do to prevent recurrance	Powell/Ash Team	24-Mar-04	
5	WCF Dredge Cell	Review survey data to check pond FWV	Ash Team	24-Mar-04	
6	WCF Dredge Cell	Determine if temporary dredge cell needs to be raised	Ash Team	26-Mar-04	
7	WCF Dredge Cell	Is the 1-6 ditch adequate for flow, or will it need constant maintenance?	Ash Team	26-Mar-04	
8	WCF Dredge Cell	If answer to # 7 is yes, what do we do with the ash?	Ash Team	26-Mar-04	
9	WCF Dredge Cell	Determine how to handle bottom ash after flood holes and ditches	Ash Team	26-Mar-04	

Widows Creek Fossil Plant

Project: Modify ash pond discharge to allow calibration

		Item	Responsible	Complete	Status
1	WCF Calibration	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
2	WCF Calibration	Engineering design, sketches, and material specifications for modifications	Petty	30-Jun-04	
3	WCF Calibration	Procure materials for implementation	Ward	15-Aug-04	
4	WCF Calibration	Prepare detailed work package for implementation	Ward/Ash Team	15-Aug-04	
5	WCF Calibration	Complete NEPA review, obtain any permits required to perform implementation	Petty/Stiefel	31-Jul-04	
6	WCF Calibration	Begin implementation	Ward	15-Aug-04	
7	WCF Calibration	Complete implementation	Ward	31-Aug-04	

System Wide Issue

Project: Perform Engineering Studies - How to deal with Phragmites

		Item	Responsible	Complete	Status
1	Sys Phragmites	Develop options for Phragmite removal and control	Bowers/Taylor	30-Apr-04	
2	Sys Phragmites	Determine overall feasibility, cost, and risk for options	Bowers/Taylor	31-May-04	
3	Sys Phragmites	Team review of options	Ash Team	31-May-04	
4	Sys Phragmites	Perform NEPA review for viable options	Bowers/Taylor	15-Jul-04	
5	Sys Phragmites	Develop matrix of options & procedures for implementation of viable options	Bowers/Taylor	31-Aug-04	
6	Sys Phragmites	Conduct training for implementation	Bowers/Taylor	30-Sep-04	

System Wide Issue

Project: Develop policy for seep mitigation and develop scope for engineering study

		Item	Responsible	Complete	Status
1	Sys Seeps	Project scoping meeting to review current regulations, legal issues, and requirements associated with seeps	Baugh/Ash Team/EA/OGC	30-Apr-04	
2	Sys Seeps	Develop options for seep repair and/or mitigation	Bowers/Ash Team	15-May-04	
3	Sys Seeps	Determine overall feasibility, order of magnitude costs, and risk for options	Bowers/Ash Team	31-Jul-04	
4	Sys Seeps	Team review of options	Ash Team/EA/OGC	31-Jul-04	
5	Sys Seeps	Draft system wide policy based on review of options	Bowers/Ash Team	31-Aug-04	
6	Sys Seeps	Complete OGC review and present to Executive Management	Ash Team/EA/OGC	30-Sep-04	

System Wide Issue

Project: Develop options for control of dust from Coal Combustion By-Product handling facilities

		Item	Responsible	Complete	Status
1	Sys Dust Control	Develop options for dust control	Davis/Ash Team	30-Apr-04	
2	Sys Dust Control	Determine overall feasibility, cost, and risk for options	Davis/Ash Team	31-May-04	
3	Sys Dust Control	Team review of options	Ash Team	31-May-04	
4	Sys Dust Control	Perform NEPA review for viable options	Davis/Ash Team	15-Jul-04	
5	Sys Dust Control	Develop matrix of options & procedures for implementation of viable options	Davis/Ash Team	31-Aug-04	
6	Sys Dust Control	Conduct training for implementation	Davis/Ash Team	30-Sep-04	

		Item	Responsible	Complete	Status
KIF Dredge Reliability	1	Identify short lead time parts needed for improving dredge reliability	Radford	29-Feb-04	Complete
ALF Raise Ash Pond	1	Stoplogs fabricated and delivered to plant	Taylor	04-Mar-04	Complete 04-Mar-04
ALF LT Ash Disposal	1	Initial meeting with Memphis Port Authority to brainstorm utilization or disposal options	Baugh	11-Mar-04	Complete 11-Mar-04
ALF Raise Ash Pond		a. Prepare first draft of sequence	Albright	12-Mar-04	Complete 12-Mar-04
KIF LT Ash Disposal	3	10% design review meeting and coordination with plant	Petty	12-Mar-04	Complete 12-mar-04
PAF RW One		a. Size temporary pumps	Albright	12-Mar-04	Use what we had before - complete
KIF Int Dredge Cell	2	Complete DCN AA (R1) for Lift A	Petty	16-Mar-04	
PAF RW One	1	Review and comment on PAF administrative controls for prevention of Red Water Pond #1 overflow to river	Purkey	16-Mar-04	
ALF Raise Ash Pond		e. Call HED to request Nodwell to be sent to Allen	Pulley	17-Mar-04	Complete 17-Mar-04
KIF Dredge Reliability	3	Identify long lead time parts needed for improving dredge reliability	Radford	18-Mar-04	Complete
WCF Dredge Pond		a. Re-install breech in Pond 1 & Pond 2 divider dike (drop Pond 1 water level)	Radford	18-Mar-04	Did not work
ALF Raise Ash Pond		a. Modifications to internal divider dike	Albright	19-Mar-04	Complete 19-Mar-04
ALF Raise Ash Pond		b. Determine if bollards extruding from dike can be cut off	Albright	19-Mar-04	Complete
ALF Raise Ash Pond		c. Determine preliminary cost and schedule for contracting repairs to horizontal run of McKeller Lake discharge piping	Albright	19-Mar-04	Pulley to pick up (19-Mar-04)
ALF Raise Ash Pond		h. Verify that dike is at least 21' wide at all points	Pulley	19-Mar-04	Complete - it is not
ALF Raise Ash Pond		b. Agree on material staging and removal sequence	Team	19-Mar-04	Complete
ALF Raise Ash Pond		c. Arrange for crane pads	Taylor	19-Mar-04	Complete
ALF Raise Ash Pond		d. Check into LGP vehicle for moving stoplogs on dike	Radford	19-Mar-04	Complete 17-Mar-04
ALF Raise Ash Pond		e. Verify that a vehicle can make the turn onto the internal ash dike	Pulley	19-Mar-04	Complete 17-Mar-04
ALF Raise Ash Pond		f. Arrange for contract with divers (divers bring underwater camera)	Pulley	19-Mar-04	Complete
ALF Raise Ash Pond		g. Initiate CEC based on internal dike modifications (if needed)	Albright/Wells	19-Mar-04	Complete
ALF Raise Ash Pond	4	Make notifications to Corp of Engineers and City of Memphis on use of Horn Lake cutoff	Dominioni	19-Mar-04	Complete
ALF Raise Ash Pond	5	Notify state about raising dikes and routing discharge to Horn Lake Cutoff	Wells	19-Mar-04	Complete
ALF Raise Ash Pond	6	Inspect discharge to Horn Lake Cutoff (run discharge over pipe)	Dominioni, Pulley	19-Mar-04	Complete 17-Mar-04
ALF Repair Levee	1	Engineering design, drawings, and material specifications; AA DCN	Albright	19-Mar-04	Complete

ALF Repair Levee	3	Determine how to pump pond to Horn Lake discharge	Dominioni/Pulley	19-Mar-04	Complete
ALF Repair Levee	7	Request state concurrence with monitoring plan for Horn Lake cutoff (e-mail)	Wells	19-Mar-04	Complete
KIF Int Dredge Cell	3	Survey new dredge cell	Huber	19-Mar-04	
JOF Phragmites	1	Determine cost/capacity of Phragmite removal with amphibious trackhoe	Radford	19-Mar-04	
JOF Trans Ash	1	Clean out Cell 2	Trans Ash	19-Mar-04	Complete
JOF Trans Ash	2	Complete dikes - Supercell 1 & 2	Trans Ash	19-Mar-04	Complete
JOF Trans Ash	5	Reroute sluice water into perimeter ditch	Trans Ash	19-Mar-04	Complete
PAF RW Ponds	2	Determine where material removed from ponds can be disposed of	Wells	19-Mar-04	
PAF RW Ponds		a. Provide Radford with drawings showing location of pond drain piping	Petty	19-Mar-04	
PAF Ash Channel	2	Determine where material removed from ponds can be disposed of	Wells	19-Mar-04	
WCF FGD	4	Determine where material removed from stilling pond is to be placed	Bowers	19-Mar-04	Complete
WCF Dredge Pond		a. Provide Ash Team with fill volumes used to build dikes in various locations	Yogi	19-Mar-04	Complete
KIF Int Dredge Cell	4	Begin dredging	Radford	22-Mar-04	In progress
JOF Trans Ash	3	Begin dredging into Supercell 1 & 2 (200,000 cubic yards)	Radford	22-Mar-04	In progress
ALF Raise Ash Pond		f. Deliver Nodwell to Allen	HED	23-Mar-04	Complete
ALF Raise Ash Pond		g. Follow up with TPS on information for lift plan (crane capacity & radius)	Pulley	23-Mar-04	Complete
ALF Repair Levee		a. Preparing notification package for Corps and State	Wells	23-Mar-04	Complete
WCF FGD	1	Project scoping meeting with Ardeman & Associates	Petty	23-Mar-04	Complete
WCF FGD	2	Obtain preliminary instructions from Ardeman for near term operational changes in preparation of stack remediation and stilling pond clean out	Team	23-Mar-04	
ALF Raise Ash Pond		d. Establish contract for discharge piping repairs	Albright/Taylor	24-Mar-04	
ALF Repair Levee	2	Develop detailed work scope for project implementation	Radford	24-Mar-04	Complete
ALF Repair Levee		b. Sign and issue package	Lee/Dominioni	24-Mar-04	Complete
PAF Rededicate Fines	1	Prepare sketch of road regrading (x-section with silt fence(s) EMP per Kidd memo dated 2/19/04)	Knox/Petty	24-Mar-04	

PAF Rededuate Fines	2	Measure area to cover and establish vegetation	Knox	24-Mar-04	
WCF Dredge Pond		b. Based on Item a, project volume to complete dikes (and schedule)	Powell/Ash Team	24-Mar-04	Complete
WCF Dredge Pond	4	Determine why actual and design dike quantities differ so much and what to do to prevent recurrance	Powell/Ash Team	24-Mar-04	
WCF Dredge Pond	5	Review survey data to check pond FWV	Ash Team	24-Mar-04	
ALF Raise Ash Pond		1. Talk to Reed about loading ash on HED trucks (not fine material)	Frank	26-Mar-04	Complete
ALF Raise Ash Pond		h. Complete EMP for dike raising	Dominioni	26-Mar-04	Complete
ALF Raise Ash Pond	7	Develop detailed work packages for project implementation	Taylor	26-Mar-04	Complete
ALF Repair Levee	8	Develop sampling requirements if state does not concur with proposed plan	Wells/Dominioni	26-Mar-04	Complete
KIF LT Ash Disposal	1	Perform site investigation	MacTec	26-Mar-04	
JOF Du Pont	1	Determine scope of Outfall 009 pond clean out	Lynn/Hamed	26-Mar-04	
JOF Du Pont	2	Determine volume of material to be removed from Outfall 009 and where material is to be placed	Lynn/Hamed/Petty/ Bowers	26-Mar-04	
JOF Du Pont	4	Determine how to lower water level in Outfall 009	Lynn/Hamed/Stiefe	26-Mar-04	
PAF RW One	2	Modify administrative controls per comments received in item 1 (following reaching consensus with Yard Ops and plant)	Raley/Dukes	26-Mar-04	
WCF Dredge Pond	2	Determine quantities needed to complete dikes	Ash Team	26-Mar-04	Complete
WCF Dredge Pond	3	Determine schedule and cost for completing dikes	Radford/Ash Team	26-Mar-04	Complete
WCF Dredge Pond	6	Determine if temporary dredge cell needs to be raised	Ash Team	26-Mar-04	Complete
WCF Dredge Pond	7	Is the 1-6 ditch adequate for flow, or will it need constant maintenance?	Ash Team	26-Mar-04	
WCF Dredge Pond	8	If answer to # 7 is yes, what do we do with the ash?	Ash Team	26-Mar-04	
WCF Dredge Pond	9	Determine how to handle bottom ash after flood holes and ditches	Ash Team	26-Mar-04	
ALF Raise Ash Pond		2. Send longreach Track Hoe and tandem axle dump truck to ALF	Radford	29-Mar-04	Complete
ALF Raise Ash Pond	8	Review detailed work packages with plant	Taylor/Ash Team	29-Mar-04	Complete

ALF Repair Levee	4	Prepare detailed work package for implementation	Taylor	29-Mar-04	Complete
KIF Dredge Reliability	2	Procure and install short lead time parts	Radford	30-Mar-04	Complete
WCF FGD	3	Determine quantity of material to be removed from stilling pond	Huber	30-Mar-04	
WCF Perimeter Dike	1	Determine if the perimeter ditch is designed for a 10 year, 24 hour rainfall event	Petty	30-Mar-04	Complete
WCF Perimeter Dike	3	Develop a plan to insure that ditches are cleaned on a routine basis, and for additional monitoring prior to and during precipitation events	Ward	30-Mar-04	
WCF Perimeter Dike	6	Investigate use of "Soil-Sement" binder on exterior slope of dredge cell	Davis	30-Mar-04	
ALF Repair Levee	5	Review detailed work packages with plant	Radford/Ash Team	31-Mar-04	
JOF Phragmites	2	Determine volume of Phragmites to be removed	Huber	31-Mar-04	
PAF RW One		1. Repair leakage - Bottom Ash sluice lines	Raley	31-Mar-04	
WCF FGD		a. Develop methodology for isolating fuel oil in stack, pond, and from underdrains	Hedgecoth	31-Mar-04	
ALF Raise Ash Pond	9	Complete NEPA review	Albright/Wells	01-Apr-04	See item 3h
JOF Trans Ash	6	Begin clean out of Supercell 3A & 3B	Trans Ash	01-Apr-04	
ALF Raise Ash Pond		3. Repair sloughs on internal dike	Pulley	02-Apr-04	
ALF Raise Ash Pond	10	Modify internal ash divider dike for setting stoplogs	Taylor	02-Apr-04	
ALF Raise Ash Pond	11	Clean debris out of Horn Lake cutoff including Beaver Dam	Taylor	02-Apr-04	
PAF RW Ponds		b. Locate area of pipe pluggage	Radford	02-Apr-04	
WCF FGD	3	Work with HED on implementation of operational changes recommended by Ardeman	Hedgecoth	02-Apr-04	
ALF Raise Ash Pond		a. Begin installation of stoplogs	Taylor	05-Apr-04	
ALF Raise Ash Pond		b. Begin pumping to Horn Lake cutoff	Taylor	05-Apr-04	
ALF Raise Ash Pond		c. Complete stoplog installation	Taylor	05-Apr-04	
SHF LT Disposal	1	PDE kick-off meeting	Petty	5-Apr-04	

WCF FGD	8	Receive and evaluate Ardeman proposal based on March 23 meeting	Petty	06-Apr-04
WCF FGD		a. Determine if field testing is required (during scoping effort)	Ardeman	06-Apr-04
ALF Raise Ash Pond		d. Complete pumping to Horn Lake cutoff	Taylor	07-Apr-04
ALF Repair Levee	6	Complete NEPA review, obtain any permits required to perform implementation	Albright/Wells	09-Apr-04
ALF LT Ash Disposal	2	Perform high level comparison of options	Ash Team	09-Apr-04
WCF FGD	5	Obtain NEPA clearance & permits for dredging/cleaning out stilling pond	Petty/Bowers	11-Apr-04
WCF FGD		b. Implement methodology for isolating fuel oil in stack, pond and from underdrains	Radford	11-Apr-04
WCF FGD		c. Establish contract for removal and disposal of fuel oil & cenospheres on stilling pond	Radford	11-Apr-04
ALF Repair Levee	9	Begin implementation	Radford	12-Apr-04
WCF FGD		a. Begin work	Petty	14-Apr-04
WCF Perimeter Dike	2	Determine if the perimeter ditch can contain a 12 hour gypsum pipe leakage situation	Petty	14-Apr-04
WCF Perimeter Dike	7	Perform economic analysis of options	Davis	14-Apr-04
GAF LT Ash Disposal	5	Determine how to collect survey data for Pond E	Ash Team	15-Apr-04
KIF Cover Ash	1	Meet with plant & HED to clarify work scopes; Identify washes on exterior side slopes to be repaired	Ash Team	15-Apr-04
JOF Phragmites	3	Make contractual arrangements	Radford	15-Apr-04
JOF Phragmites	4	Complete NEPA review	Ash Recovery Tean	15-Apr-04
PAF RW Ponds	1	Determine volume of material to be removed from each pond	Huber	15-Apr-04

PAF Ash Channel	1	Evaluate channel elevations to determine if water level can be dropped	Huber	15-Apr-04
PAF Ash Channel	3	Determine volume to be removed	Huber	15-Apr-04
WCF Perimeter Dike	4	Determine cost of applying earth or other permanent cover to dredge cell	Petty	15-Apr-04
WCF Perimeter Dike	8	Complete CEC for Use of "Soil-Sement" (System wide use)	Davis/Bowers	15-Apr-04
ALF LT Ash Disposal		a. Meet with Port Authority to review most viable options	Baugh	16-Apr-04
GAF ST Ash Disposal	1	Prepare scope and schedule for data collection to support NEPA review for Pond A dike raising	Ash Team	16-Apr-04
KIF LT Ash Disposal	2	Develop detailed project schedule	Petty	16-Apr-04
KIF Int Dredge Cell	1	Complete construction of emergency dredge cell, Lift A	Radford	16-Apr-04
JOF Du Pont	3	Determine required volume for Outfall 009 pond	Petty/Steifel	16-Apr-04
JOF Du Pont	10	Finalize design for Du Pont Dredge Cell repairs	Petty	16-Apr-04
PAF RW Ponds		c. Size pumps (if needed) for dewatering	Petty	16-Apr-04
WCF FGD	9	Finalize Ardeman scope and award contract	Petty	16-Apr-04
JOF Phragmites	5	Begin work	Radford	19-Apr-04
PAF Redediate Fines	3	Begin Work on BMPs (road grading, silt fence)	Radford	19-Apr-04
JOF Du Pont		b. SWPPP	Petty/Stiefel	23-Apr-04
PAF Ash Channel	4	Develop work package for project	Yard Operations	23-Apr-04
WCF FGD		d. Initial removal of fuel oil & cenospheres from stilling pond	Radford	23-Apr-04
WCF FGD	10	10% Kick Off meeting with Ardeman	Petty	23-Apr-04
PAF RW Ponds		e. Develop methodology for bypassing ponds during dewatering/cleanout	Petty	26-Apr-04
PAF RW Ponds		d. Procure pumps	Radford	29-Apr-04
GAF LT Ash Disposal	1	PDE kick-off meeting	Petty	30-Apr-04
KIF Int Dredge Cell	5	Determine reason for error in dike fill quantities and actions to prevent recurrence	Ash Team	30-Apr-04
KIF Upgrade Pump	1	Calculate storm water run off (10 year, 24 hour event); select impeller materials (for pumping red water)	Petty	30-Apr-04

JOF Du Pont		a. CEC	Petty/Bowers	30-Apr-04	
JOF Du Pont		a. Review overall plan with TDEC	Bowers/Petty/Stiefel	30-Apr-04	
PAF RW One		2. Reroute RO reject line	Raley	30-Apr-04	
PAF RW One		3. Reroute new line	Nuyt	30-Apr-04	
PAF Ash Channel	5	Clean out channel	Yard Operations	30-Apr-04	
PAF Calibration	1	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
SHF LT Disposal	2	Prepare package for Phase 1 approval	Ash Team	30-Apr-04	
SHF Calibration	1	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
WCF FGD	12	Initial NEPA review based on known scope	Petty/Bowers	30-Apr-04	Investigate need/existing NEPA
WCF Perimeter Dike	9	Apply "Soil-Sement" if Investigation and economics are Positive	Ward	30-Apr-04	
WCF Calibration	1	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
SYS Phragmites	1	Develop options for Phragmite removal and control	Bowers/Taylor	30-Apr-04	
SYS Seeps	1	Project scoping meeting to review current regulations, legal issues, and requirements associated with seeps	Baugh/Ash Team/EA/OGC	30-Apr-04	
SYS Dust Control	1	Develop options for dust control	Davis/Ash Team	30-Apr-04	
PAF Redediate Fines	4	Complete work	Radford	1-May-04	
PAF RW Ponds	4	Complete NEPA review	Petty/Bowers	02-May-04	
PAF Redediate Fines	5	Begin Work on (floodplain reclaim grassing)	Radford	02-May-04	
PAF RW Ponds		a. Reroute inflow and begin dewatering	Radford	03-May-04	
PAF RW Ponds		a. Begin dewatering (using existing pumps)	Radford	03-May-04	

WCF FGD		b. Begin collection of field data	Ardeman/MacTec	03-May-04
ALF Raise Ash Pond	13	Raise stilling pond and re-route discharge to McKellar Lake	Taylor	07-May-04
KIF Upgrade Pump	2	Compare economics of electric and diesel pumps (including power supply)	Catlett/Ash Team	07-May-04
JOF Du Pont		c. Prepare and submit construction SW NOI	Stiefel/Petty	07-May-04
SHF LT Disposal	3	Obtain Phase 1 approval	Ash Team/Davis	07-May-04
ALF Repair Levee	10	Complete implementation	Radford	10-May-04
WCF FGD		c. Complete field data collection	Ardeman/MacTec	10-May-04
KIF Dredge Reliability	4	Procure long lead time parts and set up in stock	Radford	14-May-04
SHF LT Disposal	4	Begin Phase 1 study	Petty/FE	14-May-04
SHF LT Disposal	7	Develop topographical maps	Huber	14-May-04
WCF FGD		b. Complete work	Petty	14-May-04
ALF LT Ash Disposal		b. Perform negotiations with Port Authority and select viable options	Team	15-May-04
GAF LT Ash Disposal	6	Perform site work required to support survey	Radford	15-May-04
KIF Cover Ash	2	Repair washes and vegetate	Radford	15-May-04
KIF Cover Ash	3	Remove ash from top of berms and place on top of cells	Radford	15-May-04
KIF Cover Ash	4	Cover ash on exterior slopes, seed, and fertilize	Radford	15-May-04
JOF Du Pont		1. Solid waste	Petty/Bowers	15-May-04
JOF Du Pont		2. NPDES	Petty/Stiefel	15-May-04
JOF Du Pont		a. Locate borrow sites	Petty/Radford	15-May-04
PAF Rededicate Fines	6	Complete work	Radford	15-May-04
WCF FGD		a. Submit to state	Stiefel	15-May-04
SYS Seeps	2	Develop options for seep repair and/or mitigation	Bowers/Ash Team	15-May-04
PAF RW Ponds		b. Complete dewatering	Radford	17-May-04
PAF RW Ponds		c. Begin material removal	Radford	17-May-04
PAF RW Ponds		b. Complete dewatering	Radford	17-May-04
PAF RW Ponds		c. Begin material removal	Radford	17-May-04
PAF Rededicate Fines	7	Document work with photos	Dukes	18-May-04

GAF LT Ash Disposal	2	Prepare package for Phase 1 approval	Ash Team	21-May-04
KIF LT Ash Disposal	4	50% design review meeting and coordination with plant (including repairs to elevated dredge cell)	Petty	21-May-04
KIF Upgrade Pump	3	Develop sketches for installation and material specifications	Petty	21-May-04
PAF Rededicate Fines	8	Prepare letter to Kidd (draft)	Wells	24-May-04
GAF LT Ash Disposal	3	Obtain Phase 1 approval	Ash Team/Davis	28-May-04
KIF Upgrade Pump	6	Develop work package for project	Catlett/Ash Team	28-May-04
WCF FGD		e. Begin dredging stilling pond	Radford	28-May-04
ALF LT Ash Disposal		a. Determine available storage volume in inactive ash pond	Huber	30-May-04
KIF Int Dredge Cell	7	Prepare detailed schedule for dredging and lifts	Ash Team	30-May-04
KIF Int Dredge Cell	8	Determine if bottom ash dredge cell dikes need to be covered with earth or soil cement	Ash Team	30-May-04
ALF LT Ash Disposal		c. Perform flyover and develop topographical maps	Huber	31-May-04
ALF LT Ash Disposal		g. Initiate NEPA for study	Petty/Bowers	31-May-04
JOF Phragmites	6	Complete work	Radford	31-May-04
JOF Trans Ash	4	Complete dredging into Supercell 1 & 2	Radford	31-May-04
SYS Phragmites	2	Determine overall feasibility, cost, and risk for options	Bowers/Taylor	31-May-04
SYS Phragmites	3	Team review of options	Ash Team	31-May-04
SYS Dust Control	2	Determine overall feasibility, cost, and risk for options	Davis/Ash Team	31-May-04
SYS Dust Control	3	Team review of options	Ash Team	31-May-04
GAF LT Ash Disposal	4	Begin Phase 1 study	Petty/FE	01-Jun-04
GAF LT Ash Disposal	7	Develop topographical maps	Huber	01-Jun-04
GAF ST Ash Disposal	2	Develop topographical maps	Huber	01-Jun-04
KIF LT Ash Disposal	5	Prepare Part 2 Permit Application	Petty	01-Jun-04
JOF Du Pont		b. Check borrow sites for suitability	Petty	01-Jun-04
PAF RW One		a. Arrange for inspections via camera	Albright	01-Jun-04

PAF RW One		b. Develop a design for pond access for setting pumps (and future clean out)	Albright	01-Jun-04	
PAF RW One		a. Complete design drawings	Albright	01-Jun-04	
PAF RW One		a. Complete design, material specifications, and quantities	Albright	01-Jun-04	
PAF RW One		a. Determine quantity of material to be removed	Huber	01-Jun-04	
WCF FGD		b. Approval by state	Stiefel	01-Jun-04	
SHF LT Disposal	8	Meet with state to discuss project requirements	Petty/Bowers	04-Jun-04	
PAF Rededíate Fines	9	Finallize and submit letter to Kidd	Dukes	7-Jun-04	
PAF RW One	3	Estimate project cost following completion of engineering	Radford	08-Jun-04	
PAF RW Ponds		d. Complete material removal	Radford	14-Jun-04	Based on assumed quantity of 50,000 cubic yards maximum
PAF RW Ponds		a. Manage inflow and begin dewatering	Radford	14-Jun-04	
PAF RW Ponds		d. Complete material removal	Radford	14-Jun-04	Based on assumed quantity of 50,000 cubic yards maximum
KIF Upgrade Pump	4	Complete NEPA review (if required)	Petty/EA	15-Jun-04	
JOF Du Pont		d. Investigate feasibility of a Trans Ash backhaul from borrow site	Sutton	15-Jun-04	
KIF Upgrade Pump	5	Procure materials	Catlett	18-Jun-04	Including power (if required)
PAF RW Ponds		e. Determine repairs needed for valves and piping	Radford/Petty	21-Jun-04	
PAF RW Ponds		e. Determine repairs needed for valves and piping (if needed)	Radford/Petty	21-Jun-04	
WCF FGD		d. Complete analysis of field data	Ardeman	21-Jun-04	7-10 days for Proctors, 6 weeks for Tri-Axial test
PAF RW One		1. Begin work	Radford	25-Jun-04	
PAF RW Ponds		b. Complete dewatering	Radford	28-Jun-04	
PAF RW Ponds		c. Begin material removal	Radford	28-Jun-04	
GAF LT Ash Disposal	9	Develop conceptual layout of raised pond E (with associated storage volumes)	Petty	30-Jun-04	
KIF Int Dredge Cell	6	Complete DCN for Lifts B and C	Petty	30-Jun-04	
KIF Int Dredge Cell	9	Modify CEC (if needed)	Petty	30-Jun-04	
KIF Cover Ash	5	Clean out existing underdrains	Radford	30-Jun-04	

KIF Cover Ash	7	Regrade perimeter roads around ash pond to allow proper drainage and place crushed stone as needed	Radford	30-Jun-04	
PAF Calibration	2	Engineering design, sketches, and material specifications for modifications	Petty/Ash Team	30-Jun-04	
SHF LT Disposal	9	Develop conceptual layout (with associated storage volumes)	Petty	30-Jun-04	
SHF Calibration	2	Investigate the use of an improved material for packing joints on discharge weir	Petty/Ash Team	30-Jun-04	
SHF Calibration	3	Develop methodology for lowering stilling pond water level for repairs	Ash Team	30-Jun-04	
WCF FGD		e. Issue initial instructions for cutting back slopes, installing underdrains, and interim operations	Ardeman	30-Jun-04	
WCF Calibration	2	Engineering design, sketches, and material specifications for modifications	Petty	30-Jun-04	
JOF Du Pont	5	Obtain NPDES permit for Outfall 011 (formerly 009)	Stiefel	01-Jul-04	Dependent on TDEC
JOF Du Pont	6	Contracter to remove cenospheres from outfall	Miller	01-Jul-04	
JOF Du Pont		d. Receive solid waste and NPDES permit modification (assume minor modification)	Bowers/Stiefel	01-Jul-04	Dependent on TDEC
JOF Du Pont		e. Receive NOC	Stiefel	01-Jul-04	Dependent on TDEC
JOF Du Pont		c. Perform NEPA review for borrow site and permit (if required)	Petty/Stiefel	01-Jul-04	
JOF Trans Ash	10	Begin Prep of Supercell 1 & 2	Trans Ash	01-Jul-04	
WCF FGD		g. Begin implementation of initial Ardeman instructions	Radford	01-Jul-04	
KIF Upgrade Pump	7	Perform installation	Catlett	02-Jul-2004	
PAF RW Ponds		f. Procure materials for valves and piping repairs	Radford	05-Jul-04	
PAF RW Ponds		f. Procure materials for valves and piping repairs (if needed)	Radford	05-Jul-04	
PAF RW One		2. Complete work	Radford	09-Jul-04	
PAF RW One		1. Begin work	Radford	12-Jul-04	
PAF RW One		b. Purchase pipe	Radford	12-Jul-04	
KIF Cover Ash	6	Remove or cover ash in perimeter ditch along Swan Pond road; seed & vegitate (or cover with rock)	Radford	15-Jul-04	

JOF Du Pont	13	Procure materials for construction	Radford	15-Jul-04	
JOF Du Pont		e. Finalize contract for borrow site	Radford	15-Jul-04	
JOF Du Pont	15	Prepare work package(s) including detailed schedule and cost	Radford	15-Jul-04	
JOF Du Pont	16	Begin construction	Radford	15-Jul-04	
PAF Vacuum Truck	1	Determine volume of vacuum truck waste to be disposed of annually	Bowers/PAF PAEs	15-Jul-04	
PAF Vacuum Truck	2	Determine where waste is to be placed	Bowers/PAF PAEs	15-Jul-04	
WCF FGD	13	Perform additional NEPA review if needed per Arderman initial instructions	Petty/Bowers	15-Jul-04	
SYS Phragmites	4	Perform NEPA review for viable options	Bowers/Taylor	15-Jul-04	
SYS Dust Control	4	Perform NEPA review for viable options	Davis/Ash Team	15-Jul-04	
GAF LT Ash Disposal	8	Collect ash samples and perform analysis	Petty	16-Jul-04	
GAF LT Ash Disposal	16	Initiate NEPA studies (focusing on Pond E)	Petty/Ash Team	16-Jul-04	
PAF RW One		2. Complete work	Radford	16-Jul-04	
SHF LT Disposal	8	Collect ash samples and perform analysis	Petty	16-Jul-04	
SHF LT Disposal	16	Initiate NEPA studies	Petty/Ash Team	16-Jul-04	
WCF FGD		f. Complete dredging of stilling pond	Radford	16-Jul-04	Assuming 140,000 cubic yards of material
PAF RW One		f. Begin pumping down pond	Radford	19-Jul-04	
PAF RW One		b. Purchase materials	Radford	23-Jul-04	
PAF RW One		g. Pump down pond sufficiently to begin clean out	Radford	25-Jul-04	
PAF RW One		b. Second inspection with camera	Radford/Raley	26-Jul-04	
PAF RW One		c. Begin installation of pipe	Radford	26-Jul-04	
PAF RW One		c. Begin repair of slopes	Radford	26-Jul-04	
PAF RW One		c. Begin clean out of pond	Radford	26-Jul-04	
PAF RW Ponds		g. Make repairs to valves and piping	Radford	26-Jul-04	
PAF RW Ponds		g. Make repairs to valves and piping (if needed)	Radford	26-Jul-04	

GAF LT Ash Disposal	11	Perform runoff and pumping studies	Petty/FE	30-Jul-04
SHF LT Disposal	11	Perform runoff and pumping studies	Petty/FE	30-Jul-04
ALF LT Ash Disposal		d. Develop conceptual plan for viable options & perform initial screening	Petty	31-Jul-04
KIF LT Ash Disposal	6	Develop cost estimates and detailed schedules for implementation (including NEPA)	Ash Team	31-Jul-04
JOF Du Pont	7	Clean out Outfall 009 pond (including cenospheres) and repair outfalls	Radford	31-Jul-04
JOF Trans Ash	7	Complete clean out of Supercell 3A & 3B	Trans Ash	31-Jul-04
JOF Trans Ash	11	Complete Prep of Supercell 1 & 2	Trans Ash	31-Jul-04
PAF RW One		d. Complete installation of pipe	Radford	31-Jul-04
PAF Calibration	5	Complete NEPA review, obtain any permits required to perform implementation	Petty/Wells	31-Jul-04
SHF Calibration	6	Complete NEPA review, obtain any permits required to perform implementation	Petty/Barnes	31-Jul-04
WCF FGD		f. Establish overall configuration (slopes, drainage, etc) considering original design and current configuration; provide a draft CBMPP. THIS IS THE 50% DESIGN REVIEW	Ardeman	31-Jul-04
WCF FGD		a. Determine engineering requirements for cover material (volume/quality)	Ardeman	31-Jul-04
WCF Hole in Dike	1	Perform drawing search for concrete drop box	Petty	31-Jul-04
WCF Calibration	5	Complete NEPA review, obtain any permits required to perform implementation	Petty/Stiefel	31-Jul-04
SYS Seeps	3	Determine overall feasibility, order of magnitude costs, and risk for options	Bowers/Ash Team	31-Jul-04
SYS Seeps	4	Team review of options	Ash Team/EA/OGC	31-Jul-04
JOF Trans Ash	8	Begin dredging into Supercell 3A & 3B (132,000 cubic yards)	Radford	01-Aug-04
JOF Trans Ash	12	Begin clean out of Supercell 1 & 2	Trans Ash	01-Aug-04
PAF RW One		c. Clean out pipe as indicated by inspections	Radford	06-Aug-04
GAF LT Ash Disposal	10	Perform dike stability analysis	Petty	13-Aug-04
WCF Hole in Dike	2	Develop sketches for ditch bypass during exploration; prepare EMP	Petty	14-Aug-04
ALF LT Ash Disposal		e. Obtain permissions for off site data collection - viable options	Petty/Realty Services	15-Aug-04
KIF Cover Ash	8	Cleanout drainage pipes that drain the perimeter ditch	Radford	15-Aug-04

JOF Du Pont	8	Perform retention time study for pond	Quinn/Petty	15-Aug-04
PAF Vacuum Truck	5	Prepare sketch showing location for vacuum truck dumping	Petty	15-Aug-04
PAF Calibration	3	Procure materials for implementation	Radford/Ash Team	15-Aug-04
PAF Calibration	4	Prepare detailed work package for implementation	Radford/Ash Team	15-Aug-04
PAF Calibration	6	Begin implementation	Radford	15-Aug-04
SHF Calibration	4	Procure materials for implementation	Radford/Ash Team	15-Aug-04
SHF Calibration	5	Prepare detailed work scope for implementation	Radford/Ash Team	15-Aug-04
SHF Calibration	7	Begin implementation	Radford	15-Aug-04
WCF FGD	14	Complete additional NEPA review if needed based on 50% design review	Petty/Bowers	15-Aug-04
WCF Calibration	3	Procure materials for implementation	Ward	15-Aug-04
WCF Calibration	4	Prepare detailed work package for implementation	Ward/Ash Team	15-Aug-04
WCF Calibration	6	Begin implementation	Ward	15-Aug-04
WCF Hole in Dike	3	Perform exploratory excavation of dike at influent of water from ditch with Engineering observation.	Petty/Radford	16-Aug-04
WCF Hole in Dike	4	Fill hole with DGA or flowable fill (depending on size)	Radford	18-Aug-04
GAF ST Ash Disposal	4	Confirm that Pond A dikes are structurally adequate (including reactivation of railroad)	Petty	30-Aug-04
GAF ST Ash Disposal	5	Confirm remaining life of Pond A	Ash Team	30-Aug-04

SHF LT Disposal	10	Perform stability analysis	Petty	30-Aug-04
ALF LT Ash Disposal		b. Prepare detailed plans, including equipment and manpower needs, and cost for removing ash from the active ash pond and placement in the inactive ash pond at a rate that exceeds plant ash production	Radford	31-Aug-04
ALF LT Ash Disposal		c. Complete CEC for emergency ash diposal in the inactive pond	Petty/Bowers	31-Aug-04
PAF Vacuum Truck	3	Issue instructions on how to deal with existing vacuum truck dumping piles	Bowers/PAF PAEs	31-Aug-04
PAF Vacuum Truck	4	Complete NEPA review for placement of waste (if required)	Bowers/PAF PAEs	31-Aug-04
PAF Vacuum Truck	6	Develop procedure for vacuum truck dumping	Bowers/PAF PAEs	31-Aug-04
PAF Calibration	7	Complete implementation	Radford	31-Aug-04
SHF Calibration	8	Complete implementation	Radford	31-Aug-04
WCF FGD		h. Complete design and drawings THIS IS THE 100% DESIGN REVIEW	Ardernan	31-Aug-04
WCF FGD		b. Locate a borrow site that meets engineering requirements	etty/Realty Service	31-Aug-04
WCF FGD		a. Option 1: Fuel oil collection facility	Petty/FES	31-Aug-04
WCF FGD		b. Option 2: Correction of unit burner ignition system problems	FES	31-Aug-04
WCF FGD		e. Develop an interim plan for fuel oil management at the FGD stack pending implementation of final solution	Ash Recovery Team	31-Aug-04
WCF Perimeter Dike		a. Locate and determine price of cover material	etty/Realty Service	31-Aug-04
WCF Calibration	7	Complete implementation	Ward	31-Aug-04
SYS Phragmites	5	Develop matrix of options & procedures for implementation of viable options	Bowers/Taylor	31-Aug-04
SYS Seeps	5	Draft system wide policy based on review of options	Bowers/Ash Team	31-Aug-04
SYS Dust Control	5	Develop matrix of options & procedures for implementation of viable options	Davis/Ash Team	31-Aug-04
GAF LT Ash Disposal	12	Perform power supply study	FE	01-Sep-04
KIF Int Dredge Cell	10	Complete construction of Lift B	Radford	01-Sep-04
SHF LT Disposal	12	Perform power supply study	FE	01-Sep-04
WCF Perimeter Dike		b. Acquire additional project funding	Baugh	03-Sep-04
WCF Perimeter Dike		d. Complete CEC for borrow area and placement	Petty/Bowers	03-Sep-04

PAF RW Ponds		d. Complete material removal	Radford	06-Sep-04	Based on assumed quantity of 175,000 cubic yards maximum
PAF RW Ponds		e. Determine repairs needed for valves and piping	Radford/Petty	13-Sep-04	
ALF LT Ash Disposal		f. Complete off site data collection	Petty/Smith	15-Sep-04	
ALF LT Ash Disposal		i. Develop cost estimates for alternatives (30% accuracy)	Petty	15-Sep-04	
WCF FGD		g. Final removal of fuel oil & cenospheres from stilling pond	Radford	15-Sep-04	
GAF LT Ash Disposal	13	Develop conceptual cost estimates	FE	17-Sep-04	
GAF LT Ash Disposal	14	Determine if Pond E remains the most viable option for LT ash disposal	Petty/Ash Team	17-Sep-04	
SHF LT Disposal	13	Develop conceptual cost estimates	FE	17-Sep-04	
PAF RW Ponds		f. Procure materials for valves and piping repairs	Radford	20-Sep-04	
ALF LT Ash Disposal		j. Perform economic and fatal flaw analysis of alternatives	Ash Team	30-Sep-04	
GAF LT Ash Disposal	15	Rescope and reschedule project if Pond E is not viable	Petty/Ash Team	30-Sep-04	
GAF LT Ash Disposal	17	Finalize FY 05 scope and schedule	Petty/Ash Team	30-Sep-04	
GAF ST Ash Disposal	3	Initiate NEPA review for final Pond A dike raising	Ash Team	30-Sep-04	
GAF ST Ash Disposal	6	Determine scope, material quantities and specs for raising Pond A spillway	Petty	30-Sep-04	
GAF ST Ash Disposal	7	Provide sketches for dike modifications to support raising Pond A spillway	Petty	30-Sep-04	
JOF Du Pont	17	Complete FY 04 portion of work scope	Radford	30-Sep-04	
PAF RW One		i. Remove temporary pumps	Radford	30-Sep-04	
PAF RW One		d. Complete repair of slopes	Radford	30-Sep-04	
PAF RW One		d. Complete clean out of pond	Radford	30-Sep-04	
PAF RW Ponds		g. Make repairs to valves and piping	Radford	30-Sep-04	
PAF Vacuum Truck	7	Conduct training at PAF on new procedure	Bowers/PAF PAEs	30-Sep-04	
SHF LT Disposal	17	Finalize FY 05 scope and schedule	Petty/Ash Team	30-Sep-04	
WCF FGD		c. Establish a contract for borrow material or purchasing site	Petty/Radford	30-Sep-04	
WCF FGD		c. Perform an economic analysis of options 1 and 2	FES	30-Sep-04	
WCF FGD		f. Implement interim fuel oil management plan for FGD stack	Radford	30-Sep-04	

WCF Hole in Dike	5	Clean out ditch to restore proper flow	Radford	30-Sep-04
WCF Perimeter Dike		c. Procure and place earth cover.	Radford	30-Sep-04
SYS Phragmites	6	Conduct training for implementation	Bowers/Taylor	30-Sep-04
SYS Seeps	6	Complete OGC review and present to Executive Management	Ash Team/EA/OGC	30-Sep-04
SYS Dust Control	6	Conduct training for implementation	Davis/Ash Team	30-Sep-04
ALF LT Ash Disposal		k. Initiate appropriate level of NEPA review for preferred alternative	Petty/Bowers	05-Oct-04
JOF Trans Ash	9	Complete dredging into Supercell 3A & 3B	Radford	31-Oct-04
ALF LT Ash Disposal		h. Analyze off site data	Petty/Smith/Bowers	15-Nov-04
JOF Trans Ash	13	Complete clean out of Supercell 1 & 2	Trans Ash	30-Nov-04
ALF LT Ash Disposal		l. Complete Phase 1A	Petty	01-Dec-04
JOF Trans Ash	14	Begin dredging into Supercell 1 & 2 (150,000 cubic yards)	Radford	01-Dec-04
JOF Du Pont	18	Complete FY 05 portion of work scope	Radford	15-Dec-04
JOF Trans Ash	15	Complete dredging into Supercell 1 & 2	Radford	28-Feb-05
JOF Trans Ash	16	Begin Prep of Supercell 3A & 3B	Trans Ash	01-Mar-05
JOF Trans Ash	17	Complete Prep of Supercell 3A & 3B	Trans Ash	31-Mar-05
JOF Trans Ash	18	Begin clean out of Supercell 3A & 3B	Trans Ash	01-Apr-05
JOF Du Pont	19	Reseed in the spring	Radford	15-Apr-05
JOF Trans Ash	22	Begin Prep of Supercell 1 & 2	Trans Ash	01-Jun-05
JOF Du Pont	9	Complete NEPA for cleaning out Outfall 009 pond	Petty/Stiefel/Harned	15-Jun-05
JOF Trans Ash	23	Complete Prep of Supercell 1 & 2	Trans Ash	30-Jun-05
JOF Trans Ash	24	Begin clean out of Supercell 1 & 2	Trans Ash	01-Jul-05
JOF Trans Ash	19	Complete clean out of Supercell 3A & 3B	Trans Ash	31-Jul-05
JOF Trans Ash	20	Begin dredging into Supercell 3A & 3B (132,000 cubic yards)	Radford	01-Aug-05
JOF Trans Ash	21	Complete dredging into Supercell 3A & 3B	Radford	31-Oct-05
JOF Trans Ash	25	Complete clean out of Supercell 1 & 2	Trans Ash	30-Nov-05

KIF LT Ash Disposal	7	Respond to TDEC Notice of Deficiencies	Petty/Bowers	As needed
PAF RW One	4	Complete CEC for project	Albright	Complete
PAF RW One		b. Determine where material cleaned out is to be placed	Bowers	Complete
PAF RW One		h. Run temporary pumps continually	Radford	Duration of job
WCF FGD		d. Pursue most economical/environmentally sound option	FES	FY 2005
WCF Dredge Pond		b. Monitor water level in Pond 1 to insure level drops and maintains a consistent level	Radford	Ongoing
ALF Raise Ash Pond	2	Engineering design, sketches, and material specifications		
ALF Raise Ash Pond	3	Develop written sequence of events for raising pond elevations		
ALF Raise Ash Pond	12	Raise ash pond and route discharge to Horn Lake cutoff		
ALF LT Ash Disposal	3	Phase 1A study of most viable options:		
ALF LT Ash Disposal	3	Contingency plan for emergency ash disposal		
JOF Du Pont	11	Complete NEPA for Du Pont Dredge Cell repairs		
JOF Du Pont	12	Obtain permits for Du Pont Dredge Cell repairs		
JOF Du Pont		b. Prepare permit modification		
JOF Du Pont	14	Borrow Area		
PAF RW One	5	Clean out RW #1 Main Supply piping		
PAF RW One	5	Pump down level in RW #1		
PAF RW One		c. Construct access for setting pumps and pond access		
PAF RW One		d. Eliminate excess discharges into RW #1		
PAF RW One		e. Set temporary pumps		
PAF RW One	6	Extend 84" storm drain into Red Water Pond 1		
PAF RW One	7	Repair slopes		
PAF RW One	8	Clean out bottom of pond		
PAF RW Ponds	3	Develop methodology for dewatering ponds (Ponds 3 and 4)		

PAF RW Ponds	5	Pond 4		
PAF RW Ponds	6	Pond 3		
PAF RW Ponds	7	Pond 2		
WCF FGD	6	Clean out stilling pond		
WCF FGD	11	Tentative Ardeman Milestone schedule		
WCF FGD	16	Prepare initial CBMPP		
WCF FGD	17	Obtain approval of initial CBMPP		
WCF FGD	18	Stack Cover Material		
WCF FGD	19	Fuel Oil Management (Preliminary Engineering Study)		
WCF Perimeter Dike	10	If earth cover is the preferred option:		
WCF Dredge Pond	1	Resolve issues associated with closing breeches		

ALF - Raise Ash and Stilling Pond Levels

	Item	Responsible	Complete	Status
1	Stoplogs fabricated and delivered to plant	Taylor	04-Mar-04	Complete 04-Mar-04
2	Engineering design, sketches, and material specifications			
	a. Modifications to internal divider dike	Albright	19-Mar-04	Complete; no modifications needed
	1. Talk to Reed about loading ash on HED trucks (not fine material)	Frank	26-Mar-04	
	2. Send longreach Track Hoe and tandem axle dump truck to ALF	Radford	29-Mar-04	Dump truck on site; trackhoe April 1?
	3. Andrew to verify delivery date on long reach track hoe	Andrew	26-Mar-04	Would like delivery on March 29
	4. Repair sloughs on internal dike (four places)	Pulley	02-Apr-04	
	b. Determine if bollards extruding from dike can be cut off (how close can the crane get to the head wall)	Albright	19-Mar-04	Complete
	c. Determine preliminary cost and schedule for contracting repairs to horizontal run of McKeller Lake discharge piping	Albright	19-Mar-04	
	1. Establish contract for inspection (both)	Pulley/Bo	26-Mar-04	Inspection, scope and cost by Wed the 8th
	2. Follow up to confirm inspection date	Andrew/Bo	26-Mar-04	
	3. Get quote on work	Pulley	07-Apr-04	Grout all joints?
	d. Establish contract for discharge piping repairs	Albright/Taylor	24-Mar-04	Pending inspection and scope ID; will be on same requisition
	e. Call HED to request Nodwell to be sent to Allen	Pulley	17-Mar-04	Complete; Nodwell will haul 2 stoplogs at a time
	f. Deliver Nodwell to Allen	HED	23-Mar-04	Complete
	g. Follow up with TPS on information for lift plan (crane capacity & radius)	Pulley	23-Mar-04	Meeting held; TPS & Crane Coordinator assure crane is adequately sized; lift plan to be done by Yard and HED by 4/2
	h. Verify that dike is at least 21' wide at all points	Pulley	19-Mar-04	Less than 21' at 4 places; complete
	i. Determine if next size larger crane is available	Pulley	23-Mar-04	Not available, but not needed
	j. Determine if weight of next size large crane is ok (divider dike)	Albright	22-Mar-04	Dikes with handle either size crane under consideration
3	Develop written sequence of events for raising pond elevations			
	a. Prepare first draft of sequence	Albright	12-Mar-04	Complete 12-Mar-04
	b. Agree on material staging and removal sequence including lift plan	Pulley	24-Mar-04	Complete by noon Monday
	c. Arrange for crane pads	Taylor	19-Mar-04	Complete
	d. Check into LGP vehicle for moving stoplogs on dike	Radford	19-Mar-04	Complete 17-Mar-04
	e. Verify that a vehicle can make the turn onto the internal ash dike	Pulley	19-Mar-04	Complete 17-Mar-04
	f. Arrange for contract with divers (divers bring underwater camera)	Pulley	19-Mar-04	Divers scheduled for 23-Mar-04
	g. Initiate CEC based on internal dike modifications (if needed)	Albright/Wells	19-Mar-04	Fill out EMP; CEC not needed
	h. Complete EMP for dike raising	Dominioni	26-Mar-04	Complete
4	Make notifications to Corp of Engineers and City of Memphis on use of Horn Lake cutoff	Dominioni	19-Mar-04	Contacted City of Memphis - all is ok; contacted Corps, being routed to several people in Corps; will talk to correct person
	a. Find out of Corps will clean out Beaver Dams and keep them out for duration of repairs	Dominioni	22-Mar-04	Corps will clean out Beaver Dams
5	Notify state about raising dikes and routing discharge to Horn Lake Cutoff	Wells	19-Mar-04	Complete 19-Mar-04
6	Inspect discharge to Horn Lake Cutoff (run discharge over pipe)	Dominioni, Pulley	19-Mar-04	Complete 17-Mar-04
7	Develop detailed work packages for project implementation	Taylor	26-Mar-04	90% complete; complete by noon Monday, March 29
8	Review detailed work packages with plant	Taylor/Ash Team	29-Mar-04	
9	Complete NEPA review	Albright/Wells	01-Apr-04	See item 3h; complete
10	Modify internal ash divider dike for setting stoplogs	Taylor	02-Apr-04	
11	Clean debris out of Horn Lake cutoff including Beaver Dam	Taylor	02-Apr-04	
12	Raise ash pond and route discharge to Horn Lake cutoff			
	a. Begin installation of stoplogs	Taylor	05-Apr-04	
	b. Begin pumping to Horn Lake cutoff	Taylor	05-Apr-04	
	c. Complete stoplog installation	Taylor	05-Apr-04	

	d. Complete pumping to Horn Lake cutoff	Taylor	07-Apr-04	
13	Raise stilling pond and re-route discharge to McKellar Lake	Taylor	07-May-04	
14	Set up review meeting with plant	Baugh	24-Mar-04	Complete

15 What do we need to do routinely after we raise the main ash pond

a. Perform survey and obtain survey data	Huber	12-May
b. Assess condition of ditch/channel cleanout	Sutton/Oliver/Taylor	20-Apr
c. Write protocol of channel management, including responsiblities & follow-up	Sutton/Oliver/Taylor	23-Apr
d. Utilize channel fill-up rates and other data to calculate pond fill-up rate	Sutton/Hedgecoth	19-Apr

ALF - Repair Levee at Ash Pond Discharge

	Item	Responsible	Complete	Status
1	Engineering design, drawings, and material specifications; AA DCN	Albright	19-Mar-04	Complete 18-Mar-04
2	Develop detailed work scope for project implementation	Radford	24-Mar-04	Complete
3	Determine how to pump pond to Horn Lake discharge	Dominioni/Pulley	19-Mar-04	Complete
	a. Make arrangements for pumps and piping (and install)	Pulley/Bo	26-Mar-04	Per John Albright, use 8000 gpm pump(s); have quotes, requisition will go in today
4	Prepare detailed work package for implementation	Taylor	29-Mar-04	
5	Review detailed work packages with plant	Radford/Ash Team	31-Mar-04	
6	Complete NEPA review, obtain any permits required to perform implementation	Albright/Wells	09-Apr-04	
	a. Preparing notification package for Corps and State	Wells	23-Mar-04	Package to Frank for review; submitted to Corps yesterday
	b. Sign and issue package	Wells/Galyon	24-Mar-04	Complete; submitted 25-Mar-04
7	Request state concurrence with monitoring plan for Horn Lake cutoff (e-mail)	Wells	19-Mar-04	Complete; TDEC concurred
8	Follow up with Corps on permit status	Wells	02-Apr-04	If get Corps permit, will get ARAP permit from state
9	Develop NPDES sampling requirements if state does not concur with proposed plan	Wells/Dominioni	26-Mar-04	Complete
10	Begin implementation	Radford	12-Apr-04	
11	Complete implementation	Radford	10-May-04	

Allen Fossil Plant

Project: Phase 1A Engineering studies for long term ash disposal; develop contingency plan for emergency ash disposal

	Item	Responsible	Complete	Status
1	Initial meeting with Memphis Port Authority to brainstorm utilization or disposal options	Baugh	11-Mar-04	Complete
2	Perform high level comparison of options	Ash Team	09-Apr-04	Complete
3	Phase 1A study of most viable options:			
	a. Meet with Port Authority to review most viable options	Baugh	16-Apr-04	Do this after analysis of raising levee and building dredge cell
	a1. Need to determine if we can raise the ash pond dikes	Petty	15-May-04??? Petty will advise	
	1. Can this be done structurally?	Petty	15-May-04??? Petty will advise	Lynn will advise by April 23
	2. Can this be done considering sluice line elevations	Petty	15-May-04??? Petty will advise	Lynn will advise by April 23
	3. Can this be done considering Reed Minerals	Petty/Sutton	15-May-04??? Petty will advise	Lynn will advise by April 23
	4. Can this be done considering site drainage	Petty	15-May-04??? Petty will advise	Lynn will advise by April 23
	5. Will the Corps let us do this?	Petty	15-May-04??? Petty will advise	Lynn will advise by April 23
	6. How much volume can be gained by raising the ash pond dike	Petty	15-May-04??? Petty will advise	Lynn will advise by April 23
	7. What will it cost	Petty	15-May-04??? Petty will advise	Lynn will advise by April 23
	8. How much ash is going into the pond	Sutton	15-May-04??? Petty will advise	Lynn will advise by April 23
	a2. Conceptual design for dredge cell			
	b. Perform negotiations with Port Authority and select viable options	Team	15-May-04	
	c. Perform flyover and develop topographical maps	Huber	31-May-04	
	d. Develop conceptual plan for viable options & perform initial screening	Petty	31-Jul-04	
	e. Obtain permissions for off site data collection - viable options	Petty/Realty Services	15-Aug-04	
	f. Complete off site data collection	Petty/Smith	15-Sep-04	
	g. Initiate NEPA for study	Petty/Bowers	31-May-04	

	h. Analyze off site data	Petty/Smith/Bowers	15-Nov-04	15-Oct-05
	i. Develop cost estimates for alternatives (30% accuracy)	Petty	15-Sep-04	
	j. Perform economic and fatal flaw analysis of alternatives	Ash Team	30-Sep-04	
	k. Initiate appropriate level of NEPA review for preferred alternative	Petty/Bowers	05-Oct-04	
	l. Complete Phase 1A	Petty	01-Dec-04	30-Sep-04
3	Contingency plan for emergency ash disposal			
	a. Determine available storage volume in inactive ash pond	Huber	30-May-04	
	b. Prepare detailed plans, including equipment and manpower needs, and cost for removing ash from the active ash pond and placement in the inactive ash pond at a rate that exceeds plant ash production	Radford	31-Aug-04	
	c. Complete CEC for emergency ash diposal in the inactive pond	Petty/Bowers	31-Aug-04	
4	10% Design Review	Petty	01-Dec-04	01-Apr-05
5	Reforecast Captial Cash flows	Davis	01-Dec-04	
6	50% Design Review	Petty	30-Dec-04	30-Sep-05
7	Submit permit	Bowers	30-Dec-04	15-Apr-05
8	Issue Permit	TDEC	01-Jul-05	30-Oct-06
9	100% Design Review	Petty	15-Jul-05	15-Nov-06
10	Begin construction	Radford	01-Aug-05	30-Nov-06
11	Complete construction of new disposal facility	Radford	30-Aug-06	30-Aug-07

Bull Run Fossil Plant

Project: Clean out sluice trench run off pond

1	Determine volume of material to be removed	Sutton	01-Jul-04
2	Finalize project cost estimate	Radford	15-Jul-04
3	Complete CEC	Sutton/EA	30-Aug-04
4	Begin clean out of pond	Radford	01-Sep-04
5	Complete pond clean out	Radford	30-Sep-04

Colbert Fossil Plant

Project: Install ground water wells and perform assessment

1	Determine volume of earth to be placed	Hedgecoth	26-Mar-04
2	Modify design drawing to reflect HED recommendation for perimeter drainage	Petty	28-May-04
3	Finalize project cost estimate	Radford	04-Jun-04
4	Complete CEC	Petty	25-Jun-04
5	Begin installation of drainage structures and placement of cover	Radford	28-Jun-04
6	Complete placement of cover	Radford	30-Jul-04
7	Complete seeding and fertilizing	Radford	30-Sep-04

Colbert Fossil Plant

Project: Cover Bottom Ash Stack Slopes

1	Determine volume of earth to be placed	Hedgecoth	26-Mar-04
2	Modify design drawing to reflect HED recommendation for perimeter drainage	Petty	28-May-04
3	Finalize project cost estimate	Radford	04-Jun-04
4	Complete CEC	Petty	25-Jun-04
5	Begin installation of drainage structures and placement of cover	Radford	28-Jun-04
6	Complete placement of cover	Radford	30-Jul-04
7	Complete seeding and fertilizing	Radford	30-Sep-04

Colbert Fossil Plant
Project: Repair sloughs and rutting - perimeter road around Pond 5 Complex

1	Lay out work to be performed at the site	Hedgecoth	01-Jul-04
2	Finalize project cost estimate	Radford	15-Jul-04
3	Complete CEC	Hedgecoth/EA	15-Jul-04
4	Begin repairs	Radford	01-Aug-04
5	Complete repairs	Radford	30-Aug-04

Colbert Fossil Plant
Project: Establish perimeter drainage & slopes for dry ash stack

1	Lay out work to be performed at site	Hedgecoth	10-May-04
2	Finalize project cost estimate	Radford	15-May-04
3	Complete CEC (if applicable)	Hedgecoth/EA	30-May-04
4	Begin construction	Radford	01-Jun-04
5	Complete construction	Radford	15-Sep-04
6	Complete seeding and fertilizing	Radford	30-Sep-04

Gallatin Fossil Plant

Project: Phase 1 Engineering studies for long term ash disposal

	Item	Responsible	Complete
1	PDE kick-off meeting	Petty	30-Apr-04
2	Prepare package for Phase 1 approval	Ash Team	21-May-04
3	Obtain Phase 1 approval	Ash Team/Davis	28-May-04
4	Begin Phase 1 study	Petty/FE	01-Jun-04
5	Determine how to collect survey data for Pond E	Ash Team	15-Apr-04
6	Perform site work required to support survey	Radford	15-May-04
7	Develop topographical maps	Huber	01-Jun-04
8	Collect ash samples and perform analysis	Petty	16-Jul-04
9	Develop conceptual layout of raised pond E (with associated storage volumes)	Petty	30-Jun-04
10	Perform dike stability analysis	Petty	13-Aug-04
11	Perform runoff and pumping studies	Petty/FE	30-Jul-04
12	Perform power supply study	FE	01-Sep-04
13	Develop conceptual cost estimates	FE	17-Sep-04
14	Determine if Pond E remains the most viable option for LT ash disposal	Petty/Ash Team	17-Sep-04
15	Rescope and reschedule project if Pond E is not viable	Petty/Ash Team	30-Sep-04
16	Initiate NEPA studies (focusing on Pond E)	Petty/Ash Team	16-Jul-04
17	Finalize FY 05 scope and schedule	Petty/Ash Team	30-Sep-04

Status

Leave phragmites, get the toe, do the best you can, do nothing else

Gallatin Fossil Plant

Project: Short Term Ash Disposal

1	Prepare scope and schedule for data collection to support NEPA review for Pond A dike raising	Ash Team	16-Apr-04	Missy and Bill Hunt need to talk to Anne Aiken
2	Develop topographical maps	Huber	01-Jun-04	
3	Initiate NEPA review for final Pond A dike raising	Ash Team	30-Sep-04	
4	Confirm that Pond A dikes are structurally adequate (including reactivation of railroad)	Petty	30-Aug-04	
5	Confirm remaining life of Pond A	Ash Team	30-Aug-04	
6	Determine scope, material quantities and specs for raising Pond A spillway	Petty	30-Sep-04	
7	Provide sketches for dike modifications to support raising Pond A spillway	Petty	30-Sep-04	

Kingston Fossil Plant

Project: Phase 2 Engineering design for long term ash disposal

	Item	Responsible	Complete	Bowers Revision	Status
1	Perform site investigation	MacTec	26-Mar-04	15-Sep-04	
2	Develop detailed project schedule	Petty	16-Apr-04		
3	10% design review meeting and coordination with plant	Petty	12-Mar-04	Complete	
4	50% design review meeting and coordination with plant (including repairs to elevated dredge cell)	Petty	21-May-04	21-May-04	
5	Prepare Part 2 Permit Application	Petty	01-Jun-04	01-Jun-04	
6	Develop cost estimates and detailed schedules for implementation (including NEPA)	Ash Team	31-Jul-04		
7	Respond to TDEC Notice of Deficiencies	Petty/Bowers	As needed		
8	Permit Issued	TDEC	01-Jun-05	01-Jun-06	
9	100% Design Review	Petty	30-Sep-06	30-Sep-06	
10	Begin Construction	Radford	10-Oct-06	TBD	
11	End Construction	Radford	30-Aug-08	TBD	

Kingston Fossil Plant

Project: Develop Interim Dredge Cell

1	Complete construction of emergency dredge cell, Lift A	Radford	16-Apr-04
2	Complete DCN AA (R1) for Lift A	Petty	16-Mar-04
3	Survey new dredge cell	Huber	19-Mar-04
4	Begin dredging	Radford	22-Mar-04
5	Determine reason for error in dike fill quantities and actions to prevent recurrence	Ash Team	30-Apr-04
6	Complete DCN for Lifts B and C	Petty	30-Jun-04
7	Prepare detailed schedule for dredging and lifts	Ash Team	30-May-04
8	Determine if bottom ash dredge cell dikes need to be covered with earth or soil cement	Ash Team	30-May-04
9	Modify CEC (if needed)	Petty	30-Jun-04
10	Complete construction of Lift B	Radford	01-Sep-04

Kingston Fossil Plant

Project: Cover ash in Swan Pond road perimeter ditch/vegetate; perform maint - exterior of dredge cells

	Item	Responsible	Complete	Status
1	Meet with plant & HED to clarify work scopes; Identify washes on exterior side slopes to be repaired	Ash Team	15-Apr-04	
2	Repair washes and vegetate	Radford	15-May-04	
3	Remove ash from top of berms and place on top of cells	Radford	15-May-04	
4	Cover ash on exterior slopes, seed, and fertilize	Radford	15-May-04	
5	Clean out existing underdrains	Radford	30-Jun-04	
6	Remove or cover ash in perimeter ditch along Swan Pond road; seed & vegitate (or cover with rock)	Radford	15-Jul-04	
7	Regrade perimeter roads around ash pond to allow proper drainage and place crushed stone as needed	Radford	30-Jun-04	
8	Cleanout drainage pipes that drain the perimeter ditch	Radford	15-Aug-04	

Kingston Fossil Plant
Project: Improve Reliability of Dredge

	Item	Responsible	Complete	Status
1	Identify short lead time parts needed for improving dredge reliability	Radford	29-Feb-04	Complete
2	Procure and install short lead time parts	Radford	30-Mar-04	Complete
3	Identify long lead time parts needed for improving dredge reliability	Radford	18-Mar-04	Complete
4	Procure long lead time parts and set up in stock	Radford	14-May-04	

Kingston Fossil Plant
Project: Upgrade pump in Swan Pond Road

	Item	Responsible	Complete	Status
1	Calculate storm water run off (10 year, 24 hour event); select impeller materials (for pumping red water)	Petty	30-Apr-04	
2	Compare economics of electric and diesel pumps (including power supply)	Catlett/Ash Team	07-May-04	
3	Develop sketches for installation and material specifications	Petty	21-May-04	
4	Complete NEPA review (if required)	Petty/EA	15-Jun-04	
5	Procure materials	Catlett	18-Jun-04	Including power (if required)
6	Develop work package for project	Catlett/Ash Team	28-May-04	
7	Perform installation	Catlett	02-Jul-2004	

Johnsonville

Long Term Ash Disposal

	Item	Responsible	Complete		Status
1	Identify potential sites	Team	01-Oct-04		
2	Intiate Hydro-Geo studies	Petty/Bowers	01-Jan-05		
3	Start EA	RSO&E	15-Dec-04		
4	Complete Hydro-Geo studies	Petty/Bowers	15-Dec-05	15-Dec-05	
5	Complete Fatal Flaw analysis & identify preferred site	Team	15-Dec-04	01-Jan-05	
6	10% Design Review	Petty	01-Feb-05	01-Feb-05	
7	Obtain access to site	Team	01-Jan-05		
8	50% Design Review	Petty	15-Dec-05	15-Nov-05	
9	Permit Submitted	Bowers	30-Jan-06	15-Jun-06	
10	Complete EA	RSO&E	30-May-06		
11	Complete land purchase	Realty Services	30-Aug-06		
12	100% Design Review	Petty	15-Jan-07	15-Feb-07	
13	Permit Issued	TDEC	30-Jan-07	30-Jan-07	
14	Begin construction	Radford	28-Feb-07	01-Mar-07	
15	Complete construction	Radford	01-Nov-07	15-Oct-07	

Johnsonville Fossil Plant
Project: Remove Phragmites

	Item	Responsible	Complete	Status
1	Determine cost/capacity of Phragmite removal with amphibious trackhoe	Radford	19-Mar-04	
2	Determine volume of Phragmites to be removed	Huber	31-Mar-04	
3	Make contractual arrangements	Radford	15-Apr-04	
4	Complete NEPA review	Ash Recovery Team	15-Apr-04	
5	Begin work	Radford	19-Apr-04	
6	Complete work	Radford	31-May-04	

Johnsonville Creek Fossil Plant
Project: Du Pont Dredge Cell repairs

	Item	Responsible	Complete	Status
1	Determine scope of Outfall 009 pond clean out	Lynn/Harned	26-Mar-04	
2	Determine volume of material to be removed from Outfall 009 and where material is to be placed	Lynn/Harned/Petty/ Bowers	26-Mar-04	
3	Determine required volume for Outfall 009 pond	Petty/Steifel	16-Apr-04	
4	Determine how to lower water level in Outfall 009	Lynn/Harned/Stiefel	26-Mar-04	
5	Obtain NPDES permit for Outfall 011 (formerly 009)	Stiefel	01-Jul-04	Dependent on TDEC
6	Contracter to remove cenospheres from outfall	Miller	01-Jul-04	
7	Clean out Outfall 009 pond (including cenospheres) and repair outfalls	Radford	31-Jul-04	
8	Perform retention time study for pond	Quinn/Petty	15-Aug-04	
9	Complete NEPA for cleaning out Outfall 009 pond	Petty/Stiefel/Harned	15-Jun-05	
10	Finalize design for Du Pont Dredge Cell repairs	Petty	16-Apr-04	
11	Complete NEPA for Du Pont Dredge Cell repairs			
	a. CEC	Petty/Bowers	30-Apr-04	
	b. SWPPP	Petty/Stiefel	23-Apr-04	
12	Obtain permits for Du Pont Dredge Cell repairs			
	a. Review overall plan with TDEC	Bowers/Petty/Stiefel	30-Apr-04	
	b. Prepare permit modification			
	1. Solid waste	Petty/Bowers	15-May-04	
	2. NPDES	Petty/Stiefel	15-May-04	
	c. Prepare and submit construction SW NOI	Stiefel/Petty	07-May-04	
	d. Receive solid waste and NPDES permit modification (assume minor modification)	Bowers/Stiefel	01-Jul-04	Dependent on TDEC
	e. Receive NOC	Stiefel	01-Jul-04	Dependent on TDEC
13	Procure materials for construction	Radford	15-Jul-04	
14	Borrow Area			
	a. Locate borrow sites	Petty/Radford	15-May-04	
	b. Check borrow sites for suitability	Petty	01-Jun-04	
	c. Perform NEPA review for borrow site and permit (if required)	Petty/Stiefel	01-Jul-04	
	d. Investigate feasibility of a Trans Ash backhaul from borrow site	Sutton	15-Jun-04	
	e. Finalize contract for borrow site	Radford	15-Jul-04	
15	Prepare work package(s) including detailed schedule and cost	Radford	15-Jul-04	
16	Begin construction	Radford	15-Jul-04	
17	Complete FY 04 portion of work scope	Radford	30-Sep-04	
18	Complete FY 05 portion of work scope	Radford	15-Dec-04	
19	Reseed in the spring	Radford	15-Apr-05	

Johnsonville Fossil Plant

Project: Trans Ash - Clean out active ash pond

	Item	Responsible	Complete	Status
1	Clean out Cell 2	Trans Ash	19-Mar-04	
2	Complete dikes - Supercell 1 & 2	Trans Ash	19-Mar-04	
3	Begin dredging into Supercell 1 & 2 (200,000 cubic yards)	Radford	22-Mar-04	
4	Complete dredging into Supercell 1 & 2	Radford	31-May-04	
5	Reroute sluice water into perimeter ditch	Trans Ash	19-Mar-04	
6	Begin clean out of Supercell 3A & 3B	Trans Ash	01-Apr-04	
7	Complete clean out of Supercell 3A & 3B	Trans Ash	31-Jul-04	
8	Begin dredging into Supercell 3A & 3B (132,000 cubic yards)	Radford	01-Aug-04	
9	Complete dredging into Supercell 3A & 3B	Radford	31-Oct-04	
10	Begin Prep of Supercell 1 & 2	Trans Ash	01-Jul-04	
11	Complete Prep of Supercell 1 & 2	Trans Ash	31-Jul-04	
12	Begin clean out of Supercell 1 & 2	Trans Ash	01-Aug-04	
13	Complete clean out of Supercell 1 & 2	Trans Ash	30-Nov-04	
14	Begin dredging into Supercell 1 & 2 (150,000 cubic yards)	Radford	01-Dec-04	
15	Complete dredging into Supercell 1 & 2	Radford	28-Feb-05	
16	Begin Prep of Supercell 3A & 3B	Trans Ash	01-Mar-05	
17	Complete Prep of Supercell 3A & 3B	Trans Ash	31-Mar-05	
18	Begin clean out of Supercell 3A & 3B	Trans Ash	01-Apr-05	
19	Complete clean out of Supercell 3A & 3B	Trans Ash	31-Jul-05	
20	Begin dredging into Supercell 3A & 3B (132,000 cubic yards)	Radford	01-Aug-05	
21	Complete dredging into Supercell 3A & 3B	Radford	31-Oct-05	
22	Begin Prep of Supercell 1 & 2	Trans Ash	01-Jun-05	
23	Complete Prep of Supercell 1 & 2	Trans Ash	30-Jun-05	
24	Begin clean out of Supercell 1 & 2	Trans Ash	01-Jul-05	
25	Complete clean out of Supercell 1 & 2	Trans Ash	30-Nov-05	

John Sevier Fossil Plant

Project: Install and repair ground water wells

1	Determine volume of earth to be placed	Hedgecoth	26-Mar-04
2	Modify design drawing to reflect HED recommendation for perimeter drainage	Petty	28-May-04
3	Finalize project cost estimate	Radford	04-Jun-04
4	Complete CEC	Petty	25-Jun-04
5	Begin installation of drainage structures and placement of cover	Radford	28-Jun-04
6	Complete placement of cover	Radford	30-Jul-04
7	Complete seeding and fertilizing	Radford	30-Sep-04

John Sevier Fossil Plant

Project: Clean out dry ash stack intermediate settling pond and repair stack sloughs

1	Determine volume to be cleaned out of pond	Sutton	10-Apr-04
2	Finalize project cost estimate	Radford	25-Apr-04
3	Complete CEC (if needed)	Sutton/EA	30-Apr-04
4	Begin clean out of pond	Radford	01-May-04
5	Complete pond clean out	Radford	30-May-04
6	Begin stack and ditch repairs	Radford	01-Jun-04
7	Complete stack and ditch repairs	Radford	15-Sep-04
8	Complete seeding and fertilize	Radford	30-Sep-04

John Sevier Fossil Plant

Project: Place soil cover to prevent dusting - Dry Fly ash stack

1	Confirm volume of soil to be placed	Sutton	05-Apr-04
2	Finalize project cost estimate	Radford	10-Apr-04
3	Complete CEC (if needed)	Sutton/EA	15-Apr-04
4	Begin placement of soil	Radford	15-Apr-04
5	Complete placement	Radford	30-May-04

JSF - Raise spillway in bottom ash pond

	Item	Responsible	Complete	Status
1	Develop listing of materials to be procured	Radford/Ash Team		
2	Complete material procurement	Radford		
3	Complete CEC	Sutton/EA		
4	Develop project work package	Radford		
5	Complete raising	Radford		

John Sevier

Long Term Ash Disposal

	Item	Responsible	Complete	Status
	Identify potential sites	Team	30-Sep-04	
	Start EA	RSO&E	30-Oct-04	
	Complete EA	RSO&E	30-May-06	
	Complete Fatal Flaw analysis & identify preferred site	Team	15-Jun-05	
	Obtain access to site	Team	30-Sep-05	
	Intiate Hydro-Geo studies	Petty/Bowers	01-Oct-05	
	10% Design Review	Petty	01-May-06	01-Mar-06
	Complete Hydro-Geo studies	Petty/Bowers	30-Jun-06	30-Sep-06
	50% Design Review	Petty	15-Aug-06	
	Complete land purchase	Realty Services	30-Aug-06	
	Permit Submitted	Bowers	01-Sep-06	15-Jun-06
	Permit Issued	TDEC	01-Sep-07	01-Nov-08
	100% Design Review	Petty	15-Sep-07	15-Nov-08
	Begin construction	Radford	01-Oct-07	30-Sep-09
	Complete construction	Radford	30-Sep-08	01-Sep-10

Paradise Fossil Plant

Project: Remediate Red Water #1 and Dredge

	Item	Responsible	Complete	Status
1	Review and comment on PAF administrative controls for prevention of Red Water Pond #1 overflow to river	Purkey	16-Mar-04	
2	Modify administrative controls per comments received in item 1 (following reaching consensus with Yard Ops and plant)	Raley/Dukes	26-Mar-04	
3	Estimate project cost following completion of engineering	Radford	08-Jun-04	
4	Complete CEC for project	Albright	Complete	
5	Clean out RW #1 Main Supply piping			
	a. Arrange for inspections via camera	Albright	01-Jun-04	
	b. Second inspection with camera	Radford/Raley	26-Jul-04	
	c. Clean out pipe as indicated by inspections	Radford	06-Aug-04	
5	Pump down level in RW #1			
	a. Size temporary pumps	Albright	12-Mar-04	
	b. Develop a design for pond access for setting pumps (and future clean out)	Albright	01-Jun-04	
	c. Construct access for setting pumps and pond access			
	1. Begin work	Radford	25-Jun-04	
	2. Complete work	Radford	09-Jul-04	
	d. Eliminate excess discharges into RW #1			
	1. Repair leakage - Bottom Ash sluice lines	Raley	31-Mar-04	
	2. Reroute RO reject line	Raley	30-Apr-04	
	3. Reroute new line	Nuyt	30-Apr-04	
	e. Set temporary pumps			
	1. Begin work	Radford	12-Jul-04	
	2. Complete work	Radford	16-Jul-04	
	f. Begin pumping down pond	Radford	19-Jul-04	
	g. Pump down pond sufficiently to begin clean out	Radford	25-Jul-04	
	h. Run temporary pumps continually	Radford	Duration of job	
	i. Remove temporary pumps	Radford	30-Sep-04	
6	Extend 84" storm drain into Red Water Pond 1			
	a. Complete design drawings	Albright	01-Jun-04	
	b. Purchase pipe	Radford	12-Jul-04	
	c. Begin installation of pipe	Radford	26-Jul-04	
	d. Complete installation of pipe	Radford	31-Jul-04	
7	Repair slopes			
	a. Complete design, material specifications, and quantities	Albright	01-Jun-04	
	b. Purchase materials	Radford	23-Jul-04	
	c. Begin repair of slopes	Radford	26-Jul-04	
	d. Complete repair of slopes	Radford	30-Sep-04	
8	Clean out bottom of pond			
	a. Determine quantity of material to be removed	Huber	01-Jun-04	

	b. Determine where material cleaned out is to be placed	Bowers	Complete
	c. Begin clean out of pond	Radford	26-Jul-04
	d. Complete clean out of pond	Radford	30-Sep-04

Paradise Fossil Plant

Project: Clean out Red Water Ponds 2, 3, and 4; restore design conditions for pond to pond flow

	Item	Responsible	Complete	Status
1	Determine volume of material to be removed from each pond	Huber	15-Apr-04	
2	Determine where material removed from ponds can be disposed of	Wells	19-Mar-04	
3	Develop methodology for dewatering ponds (Ponds 3 and 4)			
	a. Provide Radford with drawings showing location of pond drain piping	Petty	19-Mar-04	
	b. Locate area of pipe pluggage	Radford	02-Apr-04	
	c. Size pumps (if needed) for dewatering	Petty	16-Apr-04	
	d. Procure pumps	Radford	29-Apr-04	
	e. Develop methodology for bypassing ponds during dewatering/cleanout	Petty	26-Apr-04	
4	Complete NEPA review	Petty/Bowers	02-May-04	
5	Pond 4			
	a. Reroute inflow and begin dewatering	Radford	03-May-04	
	b. Complete dewatering	Radford	17-May-04	
	c. Begin material removal	Radford	17-May-04	
	d. Complete material removal	Radford	14-Jun-04	Based on assumed quantity of 50,000 cubic yards maximum
	e. Determine repairs needed for valves and piping	Radford/Petty	21-Jun-04	
	f. Procure materials for valves and piping repairs	Radford	05-Jul-04	
	g. Make repairs to valves and piping	Radford	26-Jul-04	
6	Pond 3			
	a. Manage inflow and begin dewatering	Radford	14-Jun-04	
	b. Complete dewatering	Radford	28-Jun-04	
	c. Begin material removal	Radford	28-Jun-04	
	d. Complete material removal	Radford	06-Sep-04	Based on assumed quantity of 175,000 cubic yards maximum
	e. Determine repairs needed for valves and piping	Radford/Petty	13-Sep-04	
	f. Procure materials for valves and piping repairs	Radford	20-Sep-04	
	g. Make repairs to valves and piping	Radford	30-Sep-04	
7	Pond 2			
	a. Begin dewatering (using existing pumps)	Radford	03-May-04	
	b. Complete dewatering	Radford	17-May-04	
	c. Begin material removal	Radford	17-May-04	
	d. Complete material removal	Radford	14-Jun-04	Based on assumed quantity of 50,000 cubic yards maximum
	e. Determine repairs needed for valves and piping (if needed)	Radford/Petty	21-Jun-04	
	f. Procure materials for valves and piping repairs (if needed)	Radford	05-Jul-04	
	g. Make repairs to valves and piping (if needed)	Radford	26-Jul-04	

Paradise Fossil Plant

Project: Clean out supply channel for Jacobs Creek Ash Pond

	Item	Responsible	Complete	Status
1	Evaluate channel elevations to determine if water level can be dropped	Huber	15-Apr-04	
2	Determine where material removed from ponds can be disposed of	Wells	19-Mar-04	
3	Determine volume to be removed	Huber	15-Apr-04	
4	Develop work package for project	Yard Operations	23-Apr-04	
5	Clean out channel	Yard Operations	30-Apr-04	

Paradise Fossil Plant

Project: Procedure for disposal of waste from vacuum truck

	Item	Responsible	Complete	Status
1	Determine volume of vacuum truck waste to be disposed of annually	Bowers/PAF PAEs	15-Jul-04	
2	Determine where waste is to be placed	Bowers/PAF PAEs	15-Jul-04	
3	Issue instructions on how to deal with existing vacuum truck dumping piles	Bowers/PAF PAEs	31-Aug-04	
4	Complete NEPA review for placement of waste (if required)	Bowers/PAF PAEs	31-Aug-04	
5	Prepare sketch showing location for vacuum truck dumping	Petty	15-Aug-04	
6	Develop procedure for vacuum truck dumping	Bowers/PAF PAEs	31-Aug-04	
7	Conduct training at PAF on new procedure	Bowers/PAF PAEs	30-Sep-04	

Paradise Fossil Plant

Project: Modify ash pond discharge to allow calibration

	Item	Responsible	Complete	Status
1	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
2	Engineering design, sketches, and material specifications for modifications	Petty/Ash Team	30-Jun-04	
3	Procure materials for implementation	Radford/Ash Team	15-Aug-04	
4	Prepare detailed work package for implementation	Radford/Ash Team	15-Aug-04	
5	Complete NEPA review, obtain any permits required to perform implementation	Petty/Wells	31-Jul-04	
6	Begin implementation	Radford	15-Aug-04	
7	Complete implementation	Radford	31-Aug-04	

Paradise Creek Fossil Plant

Project: Remediate coal fines/slag in Daniel Run Creek

	Item	Responsible	Complete	Status
1	Prepare sketch of road regrading (x-section with silt fence(s) EMP per Kidd memo dated 2/19/04)	Knox/Petty	24-Mar-04	
2	Measure area to cover and establish vegetation	Knox	24-Mar-04	
3	Begin Work on BMPs (road grading, silt fence)	Radford	19-Apr-04	
4	Complete work	Radford	1-May-04	
5	Begin Work on (floodplain reclaim grassing)	Radford	02-May-04	
6	Complete work	Radford	15-May-04	
7	Document work with photos	Dukes	18-May-04	
8	Prepare letter to Kidd (draft)	Wells	24-May-04	
9	Filnallize and submit letter to Kidd	Dukes	7-Jun-04	
10	Perform DCN	Lynn		
11	Perform CEC	Lynn		
12	Put gravel and silt fences on creek side; put rest of gravel after clean out fines pond and haul; go ahead and fix lower bank; 10' of interim gravel	Radford		

Paradise Creek Fossil Plant
Project: Extend Gypsum Sluice Lines

	Item	Responsible	Complete	Status
1	Environmental review for whole site	Lee	30-Apr-04	
2	Where to extend U3 sluice lines? Same as U1 and U2	-	Complete	
3	Do we need to segregate U3 from U1 &U2/ No at this time		Complete	
4	Look at stockpiling dirt cover before flooding		Complete	
	a. Is the material suitable	Powell/Bowers		
	b. How much material and where from	Powell/HED		
	c. Include in current environmental review	Do not add		
	d. See if cultural resources is already included	D. Kellar	22-Apr-04	
5	Who pays for the stacking plan?	Baugh/Lee	22-Apr-04	
6	Who does stacking plan?	Ash Team	23-Apr-04	
7	Talk to Floyd Jennings about U1 and U2 pump capacity	Gentry	31-May-04	
8	Look at U1 and U2 pipe material/DCN	Gentry	31-May-04	
9	Add valves at tie in point for flexibility	Gentry	31-May-04	
	a. Stay within current budget			
10	Provide sketch/design for ditch to Radford	Powell	15-May-04	
11	Provide cost estimate for ditch	Radford	31-May-04	
12	Construction Phase	GUBMK/HED	July/August	

Paradise Creek Fossil Plant

Project: Install Underdrains in FGD stack

	Item	Responsible	Complete	Status
1	Review HED scope	Powell	Complete	
2	Change notes and drawings per scope	Powell	Complete	
3	Initiate Advanced Authorization DCN	Powell	25-Jun-04	
4	Agree to quantities (about 7,500 linear feet)	Team	Complete	
5	Finalize cost estimate	HED	Complete	
6	Update Courtney on scope and cost estimate	Missy	Complete	
7	Engineering support at project kickoff	Powell	July	
8	Construction phase	HED	July/August	
9	Include CEC with DCN	Powell	30-May-04	

Shawnee Fossil Plant

Project: Phase 1A Engineering studies for long term ash disposal

	Item	Responsible	Complete		Status
1	PDE kick-off meeting	Petty	5-Apr-04		
2	Initiate Hydro-Geo studies	Petty/Smith	15-Apr-04		
3	Prepare package for Phase 1 approval	Ash Team	30-Apr-04		
4	Obtain Phase 1 approval	Ash Team/Davis	07-May-04		
5	Begin Phase 1 study	Petty/FE	14-May-04		
6	Develop topographical maps	Huber	14-May-04		
7	Meet with state to discuss project requirements	Petty/Bowers	04-Jun-04		
8	Develop conceptual layout (with associated storage volumes)	Petty	30-Jun-04		
9	Collect ash samples and perform analysis	Petty	16-Jul-04		
10	Initiate NEPA studies	Petty/Ash Team	16-Jul-04		
11	Perform runoff and pumping studies	Petty/FE	30-Jul-04		
12	Perform stability analysis	Petty	30-Aug-04		
13	Perform power supply study	FE	01-Sep-04		
14	Develop conceptual cost estimates	FE	17-Sep-04		
15	Finalize FY 05 scope and schedule	Petty/Ash Team	30-Sep-04		
16	10% Design Review	FE	15-Oct-04	15-Oct-04	
17	Complete Hydro-Geo studies	Petty/Smith	15-Oct-04	30-Dec-04	
18	50% Design Review	Petty	15-May-05	15-Mar-05	
19	Submit Permit Application	Bowers	01-Jun-05	01-Apr-05	
20	Permit Issued	KDEC	15-Sep-06	01-Apr-07	
21	100% Design Review	Petty	30-Sep-06	15-Apr-07	
22	Begin Construction	Radford	01-Oct-06	01-May-07	
23	Complete Construction	Radford	30-Sep-07	30-Sep-07	

Shawnee Fossil Plant

Project: Modify ash pond discharge to allow calibration

	Item	Responsible	Complete	Status
1	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
2	Investigate the use of an improved material for packing joints on discharge weir	Petty/Ash Team	30-Jun-04	
3	Develop methodology for lowering stilling pond water level for repairs	Ash Team	30-Jun-04	
4	Procure materials for implementation	Radford/Ash Team	15-Aug-04	
5	Prepare detailed work scope for implementation	Radford/Ash Team	15-Aug-04	
6	Complete NEPA review, obtain any permits required to perform implementation	Petty/Barnes	31-Jul-04	
7	Begin implementation	Radford	15-Aug-04	
8	Complete implementation	Radford	31-Aug-04	

Widows Creek Fossil Plant

Project: Remediate Gypsum Stack; dredge gypsum stilling pond

	Item	Responsible	Complete	Status
1	Project scoping meeting with Ardeman & Associates	Petty	23-Mar-04	
2	Obtain preliminary instructions from Ardeman for near term operational changes in preparation of stack remediation and stilling pond clean out	Team	23-Mar-04	
3	Work with HED on implementation of operational changes recommended by Ardeman	Hedgecoth	02-Apr-04	
3	Determine quantity of material to be removed from stilling pond	Huber	30-Mar-04	
4	Determine where material removed from stilling pond is to be placed	Bowers	19-Mar-04	
5	Obtain NEPA clearance & permits for dredging/cleaning out stilling pond	Petty/Bowers	11-Apr-04	
6	Clean out stilling pond			
	a. Develop methodology for isolating fuel oil in stack, pond, and from underdrains	Hedgecoth	31-Mar-04	
	b. Implement methodology for isolating fuel oil in stack, pond and from underdrains	Radford	11-Apr-04	
	c. Establish contract for removal and disposal of fuel oil & cenospheres on stilling pond	Radford	11-Apr-04	
	d. Initial removal of fuel oil & cenospheres from stilling pond	Radford	23-Apr-04	
	e. Begin dredging stilling pond	Radford	28-May-04	
	f. Complete dredging of stilling pond	Radford	16-Jul-04	Assuming 140,000 cubic yards of material
	g. Final removal of fuel oil & cenospheres from stilling pond	Radford	15-Sep-04	
8	Receive and evaluate Ardeman proposal based on March 23 meeting	Petty	06-Apr-04	
9	Finalize Ardeman scope and award contract	Petty	16-Apr-04	
10	10% Kick Off meeting with Ardeman	Petty	23-Apr-04	
11	Tentative Ardeman Milestone schedule			
	a. Determine if field testing is required (during scoping effort)	Ardeman	06-Apr-04	
	b. Begin collection of field data	Ardeman/MacTec	03-May-04	
	c. Complete field data collection	Ardeman/MacTec	10-May-04	
	d. Complete analysis of field data	Ardeman	21-Jun-04	7-10 days for Proctors, 6 weeks for Tri-Axial test
	e. Issue initial instructions for cutting back slopes, installing underdrains, and interim operations	Ardeman	30-Jun-04	
	f. Establish overall configuration (slopes, drainage, etc) considering original design and current configuration; provide a draft CBMPP. THIS IS THE 50% DESIGN REVIEW	Ardeman	31-Jul-04	
	g. Begin implementation of initial Ardeman instructions	Radford	01-Jul-04	
	h. Complete design and drawings THIS IS THE 100% DESIGN REVIEW	Ardeman	31-Aug-04	
12	Initial NEPA review based on known scope	Petty/Bowers	30-Apr-04	Investigate need/existing NEPA
13	Perform additional NEPA review if needed per Ardeman initial instructions	Petty/Bowers	15-Jul-04	
14	Complete additional NEPA review if needed based on 50% design review	Petty/Bowers	15-Aug-04	
16	Prepare initial CBMPP			
	a. Begin work	Petty	14-Apr-04	
	b. Complete work	Petty	14-May-04	
17	Obtain approval of initial CBMPP			
	a. Submit to state	Stiefel	15-May-04	
	b. Approval by state	Stiefel	01-Jun-04	
18	Stack Cover Material			
	a. Determine engineering requirements for cover material (volume/quality)	Ardeman	31-Jul-04	
	b. Locate a borrow site that meets engineering requirements	Petty/Realty Services	31-Aug-04	
	c. Establish a contract for borrow material or purchasing site	Petty/Radford	30-Sep-04	
19	Fuel Oil Management (Preliminary Engineering Study)			
	a. Option 1: Fuel oil collection facility	Petty/FES	31-Aug-04	
	b. Option 2: Correction of unit burner ignition system problems	FES	31-Aug-04	
	c. Perform an economic analysis of options 1 and 2	FES	30-Sep-04	
	d. Pursue most economical/environmentally sound option	FES	FY 2005	
	e. Develop an interim plan for fuel oil management at the FGD stack pending implementation of final solution	Ash Recovery Team	31-Aug-04	
	f. Implement interim fuel oil management plan for FGD stack	Radford	30-Sep-04	

Widows Creek Fossil Plant

Project: Engineering studies to evaluate impacts to dike stability from perimeter ditch flow into toe of dike

	Item	Responsible	Complete	Status
1	Perform drawing search for concrete drop box	Petty	31-Jul-04	
2	Develop sketches for ditch bypass during exploration; prepare EMP	Petty	14-Aug-04	
3	Perform exploratory excavation of dike at influent of water from ditch with Engineering observation.	Petty/Radford	16-Aug-04	
4	Fill hole with DGA or flowable fill (depending on size)	Radford	18-Aug-04	
5	Clean out ditch to restore proper flow	Radford	30-Sep-04	

Widows Creek Fossil Plant

Project: Perform engineering studies to verify the adequacy of the perimeter ditch at the base of the old scrubber pond dredge cell dikes

	Item	Responsible	Complete	Status
1	Determine if the perimeter ditch is designed for a 10 year, 24 hour rainfall event	Petty	30-Mar-04	
2	Determine if the perimeter ditch can contain a 12 hour gypsum pipe leakage situation	Petty	14-Apr-04	
3	Develop a plan to insure that ditches are cleaned on a routine basis, and for additional monitoring prior to and during precipitation events	Ward	30-Mar-04	
4	Determine cost of applying earth or other permanent cover to dredge cell	Petty	15-Apr-04	
6	Investigate use of "Soil-Sement" binder on exterior slope of dredge cell	Davis	30-Mar-04	
7	Perform economic analysis of options	Davis	14-Apr-04	
8	Complete CEC for Use of "Soil-Sement" (System wide use)	Davis/Bowers	15-Apr-04	
9	Apply "Soil-Sement" if Investigation and economics are Positive	Ward	30-Apr-04	
10	If earth cover is the preferred option:			
	a. Locate and determine price of cover material	Petty/Realty Services	31-Aug-04	
	b. Acquire additional project funding	Baugh	03-Sep-04	
	c. Procure and place earth cover.	Radford	30-Sep-04	
	d. Complete CEC for borrow area and placement	Petty/Bowers	03-Sep-04	

Widows Creek Fossil Plant

Project: Additional Work - Build dredge cell on old scrubber pond

	Item	Responsible	Start	Complete	Status	Quantity Required	Unit Cost	Cost
1	Resolve issues associated with closing breeches							
	a. Re-install breech in Pond 1 & Pond 2 divider dike (drop Pond 1 water level)	Radford		18-Mar-04	Complete			
	b. Monitor water level in Pond 1 to insure level drops and maintains a consistent level	Radford		Ongoing	Ongoing			
2	Determine quantities needed to complete dikes	Ash Team		26-Mar-04	Estimate is 185,000 cubic yards			
	a. Provide Ash Team with fill volumes used to build dikes in various locations	Yogi		19-Mar-04	Complete (estimate)			
	b. Based on Item a, project volume to complete dikes (and schedule)	Powell/Ash Team		24-Mar-04	Complete			
3	Determine schedule and cost for completing dikes	Radford/Ash Team		26-Mar-04	Complete			
4	Determine why actual and design dike quantities differ so much and what to do to prevent recurrance	Powell/Ash Team		24-Mar-04	In Progress			
5	Review survey data to check pond FWV	Ash Team		24-Mar-04	Complete			
6	Determine if temporary dredge cell needs to be raised	Ash Team		26-Mar-04	Complete			
7	Is the 1-6 ditch adequate for flow, or will it need constant maintenance?	Ash Team		26-Mar-04				
8	If answer to # 7 is yes, what do we do with the ash?	Ash Team		26-Mar-04				
9	Determine how to handle bottom ash after flood holes and ditches	Ash Team		26-Mar-04				
10	Install additional 36" pipe to keep flow to FGD pond	HED		07-Apr-04				
	Develop alternative for project completion at a reduced cost	Missy		02-Apr-04	Complete			
	Review revised scope with HED site personnel and Yard Operations	Missy/Powell	08-Apr-04	08-Apr-04				
	Determine if finger dike needs to be raised	Missy/Powell/Wilson	07-Apr-04	09-Apr-04				
	Verify quantities required to raise ash pond dike	Missy/Powell/Wilson	07-Apr-04	09-Apr-04				
	Verify cost to raise ash pond dike, finish project on O&M, and new schedule	Radford/HED	07-Apr-04	09-Apr-04				
	Obtain Engineering and Environmental concurrence to raise ash pond	Ash Team	09-Apr-04	09-Apr-04				
	Develop written project sequence in support of work package (through end of FY 05)	Missy/Powell	10-Apr-04	21-Apr-04				
	Complete CEC (if needed)	Powell	12-Apr-04	16-Apr-04				
	Review revised scope with plant	Missy/Powell	12-Apr-04	16-Apr-04				
	Lay out sections of earth ash pond dike that need to be raised	Missy/Wilson	12-Apr-04	16-Apr-04				
	Revise drawings/follow DCN process	Petty	12-Apr-04	16-Apr-04				
	Perform cone penetration test	Petty/MacTec	19-Apr-04	23-Apr-04				
	Dredge to FGD pond via temporary cell	HED	Present	30-Apr-04				
	Construct bottom ash dikes to El. 640	HED	Present	30-Apr-04				
	Raise dikes around active ash pond to El 636	HED	19-Apr-04	30-Apr-04				
	Prepare bottom ash area for flooding	HED	19-Apr-04	30-Apr-04				
	Develop work package for raising spillways in active ash pond	Radford/Ash Team	21-Apr-04	30-Apr-04				
	Analyze data from cone penetration test	MacTec	26-Apr-04	21-May-04				
	Close off FGD pond	HED	03-May-04	07-May-04				
	Flood bottom ash area	HED	03-May-04	07-May-04				
	Raise Active ash pond spillway	HED	03-May-04	07-May-04				
	Perform survey for FWV report to state	Missy/Wilson	17-May-04	21-May-04				
	Revise stability analysis per data from cone penetration test	Petty	24-May-04	28-May-04				
	Complete FWV report to state	Missy	31-May-04	04-Jun-04				

Widows Creek Fossil Plant

Project: Modify ash pond discharge to allow calibration

	Item	Responsible	Complete	Status
1	Clarify how permit requirements are not being met	Harris/Ash Team	30-Apr-04	
2	Engineering design, sketches, and material specifications for modifications	Petty	30-Jun-04	
3	Procure materials for implementation	Ward	15-Aug-04	
4	Prepare detailed work package for implementation	Ward/Ash Team	15-Aug-04	
5	Complete NEPA review, obtain any permits required to perform implementation	Petty/Stiefel	31-Jul-04	
6	Begin implementation	Ward	15-Aug-04	
7	Complete implementation	Ward	31-Aug-04	

System Wide Issue

Project: Develop policy for seep mitigation and develop scope for engineering study

	Item	Responsible	Complete	Status
1	Project scoping meeting to review current regulations, legal issues, and requirements associated with seeps	Baugh/Ash Team/EA/OGC	30-Apr-04	
2	Develop options for seep repair and/or mitigation	Bowers/Ash Team	15-May-04	
3	Determine overall feasibility, order of magnitude costs, and risk for options	Bowers/Ash Team	31-Jul-04	
4	Team review of options	Ash Team/EA/OGC	31-Jul-04	
5	Draft system wide policy based on review of options	Bowers/Ash Team	31-Aug-04	
6	Complete OGC review and present to Executive Management	Ash Team/EA/OGC	30-Sep-04	

System Wide Issue

Project: Develop options for control of dust from Coal Combustion By-Product handling facilities

	Item	Responsible	Complete	Status
1	Develop options for dust control	Davis/Ash Team	30-Apr-04	
2	Determine overall feasibility, cost, and risk for options	Davis/Ash Team	31-May-04	
3	Team review of options	Ash Team	31-May-04	
4	Perform NEPA review for viable options	Davis/Ash Team	15-Jul-04	
5	Develop matrix of options & procedures for implementation of viable options	Davis/Ash Team	31-Aug-04	
6	Conduct training for implementation	Davis/Ash Team	30-Sep-04	

System Wide Issue

Project: Perform Engineering Studies - How to deal with Phragmites

	Item	Responsible	Complete	Status
1	Develop options for Phragmite removal and control	Bowers/Taylor	30-Apr-04	
2	Determine overall feasibility, cost, and risk for options	Bowers/Taylor	31-May-04	
3	Team review of options	Ash Team	31-May-04	
4	Perform NEPA review for viable options	Bowers/Taylor	15-Jul-04	
5	Develop matrix of options & procedures for implementation of viable options	Bowers/Taylor	31-Aug-04	
6	Conduct training for implementation	Bowers/Taylor	30-Sep-04	

Haber, Stanley M

From: Haber, Stanley M.
Sent: Tuesday, May 11, 2004 11:13 AM
To: Deskins, Earl L
Cc: Rehberg, Robert L.; Holmes, James B.
Subject: Emailing: KIF530 New Ash Pond capacity CPJSForm 2004 04 24.pdf

Attachments: KIF530 New Ash Pond capacity CPJSForm 2004 04 24.pdf

KIF530 New Ash Pond capacity C...

Earl,

For your information.

Stan

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: KIF

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	07/30/2003	
In-Srvc Date:	09/30/2008	
Outage Date:		

Problem Description
Analysis of recent dike failure in the existing dredge cells has raised uncertainties regarding the current long-term disposal plans for fly ash and bottom ash. An emergency cell was developed (O&M) which will provide a maximum of three years of fly ash and bottom ash capacity. In addition, planned scrubbers for Kingston will produce an additional high-volume by-product which may be co-disposed with fly ash and bottom ash beginning in FY 2009.

Project Scope
Expansion of dredge cell adjacent to existing dredge cell by construction of a new dike. Scope will also include development of a waste stack for flyash bottom ash, and gypsum within the existing perimeter dikes of the active ash disposal area.

Perform detailed analysis to determine the overall structural, environmental, and operational viability of continuing to raise and dredge to the existing dredge cells, considering the recent failure along Swan Pond road and the saturation of the lower dikes along the backwaters of the Emory river.

Perform engineering analysis and collect field data as required to develop a detailed design for maximizing the disposal capacity of fly ash, bottom ash, and gypsum on the existing ash pond complex at the Kingston Fossil Plant while maintaining the required Free Water Volume. The detailed design should consider economic, structural, environmental, and operational issues and impacts associated with long term ash disposal. The engineering suitability of ash currently produced at Kingston for storage in an engineered stack should be verified through testing (if this has not already been satisfactorily completed). A part II permit package is to be submitted to Environmental Affairs.

Scope will also include the design, materials procurement, and installation as necessary to support the engineering study findings.

Performance Measurement
Permitted disposal capacity for fly ash and bottom ash by FY 2007. Permitted disposal capacity for gypsum by FY 2009.

Other Options/Alternatives
Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Kingston's ash there.

Reason For Change
New project.

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

News Release

No Information Available

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST

SUNK CAPITAL PROJECTS: $0
SUNK O&M PROJECTS: $0
REMAINING COST: $16,300
TOTAL COST: $16,300
ESTIMATE TYPE: Order of Magnitude

ECONOMIC INDICATORS

NPV: $8,864.0
PI: 1.877
IRR: 53.0
SIMPLE PAYBACK: 6
BASE YEAR: 2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	200	0	0	0	0
2005	0	0	0	0	0
2006	100	0	0	0	0
2007	8,000	0	5,000	0	0
2008	8,000	0	5,000	0	0
2009	0	0	5,000	0	0
2010	0	0	5,000	0	0
2011	0	0	5,000	0	0
2012	0	0	5,000	0	0
2013	0	0	5,000	0	0
2014	0	0	5,000	0	0
2015	0	0	5,000	0	0
2016	0	0	5,000	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

	Cost Assumptions	Risks
1.	Engineering = $200k in FY 04; $100k in FY 06.	Based on similar projects.
2.	Implementation (Develop by-product handling system.)= $8,000k in FY 07; $8,000k in FY 08.	Conceptual estimate for turn-key system.
3.	No significant marketing or utilization of ash or gypsum will take place. Waste production (cubic yards per year): Fly Ash = 410,000 Bottom Ash = 90,000 Gypsum = 750,000	Based on historical data (ash) and similar projects (gypsum).
4.	The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.	Support of plant business plan.

	Benefit Assumptions	Risks
1.	Haul fly ash and bottom ash offsite to an existing permitted disposal site @ $10/ton for 500,000 tons per year = $5,000k per year for ten years.	Assumes a disposal site can be found within 30 miles of the plant which could handle 500,000 tons per year.

Haber, Stanley M

From: Haber, Stanley M.
Sent: Tuesday, May 11, 2004 11:04 AM
To: Bowers, Larry C; Petty, Harold L.
Subject: Emailing: KIF530 New Ash Pond capacity CPJSForm 2004 04 24.pdf

Attachments: KIF530 New Ash Pond capacity CPJSForm 2004 04 24.pdf

KIF530 New Ash Pond capacity C...

Lynn,

Per your request.

Stan

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization

Owner: FPG
Lead: Yard Operations

Location

Loc: KIF

Technical Contact

Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr

Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project

Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	07/30/2003	
In-Srvc Date:	09/30/2008	
Outage Date:		

Problem Description

Analysis of recent dike failure in the existing dredge cells has raised uncertainties regarding the current long-term disposal plans for fly ash and bottom ash. An emergency cell was developed (O&M) which will provide a maximum of three years of fly ash and bottom ash capacity. In addition, planned scrubbers for Kingston will produce an additional high-volume by-product which may be co-disposed with fly ash and bottom ash beginning in FY 2009.

Project Scope

Expansion of dredge cell adjacent to existing dredge cell by construction of a new dike. Scope will also include development of a waste stack for flyash bottom ash, and gypsum within the existing perimeter dikes of the active ash disposal area.

Perform detailed analysis to determine the overall structural, environmental, and operational viability of continuing to raise and dredge to the existing dredge cells, considering the recent failure along Swan Pond road and the saturation of the lower dikes along the backwaters of the Emory river.

Perform engineering analysis and collect field data as required to develop a detailed design for maximizing the disposal capacity of fly ash, bottom ash, and gypsum on the existing ash pond complex at the Kingston Fossil Plant while maintaining the required Free Water Volume. The detailed design should consider economic, structural, environmental, and operational issues and impacts associated with long term ash disposal. The engineering suitability of ash currently produced at Kingston for storage in an engineered stack should be verified through testing (if this has not already been satisfactorily completed). A part II permit package is to be submitted to Environmental Affairs.

Scope will also include the design, materials procurement, and installation as necessary to support the engineering study findings.

Performance Measurement

Permitted disposal capacity for fly ash and bottom ash by FY 2007. Permitted disposal capacity for gypsum by FY 2009.

Other Options/Alternatives

Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Kingston's ash there.

Reason For Change

New project.

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

News Release

No Information Available

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$8,864.0
SUNK O&M PROJECTS:	$0	**PI:**	1.877
REMAINING COST:	$16,300	**IRR:**	53.0
TOTAL COST:	$16,300	**SIMPLE PAYBACK:**	6
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	200	0	0	0	0
2005	0	0	0	0	0
2006	100	0	0	0	0
2007	8,000	0	5,000	0	0
2008	8,000	0	5,000	0	0
2009	0	0	5,000	0	0
2010	0	0	5,000	0	0
2011	0	0	5,000	0	0
2012	0	0	5,000	0	0
2013	0	0	5,000	0	0
2014	0	0	5,000	0	0
2015	0	0	5,000	0	0
2016	0	0	5,000	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

	Cost Assumptions	Risks
1.	Engineering = $200k in FY 04; $100k in FY 06.	Based on similar projects.
2.	Implementation (Develop by-product handling system.)= $8,000k in FY 07; $8,000k in FY 08.	Conceptual estimate for turn-key system.
3.	No significant marketing or utilization of ash or gypsum will take place. Waste production (cubic yards per year): Fly Ash = 410,000 Bottom Ash = 90,000 Gypsum = 750,000	Based on historical data (ash) and similar projects (gypsum).
4.	The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.	Support of plant business plan.

	Benefit Assumptions	Risks
1.	Haul fly ash and bottom ash offsite to an existing permitted disposal site @ $10/ton for 500,000 tons per year = $5,000k per year for ten years.	Assumes a disposal site can be found within 30 miles of the plant which could handle 500,000 tons per year.

Haber, Stanley M

From: Haber, Stanley M.
Sent: Wednesday, April 28, 2004 2:50 PM
To: Long, S. Scott
Subject: KIF530: Develop Fly Ash, Bottom Ash, and Gypsum Disposal Capacity
Tracking:

Recipient	Delivery
Long, S. Scott	Delivered: 04/28/2004 2:50 PM

Scott,

The referenced PJ is ready for your review.

Stan

Haber, Stanley M

From: Haber, Stanley M.
Sent: Tuesday, April 27, 2004 2:45 PM
To: Nash, Lee A.
Cc: Petty, Harold L.; Purkey, Ronald E.
Subject: Status: Ash Blitz Projects at Kingston

Tracking:

Recipient	Delivery
Nash, Lee A.	Delivered: 04/27/2004 2:45 PM
Petty, Harold L.	Delivered: 04/27/2004 2:45 PM
Purkey, Ronald E.	Delivered: 04/27/2004 2:45 PM

Lee,

Per your request in the trailing email, I am providing you a status of these projects at Kingston.

In general, I am working toward the goal of having both of these packages ready for my next FPEP meeting in the next few weeks (specific date TBD).

I have drafted the EMP for both of these projects and had them reviewed by the site environmental Program Administrator. I have also reviewed the PJ for KIF530 (Develop Dry Flyash Capacity) and revised it to accommodate scope definition that was identified in the development of the EMP. We are now at a point of defining the cash flow distribution per organization so that the Cost Estimate Summary and PA can be generated.

In discussing this project today with Lynn Petty and Steve Baugh, it appears that Steve is not sure that the money shown for this FY is accurate due to uncertainty about both (1) how much of the funding will be picked up by the FGD program and (2) because there is uncertainty as to how much of the emergency work done earlier this FY should be covered by this PA.

The scope and funding questions are supposed to be answered by Tuesday, May 4. Steve, Lynn, and I are supposed to have a telecon Tuesday afternoon to discuss the answers to these questions so that I can proceed with package development of both of these projects. I would hope to have the packages ready for signatures by the end of next week (May 7).

Please let me know if you have any questions.

Stan

> -----Original Message-----
> **From:** Nash, Lee A.
> **Sent:** Wednesday, April 14, 2004 11:39 AM
> **To:** Walton, Courtney R.; Cooper, Dirk R.; Elder, B. Keith; Eslinger, Sandra W.; Evans, Kelly E.; Haber, Stanley M.; Johnston, Jesse J.; Kelley, Philip G.; Mason, Michael E.; Reed, Ernest J.; Varner, Arthur L.
> **Subject:** FW: Ash Blitz Project listings and CPJs
>
> PLEASE NOTE THE ATTACHED NEW PJ'S FROM THE YARD GROUP, PLEASE HANDLE FOR THE PLANT. THIS IS A PRETTY HIGH LEVEL PROJECT(S), CURRENTLY WITH A HIGH LEVEL OF VISIBLITY, THAT IS WAY JAMES IS IN THE MIDDLE, HE WAS AT SEVERAL MEETINGS. AFTER YOUR REVIEW PLEASE GET WITH ME A GIVE ME A STATUS OF WHERE YOU SEE US ON THESE PROJECTS.

Lee A. Nash, P.E.
Tennessee Valley Authority
Fossil Engineering Design Services
1101 Market Street, LP 2G-C
Chattanooga, TN 37402-2801

Telephone: (423) 751-3256
Fax: (423) 751-7094
Mobile: (423) 838-1153
-----Original Message-----
From: Adair, James G.
Sent: Wednesday, April 14, 2004 11:04 AM
To: Nash, Lee A.
Cc: Rea, Richard P.; Preslar, Jacky D.; Baugh, James S.
Subject: FW: Ash Blitz Project listings and CPJs

Lee Please get these to the respective PEs to take thru the process. If questions, please get with me. Thanks

James Adair

-----Original Message-----
From: Rea, Richard P.
Sent: Wednesday, April 14, 2004 10:59 AM
To: Seabaugh, Allen W.; Adair, James G.; Watts, Janet K; Purkey, Ronald E.; Johnson, Randall E.
Cc: Preslar, Jacky D.; Baugh, James S.
Subject: Ash Blitz Project listings and CPJs

Per our discussion last week.

The Excel spreadsheet contains the listing of the Blitz projects and budgets to date.

The PDF files contain the CPJ's for '04. The '05's are in process.

If you have any questions, please let me or Steve know.

Richard

Haber, Stanley M

From: Nash, Lee A.

Sent: Monday, April 19, 2004 7:26 AM

To: Walton, Courtney R.; Cooper, Dirk R.; Elder, B. Keith; Eslinger, Sandra W.; Evans, Kelly E.; Haber, Stanley M.; Johnston, Jesse J.; Kelley, Philip G.; Mason, Michael E.; Reed, Ernest J.; Varner, Arthur L.

Subject: FW: Ash Blitz CPJs - FY 05 and FY 06

Attachments: CPJ BRF Cover for Dry Fly Ash stack.pdf; CPJ COF Sluice Line Containment.pdf; COF New Capacity CPJ.pdf; JOF CPF Long Term Disposal R1.pdf; JOF Containment CPJs R1.pdf; CPJ KIF Kennedy Weir R1.pdf; CPJ PAF Red Water 1 Pumps.pdf; CPJ SHF ash piping joints.pdf

Here are the remaining Yard (Ash Blitz) Projects.

Lee A. Nash, P.E.
Tennessee Valley Authority
Fossil Engineering Design Services
1101 Market Street, LP 2G-C
Chattanooga, TN 37402-2801

Telephone: (423) 751-3256
Fax: (423) 751-7094
Mobile: (423) 838-1153

-----Original Message-----
From: Baugh, James S.
Sent: Friday, April 16, 2004 4:54 PM
To: Seabaugh, Allen W.; Adair, James G.; Watts, Janet K; Purkey, Ronald E.; Johnson, Randall E.; Nash, Lee A.
Cc: Rea, Richard P.; Preslar, Jacky D.; Sutton, Michael E.; Bowers, Larry C; Hedgecoth, Melissa A.; Huber II, James M.; Knox, Robert; Oliver, Don; Petty, Harold L.; Radford, Larry D.
Subject: Ash Blitz CPJs - FY 05 and FY 06

Attached are CPJs prepared for FY 05 and FY 06 Ash Blitz projects. Let me know if you have any questions.

Steve Baugh
Fuel By-Products and Properties
LP 5G-C
(423) 751-6137

Capital Project Justification Form

Project Name	Project ID	Rev#
BRF - FINAL COVER FOR DRY FLY ASH STACK	BRF248	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: Bull Run

Technical Contact
Name: SUTTON,MICHAEL E
Phone: 423/751-3539

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: REGULATORY
Prgm: No Program

	Estimated	Actual
Start Date:	10/01/2004	
In-Srvc Date:	09/30/2005	
Outage Date:		

Problem Description
The solid waste permit for the dry fly ash stack at Bull Run requires the placement of final cover as the stack meets final grade. The stack configuration is such that final grade will be achieved starting in FY 05, and final cover must be placed in order to comply with permit conditions.

Project Scope
Locate and permit an appropriate borrow site; haul and place earth cover in accordance with the solid waste permit for the Bull Run dry fly ash stack; perform appropriate QA/QC on cover placement.

Performance Measurement
QA/QC data indicating compliance with permit conditions.

Other Options/Alternatives
No Information Available

Reason For Change
No Information Available

News Release
No Information Available

Capital Project Justification Form

Project Name
BRF - FINAL COVER FOR DRY FLY ASH STACK

Project ID BRF248 **Rev#** 0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST

SUNK CAPITAL PROJECTS: $0
SUNK O&M PROJECTS: $0
REMAINING COST: $475
TOTAL COST: $475
ESTIMATE TYPE: Order of Magnitude

ECONOMIC INDICATORS

NPV: -$385.0
PI: 0
IRR: 0.0
SIMPLE PAYBACK: 20
BASE YEAR: 2005

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2005	100	0	0	0	0
2006	125	0	0	0	0
2007	125	0	0	0	0
2008	125	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
BRF - FINAL COVER FOR DRY FLY ASH STACK	BRF248	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

Cost Assumptions

1. Suitable borrow material located within 10 miles of the plant site; material hauled and placed in accordance with permit requirements; QA/QC performed
   FY 05 - $100k
   FY 06 - $125k
   FY 07 - $125k
   FY 08 - $125k

Risks

Based upon preliminary quantities and research of area borrow sites.

Benefit Assumptions

1. Compliance with requirements of the solid waste permit for the dry fly ash stack.

Risks

Capital Project Justification Form

Project Name	Project ID	Rev#
COF - SLUICE LINE CONTAINMENT AT BRIDGE CROSSING	COF300	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization

Owner: FPG
Lead: Yard Operations

Location

Loc:

Technical Contact

Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr

Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project

Type: Capital
Cat: REGULATORY
Prgm: No Program

	Estimated	Actual
Start Date:	10/01/2005	
In-Srvc Date:	09/30/2006	
Outage Date:		

Problem Description

The discharge piping from the active bottom ash pond to the CCW discharge channel is buried under Cane Creek. Pipe leakage has caused bank erosion, and is also resulting in an unpermitted discharge to Cane Creek.

Project Scope

This project is to design and install a liner system to prevent ash pipe leakage from migrating to Cane Creek.

Performance Measurement

No REEs for unpermitted discharges to Cane Creek

Other Options/Alternatives

No Information Available

Reason For Change

No Information Available

News Release

No Information Available

Capital Project Justification Form

Project Name	Project ID	Rev#
COF - SLUICE LINE CONTAINMENT AT BRIDGE CROSSING	COF300	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	-$434.0
SUNK O&M PROJECTS:	$0	**PI:**	0
REMAINING COST:	$500	**IRR:**	0.0
TOTAL COST:	$500	**SIMPLE PAYBACK:**	20
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2005

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2005	0	0	0	0	0
2006	500	0	0	0	0
2007	0	0	0	0	0
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
COF - SLUICE LINE CONTAINMENT AT BRIDGE CROSSING	COF300	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

Cost Assumptions	Risks
1. Project Engineering - $50k	Based on similar project cost
2. Installation of a lining system - $450k	Based on contractor estimate

Benefit Assumptions	Risks
1. No REEs for unpermitted discharge to Cane Creek due to piping leaks.	

Capital Project Justification Form

Project Name
COF--DEVELOP NEW DISPOSAL AREA

Project ID COF185 **Rev#** 0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: Colbert Fossil Plant

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: Ash Handling (FPG)

	Estimated	Actual
Start Date:	10/01/2004	
In-Srvc Date:	09/30/2009	
Outage Date:		

Problem Description
Colbert will be out of dry fly ash disposal capacity in their dry stacking area in FY09.

Project Scope
Construct a new disposal area that will be ready to store ash in FY09. In the past it has taken 3-5 years to perform site studies, obtain environmental clearances, perform detailed design, and construct a solid waste facility in which to stack ash. A borrow site will be located and permitted in FY 05. Detailed design and environmental studies in FY06 & FY07. Construct the new site in FY08.

Performance Measurement
Have available ash disposal capacity, such that the plant can continue to run and produce ash.

Other Options/Alternatives
Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Colbert's fly ash there.

Reason For Change
No Information Available

News Release
No Information Available

Capital Project Justification Form

Project Name	Project ID	Rev#
COF--DEVELOP NEW DISPOSAL AREA	COF185	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$10,330.0
SUNK O&M PROJECTS:	$0	**PI:**	5.317
REMAINING COST:	$3,550	**IRR:**	77.0
TOTAL COST:	$3,550	**SIMPLE PAYBACK:**	5
ESTIMATE TYPE:	Conceptual	**BASE YEAR:**	2005

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2005	50	0	0	0	0
2006	150	0	0	0	0
2007	100	0	0	0	0
2008	3,250	0	0	0	0
2009	0	0	3,250	0	0
2010	0	0	3,250	0	0
2011	0	0	3,250	0	0
2012	0	0	3,250	0	0
2013	0	0	3,250	0	0
2014	0	0	3,250	0	0
2015	0	0	3,250	0	0
2016	0	0	3,250	0	0
2017	0	0	3,250	0	0
2018	0	0	3,250	0	0
2019	0	0	3,250	0	0
2020	0	0	3,250	0	0
2021	0	0	3,250	0	0
2022	0	0	3,250	0	0
2023	0	0	3,250	0	0
2024	0	0	3,250	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
COF--DEVELOP NEW DISPOSAL AREA	COF185	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

	Cost Assumptions	Risks
1.	Locate & permit borrow site (FY 05) = $50k	Prior project costs
2.	Detailed design/environmental clearances (FY 06 = $150k, FY 07 = $100k)	Prior project costs
3.	Construction (FY 08) = $3250k	Prior project costs
4.	Total project costs = $3,550k	Prior project costs

	Benefit Assumptions	Risks
1.	Haul ash offsite to an existing permitted disposal site @ $10 / ton for 325,000 tons per year = $3,250,000 / year	Assumes a disposal site can even be found within 30 miles of the plan, which could handle 325,000 tons per year.

Capital Project Justification Form

Project Name
JOF - ADDITIONAL ASH DISPOSAL CAPACITY

Project ID JOF455 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: Johnsonville Fossil Plant

Technical Contact
Name: SUTTON,MICHAEL E
Phone: 423/751-3539

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	10/01/2004	
In-Srvc Date:	09/30/2008	
Outage Date:		

Problem Description
Upon completion of the current project with Trans Ash to remove ash from the active ash pond, Johnsonville will have less than one year of remaining capacity for ash storage.

Project Scope
Develop options for long term ash disposal, perform environmental studies, select the best overall option, acquire appropriate permits and clearances, and construct new facility.

Performance Measurement
> 5 Years of remaining ash disposal capacity.

Other Options/Alternatives
Reduce or discontinue plant operation to produce less by-products, or locate an existing off-site permitted disposal area and pay a tipping fee.

Reason For Change
No Information Available

News Release
No Information Available

Capital Project Justification Form

Project Name
JOF - ADDITIONAL ASH DISPOSAL CAPACITY

Project ID JOF455 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST

SUNK CAPITAL PROJECTS: $0
SUNK O&M PROJECTS: $0
REMAINING COST: $4,400
TOTAL COST: $4,400
ESTIMATE TYPE: Order of Magnitude

ECONOMIC INDICATORS

NPV: $5,716.0
PI: 2.844
IRR: 59.0
SIMPLE PAYBACK: 5
BASE YEAR: 2005

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2005	250	0	0	0	0
2006	500	0	0	0	0
2007	150	0	0	0	0
2008	3,500	0	0	0	0
2009	0	0	4,000	0	0
2010	0	0	4,000	0	0
2011	0	0	4,000	0	0
2012	0	0	4,000	0	0
2013	0	0	4,000	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
JOF - ADDITIONAL ASH DISPOSAL CAPACITY	JOF455	0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

Cost Assumptions

1. Identify potential sites; assess environmental suitability; Select site; Perform detailed engineering; Obtain permits/clearances; Construct Facility
   FY 05 - $250k
   FY 06 - $500K
   FY 07 - $150k
   FY 08 - $3,500k
   Total Cost = $4,400k

Risks

Based on preliminary cost estimates and past studies.

Benefit Assumptions

1. Cost to haul ash offsite for 5 years or more, while a new disposal facility is developed for 400,000 tons/year at $10/ton = $4,000k per year for 5 years.

Risks

Assumes a disposal site can be found within a reasonable distance of the plant that can accept 400,000 tons of ash per year.

Capital Project Justification Form

Project Name
JOF--BOTTOM ASH & FLY ASH LINES SUPPORT & CONTAINMENT
CSF: No CSF

Project ID JOF330 **Rev#** 0

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: Johnsonville

Technical Contact
Name: JENNINGS,FLOYD D
Phone: 931/827-6025

Responsible Mgr
Name: PULLEY,ROBERT D
Phone: 931/827-6287

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: Reliability (FPG)

	Estimated	Actual
Start Date:	10/01/2004	
In-Srvc Date:	09/30/2007	
Outage Date:		

Problem Description
The bottom ash lines at Johnsonville are routed along the harbor bank. The piping is supported on cross ties as high as 6 ft above grade in many locations along the harbor (refer to TVA dwg. 17W502)
The cross ties have deteriorated to the point that there is a high risk of failure of the supports. Should the cross ties fail, this will allow the bottom ash piping to separate and fall into the harbor. When this event happens, bottom ash would be discharged into the harbor; thus an REE would occur. This event would have a very high probability of being a Notice of Violation Event (NOV).

Project Scope
The project is to increase the dike width by installing fill under the bottom ash piping to provide for permanent support. Not only will this fill provide for support, it will also provide a means to direct any leak that should develop in the bottom ash piping away from the harbor to prevent an REE. The fill would be installed starting near the western most barge cell and proceed east until reaching the corner where the piping turns back north. The fill would consist of riprap and soil. The dike width increase will not change the location of the harbor shore line.

Performance Measurement
No REE's as a result of ash line failure.

Other Options/Alternatives
Continue operation with REE risk.

Reason For Change
New Project

News Release
N/A

Capital Project Justification Form

Project Name
JOF--BOTTOM ASH & FLY ASH LINES SUPPORT & CONTAINMENT

Project ID JOF330 **Rev#** 0

CSF: No CSF

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	-$2,584.0
SUNK O&M PROJECTS:	$0	**PI:**	0
REMAINING COST:	$3,000	**IRR:**	0.0
TOTAL COST:	$3,000	**SIMPLE PAYBACK:**	20
ESTIMATE TYPE:	Conceptual	**BASE YEAR:**	2005

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2005	250	0	0	0	0
2006	2,250	0	0	0	0
2007	500	0	0	0	0
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0

Capital Project Justification Form

Project Name
JOF--BOTTOM ASH & FLY ASH LINES SUPPORT & CONTAINMENT
CSF: No CSF

Project ID JOF330 **Rev#** 0

II. Project Economic Evaluation

Cost Assumptions	Risks
1. Engineering & Environmental Clearance (FY05) - $250K	Based on similar project costs.
2. Project Implementation (FY 06 = $2,250k; FY 07 = $500K)	Based on similar project costs and preliminary HED estimates.

Benefit Assumptions	Risks
1. Elimination of REE potential.	

Capital Project Justification Form

Project Name
KIF - REPLACE KENNEDY WEIR

Project ID
KIF531

Rev#
0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: Kingston Fossil Plant

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: REGULATORY
Prgm: No Program

	Estimated	Actual
Start Date:	10/01/2004	
In-Srvc Date:	09/30/2005	
Outage Date:		

Problem Description
The weir that discharges from the active ash pond to the stilling pond is a field design rather than a TVA standard engineered design. The weir configuration is not known, which inhibits the ability to accurately determine and report pond free water volume in accordance with the plant NPDES permit requirements. The disharge side of the weir are equipped with control gates that require manual manipulation and adjustment based on precipitation and dredging activities. This activity is hazardous due to the location, physical requirements for performing work, and risk to employees should equipment failure occur. It should be noted that equipment failure could also cause a water surge that would likely result in dike overtopping and an REE.

Project Scope
Abandon the Kennedy Weir and install a TVA standard engineered design weir that requires no manual intervention or operation.

Performance Measurement
Ash pond free water volume accurately determined and reported.

Other Options/Alternatives
No Information Available

Reason For Change
No Information Available

News Release
No Information Available

Capital Project Justification Form

Project Name
KIF - REPLACE KENNEDY WEIR

Project ID KIF531 **Rev#** 0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST

SUNK CAPITAL PROJECTS: $0
SUNK O&M PROJECTS: $0
REMAINING COST: $250
TOTAL COST: $250
ESTIMATE TYPE: Order of Magnitude

ECONOMIC INDICATORS

NPV: -$250.0
PI: 0
IRR: 0.0
SIMPLE PAYBACK: 20
BASE YEAR: 2005

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2005	250	0	0	0	0
2006	0	0	0	0	0
2007	0	0	0	0	0
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF - REPLACE KENNEDY WEIR	KIF531	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

Cost Assumptions

1. Abandon Kennedy Weir in place; design, procure materials, and install a TVA standard Design Weir - $250k

Risks

Based upon similar project costs.

Benefit Assumptions

1. Ash pond free water volume accurately determined and reported.

Risks

Capital Project Justification Form

Project Name	Project ID	Rev#
PAF - INSTALL PUMPS IN RED WATER POND NUMBER 1	PAF340	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization

Owner: FPG
Lead: Yard Operations

Location

Loc: Paradise

Technical Contact

Name: HUBER II,JAMES M
Phone: 423/751-3513

Responsible Mgr

Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project

Type: Capital
Cat: REGULATORY
Prgm: No Program

	Estimated	Actual
Start Date:	10/01/2004	
In-Srvc Date:	09/30/2005	
Outage Date:		

Problem Description

The current configuration of the pumping system in Red Water Pond 1 does not have the capacity to handle a 10 year, 24 hour rainfall event. Heavy rains cause the pond to overflow into the Green River, resulting in an unpermitted discharge and an asoociated REE. In addition, flooding of the ball mill area can occur if manual intervention is not made by plant personnel during heavy rain events.

Project Scope

Modify the pump configuration in Red Water Pond 1 to prevent pond overflow to the Green River during heavy rainfall events. The modification will consist of purchasing and installation of two new pumps mounted on a lower, modified platform.

Performance Measurement

No REEs due to Red Water Pond 1 overflowing to the Green River. No occurances of ball mill area flooding due to inoperability of the red water pond system.

Other Options/Alternatives

No Information Available

Reason For Change

No Information Available

News Release

No Information Available

Capital Project Justification Form

Project Name
PAF - INSTALL PUMPS IN RED WATER POND NUMBER 1

Project ID PAF340 **Rev#** 0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST

SUNK CAPITAL PROJECTS: $0
SUNK O&M PROJECTS: $0
REMAINING COST: $400
TOTAL COST: $400
ESTIMATE TYPE: Order of Magnitude

ECONOMIC INDICATORS

NPV: -$400.0
PI: 0
IRR: 0.0
SIMPLE PAYBACK: 20
BASE YEAR: 2005

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2005	400	0	0	0	0
2006	0	0	0	0	0
2007	0	0	0	0	0
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
PAF - INSTALL PUMPS IN RED WATER POND NUMBER 1	PAF340	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

Cost Assumptions **Risks**

Benefit Assumptions **Risks**

1. No REEs due to overflowing of Red Water Pond 1 into the Green River.

Capital Project Justification Form

Project Name
SHF - REPLACE DRY ASH PIPING AND EXPANSION JOINTS

Project ID SHF411

Rev# 0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: Shawnee Fossil Plant

Technical Contact
Name: HUBER II,JAMES M
Phone: 423/751-3513

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: REGULATORY
Prgm: No Program

	Estimated	Actual
Start Date:	10/01/2004	
In-Srvc Date:	09/30/2005	
Outage Date:		

Problem Description
The existing pressurized piping that conveys ash from the baghouses to the disposal silos are not properly anchored and do not allow for piping expansion and contraction. The pipes are supported on wooden ties, which are deteriorated. The lack of proper support is causing pipe joint breakage, which results in fly ash being discharged into the air. The unpermitted discharge of fly ash into the air is creating a significant potential for an REE due to fugitive dusting. In addition, the introduction of moisture into the system causes pipe pluggage and resulting maintenance costs to clean pipes.

Project Scope
Raise piping, install concrete pipe supports, properly anchor pipes, and install expansion joints.

Performance Measurement
No REEs due to fugitive dusting from pipe joint leakage.

Other Options/Alternatives
No Information Available

Reason For Change
No Information Available

News Release
No Information Available

Capital Project Justification Form

Project Name	Project ID	Rev#
SHF - REPLACE DRY ASH PIPING AND EXPANSION JOINTS	SHF411	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	-$400.0
SUNK O&M PROJECTS:	$0	**PI:**	0
REMAINING COST:	$400	**IRR:**	0.0
TOTAL COST:	$400	**SIMPLE PAYBACK:**	20
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2005

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2005	400	0	0	0	0
2006	0	0	0	0	0
2007	0	0	0	0	0
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
SHF - REPLACE DRY ASH PIPING AND EXPANSION JOINTS	SHF411	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

Cost Assumptions **Risks**

Benefit Assumptions **Risks**

1. No REEs due to fugitive dusting from ash piping expansion joint leakage.

Haber, Stanley M

From: Powell, Ronald D.
Sent: Friday, April 16, 2004 3:46 PM
To: Haber, Stanley M.
Cc: Petty, Harold L.
Subject: RE: Ash Blitz Projects: KIF530 and 531: EMPs

Stan, CEC 5718 was done by Cheri Miller for KIF530.
Ron

-----Original Message-----
From: Haber, Stanley M.
Sent: Thursday, April 15, 2004 2:49 PM
To: Powell, Ronald D.; Hedgecoth, Melissa A.; Smith, Daniel R.
Cc: Petty, Harold L.; Nash, Lee A.
Subject: Ash Blitz Projects: KIF530 and 531: EMPs

Dear Team,

Ron Powell and I have drafted the attached EMPs for the ash blitz projects at Kingston (KIF530 and KIF531). I would like you to review these prior to me sending them to Linda Campbell (KIF) and Darlene Keller for comments.

Please review the scopes and comment as needed. (Dan: please provide the appropriate CEC number for the work on KIF530/dredge cell expansion). Comments are needed by close-of-business 4/16/04.

Thanks.

Stan
3838-C
580-4830

Haber, Stanley M

From: Cooper, Dirk R.

Sent: Wednesday, April 14, 2004 1:09 PM

To: Nash, Lee A.; Walton, Courtney R.; Elder, B. Keith; Eslinger, Sandra W.; Evans, Kelly E.; Haber, Stanley M.; Johnston, Jesse J.; Kelley, Philip G.; Mason, Michael E.; Reed, Ernest J.; Varner, Arthur L.

Subject: RE: Ash Blitz Project listings and CPJs

Mine appears to be problem statement more than a PJ. It does not follow the guidelines that Bob Bruce put out in our project meeting...No cost basis no detailed resolution. I will process but have no clue how to document construction cost or for that matter even do a cost estimate... I will proceed as though we are only wanting approval for a study...all estimates will just state how many CY's of material can be moved and we can hope that number ends up being ballpark...

-----Original Message-----
From: Nash, Lee A.
Sent: Wednesday, April 14, 2004 11:39 AM
To: Walton, Courtney R.; Cooper, Dirk R.; Elder, B. Keith; Eslinger, Sandra W.; Evans, Kelly E.; Haber, Stanley M.; Johnston, Jesse J.; Kelley, Philip G.; Mason, Michael E.; Reed, Ernest J.; Varner, Arthur L.
Subject: FW: Ash Blitz Project listings and CPJs

PLEASE NOTE THE ATTACHED NEW PJ'S FROM THE YARD GROUP, PLEASE HANDLE FOR THE PLANT. THIS IS A PRETTY HIGH LEVEL PROJECT(S), CURRENTLY WITH A HIGH LEVEL OF VISIBLITY, THAT IS WAY JAMES IS IN THE MIDDLE, HE WAS AT SEVERAL MEETINGS. AFTER YOUR REVIEW PLEASE GET WITH ME A GIVE ME A STATUS OF WHERE YOU SEE US ON THESE PROJECTS.

Lee A. Nash, P.E.
Tennessee Valley Authority
Fossil Engineering Design Services
1101 Market Street, LP 2G-C
Chattanooga, TN 37402-2801

Telephone: (423) 751-3256
Fax: (423) 751-7094
Mobile: (423) 838-1153
-----Original Message-----
From: Adair, James G.
Sent: Wednesday, April 14, 2004 11:04 AM
To: Nash, Lee A.
Cc: Rea, Richard P.; Preslar, Jacky D.; Baugh, James S.
Subject: FW: Ash Blitz Project listings and CPJs

Lee Please get these to the respective PEs to take thru the process. If questions, please get with me. Thanks

James Adair
-----Original Message-----
From: Rea, Richard P.
Sent: Wednesday, April 14, 2004 10:59 AM
To: Seabaugh, Allen W.; Adair, James G.; Watts, Janet K; Purkey, Ronald E.; Johnson, Randall E.

Cc: Preslar, Jacky D.; Baugh, James S.
Subject: Ash Blitz Project listings and CPJs

Per our discussion last week.

The Excel spreadsheet contains the listing of the Blitz projects and budgets to date.

The PDF files contain the CPJ's for '04. The '05's are in process.

If you have any questions, please let me or Steve know.

Richard

Haber, Stanley M

From: Nash, Lee A.

Sent: Wednesday, April 14, 2004 11:39 AM

To: Walton, Courtney R.; Cooper, Dirk R.; Elder, B. Keith; Eslinger, Sandra W.; Evans, Kelly E.; Haber, Stanley M.; Johnston, Jesse J.; Kelley, Philip G.; Mason, Michael E.; Reed, Ernest J.; Varner, Arthur L.

Subject: FW: Ash Blitz Project listings and CPJs

Attachments: ALF New Capacity CPJ.pdf; GAF New Fly Ash Capacity.pdf; JOF Du Pont Cell Closure CPJ.pdf; KIF New Ash Capacity CPJ.pdf; SHA New Ash Capacity CPJ.pdf; New Ash Disposal Capacity CPJ.pdf; ByProduct management project budgets April 14 2004.xls

PLEASE NOTE THE ATTACHED NEW PJ'S FROM THE YARD GROUP, PLEASE HANDLE FOR THE PLANT. THIS IS A PRETTY HIGH LEVEL PROJECT(S), CURRENTLY WITH A HIGH LEVEL OF VISIBLITY, THAT IS WAY JAMES IS IN THE MIDDLE, HE WAS AT SEVERAL MEETINGS. AFTER YOUR REVIEW PLEASE GET WITH ME A GIVE ME A STATUS OF WHERE YOU SEE US ON THESE PROJECTS.

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Subject: FW: Ash Blitz Project listings and CPJs

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James Adair

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Subject: Ash Blitz Project listings and CPJs

Per our discussion last week.

The Excel spreadsheet contains the listing of the Blitz projects and budgets to date.

The PDF files contain the CPJ's for '04. The '05's are in process.

If you have any questions, please let me or Steve know.

Richard

Capital Project Justification Form

Project Name
ALF--DEVELOP NEW ASH DISPOSAL CAPACITY

Project ID ALF202 **Rev#** 1

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: Allen Fossil Plant

Technical Contact
Name: SUTTON,MICHAEL E
Phone: 423/751-3539

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	06/01/2004	
In-Srvc Date:	09/30/2006	
Outage Date:		

Problem Description
The existing ash pond storage capacity is heavily dependent on REED Minerals marketing operations. If marketing operations cease, the ash pond would have less than 3 years of storage capacity. Also, the existing ash pond is not owned by TVA. It is part of an easement with the City of Memphis and the Memphis Light, Gas and Water Division. The agreement states that the City of Memphis can take ownership of the ash pond if the ash is stacked above elevation 233 or upon 2 years notice. If marketing ceases or if the City of Memphis decides to take possession of the ash pond, TVA will have at most 2 years to purchase additional property, design, permit and construct a new disposal site. This process typically takes at least 5 years.

Project Scope
This project will identify additonal disposal options and study / design / construct a new disposal facility.

Fossil Engineering: Perform conceptual (Phase 1A) engineering analysis and collect field data as required to identify viable on and off site options for long- term (10 years or more) ash disposal capacity at the Allen Fossil Plant while maintaining required Free Water Volume. The viability of options should consider economic, structural, environmental, and operational issues and impacts associated with long term ash disposal as well as the provisions of TVA's long term property agreements with the City of Memphis. Total ash production disposed in the pond is assumed to be 130,000 cubic yards per year (65,000 cubic yards each of fly ash and boiler slag), assuming 50% of boiler slag production is marketed. The engineering properties of ash currently produced at Allen for ponded disposal, dredging, or stacking should be verified through testing. Fossil Engineering is to work with Environmental Affairs to complete a CEC (Categorical Exclusion Checklist) for each project with input from RSO&E. If the CEC leads to a requirement that an Environmental Assessment (EA) or Environmental Assessment (EIS) must be prepared, FE will consult with Environmental Affairs for direction on how to proceed.

Performance Measurement
Permitted disposal site available by close of FY 2006.

Other Options/Alternatives
Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Allen's ash there.

Reason For Change
New project.

News Release
No Information Available

Capital Project Justification Form

Project Name | **Project ID** | **Rev#**

ALF--DEVELOP NEW ASH DISPOSAL CAPACITY | ALF202 | 1

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$3,906.0
SUNK O&M PROJECTS:	$0	**PI:**	2.183
REMAINING COST:	$4,500	**IRR:**	44.0
TOTAL COST:	$4,500	**SIMPLE PAYBACK:**	4
ESTIMATE TYPE:	Conceptual	**BASE YEAR:**	2003

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	200	0	0	0	0
2005	2,800	0	0	0	0
2006	1,500	0	1,900	0	0
2007	0	0	1,900	0	0
2008	0	0	1,900	0	0
2009	0	0	1,900	0	0
2010	0	0	1,900	0	0
2011	0	0	1,900	0	0
2012	0	0	1,900	0	0
2013	0	0	1,900	0	0
2014	0	0	1,900	0	0
2015	0	0	1,900	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
ALF--DEVELOP NEW ASH DISPOSAL CAPACITY	ALF202	1

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

Cost Assumptions

		Risks
1.	Engineering = $190k	Based on preliminary estimate prepared by engineering.
2.	Heavy Equipment Division = $10k	Based on preliminary estimate prepared by HED.
3.	HED implementation = $2,800k in FY 05, $1,500k in FY 06	Based upon similar project costs.

Benefit Assumptions

		Risks
1.	Cost to haul ash offsite for 10 years or more, while a new disposal facility is developed for 190,000 c.y. / year @ $10 / c.y. = $1,900k / year for 10 years.	Assumes a disposal site can be found within 30 miles of the plant which could accept 190,000 c.y. per year of fly ash and boiler slag.

Capital Project Justification Form

Project Name
GAF--DEVELOP NEW FLY ASH CAPACITY

Project ID GAF228

Rev# 0

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: Gallatin Fossil Plant

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: No Program

	Estimated	Actual
Start Date:	10/01/2003	
In-Srvc Date:	09/30/2006	
Outage Date:		

Problem Description
Gallatin will be out of ash pond storage capacity in FY 2007.

Project Scope
Fossil Engineering: Perform conceptual Phase 1 engineering analysis and collect field data as required to identify viable on site options for long term (10 years or more) ash disposal capacity at the Gallatin Fossil Plant while maintaining required Free Water Volume. The viability of on site options should consider economic, structural, environmental, and operational issues and impacts associated with long term ash disposal. The study should focus initially on the maximization of ash storage in Pond E, and then on maximizing remaining on-site capacity. Total ash production is assumed to be 280,000 cubic yards per year, and it should be assumed that no marketing or utilization of ash will take place other than routine dike raisings with bottom ash (if material suitable for this application). The engineering suitability of ash currently produced at Gallatin as a construction material for dikes should be verified through testing. Bottom ash stacking plan(s) are to be provided for any bottom ash produced in excess of dike construction needs as a part of Phase 2 deliverables. Fossil Engineering is to work with Environmental Affairs to complete a CEC (Categorical Exclusion Checklist) with input from RSO&E. If the CEC leads to a requirement that an Environmental Assessment (EA) or Environmental Impact Statement (EIS) must be prepared, FE will consult with Environmental Affairs for direction on how to proceed.

Performance Measurement
Have available ash disposal capacity in FY 2007, such that the plant can continue to run and produce ash.

Other Options/Alternatives
Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Gallatin's ash there.

Reason For Change
No Information Available

News Release
No Information Available

Capital Project Justification Form

Project Name
GAF--DEVELOP NEW FLY ASH CAPACITY

Project ID GAF228 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$8,571.0
SUNK O&M PROJECTS:	$0	**PI:**	5.172
REMAINING COST:	$2,600	**IRR:**	83.0
TOTAL COST:	$2,600	**SIMPLE PAYBACK:**	3
ESTIMATE TYPE:	Conceptual	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	130	0	0	0	0
2005	500	0	0	0	0
2006	1,970	0	0	0	0
2007	0	0	2,800	0	0
2008	0	0	2,800	0	0
2009	0	0	2,800	0	0
2010	0	0	2,800	0	0
2011	0	0	2,800	0	0
2012	0	0	2,800	0	0
2013	0	0	2,800	0	0
2014	0	0	2,800	0	0
2015	0	0	2,800	0	0
2016	0	0	2,800	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
GAF--DEVELOP NEW FLY ASH CAPACITY	GAF228	0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

	Cost Assumptions	Risks
1.	Fossil Engineering = $100k in FY 04; $75k in FY 05	Prior project costs
2.	RSO&E = $30k	Prior project costs
3.	Construct a new disposal site = $425k in FY 05; $1,970k in FY 06.	Prior project costs

	Benefit Assumptions	Risks
1.	Haul ash offsite to an existing permitted disposal site @ $10 / cubic yard for 280,000 cubic yards per year = $2,800,000 / year	Assumes a disposal site can be found within 30 miles of the plant, which could handle 280,000 c.y. / year

Capital Project Justification Form

Project Name	Project ID	Rev#
JOF--DUPONT DREDGE CELL CLOSURE	JOF451	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: JOF

Technical Contact
Name: SUTTON,MICHAEL E
Phone: 423/751-3539

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: REGULATORY
Prgm: No Program

	Estimated	Actual
Start Date:	03/01/2004	
In-Srvc Date:	09/30/2005	
Outage Date:		

Problem Description
Previous closure methods failed to meet TVA long-term care committments to state of Tennessee.

Project Scope
Fossil Engineering: Determine the root cause of water seeping from the closed DuPont dredge cell. After the determination of root cause, develop a detailed design for intercepting the seeps and routing them to a new NPDES permitted discharge. This design should consider structural, environmental, and operational issues, and must result in TDEC approval and acceptance of the closed facility. Fossil Engineering is to complete a CEC (Categorical Exclusion Checklist) with input from RSO&E as needed. Plans and drawings shall be done in accordance with requirements of State of Tennessee Department of Environment and Conservation and will need to be stamped by a Professional Engineer in the state of TN.

Performance Measurement
Closure of permitted disposal facility in accordance with TVA long-term care committments to state of Tennessee. Passes inspection by state regulators.

Other Options/Alternatives
Do nothing and accept risk of NOV by state regulators and/or potential fine.

Reason For Change
No Information Available

News Release
No Information Available

Capital Project Justification Form

Project Name
JOF--DUPONT DREDGE CELL CLOSURE

Project ID JOF451 **Rev#** 0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$0.0
SUNK O&M PROJECTS:	$0	**PI:**	0
REMAINING COST:	$0	**IRR:**	0.0
TOTAL COST:	$0	**SIMPLE PAYBACK:**	0
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	0	0	0	0	0
2005	0	0	0	0	0
2006	0	0	0	0	0
2007	0	0	0	0	0
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
JOF--DUPONT DREDGE CELL CLOSURE	JOF451	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

Cost Assumptions	Risks
1. Fossil Engineering = $30k	Estimate from engineering.
2. Heavy Equipment Implementation = $500k in FY 2004; $300k in FY 2005.	Estimate from engineering based on similar projects.

Benefit Assumptions	Risks

Capital Project Justification Form

Project Name | **Project ID** | **Rev#**

KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY | KIF530 | 0

CSF: Achieve excellence in the Asset optimization and production processes.

I. Project Description

Organization

Owner: FPG

Lead: Yard Operations

Location

Loc: KIF

Technical Contact

Name: HEDGECOTH,MELISSA A

Phone: 423/751-6426

Responsible Mgr

Name: DAVIS,MICHAEL D

Phone: 423/751-7864

Project

Type: Capital

Cat: ASSET PRESERVATION

Prgm: No Program

	Estimated	Actual
Start Date:	10/01/2003	
In-Srvc Date:	09/30/2008	
Outage Date:		

Problem Description

Analysis of recent dike failure in the existing dredge cells has raised uncertainties regarding the current long-term disposal plans for fly ash and bottom ash. An emergency cell was developed (O&M) which will provide a maximum of three years of fly ash and bottom ash capacity. In addition, planned scrubbers for Kingston will produce an additional high-volume by-product which may be co-disposed with fly ash and bottom ash beginning in FY 2009.

Project Scope

Perform detailed analysis to determine the overall structural, environmental, and operational viability of continuing to raise and dredge to the existing dredge cells, considering the recent failure along Swan Pond road and the saturation of the lower dikes along the backwaters of the Emory river.

Perform engineering analysis and collect field data as required to develop a detailed design for maximizing the disposal capacity of fly ash, bottom ash, and gypsum on the existing ash pond complex at the Kingston Fossil Plant while maintaining the required Free Water Volume. The detailed design should consider economic, structural, environmental, and operational issues and impacts associated with long term ash disposal. The study should focus on the maximization of ash and gypsum storage on the existing dredge cells and ponds, as needed to provide 10 years or more of ash disposal capacity. Ash production is assumed to be 410,000 cubic yards per year of fly ash and 90,000 cubic yards per year of ponded bottom ash. Gypsum production is assumed to be 750,000 cubic yards per year. It should be assumed that no significant marketing or utilization of ash or gypsum will take place. The engineering suitability of ash currently produced at Kingston for storage in an engineered stack should be verified through testing (if this has not already been satisfactorily completed). A part II permit package is to be submitted to Environmental Affairs by June 1. Fossil Engineering is to work with Environmental Affairs to complete a CEC (Categorical Exclusion Checklist) for with input from RSO&E (if needed). If the CEC leads to a requirement that an Environmental Assessment (EA) or Environmental Impact Statement (EIS) must be prepared, FE will consult with Environmental Affairs for direction on how to proceed.

Performance Measurement

Permitted disposal capacity for fly ash and bottom ash by FY 2007. Permitted disposal capacity for gypsum by FY 2009.

Other Options/Alternatives

Reduce or discontinue plant operations such that no ash is produced, or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Kingston's ash there.

Reason For Change

No Information Available

News Release

No Information Available

Capital Project Justification Form

Project Name
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY

Project ID KIF530 **Rev#** 0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$8,864.0
SUNK O&M PROJECTS:	$0	**PI:**	1.877
REMAINING COST:	$16,300	**IRR:**	53.0
TOTAL COST:	$16,300	**SIMPLE PAYBACK:**	6
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	200	0	0	0	0
2005	0	0	0	0	0
2006	100	0	0	0	0
2007	8,000	0	5,000	0	0
2008	8,000	0	5,000	0	0
2009	0	0	5,000	0	0
2010	0	0	5,000	0	0
2011	0	0	5,000	0	0
2012	0	0	5,000	0	0
2013	0	0	5,000	0	0
2014	0	0	5,000	0	0
2015	0	0	5,000	0	0
2016	0	0	5,000	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
KIF--DEVELOP FLY ASH, GYPSUM & BOTTOM ASH DISPOSAL CAPACITY	KIF530	0

CSF: Achieve excellence in the Asset optimization and production processes.

II. Project Economic Evaluation

Cost Assumptions	Risks
1. Engineering = $200k in FY 04; $100k in FY 06.	Based on similar projects.
2. Implementation (Develop by-product handling system.)= $8,000k in FY 07; $8,000k in FY 08.	Conceptual estimate for turn-key system.

Benefit Assumptions	Risks
1. Haul fly ash and bottom ash offsite to an existing permitted disposal site @ $10/ton for 500,000 tons per year = $5,000k per year for ten years.	Assumes a disposal site can be found within 30 miles of the plant which could handle 500,000 tons per year.

Capital Project Justification Form

Project Name	Project ID	Rev#
SHF--DEVELOP NEW DRY STACK AREA	SHF328	1

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization
Owner: FPG
Lead: Yard Operations

Location
Loc: SHAWNEE FOSSIL PLANT

Technical Contact
Name: HEDGECOTH,MELISSA A
Phone: 423/751-6426

Responsible Mgr
Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project
Type: Capital
Cat: ASSET PRESERVATION
Prgm: Ash Handling (FPG)

	Estimated	Actual
Start Date:	03/01/2004	
In-Srvc Date:	09/30/2007	
Outage Date:		

Problem Description
Shawnee will be out of dry ash disposal capacity in their dry stacking area in FY08.

Project Scope
Construct a new area that will be ready to store ash in FY08. In the past it has taken 5-7 years to get a solid waste permit to stack ash. Identification of a new site and performance of the hydro-geo analysis will occur in FY04. Detailed design and the permit package will occur in FY05. In FY06, TVA will make any necessary changes to the design/permit based on the State's response to the permit package. Construction of the facility will occur in FY07.

Performance Measurement
Upon project implementation in FY07, have available ash disposal capacity such that the plant can contine to run and produce ash.

Other Options/Alternatives
Reduce or discontinue plant operations such that no ash is produced or locate an existing off-site permitted disposal area and pay a tipping fee to haul all of Shawnee's ash there.

Reason For Change
New project

News Release
N/A

Capital Project Justification Form

Project Name | **Project ID** | **Rev#**

SHF--DEVELOP NEW DRY STACK AREA | SHF328 | 1

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$16,233.0
SUNK O&M PROJECTS:	$0	**PI:**	7.276
REMAINING COST:	$3,800	**IRR:**	95.0
TOTAL COST:	$3,800	**SIMPLE PAYBACK:**	4
ESTIMATE TYPE:	Conceptual	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2002	0	0	0	0	0
2003	0	0	0	0	0
2004	150	0	0	0	0
2005	150	0	0	0	0
2006	50	0	0	0	0
2007	3,450	0	0	0	0
2008	0	0	5,000	0	0
2009	0	0	5,000	0	0
2010	0	0	5,000	0	0
2011	0	0	5,000	0	0
2012	0	0	5,000	0	0
2013	0	0	5,000	0	0
2014	0	0	5,000	0	0
2015	0	0	5,000	0	0
2016	0	0	5,000	0	0
2017	0	0	5,000	0	0
2018	0	0	5,000	0	0
2019	0	0	5,000	0	0
2020	0	0	5,000	0	0
2021	0	0	5,000	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
SHF--DEVELOP NEW DRY STACK AREA	SHF328	1

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

Cost Assumptions	Risks
1. Site identification and hydro-geo = $150k in FY04	Prior project costs
2. Detailed design & permit package = $150k in FY05	Prior project costs
3. Respond to permit deficiencies = $50k in FY06	Prior project costs
4. Construct new disposal site = $3,450k in FY07	Prior project costs
Total project costs = $3,800k	

Benefit Assumptions	Risks
1. Haul ash offsite to an existing permitted disposal site @ $10 / ton for 500,000 tons per year = $5,000,000 / year	Assumes a disposal site can even be found within 30 miles of the plant, which could handle 400,000 c.y. per year.

Capital Project Justification Form

Project Name	Project ID	Rev#
JSF--DEVELOP LONG-TERM ASH DISPOSAL CAPACITY	JSF392	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

I. Project Description

Organization

Owner: FPG
Lead: Yard Operations

Location

Loc: John Sevier Fossil Plant

Technical Contact

Name: SUTTON,MICHAEL E
Phone: 423/751-3539

Responsible Mgr

Name: DAVIS,MICHAEL D
Phone: 423/751-7864

Project

Type: Capital
Cat: ASSET PRESERVATION
Prgm: Ash Handling (FPG)

	Estimated	Actual
Start Date:	05/03/2004	
In-Srvc Date:	09/30/2008	
Outage Date:		

Problem Description

John Sevier will deplete its permitted fly ash disposal capacity in FY 2009. The plant cannot operate without a permitted area for disposal.

Project Scope

Perform analysis of options for long-term disposal to allow at least ten years of disposal capacity. Options may include: expand current permitted facility, develop new facility on-site, develop new facility adjacent to reservation, develop remote disposal or utilization site, haul ash to other permitted landfill. Acquire property if necessary, design, permit, construct selected option.

Performance Measurement

Permitted disposal capacity by FY 2009.

Other Options/Alternatives

Reduce or discontinue plant operation to produce less by-products, or locate an existing off-site permitted disposal area and pay a tipping fee.

Reason For Change

No Information Available

News Release

No Information Available

Capital Project Justification Form

Project Name	Project ID	Rev#
JSF--DEVELOP LONG-TERM ASH DISPOSAL CAPACITY	JSF392	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

COST		ECONOMIC INDICATORS	
SUNK CAPITAL PROJECTS:	$0	**NPV:**	$4,407.0
SUNK O&M PROJECTS:	$0	**PI:**	2.593
REMAINING COST:	$4,450	**IRR:**	42.0
TOTAL COST:	$4,450	**SIMPLE PAYBACK:**	6
ESTIMATE TYPE:	Order of Magnitude	**BASE YEAR:**	2004

Year	Capital Projects	O&M Projects	Benefit	O&M Base	Environ. Cost
SUNK	0	0	0	0	
OUT YEARS	0	0	0	0	
2004	75	0	0	0	0
2005	175	0	0	0	0
2006	700	0	0	0	0
2007	100	0	0	0	0
2008	3,400	0	0	0	0
2009	0	0	2,500	0	0
2010	0	0	2,500	0	0
2011	0	0	2,500	0	0
2012	0	0	2,500	0	0
2013	0	0	2,500	0	0
2014	0	0	2,500	0	0
2015	0	0	2,500	0	0
2016	0	0	2,500	0	0
2017	0	0	2,500	0	0
2018	0	0	2,500	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0

Capital Project Justification Form

Project Name	Project ID	Rev#
JSF--DEVELOP LONG-TERM ASH DISPOSAL CAPACITY	JSF392	0

CSF: Manage the environmental and safety impacts TVA's operations have on employees and the region.

II. Project Economic Evaluation

Cost Assumptions	Risks
1. Engineering = $75k in FY 04, $175k in FY 05, $100k in FY 07.	Based on preliminary estimates by Engineering.
2. Land acquisition = $700k in FY 06	Based on value of local real estate.
3. Implementation = $3,400k in FY 08	Based similar projects.

Benefit Assumptions	Risks
1. Cost to haul ash offsite for 10 years or more, while a new disposal facility is developed for 250,000 tons/year @ $10/ton = $2,500k per year for 10 years.	Assumes a disposal site can be found within 30 miles of the plant which could accept 250,000 tons per year of fly ash.

By-Product Management Projects

Previously identified and in Yard Spend Plan

Current FY 05

Plant	Work Item		Fiscal Years 2004	2005	2006	2007	2008	OutYear
System	1	Perform engineering study: How to deal with phragmites	70					
	2	Develop policy for seep mitigation and develop scope for engineering study	25					
	3	Perform fugitive dusting Environmental Assessment	70					
	4	System wide problem - drainage ditches are too flat			100			
ALF	1	Repair main pond spillway	35					
	2	Fabricate and install stoplogs	140					
	3	Phragmite management			50	50	50	
	4	Pond management including channel clean out and material stacking	50	50	50	50	50	
	5	Raise ash pond		25				
	6	Engineering assesment for CYROP drainage			15			
	7	Maintenance of inactive West Ash Pond		25	25	25	25	
	8	Improve access control			25	25	25	
	10	Mow ash pond dikes and remove trees - east pond, west pond, and CYROP		25	50	50	50	
	11	Ash Pond surveys		20	20	20	20	
	12	Mitigate Red Water Seeps			75	75	75	
	13	Close and repair groundwater monitoring wells			10			
BRF	1	Ash Pond and Stack surveys		23	23	23	23	
	2	Improved access control			25	25	25	
	3	Mow dikes and stack, remove trees		75	150	150	150	
	4	Repair dikes - bottom ash pond		25	25	25	25	
	5	Mitigate red water seeps			100	100	100	
	6	Dry Ash Handling	560	560	560	560	565	
	7	General ash stack maintenance		25	25	25	25	
	8	Phragmites control			25	25	25	
	9	Locate a borrow site		25				
	10	Develop incremental dry ash stacking plans		80	200			
	11	Bottom ash channel cleaning		75	75	75	75	
	12	Clean out CYROP			50			
	13	Close and repair groundwater wells			10			
	14	Clean out Ash Sluice trench run off pond	70					
COF	1	Ash Pond and Stack surveys		30	30	30	30	
	2	Improved access control			25	25	25	

	3	Mow dikes and stack, remove trees		75	150	150	150	
	4	Repair dikes - bottom ash pond		150	25	25	25	
	5	Mitigate red water seeps			100	100	100	
	6	Dry Ash Handling	887	887	887	887	890	
	7	Repair dry ash stack		25	25	25	25	
	8	Phragmites control			25	25	25	
	9	Develop incremental dry ash stacking plans		77	150			
	10	Bottom ash handling		160	160	160	160	
	11	Reline ash pond discharge pipe under Cain Creek		450				
	12	Earth Cover for dry stack (assume dirt comes from on-site, temporary)			150	150	150	
	13	Remove Cenospheres		25	25	25	25	
	14	Groundwater assessment and remediation	25	100	25	400		
	15	Dry ash silo maintenance	40	40	40	40	43	
	16	Cover Bottom ash Stack side slopes (assume on site dirt)	40					
	17	Repair sloughs and rutting - perimeter road around Pond 5 Complex	10					
	18	Establish perimeter drainage & slopes for dry ash stack	50					

CUF	1	Ash Pond and Stack surveys		50	50	50	50	
	2	Improved access control			25	25	25	
	3	Mow dikes and stack; remove trees		50	75	75	75	
	4	General maintenance - ash pond dikes		25	25	25	25	
	5	Mitigate red water seeps			100	100	100	
	6	Dry Ash Handling	1,000	1,000	1,000	1,000	1,000	
	7	General maintenance - dry ash stack		25	25	25	25	
	8	Phragmites control			25	25	25	
	9	Locate a borrow site		25				
	10	Develop incremental dry ash stacking plan		154	150			
	11	Earth Cover for Dry Ash Stack (temporary) - assume comes from off site	150	75	75	75	75	
	12	Final earth cover for dry ash stack - assume comes from off site						500
	13	Investigate gypsum stack perimeter ditch drainage and implement fix (if needed)			150	50		
	14	Gypsum stack dust control		175	175	175	175	

GAF	1	Raise ash pond A		50				
	2	Mitigate Red Water Seeps			100	100	100	
	3	Manage deltas and phragmites in ash ponds and channels	100	200	75	75	75	
	4	Maintenance of abandoned ash pond		10	10	10	10	
	5	Bottom Ash Handling		100	150	150	150	
	6	Improved access control			25	25	25	
	7	Mow ash pond dikes and remove trees		50	75	75	75	
	8	Ash Pond surveys		20	20	20	20	
	9	Close and install groundwater monitoring wells			25			

JOF	1	DuPont dredge cell repairs and maintenance			30	30	30	
	2	South rail loop repairs and maintenance	50	50	50	50	50	
	3	Engineering exploration to evaluate plant concerns about dike stability below old discharge structures (southeast side of Pond B)		50				

	4	Close abandoned discharge structures in Pond B				150		
	5	Dike repair at active discharge structures	160					
	6	Phragmites control	50	25	25	25	25	
	7	Bottom Ash Handling and dike maintenance		50	50	50	50	
	8	Trans Ash Project	4,110	6,336	4,724	3,009	3,584	In Fuels Budget
	9	Additional Ash Disposal Capacity - design, permit, and build	100					
	10	Maintenance of abandoned ash pond		20	20	20	20	
	11	Mitigate Red Water Seeps (does not match M. Davis sheet)			500	100	100	
	12	Improved access control			25	25	25	
	13	Mow ash pond dikes and remove trees		50	50	50	50	
	14	Ash Pond Surveys		20	20	20	20	
	15	F5 Discharge - environmental exceedance	150					
	16	F19 discharge - sump and piping	77					
	17	Close and repair groundwater monitoring wells		10				
JSF	1	Raise spillways in bottom ash pond	25		50			
	2	Ash Pond and Stack surveys		20	20	20	20	
	3	Improved access control			25	25	25	
	4	Mow dikes and stack; remove trees		50	75	75	75	
	5	Repair dikes - bottom ash pond		25	25	25	25	
	6	Mitigate red water seeps			100	100	100	
	7	Dry Ash Handling	510	510	510	510	515	
	8	Repair dry ash stack and install additional gutters		75	100	25	25	
	9	Phragmites control			25	25	25	
	10	Locate a borrow site		25				
	11	Develop incremental dry ash stacking plan		77	150			
	12	Remove trees from ash stack drainage ditch		50	60	10	10	
	13	Maintenance of Pond J		30	30	30	30	
	14	Bottom ash handling and CYROP maintenance	150	150	150	150	150	
	15	Dry Fly Ash Stack Stability (complete)	365					
	16	Earth cover for ash stack (assume off site dirt, partial final cover)	25	150	500	500	500	
	17	Close, repair, and develop new ground water monitoring wells	20	15				
	18	Clean out interim setlling pond, stablize ditch and adjacent bank	175					
KIF	1	Upgrade pump in perimiter ditch on Swan Pond Road	85					
	2	Cover ash in Swan Pond Road ditch and vegetate	25					
	3	Develop new emergency dredge cell	630		630			
	4	Additional dipping and hauling during emergency dredge cell construction	640					
	5	Improve reliability of dredge	100					
	6	General maintenance, cleanout of underdrains, washes						
	7	Clean ash off of berms and repair earth cover on berms and washes, seed, fertilize	65					
	8	Address fugitive dusting: build finger dikes for water cannon, spray soil cement	50					
	9	Mow ash pond dikes and remove trees		50	75	75	75	
	10	Repair ash pond dikes		30	30	30	30	

	11	Mitigate Red Water Seeps			100	100	100	
	12	Repair elevated dredge cells (assume vibrating beam on 3 sides)			3,500			
	13	Repair and maintain elevated dredge cells; install earth cover (assume on site cover)		75	75	75	75	
	14	Construct dredge cells and dredge		135	700	700	700	820
	15	Locate a borrow site		25				
	16	Dip bottom ash and maintain ash channels			50	50	50	
	17	Improved access control			25	25	25	
	18	Repair abandoned ash pond spillway			150			
	19	Engineering study - adequacy of CYROP			25			
	20	Clean out CYROP			75			
	21	Ash Pond Surveys		22	22	22	22	
	22	Dust Control		80	100	100	100	
	23	Interim Earth cover (assume cover available on site)		150	125	75	75	
	24	Close and repair groundwater monitoring wells			15			

PAF	1	Remediate coal fines/slag in Daniel Run Creek	175					
	2	Cemetery access			100			
	3	Remediate Redwater 1 (slope stability) and dredge	100		50	50	50	
	4	Clean out Redwater 2, 3, 4 (dredge 2, 3; unplug pipe in 4)	755		75	75	75	
	5	Repair leaking abandoned spillways in Jacobs Creek Ash Pond		150				
	6	Security gates for public access control			50	50	50	
	7	Cleanout Jacobs Creek channel/uncover pipes	45					
	8	Regain freeboard in fines pond	10					
	9	Evaluate vacuum truck dumping and develop procedure for managing waste	5					
	10	Modify Jacobs Creek discharge channel to allow calibration.	60					
	11	Ash Pond surveys		50	50	50	50	
	12	Maintain red water ponds and system			25	25	25	
	13	Operate and maintain gypsum stack	150	150	150	150	150	
	14	Interim Management - Coal Fines Pond		500	500	500	500	
	15	Interim Closure - Coarse and Medium Coal Wash Refuse Areas			2,300			
	16	Locate a borrow area		25				
	17	Phragmites control			25	25	25	
	18	Improve operations of boiler slag pond			50			
	19	Clean out CYROPs			75		75	
	20	Install baffles in FGD stilling pond		50				
	21	Install underdrains in FGD stack	200					
	22	Develop FGD incremental stacking plan		150				
	23	Ash pond dike and dredge cell maintenance		50	75	75	75	
	24	Mow dikes and cut trees		75	150	150	150	
	25	Jacobs Creek Ash Pond Divider dike			250			
	26	Dredge Slag Ponds (Complete)	273					
	27	Extend gypsum piping	200					
	28	Earth cover for gypsum stack (assume on site dirt)		75	175	175	175	
	29	Close and install groundwater monitoring wells			50			

SHF	1	Repair internal slough at stilling pond		100			
	2	Reline discharge structures for calibration	25		275		
	3	Ash Pond and Stack surveys		35	35	35	35
	4	Improved access control			25	25	25
	5	Mow dikes and stack; remove trees		50	75	75	75
	6	Repair dikes - active ash pond		50	50	50	50
	7	Make repairs under ash piping		25	25	25	25
	8	Mitigate seeps			75	75	75
	9	Dry Ash Handling	990	990	990	990	990
	10	Bottom Ash Handling		50	50	50	50
	11	Maintain AFBC ash stack area		10	10	10	10
	12	Repair dry ash stack and install additional gutters		75	125	50	50
	13	Phragmites control			25	25	25
	14	Locate a borrow site		25			
	15	Engineering study - adequacy of CYROP and clean out			105	50	
	16	Develop incremental dry ash stacking plan		77	150		
	17	Final cover bottom ash stack (assuming on site cover)		50	175	175	175
	18	Dry Stack Final Closure Certification				75	
	19	Close and install groundwater monitoring wells			30		
	20	Replace bags and valves - Silo 5			55		
	21	Replace bags and valves - Silo 6			55		

WCF	1	Perform engineering study for water that drains into ash pond dike	15				
	2	Establish 2' of freeboard near units 1-6 discharge lines					
	3	QA/QC for previously placed ash for current dike-raising project					
	4	Perform engineering study to determine adequacy of perimeter ditch around raised dikes	10				
	5	Cenosphere control/marketing	30				
	6	Dredge gypsum stilling pond	135				
	7	Perform engineering study to remediate gypsum stack and implement (including underdrains)	250	500			
	8	Ash Pond surveys		50	50	50	50
	9	Mow dikes and gypsum stack; remove trees		50	75	75	75
	10	Improved access control			25	25	25
	11	Dredge ash pond	400	100	75	600	600
	12	Operate gypsum stack and handle bottom ash	315	315	315	315	315
	13	Phragmites control			25	25	25
	14	Upgrade ash pond perimeter ditch along back access road		30	150		
	15	Mitigate red water seeps			100	100	100

	16	Install riprap on ash pond dike at red water seeps (does not match M. Davis sheet)		100		
	17	Locate a borrow site	25			
	18	General ash pond dike maintenance	50	50	50	50
	19	Modify dredge cell perimeter ditch or cover new dredge cell dikes	100			
	20	Maintenance of abandoned ash pond	15	15	15	15
	21	Repair of ash pond discharge pipes		150		
	22	Resolve CO2 system maintenance problems		100		
	23	Routine gypsum stack maintenance	25	25	25	25
	24	Earth cover for gypsum stack (assume off site dirt)	175	175	175	175
	25	Dust control for gypsum stack	175	175	175	175
	26	Well closure and groundwater assessment	25	100		

By-Product Management Projects

Plant	Work Item		Blitz item currently in Yard Spend Plan	Fiscal Years 2004	2005	2006	2007	2008	OutYear
ALF	3	Engineering study for emergency and long term ash storage capacity, additional ash storage or utilization projects		200	2,800	1,500			
BRF	1	Perform engineering study for long term capacity					150	150	
	14	Earth cover for dry stack (assumes dirt available off site, final)			100	125	125	125	
Colbert	1	Perform engineering study of longterm capacity and implement			50	150	100	3,250	
	17	Sluice line containment at bridge crossing				500			
GAF	1	Engineering study for short and long term ash storage capacity & implementation		130	500	1,970			
JOF	1	DuPont dredge cell repairs and maintenance		530	300				
	10	Additional Ash Disposal Capacity - design, permit, and build			250	500	150	3,500	
	18	Sluice line containment			250	2,500	500		
JSF	1	Perform design , permit, and build longterm ash disposal capacity		75	175	700	100	3,400	
	20	Install sluice line containment at Polly Branch					500		
KIF	3	Permit fly ash, gypsum, bottom ash capacity		200		100	8,000	8,000	
	13	Replace/redesign Kennedy Weir			250				
PAF	4	**Remediate Redwater 1 (dredging, pumps for 10 year-24 hour storm event)**			400				
SHF	2	**Repair dry ash piping expansion joints and supports**			400				
	3	Perform engineering study of longterm capacity/permitting for dry ash		150	150	50	3,450		

Haber, Stanley M

(01

From: Welch, Rita A.
Sent: Wednesday, February 02, 2005 6:59 AM
To: Petty, Harold L.
Cc: Purkey, Ronald E.; Haber, Stanley M.
Subject: TAO 0711-0A, MACTEC, KIF- Cone Penetrometer Testing
Attachments: tao_print_cvr_word.doc

SUBJECT TAO APPROVED.

001a

Proposal Number :
WO/JO Number :
Letter Number :

Scope Change Number : 0A

TENNESSEE VALLEY AUTHORITY
TASK ASSIGNMENT ORDER (TAO)

CONTRACT NUMBER : **00021705**
CONTRACTOR : **MACTEC Engineering**
TASK NUMBER : **Mac - 0711 - 00069**
REVISION NUMBER : 00

LEAD : **Lynn Petty**
TECHNICAL MGR. : **Ron Purkey**
EFFECTIVE BEGIN DATE : **1/31/05**
CURRENT END DATE : **3/31/05**
PHASE :

PLANT : **Kingston Fossil Plant**
PROJECT : **Cone Penetrometer Testing**
TASK DESCRIPTION : **Payment for omitted invoice**
DESCRIPTION OF REVISION: **Initial Authorization**

FEE TYPE APPLICABLE TO THIS TAO :
_ Performance Award Fee
_ Fixed Price Fee - Managed
Fixed-Percentage Fee ==========> Staff Augmentation Field Support (Fixed Percentage Type)
_ No fee applies to this task

TASK SUMMARY

	Previous Revision		Net Change		Total task Authorization
Negotiated Estimated Cost	$0	+	$8,800	=	$8,800
Fixed Fee	$0	+	$0	=	$0
Earned Award Fee To Date	$0	+	$0	=	$0
Available Award Fee	$0	+	$0	=	$0
Total Estimated Price	$0	+	$8,800	=	$8,800

TVA SHORT CODE 091D9VR PCN K1F53[illegible]

LOCATION CODE _____ PERFORMANCE UNIT

APPROVED BY:

_____ _____
TVA Contract Administrator Date

DISTRIBUTION:

Partner (cc)
Eng.

Lead

2/2/2005

02

Haber, Stanley M

From: GEOSYNTEC CONSULTANTS INC Attn: R NEIL DAVIES
Sent: Tuesday, February 01, 2005 2:22 PM
To: Purkey, Ronald E.; RBachus@GeoSyntec.com; Smith, Daniel R.; Hedgecoth, Melissa A.; Petty, Harold L.
Cc: Baugh, James S.; Haber, Stanley M.
Subject: RE: Wednesday telecon regarding "drainage blanket's value for structural considerations"

Bob and I are available at 11:00am

From: Purkey, Ronald E. [mailto:repurkey@tva.gov]
Sent: Tuesday, February 01, 2005 2:09 PM
To: Purkey, Ronald E.; Robert Bachus; Smith, Daniel R.; Hedgecoth, Melissa A.; Petty, Harold L.
Cc: Neil Davies; Baugh, James S.; Haber, Stanley M.
Subject: RE: Wednesday telecon regarding "drainage blanket's value for structural considerations"

There is a conflict. Please change the time for 11 am est same day etc. Thanks.
Ron

-----Original Message-----
From: Purkey, Ronald E.
Sent: Tuesday, February 01, 2005 2:02 PM
To: 'RBachus@GeoSyntec.com'; Smith, Daniel R.; Hedgecoth, Melissa A.; Petty, Harold L.
Cc: GEOSYNTEC CONSULTANTS INC Attn: R NEIL DAVIES; Baugh, James S.; Haber, Stanley M.
Subject: Wednesday telecon regarding "drainage blanket's value for structural considerations"

There seems to be some misunderstanding as to the value of the drainage blanket at the base of the "In Pond" option. Please participate in the subject telecon Tomorrow at 10 am (est) (423 751 2428, meet me no 4820; Chattanooga participants, please meet in the Civil work area).

I wish to start the telecon out by Parsons (Dan - i know you will want have Greg and Yogi on there) presenting their case as to why the drainage blanket is required for structural reasons. Go over properties such as:

height assumed:

material parameters both inside and outside the pheratic surface:

Assumed seismic condition:

Discussion as to reason drain is required etc.

An email from Parsons with the above before the telecon may be helpful.

After Parsons states their reasons, I would like Geosyntec to render their opinion regarding their assumptions and conclusions. If we can agree where we disagree (if we still do) that would be helpful. Documentation may be requested from each party as to their position.

Thanks to all,
Ron Purkey

003

Haber, Stanley M

From: Purkey, Ronald E.
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To: Purkey, Ronald E.; 'RBachus@GeoSyntec.com'; Smith, Daniel R.; Hedgecoth, Melissa A.; Petty, Harold L.
Cc: GEOSYNTEC CONSULTANTS INC Attn: R NEIL DAVIES; Baugh, James S.; Haber, Stanley M.
Subject: RE: Wednesday telecon regarding "drainage blanket's value for structural considerations"

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Thanks to all,
Ron Purkey

005

Haber, Stanley M

From: Haber, Stanley M.
Sent: Friday, September 17, 2004 1:03 PM
To: Haber, Stanley M.
Subject: KIF530: Project Schedule
Attachments: ~MAP0005.PDF

Attachment 1
(Page 1 of 1)

Project Milestone Schedule

Project Name: KIF Fuel Switch - Fuel Savings

Location: Kingston PCN FI- KIF01

Use this table to record the schedule for milestones and major activities to be included in the project schedule. This schedule is developed during the project scoping meeting and is to be included in the project approval package.

MILESTONE OR ACTIVITY		PROPOSED DATES
* Project Approved by FPEP (Process Indicator P1) (P1 is 18 months prior to the implementation Start Date).		10/13/04
Preliminary Engineering Authorized		10/22/04
Preliminary Engineering start and finish dates	start finish	10/22/04 12/2/04
* Final Engineering Authorized (Process Indicator P2) (P2 is 12 months prior to the implementation Start Date).		12/16/04
Final Engineering start and finish dates *	start finish	1/3/05 3/3/05
* Final Engineering finished, all DCN's issued (Process Indicator P3) (P3 is 6 months prior to the implementation Start Date).		3/18/05
Implementation Authorized (SET for 120 days prior to the implementation Start Date).		4/8/05
Implementation start and finish dates and outage number (if applicable)	start finish Outage	4/15/05 6/18/05 —
Return to operation		6/15/05
* Project closed (Process Indicator P4) (P4 is 120 days after the return-to-operation date).		9/16/05

Project Engineer: Stanley M. Haber Date: 9/17/04

* NOTE: The dates associated with the process indicators P1, P2, P3, and P4 set the standard durations for project activities. Projects needing longer design durations, or that have long lead procurements that require more time than the standard, or that will require an EA or EIS (NEPA documentation), or have any other special design considerations, will require the standard schedule times be revised. Expedited projects may require shortening the standard durations.

0016

Haber, Stanley M

From: Haber, Stanley M.
Sent: Tuesday, September 14, 2004 1:27 PM
To: Petty, Harold L.; Purkey, Ronald E.
Cc: Stewart, David W.
Subject: KIF530 (Ash disposal capacity): Technical contact forPJ

Tracking:

Recipient	Delivery
Petty, Harold L.	Delivered: 09/14/2004 1:27 PM
Purkey, Ronald E.	Delivered: 09/14/2004 1:27 PM
Stewart, David W.	Delivered: 09/14/2004 1:27 PM

Steve and Ron,

It was my understanding that a System Engineer is listed on the PJ as the Technical Contact (and is responsible for the PJ) unless there is an unusual sitiuation. Do you have any comments on the trailing email?

Stan
-----Original Message-----
From: Hedgecoth, Melissa A.
Sent: Tuesday, September 14, 2004 1:15 PM
To: Haber, Stanley M.
Cc: Johnson, Randall E.; Wiggall, Richter E.; Davis, Michael D
Subject: RE: KIF530 (Ash disposal capacity): Changes needed on PJ

Stan,
I feel very uncomfortable being the "technical contact" for this project. I am not controlling the budget or the schedule and I am not performing the work. The Civil Design group is doing all the work, setting the budget and the schedule. So, I would like to change the "technical contact" to Lynn Petty. I have discussed this with both Randy Johnson and Steve Baugh, and they have no problem with the change.
Thanks,
Missy

> -----Original Message-----
> **From:** Haber, Stanley M.
> **Sent:** Monday, September 13, 2004 2:40 PM
> **To:** Hedgecoth, Melissa A.
> **Cc:** Johnson, Randall E.; Wiggall, Richter E.; Davis, Michael D
> **Subject:** FW: KIF530 (Ash disposal capacity): Changes needed on PJ
>
> Missy,
>
> We need the following changes made before we can generate the balance of the project package. Will this be done today?
>
> Stan
> -----Original Message-----
> **From:** Haber, Stanley M.
> **Sent:** Friday, September 10, 2004 1:52 PM
> **To:** Hedgecoth, Melissa A.
> **Cc:** Halicks, David R.; Davis, Michael D; Baugh, James S.; Auguste, Myriam B.; Mealer, John A.; Halicks, David R.; Long, S. Scott; Purkey, Ronald E.; Petty, Harold L.; Bowers, Larry C; Rehberg, Robert L.;

Holmes, James B.; Tolliver, Sherry D.; Kimsey, Barry A.; Davis, Victor W.; Waldrep, Roger T.; Harless, J. Larry; Chattin, Mike E.; Catlett, James H
Subject: KIF530 (Ash disposal capacity): Changes needed on PJ

Missy,

Based on the information that was provided to me at the last meeting that we had, I have made changes to the cost estimate input sheet that reflects the need to begin design and construction on the Kingston ash disposal facilities in FY05 rather than what is presently in the PJ (FY07). For your information and use, I am attaching a copy of the spreadsheet to this email. You will note that I have a row at the end of the spreadsheet that shows the proposed, present, and differential funding levels per FY.

After reviewing the PJ in light of our last meeting, it appears that you need to address the following areas:

Project description page:

1. Verify that the in-service date is accurate (or change it as appropriate)
2. Indicate the reason for this revision of the PJ in the "Reason for Change" box

Project economic evaluation pages

1. Change the cash flows to match the new numbers that are needed to support the proposed changes to the implementation plan (shown on my attached spreadsheet as "total, all phases").
2. Under cost assumptions, the risks for assumptions 1 and 2 need to be updated. Cost assumption 2 also needs to be updated (this project is no longer based on a turnkey DFA system; worse case basis is wet ash in pond, gypsum in pond as noted in my spreadsheet). Cost assumption 1 needs to be updated to reflect project totals for each major org/item (Engineering, implementation, plant support, long lead material, GUBMK support) as shown on the attached cost estimate input sheet.

Please confirm that you can make these changes by Monday, September 13th.

Thanks.

Stan

007

Haber, Stanley M

From: Hedgecoth, Melissa A.
Sent: Tuesday, September 14, 2004 1:15 PM
To: Haber, Stanley M.
Cc: Johnson, Randall E.; Wiggall, Richter E.; Davis, Michael D
Subject: RE: KIF530 (Ash disposal capacity): Changes needed on PJ

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Thanks.

Stan

008

Haber, Stanley M

From: Hedgecoth, Melissa A.
Sent: Tuesday, September 14, 2004 12:08 PM
To: Haber, Stanley M.
Subject: RE: KIF530 (Ash disposal capacity): Changes needed on PJ

What is pushing this to be done today?

-----Original Message-----
From: Haber, Stanley M.
Sent: Tuesday, September 14, 2004 9:02 AM
To: Johnson, Randall E.; Hedgecoth, Melissa A.
Cc: Wiggall, Richter E.; Davis, Michael D
Subject: RE: KIF530 (Ash disposal capacity): Changes needed on PJ

Is Systems going to be able to do this PJ today?

-----Original Message-----
From: Johnson, Randall E.
Sent: Monday, September 13, 2004 2:49 PM
To: Haber, Stanley M.; Hedgecoth, Melissa A.
Cc: Wiggall, Richter E.; Davis, Michael D
Subject: RE: KIF530 (Ash disposal capacity): Changes needed on PJ

Missy is out with the stomach flu. May be back tomorrow.

-----Original Message-----
From: Haber, Stanley M.
Sent: Monday, September 13, 2004 2:40 PM
To: Hedgecoth, Melissa A.
Cc: Johnson, Randall E.; Wiggall, Richter E.; Davis, Michael D
Subject: FW: KIF530 (Ash disposal capacity): Changes needed on PJ

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089

Haber, Stanley M

From: Haber, Stanley M.
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Cc: Wiggall, Richter E.; Davis, Michael D
Subject: RE: KIF530 (Ash disposal capacity): Changes needed on PJ

Tracking:

Recipient	Delivery
Johnson, Randall E.	Delivered: 09/14/2004 9:02 AM
Hedgecoth, Melissa A.	Delivered: 09/14/2004 9:02 AM
Wiggall, Richter E.	Delivered: 09/14/2004 9:02 AM
Davis, Michael D	Delivered: 09/14/2004 9:02 AM

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your information and use, I am attaching a copy of the spreadsheet to this email. You will note that I have a row at the end of the spreadsheet that shows the proposed, present, and differential funding levels per FY.

After reviewing the PJ in light of our last meeting, it appears that you need to address the following areas:

Project description page:

1. Verify that the in-service date is accurate (or change it as appropriate)
2. Indicate the reason for this revision of the PJ in the "Reason for Change" box

Project economic evaluation pages

1. Change the cash flows to match the new numbers that are needed to support the proposed changes to the implementation plan (shown on my attached spreadsheet as "total, all phases").
2. Under cost assumptions, the risks for assumptions 1 and 2 need to be updated. Cost assumption 2 also needs to be updated (this project is no longer based on a turnkey DFA system; worse case basis is wet ash in pond, gypsum in pond as noted in my spreadsheet). Cost assumption 1 needs to be updated to reflect project totals for each major org/item (Engineering, implementation, plant support, long lead material, GUBMK support) as shown on the attached cost estimate input sheet.

Please confirm that you can make these changes by Monday, September 13th.

Thanks.

Stan

010

Haber, Stanley M

From: Johnson, Randall E.
Sent: Monday, September 13, 2004 2:49 PM
To: Haber, Stanley M.; Hedgecoth, Melissa A.
Cc: Wiggall, Richter E.; Davis, Michael D
Subject: RE: KIF530 (Ash disposal capacity): Changes needed on PJ

Missy is out with the stomach flu. May be back tomorrow.

-----Original Message-----
From: Haber, Stanley M.
Sent: Monday, September 13, 2004 2:40 PM
To: Hedgecoth, Melissa A.
Cc: Johnson, Randall E.; Wiggall, Richter E.; Davis, Michael D
Subject: FW: KIF530 (Ash disposal capacity): Changes needed on PJ

Missy,

We need the following changes made before we can generate the balance of the project package. Will this be done today?

Stan
-----Original Message-----
From: Haber, Stanley M.
Sent: Friday, September 10, 2004 1:52 PM
To: Hedgecoth, Melissa A.
Cc: Halicks, David R.; Davis, Michael D; Baugh, James S.; Auguste, Myriam B.; Mealer, John A.; Halicks, David R.; Long, S. Scott; Purkey, Ronald E.; Petty, Harold L.; Bowers, Larry C; Rehberg, Robert L.; Holmes, James B.; Tolliver, Sherry D.; Kimsey, Barry A.; Davis, Victor W.; Waldrep, Roger T.; Harless, J. Larry; Chattin, Mike E.; Catlett, James H
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0 11

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Cc: Johnson, Randall E.; Wiggall, Richter E.; Davis, Michael D
Subject: FW: KIF530 (Ash disposal capacity): Changes needed on PJ
Attachments: KIF530 Input for Cost Estimate Summary 2004 09 09 R0.xls

Tracking:

Recipient	Delivery
Hedgecoth, Melissa A.	Delivered: 09/13/2004 2:40 PM
Johnson, Randall E.	Delivered: 09/13/2004 2:40 PM
Wiggall, Richter E.	Delivered: 09/13/2004 2:40 PM
Davis, Michael D	Delivered: 09/13/2004 2:40 PM

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Stan

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**									
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**		**Totals**	**Prv Yrs**	
3										
4										
5	**Phase 1**									
6	Engineering	200	195					395		
7	PE/PC/PS		12					12		
8	Plant Support		5					5		
9	PSS - Inspection							0		
10										
11	**Total Phase 1**	**200**	**212**	**0**	**0**	**0**		**412**		
12										
13	**Phase 2**									
14										
15	Engineering (Systems and EDS)	0	30	70	300	0		400		
16										
17	PE/PC/PS	0	20	25	30	0		75		
18										
19	GUBMK/HED (estimate)	0	15	0	0	0		15		
20	Plant Support	0	3	0	0	0		3		
21										
22	Long Lead Material (LLM)									
23	*blank*	0	200	200		0		400		
24	*blank*	0	0		2500	4000		6500		
25	*total LLM*	0	200	200	2500	4000		6900		
26										
27	**Total Phase 2**	**0**	**268**	**295**	**2830**	**4000**		**7393**		
28										

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**								
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**Totals**	**Prv Yrs**	
29	**Phase 3**								
30									
31	Engineering	0	25	30	200	200	455		
32									
33	PE/PC/PS	0	25	25	15	35	100		
34									
35	Plant Support	0	20	20	20	20	80		
36									
37	Installation (x)								
38	*GUBMK*	0	0	0	20	20	40		
39	*blank*	0	0	0	0	0	0		
40	*Total GUBMK*	0	0	0	20	20	40		
41									
42	*Turnkey Installation*	0	1075	1,135	1960	3725	7895		
43	*blank*	0	0	0	0	0	0		
44	*Total*	0	1075	1135	1960	3725	7895		
45									
46	*Asbestos abatement (GUBMK)*	0	0	0	0	0	0		
47									
48	*Total Installation*	0	1075	1135	1980	3745	7935		
49									
50	**Total Phase 3**	**0**	**1145**	**1210**	**2215**	**4000**	**8570**		
51									
52	**Total: All Phases**	**200**	**1625**	**1505**	**5045**	**8000**	**16375**		
	Current funding	200	75	100	8000	8000	16375		
	Differential	**0**	**1550**	**1405**	**-2955**	**0**	**0**		
	Assumptions:								
	1. Original project PJ was for a DFA system; Design and installation of system was to be by turnkey contractor; scope similar to CUF dry fly ash system.								
	2. Design of BOP interfaces will be by FE&TS								
	3. FE&TS Lead will be Civil Department								
	4. An outage will be required for some BOP interface tie-ins								
	5. Ph 1 eng includes Peer review ($50k), study of deep french drains ($70k), answering permit questions ($75k)								

Haber, Stanley M

From: Harless, J. Larry
Sent: Monday, September 13, 2004 10:12 AM
To: Toney, Calvin L.
Cc: Haber, Stanley M.
Subject: FW: Cost Rollup for KIF530 (Develop Ash Disposal capacity)
Attachments: KIF530 Input for Cost Estimate Summary 2004 09 09 R0.xls; KIF530 Engineering Cost Spreadsheet 2004 09 10.xls

Calvin,

Do a cost rollup for Stan. Also don't forget to get Jeff's input on the hours for PCS.
-----Original Message-----
From: Haber, Stanley M.
Sent: Friday, September 10, 2004 1:57 PM
To: Harless, J. Larry
Cc: Auguste, Myriam B.; Long, S. Scott; Halicks, David R.; Davis, Michael D
Subject: Cost Rollup for KIF530 (Develop Ash Disposal capacity)

Larry,

Would you be able to provide a cost roll-up for KIF530 for me? I have attached my project input sheet and an engineering cost sheet for your use.

Thanks.

Stan

1	**KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage**							
2	**Phase/Activity**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**Totals**	**Prv Yrs**
3								
4								
5	**Phase 1**							
6	Engineering	200	195				395	
7	PE/PC/PS		12				12	
8	Plant Support		5				5	
9	PSS - Inspection						0	
10								
11	**Total Phase 1**	**200**	**212**	**0**	**0**	**0**	**412**	
12								
13	**Phase 2**							
14								
15	Engineering (Systems and EDS)	0	30	70	300	0	400	
16								
17	PE/PC/PS	0	20	25	30	0	75	
18								
19	GUBMK/HED (estimate)	0	15	0	0	0	15	
20	Plant Support	0	3	0	0	0	3	
21								
22	Long Lead Material (LLM)							
23	*blank*	0	200	200		0	400	
24	*blank*	0	0		2500	4000	6500	
25	*total LLM*	0	200	200	2500	4000	6900	
26								
27	**Total Phase 2**	**0**	**268**	**295**	**2830**	**4000**	**7393**	
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