

Scope - Microsoft Outlook

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- KIF FGD
- KIF PRB Fuel Switch
- KIF Projects
- KIF Projects - Ash
  - Deleted Items
  - KIF450 (Gypsum)
    - Budget
    - Design
    - Environmental
    - Meeting Agendas and Notes
    - Meetings
    - Parsons
    - Peer Review
    - Pond vs Peninsula
    - Roles and Responsibilities
    - KIF531 (Replace Kennedy Weir)
      - Other
      - Progress Reports
      - Search Folders
  - KIF Projects - Closed
  - KIF Projects - General Information
  - VIE SCP 110 (VIE530)

40 Items

**Scope**

Arranged By: Date Newest on top

Older

Hughes, Michael	03/28/2006
FW: FYI -----Original Message----- From: Petty, Harold L.	
Hughes, Michael	08/04/2005
KIF schedule Stan, bob Rehberg was struggling with the dredge cell restoration schedue yesterday while I was at the plant. I beleive he had a way out of date schedule. Would it	
Hughes, Michael	06/20/2005
KIF Dredge Cell Restoration Stan, looking at the schedule for the above project, it seems we are behind on the implementation and construction period start. What do we lack or need to	
Welch, Rita A.	06/16/2005
TAO 0724-0A, MACTEC, KIF- Gyp Stack Borrow A... @ SUBJECT TAO APPROVED. <end>	
Haber, Stanley M.	06/13/2005
KIF530 (French Drains): Borrow area short code Brian, This scope is part of our project. Please provide Michael a short code for this activity.	
Crane, Michael Lynn	06/13/2005
RE: Borrow area short code They charge by the cubic yard of mulch generated, so it's going to be hard to tell, but it should be not be over \$5k or so. Probably less than that.	
Crane, Michael Lynn	06/13/2005
Borrow area short code Stan, I need a short code to cover the cost of the tree stump and top grinding we are going to set up after the wood	

**FW:**  
Hughes, Michael

You replied on 06/23/2006 1:13 AM

To: Haber, Stanley M.

FYI

-----Original Message-----  
**From:** Petty, Harold L.  
**Sent:** Friday, March 24, 2006 5:23 PM  
**To:** Lankford, Brian S.  
**Cc:** Baugh, James S.; Hughes, Michael; Purkey, Ronald E.  
**Subject:**

In response to your request Mike Hughes went to Kingston this afternoon to investigate the wet spot you described to me.

He just called and gave me a verbal report after walking considerable portions of the dike. He indicated he found one wet spot in the vicinity you described. The source of water for that wet spot is the outlet pipe from the dike underdrain of the next upper level. Such a wet spot would not be indicative of a pending failure.

He indicated some remedial cleaning, grassing, and perhaps rip-raping of the outlet would be in order in the future. That would improve the flow, dispersement, and overall appearance of the dike in that area.

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**Mall**

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  - VTE SCP 110 (VTE538)

40 Items

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Crane, Michael Lynn 06/13/2005  
Borrow area short code  
Stan,  
I need a short code to cover the cost of the tree stump and top grinding we are going to set up after the wood

Baugh, James S. 06/06/2005  
RE: KIF 530 Short Codes Needed  
Thanks for your help.  
Steve Baugh  
-----Original Message-----

Franklin, Thomas 06/06/2005  
KIF 530 Short Codes Needed  
short code for HED Implementation below:  
001DQYY  
-----Original Message-----

Baugh, James S. 06/06/2005  
FW: KIF 530 Short Codes Needed  
Tom,  
We are willing to proceed with the KIF project "at-risk".  
Let me know if you have any questions.

Toney, Calvin L. 05/26/2005  
KIF530 Project  
Please find attached the estimate summary sheets and pdf formatted cost estimates for the above subject.  
Please review and if you have any comments or

Toney, Calvin L. 05/23/2005  
French Drain Estimate Comparison Summary Sheets  
Attached is the file for the above subject per your request.  
If you have any comments or questions please e-mail me

Petty, Harold L. 05/17/2005  
FW: TDEC's Approval of KIF Dredge Cell Repair  
Stan:  
Are you up on all this chain of e-mails?  
Thanks Lynn

**Borrow area short code**

Crane, Michael Lynn

You replied on 06/13/2005 10:44 AM

To: Haber, Stanley M.

Stan,

I need a short code to cover the cost of the tree stump and top grinding we are going to set up after the wood cutters harvest the trunks in the new borrow area. I am told you have that information.

Mike

Scope - Microsoft Outlook

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- KIF Projects - Closed
- KIF Projects - General Information
- KIF SCR 110 (KIF538)

Mail

**Scope**

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Petty, Harold L. 05/17/2005  
FW: TDEC's Approval of KIF Dredge Cell Repair  
Stan:  
Are you up on all this chain of e-mails?  
Thanks Lynn

Knox, Robert 04/20/2005  
KIF Dredge Cell - Seepage Repair Quantities by HED Stan,  
The materials for the KIF Dredge Cell - Seepage Repair are listed below. Many of the items listed will required

Petty, Harold L. 04/07/2005  
RE: Draft Phase 2 engineering schedule for seep ren...  
The Primavera schedule is in the system but is not correct. It will look very similar to the one attached to my e-mail except the discussion Stan and I was having

Smith, Daniel R 04/06/2005  
RE: Draft Phase 2 engineering schedule for seep ren...  
Please advise when the primavera schedule will be completed. Is it going to be substantially different?  
Dan

Petty, Harold L. 04/06/2005  
RE: Draft Phase 2 engineering schedule for seep r...  
Dan:  
This is a later version of the schedule than the one attached to your e-mail. Really the one that counts is

Smith, Daniel R 04/06/2005  
Draft Phase 2 engineering schedule for seep reme...  
<html>  
<font face="Arial" style="font-size: 8pt;">\*\*\*  
WorleyParsons Group Notice \*\*\*

Petty, Harold L. 03/31/2005  
FW: Review of cost estimate for drain installation t...  
Here is the estimate revised per Dan's comments.  
Thanks, Lynn  
-----Original Message-----

**FW: TDEC's Approval of KIF Dredge Cell Repair**

Petty, Harold L.

You forwarded this message on 05/17/2005 3:45 PM

To: Haber, Stanley M.  
Cc: Purkey, Ronald E.

Stan:

Are you up on all this chain of e-mails?

Thanks  
Lynn

-----Original Message-----

**From:** Bowers, Larry C  
**Sent:** Monday, May 16, 2005 12:07 PM  
**To:** Baugh, James S.; Purkey, Ronald E.; Petty, Harold L.; Petty, Randal L; Radford, Larry D.  
**Subject:** RE: TDEC's Approval of KIF Dredge Cell Repair

Please do from my perspective. As I stated earlier I think KIF's concerns are valid. Also I think we need to raise the existing dredge cell dikes before we can resume normal dredging in November. If that is correct we need to include this work in the schedule.

-----Original Message-----

**From:** Baugh, James S.  
**Sent:** Monday, May 16, 2005 11:53 AM  
**To:** Bowers, Larry C; Purkey, Ronald E.; Petty, Harold L.; Petty, Randal L; Radford, Larry D.

40 Items

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- KIF Projects - General Information
- KIF SCP HQ (KIF530)

40 Items

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Petty, Harold L.      03/31/2005  
FW: Review of cost estimate for drain installation t...  
Here is the estimate revised per Dan's comments.  
Thanks, Lynn  
-----Original Message-----

Smith, Daniel R      03/30/2005  
FW: Review of cost estimate for drain installation t...  
<html>  
<font face="Arial" style="font-size: 8pt;">\*\*\*  
WorleyParsons Group Notice \*\*\*

Petty, Harold L.      03/30/2005  
RE: Review of cost estimate for drain installation to mi...  
Stan:  
Here are Dan's comments.  
Thanks, Lynn

Petty, Harold L.      03/30/2005  
FW: KIF French Drains Cost Estimate  
-----Original Message-----  
From: Toney, Calvin L.  
Sent: Friday, March 25, 2005 3:05 PM

Haber, Stanley M.      03/12/2005  
KIF530 (French Drains): Review of PCR  
Ron and Lynn,  
I have attached a draft PCR for moving the target date  
associated with Preliminary Engineering Complete. I plan

Petty, Harold L.      02/14/2005  
FW: KIF peninsula area #2 PDF files  
Here is one  
-----Original Message-----  
From: Holmquist, Kenneth W.

Purkey, Ronald E.      02/11/2005  
FW: KIF budget  
fyi  
-----Original Message-----  
From: Purkey, Ronald E.

**FW: Review of cost estimate for drain installation to mitigate seepage at KIF**

Petty, Harold L.



You forwarded this message on 04/29/2005 10:21 AM

To: Purkey, Ronald E.; Haber, Stanley M.

Here is the estimate revised per Dan's comments.

Thanks,  
Lynn

-----Original Message-----  
**From:** Toney, Calvin L.  
**Sent:** Thursday, March 31, 2005 2:05 PM  
**To:** 'Smith, Daniel R'  
**Cc:** Melton, Gary; Petty, Harold L.; Hughes, Michael  
**Subject:** RE: Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell

Project Summary 05359R1.pdf (32 KB)  
Sheet(05359R1)...

Attached are the revised files per Dan's comments.

-----Original Message-----  
**From:** Smith, Daniel R  
[mailto:Daniel.R.Smith@worleyparsons.com]  
**Sent:** Wednesday, March 30, 2005 7:40 AM

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    - Environmental
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    - Meetings
    - Persons
    - Peer Review
    - Pond vs Peninsula
    - Roles and Responsibilities
    - Scope
  - KIF531 (Replace Kennedy Weir)
    - Other
    - Progress Reports
    - Search Folders
  - KIF Projects - Closed
  - KIF Projects - General Information
  - KIF SCF 110 (KIF530)

40 Items

**Scope**

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- Purkey, Ronald E. 02/11/2005  
FW: KIF budget  
-----Original Message-----  
From: Purkey, Ronald E.
- Short, James L. Jr. 01/21/2005  
Revised Order of Magnitude Estimate and Summary...  
Stan, Attached are the revised estimate and summary sheet for the above named project. Please call if you have comments and/or questions.
- Franklin, Thomas 01/21/2005  
KIF530.xls  
Your files are attached and ready to send with this message. <end>
- Haber, Stanley M. 09/17/2004  
KIF530 (Develop Ash capacity): Request for PA  
Myriam,  
Please prepare a revised PA for KIF530. I have attached the PJ (revision 1), my cost input sheet, the
- Toney, Calvin L. 09/13/2004  
RE: Cost Rollup for KIF530 (Develop Ash Disposal c...  
Please find attached the estimate summary sheet and pdf formatted cost estimate for the above subject. Please review and if you have any comments or
- Haber, Stanley M. 08/31/2004  
FW: KIF530 Input for Cost Estimate Summary 200...  
Lynn,  
I guess that we need to talk about this. I would think that the other disciplines would get a chance to provide
- Haber, Stanley M. 08/26/2004  
Ron,  
Attached is the cost input sheet that I would like to revise to capture our proposed cash flow.
- Baugh, James S. 06/14/2004

**FW: KIF budget**

Purkey, Ronald E.

To: Petty, Harold L.; Haber, Stanley M.; Smith, Daniel R.

fyi

-----Original Message-----

**From:** Purkey, Ronald E.  
**Sent:** Friday, February 11, 2005 10:26 AM  
**To:** Baugh, James S.  
**Subject:** RE: KIF budget

Steve,  
For capital money I propose the following for Option 1-1

2005 - 2850k	2100 for french drain	550
for engineering	100 for soil exploration	100
misc		
2006 - 300k	300 for	
engineering/hydrogeo/permitting etc		
2007 - 200k	200 for engineering and	
	permitting	
2008 - 4500k	4500 for gypsum stack	
	const and piping/misc	

As phase 2 progresses on the Penninsula, we will be able to see clearer what the economics are.

Ron

-----Original Message-----  
From: Baugh, James S.

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  - KIF Projects - General Information
  - KIF SCP 110 (VFSSR)

**Scope**

Arranged By: Date Newest on top

Baugh, James S. 06/14/2004  
 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

Haber, Stanley M. 06/10/2004  
 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

Haber, Stanley M. 06/09/2004  
 KIF530 and KIF531 PJs  
 Steve,  
 The attached files are the Kingston ash blitz project PJs that were provided to me and that were subsequently

Long, S. Scott 05/17/2004  
 RE: YPF466: Request for PA  
 sorry these comments apply to KIF530  
 Scott Long Manager, Project Development Strategic  
 Project Planning, FPG LP 2R-C

Bowers, Larry C 05/11/2004  
 FW: Requested Information about CPJs: KIF 530&531  
 FYI  
 -----Original Message-----  
 From: Bowers, Larry C

Hedgecoth, Melissa A. 04/28/2004  
 RE: Emailing: KIF530 New Ash Pond capacity CPJ5For...  
 Looks good to me.  
 -----Original Message-----  
 From: Haber, Stanley M.

Haber, Stanley M. 04/28/2004  
 Emailing: KIF530 New Ash Pond capacity CPJ5Form...  
 Missy,  
 I have reviewed the CPJ that you prepared for this project and have made some editorial adjustments. I

**RE: Second Call: KIF530 and KIF531 PJs**

Baugh, James S.

You forwarded this message on 06/14/2004 9:33 AM

To: Haber, Stanley M.  
 Cc: Preslar, Jacky D.; Hedgecoth, Melissa A.; Davis, Michael D

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" capital 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

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40 Items

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Haber, Stanley M.      06/09/2004  
 KIF530 and KIF531 PJs  
 Steve,  
 The attached files are the Kingston ash blitz project PJs that were provided to me and that were subsequently

Long, S. Scott      05/17/2004  
 RE: KIF466: Request for PA  
 sorry these comments apply to KIF530  
 Scott Long Manager, Project Development Strategic  
 Project Planning, FPG LP 2R-C

Bowers, Larry C      05/11/2004  
 FW: Requested Information about CPJs: KIF 530&531  
 FYI  
 -----Original Message-----  
 From: Bowers, Larry C

Hedgecoth, Melissa A.      04/28/2004  
 RE: Emailing: KIF530 New Ash Pond capacity CPJ5For...  
 Looks good to me.  
 -----Original Message-----  
 From: Haber, Stanley M.

Haber, Stanley M.      04/28/2004  
 Emailing: KIF530 New Ash Pond capacity CPJ5Form...  
 Missy,  
 I have reviewed the CPJ that you prepared for this project and have made some editorial adjustments. I

Haber, Stanley M.      04/26/2004  
 Kingston Ash Pond-Related Projects (Draft EMPs fo...  
 Last Friday in our monthly projects meeting we discussed the upcoming FGD projects. Two related project scopes that we discussed are the replacement of the ash pond

Hedgecoth, Melissa A.      03/31/2004  
 KIF530 - Develop fly ash, gypsum and bottom ash dis...  
 Stan, Just wanted to let you know that I added the subject CPJ to the yard projects for FY04. Thanks, Missy  
 <end>

**Emailing: KIF530 New Ash Pond capacity CPJ5Form 2004 04 24.pdf**

Haber, Stanley M.

To: Hedgecoth, Melissa A.  
 Cc: Petty, Harold L.; Davis, Michael D

Attachments: KIF530 New Ash Pond capacity CPJ5Form 2004 04 24.pdf

Missy,

I have reviewed the CPJ that you prepared for this project and have made some editorial adjustments. I would like you to review my comments. Please look over the attached file by close-of-business today and let me know if I need to adjust any of my changes to make this CPJ accurate.

Thanks for your help.

**Haber, Stanley M**

---

**From:** Hughes, Michael  
**Sent:** Tuesday, March 28, 2006 8:37 AM  
**To:** Haber, Stanley M.  
**Subject:** FW:

FYI

-----Original Message-----

**From:** Petty, Harold L.  
**Sent:** Friday, March 24, 2006 5:23 PM  
**To:** Lankford, Brian S.  
**Cc:** Baugh, James S.; Hughes, Michael; Purkey, Ronald E.  
**Subject:**

In response to your request Mike Hughes went to Kingston this afternoon to investigate the wet spot you described to me.

He just called and gave me a verbal report after walking considerable portions of the dike. He indicated he found one wet spot in the vicinity you described. The source of water for that wet spot is the outlet pipe from the dike underdrain of the next upper level. Such a wet spot would not be indicative of a pending failure.

He indicated some remedial cleaning, grassing, and perhaps rip-raping of the outlet would be in order in the future. That would improve the flow, dispersement, and overall appearance of the dike in that area.

Thanks,  
Lynn

03/14/2009

TVA-00028159



**Haber, Stanley M**

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**From:** Hughes, Michael  
**Sent:** Thursday, August 04, 2005 8:48 AM  
**To:** Haber, Stanley M.  
**Subject:** KIF schedule

Stan, bob Rehberg was struggling with the dredge cell restoration schedlue yesterday while I was at the plant. I beleive he had a way out of date schedule. Would it be okay if I faxed him the latest schedule? Let me know.....

Thanks

Michael S. Hughes, P.E.  
Tennessee Valley Authority  
FES  
1101 Market St.  
Chattanooga, TN 37402  
LP 2G-C  
(423) 751-2783  
Cell (423) 364-4891

**Haber, Stanley M**

---

**From:** Hughes, Michael  
**Sent:** Monday, June 20, 2005 8:00 AM  
**To:** Haber, Stanley M.  
**Subject:** KIF Dredge Cell Restoration

Stan, looking at the schedule for the above project, it seems we are behind on the implementation and construction period start. What do we lack or need to get started? If there's anything else I need to do, please let me know.

Thanks,

Michael S. Hughes, P.E.  
Tennessee Valley Authority  
FES  
1101 Market St.  
Chattanooga, TN 37402  
LP 2G-C  
(423) 751-2783  
Cell (423) 364-4891

03/14/2009

TVA-00028161

**Haber, Stanley M**

---

**From:** Welch, Rita A.  
**Sent:** Thursday, June 16, 2005 12:59 PM  
**To:** Petty, Harold L.; Purkey, Ronald E.; Haber, Stanley M.  
**Subject:** TAO 0724-0A, MACTEC, KIF- Gyp Stack Borrow Area  
**Attachments:** tao\_print\_cvr\_word.doc

SUBJECT TAO APPROVED.

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 - 0724 - 00082  
REVISION NUMBER : 00

LEAD : Lynn Petty  
TECHNICAL MGR. : Ron Purkey  
EFFECTIVE BEGIN DATE : 06/13/2005  
CURRENT END DATE : 08/30/2005  
PHASE : 3

PLANT : Kingston Fossil Plant  
PROJECT : Gyp Stack Borrow Area  
TASK DESCRIPTION :  
DESCRIPTION OF REVISION: Initial Authorization.

FEE TYPE APPLICABLE TO THIS TAO :

Performance Award Fee  
 Fixed Price Fee - Managed Fixed Percentage Type  
 Fixed-Percentage Fee =====>  Staff Augmentation  Field Support  
 No fee applies to this task

**TASK SUMMARY**

	<b>Previous Revision</b>		<b>Net Change</b>		<b>Total task Authorization</b>
Negotiated Estimated Cost	\$0	+	\$22,965	=	\$22,965
Fixed Fee	\$0	+	\$0	=	\$0
Earned Award Fee To Date	\$0	+	\$0	=	\$0
Available Award Fee	\$0	+	\$0	=	\$0
<hr/>					
<b>Total Estimated Price</b>	<b>\$0</b>	<b>+</b>	<b>\$22,965</b>	<b>=</b>	<b>\$22,965</b>

TVA SHORT CODE **001DQYY** PCN \_\_\_\_\_

LOCATION CODE \_\_\_\_\_ PERFORMING  
UNIT

**APPROVED BY:**

\_\_\_\_\_  
TVA Contract Administrator

\_\_\_\_\_  
Date

DISTRIBUTION:

Partner (cc)  
Eng.

Lead

6/16/2005

**Haber, Stanley M**

---

**From:** Haber, Stanley M.  
**Sent:** Monday, June 13, 2005 2:40 PM  
**To:** Lankford, Brian S.  
**Cc:** Catlett, James H; Crane, Michael Lynn; Franklin, Thomas  
**Subject:** KIF530 (French Drains): Borrow area short code

**Tracking:**

Recipient	Delivery
Lankford, Brian S.	Delivered: 06/13/2005 2:40 PM
Catlett, James H	Delivered: 06/13/2005 2:40 PM
Crane, Michael Lynn	Delivered: 06/13/2005 2:40 PM
Franklin, Thomas	Delivered: 06/13/2005 2:40 PM

Brian,

This scope is part of our project. Please provide Michael a short code for this activity.

Thanks.

Stan

-----Original Message-----

**From:** Crane, Michael Lynn  
**Sent:** Monday, June 13, 2005 10:46 AM  
**To:** Haber, Stanley M.  
**Subject:** RE: Borrow area short code

They charge by the cubic yard of mulch generated, so it's going to be hard to tell, but it should be not be over \$5k or so. Probably less than that.

-----Original Message-----

**From:** Haber, Stanley M.  
**Sent:** Monday, June 13, 2005 10:44 AM  
**To:** Crane, Michael Lynn  
**Subject:** RE: Borrow area short code

Do you have a cost?

-----Original Message-----

**From:** Crane, Michael Lynn  
**Sent:** Monday, June 13, 2005 10:37 AM  
**To:** Haber, Stanley M.  
**Subject:** Borrow area short code

Stan,

I need a short code to cover the cost of the tree stump and top grinding we are going to set up after the wood cutters harvest the trunks in the new borrow area. I am told you have that information.

Mike

03/14/2009

TVA-00028165

**Haber, Stanley M**

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**From:** Crane, Michael Lynn  
**Sent:** Monday, June 13, 2005 10:46 AM  
**To:** Haber, Stanley M.  
**Subject:** RE: Borrow area short code

They charge by the cubic yard of mulch generated, so it's going to be hard to tell, but it should be not be over \$5k or so. Probably less than that.

-----Original Message-----

**From:** Haber, Stanley M.  
**Sent:** Monday, June 13, 2005 10:44 AM  
**To:** Crane, Michael Lynn  
**Subject:** RE: Borrow area short code

Do you have a cost?

-----Original Message-----

**From:** Crane, Michael Lynn  
**Sent:** Monday, June 13, 2005 10:37 AM  
**To:** Haber, Stanley M.  
**Subject:** Borrow area short code

Stan,

I need a short code to cover the cost of the tree stump and top grinding we are going to set up after the wood cutters harvest the trunks in the new borrow area. I am told you have that information.

Mike

**Haber, Stanley M**

---

**From:** Crane, Michael Lynn  
**Sent:** Monday, June 13, 2005 10:37 AM  
**To:** Haber, Stanley M.  
**Subject:** Borrow area short code

Stan,

I need a short code to cover the cost of the tree stump and top grinding we are going to set up after the wood cutters harvest the trunks in the new borrow area. I am told you have that information.

Mike

03/14/2009

TVA-00028167



**Haber, Stanley M**

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**From:** Baugh, James S.  
**Sent:** Monday, June 06, 2005 2:55 PM  
**To:** Franklin, Thomas  
**Cc:** Haber, Stanley M.; Lankford, Brian S.  
**Subject:** RE: KIF 530 Short Codes Needed

Thanks for your help.

Steve Baugh

-----Original Message-----

**From:** Franklin, Thomas  
**Sent:** Monday, June 06, 2005 1:01 PM  
**To:** Baugh, James S.; Lankford, Brian S.  
**Cc:** Haber, Stanley M.  
**Subject:** KIF 530 Short Codes Needed  
**Importance:** High

short code for HED Implementation below:

|001DQYY|

-----Original Message-----

**From:** Baugh, James S.  
**Sent:** Monday, June 06, 2005 12:08 PM  
**To:** Franklin, Thomas  
**Cc:** Lankford, Brian S.; Haber, Stanley M.  
**Subject:** FW: KIF 530 Short Codes Needed  
**Importance:** High

Tom,

We are willing to proceed with the KIF project "at-risk". Let me know if you have any questions.

Steve Baugh

-----Original Message-----

**From:** Lankford, Brian S.  
**Sent:** Monday, June 06, 2005 11:41 AM  
**To:** Baugh, James S.  
**Subject:** KIF 530 Short Codes Needed  
**Importance:** High

Steve,

Please forward this e-mail on to Tom Franklin.

HED has started construction on the French Drain System on the dredge cell at KIF without a short code. The reason is that the project has not been PRC approved for a fiscal year over-run of one million dollars, but a total project under-run of approximately fourteen million. I talked to Stan Haber this morning and asked what needed to be done in order to get a short code for the project, and he stated that you needed

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TVA-00028168

to inform Tom Franklin that we are going to proceed with this project "at-risk". This means that a short code needs to be generated so that HED work can be billed without PRC approval of the entire year's expenditures. Most likely, this project will become phase 3 PRC approved after July 17th, but HED cannot wait until after PRC approval to start construction. Please get a short code as soon as possible.

Thanks,

Brian Lankford  
423-751-7602 (Chattanooga)  
423-838-1789 (Cell)

03/14/2009

TVA-00028169

**Haber, Stanley M**

---

**From:** Franklin, Thomas  
**Sent:** Monday, June 06, 2005 1:01 PM  
**To:** Baugh, James S.; Lankford, Brian S.  
**Cc:** Haber, Stanley M.  
**Subject:** KIF 530 Short Codes Needed  
**Importance:** High

short code for HED Implementation below:

|001DQYY|

-----Original Message-----

**From:** Baugh, James S.  
**Sent:** Monday, June 06, 2005 12:08 PM  
**To:** Franklin, Thomas  
**Cc:** Lankford, Brian S.; Haber, Stanley M.  
**Subject:** FW: KIF 530 Short Codes Needed  
**Importance:** High

Tom,

We are willing to proceed with the KIF project "at-risk". Let me know if you have any questions.

Steve Baugh

-----Original Message-----

**From:** Lankford, Brian S.  
**Sent:** Monday, June 06, 2005 11:41 AM  
**To:** Baugh, James S.  
**Subject:** KIF 530 Short Codes Needed  
**Importance:** High

Steve,

Please forward this e-mail on to Tom Franklin.

HED has started construction on the French Drain System on the dredge cell at KIF without a short code. The reason is that the project has not been PRC approved for a fiscal year over-run of one million dollars, but a total project under-run of approximately fourteen million. I talked to Stan Haber this morning and asked what needed to be done in order to get a short code for the project, and he stated that you needed to inform Tom Franklin that we are going to proceed with this project "at-risk". This means that a short code needs to be generated so that HED work can be billed without PRC approval of the entire year's expenditures. Most likely, this project will become phase 3 PRC approved after July 17th, but HED cannot wait until after PRC approval to start construction. Please get a short code as soon as possible.

Thanks,

Brian Lankford  
423-751-7602 (Chattanooga)  
423-838-1789 (Cell)

03/14/2009

03/14/2009

TVA-00028171

**Haber, Stanley M**

---

**From:** Baugh, James S.  
**Sent:** Monday, June 06, 2005 12:08 PM  
**To:** Franklin, Thomas  
**Cc:** Lankford, Brian S.; Haber, Stanley M.  
**Subject:** FW: KIF 530 Short Codes Needed  
**Importance:** High

Tom,

We are willing to proceed with the KIF project "at-risk". Let me know if you have any questions.

Steve Baugh

-----Original Message-----

**From:** Lankford, Brian S.  
**Sent:** Monday, June 06, 2005 11:41 AM  
**To:** Baugh, James S.  
**Subject:** KIF 530 Short Codes Needed  
**Importance:** High

Steve,

Please forward this e-mail on to Tom Franklin.

HED has started construction on the French Drain System on the dredge cell at KIF without a short code. The reason is that the project has not been PRC approved for a fiscal year over-run of one million dollars, but a total project under-run of approximately fourteen million. I talked to Stan Haber this morning and asked what needed to be done in order to get a short code for the project, and he stated that you needed to inform Tom Franklin that we are going to proceed with this project "at-risk". This means that a short code needs to be generated so that HED work can be billed without PRC approval of the entire year's expenditures. Most likely, this project will become phase 3 PRC approved after July 17th, but HED cannot wait until after PRC approval to start construction. Please get a short code as soon as possible.

Thanks,

Brian Lankford  
423-751-7602 (Chattanooga)  
423-838-1789 (Cell)

03/14/2009

TVA-00028172

**Haber, Stanley M**

---

**From:** Toney, Calvin L.  
**Sent:** Thursday, May 26, 2005 10:19 AM  
**To:** Haber, Stanley M.; Franklin, Thomas  
**Subject:** KIF530 Project  
**Attachments:** Project Summary Sheet(05410).rtf; 05410.pdf

Please find attached the estimate summary sheets and pdf formatted cost estimates for the above subject.

Please review and if you have any comments or questions call me at x7666 or e-mail me.

Stan,

If everything looks okay with you, would you forward to Brian or let me know and I can forward to him?

**Calvin L. Toney**  
**LP 2P-C**  
**Cost Estimator**  
**Phone 751-7666**  
**Fax 751- 4295**

**KINGSTON FOSSIL PLANT  
(KIF530) DREDGE CELL FRENCH DRAINS  
(SEEPAGE REPAIR) INCLUDES HED CONSTRUCTION**

Estimate Number	05410	Option:	0	PCN Number:	KIF530
Plant:	KIF	Revision:	0	Estimate Type:	Detailed
Cost Engineer:	C. L. Toney	Unit #:		Estimate Accuracy:	+/- 10%
Requesting Engr:	Stan Haber	Phase:	3	Estimate Issue Date	05/26/05

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering (Sunk Cost)		\$489,000
Engineering (Remaining)		\$168,000
Partner (Non-Manual)		
Other / Other Organizations		\$0
<b><u>Total Phase I</u></b>		<b><u>\$657,000</u></b>
<u>Phase II</u>		
Engineering		\$0
Long Lead Procurement		\$0
Partner ( Non-Manual )		
Other / Other Organizations		\$0
<b><u>Total Phase II</u></b>		<b><u>\$0</u></b>
<u>Phase III</u>		
Construction ( Partner )		
Permanent Material		\$518,009
Labor ( T&L )	17,122.00	\$576,510
Labor ( Non-Manual )	600.00	\$27,600
Equipment		\$222,397
Subcontracts		\$386,010
Partner Fee		\$76,274
Partner Insurance		\$0
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$40,200
Total Construction Cost		\$1,847,000
Engineering		\$52,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$200,000
Other / Other Organizations		\$0
<b><u>Total Phase III</u></b>		<b><u>\$2,099,000</u></b>
<u>All Phases</u>		
Construction Partner	17,722.00	\$1,847,000
Long Lead Procurement		\$0
Engineering (Sunk)		\$489,000
Engineering (Remaining)		\$220,000
Other / Other Organizations		\$0
Total Risk Dollars		\$200,000
<b><u>Total Project Costs</u></b>	<b><u>17,722.00</u></b>	<b><u>\$2,756,000</u></b>
<b><u>For Information only Total Environmental</u></b>		<b><u>\$0</u></b>
<b><u>For Information only Total Demolition Costs</u></b>		<b><u>\$0</u></b>

**KINGSTON FOSSIL PLANT  
(KIF30) DREDGE CELL FRENCH DRAINS  
(SEEPAGE REPAIR) INCLUDES HED CONSTRUCTION**

Project name KIF/05410/FRENCH DRAINS

Engineer Stan Haber

Estimator C. L. Toney

Project French Drains

Plant KIF

Estimate # 05410

PCN # KIF30

Requesting Engr Stan Haber

Option 0

Revision 0

Phase 3

Estimate Type Detailed

Estimate Accuracy +/- 10%

Est. Issue Date 05/26/05

Funding Type Capital

Outage(Y/N) N

Notes This is total rollup cost estimate.

Construction part of estimate provided by HED.

Wage rates are per FY2005 craft augmented rates and no escalation is included for wages.

Estimate is based on 40 hours per week.

Report format

Sorted by "Location/Activity"  
Detail summary



Location	Activity	Description	Phase Quantity	Labor Productivity	Labor Quantity	Labor Amount	Material Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount	
<b>PHASE 3 - HED</b>	Installation	Construction Labor	1.00 ls	17,122.000	17,122.00 mh	576,510	-	-	-	576,510.00	576,510	
		Non Manual Labor	1.00 ls	600.000	600.00 mh	27,600	-	-	-	-	27,600.00	27,600
		Partner Purchased Material	1.00 ls	-	-	-	518,009	-	-	-	518,009.00	518,009
		Construction Heavy Equipment	1.00 ls	-	-	-	-	217,695	-	-	217,695.00	217,695
		Partner Subcontracts	1.00 ls	-	-	-	-	-	386,010	-	386,010.00	386,010
		Construction Tagged & 3rd Party Rental Equipment	1.00 ls	-	-	-	-	-	4,702	-	4,702.00	4,702
		Travel & Living Expenses	1.00 ls	-	-	-	-	-	-	5,100	5,100.00	5,100
		Installation				17,722.00 hrs	604,110	518,009	222,397	5,100	5,100.00	1,735,626
						17,722.00 hrs	604,110	518,009	222,397	5,100	5,100.00	1,735,626
				<b>PHASE 3 - HED</b>								

Estimate Totals

Labor	604,110	17,722,000	hrs	
Material	518,009			
Subcontract	388,010			
Equipment	222,397			
Other	<u>5,100</u>			
	1,735,626			
Small Tools Expense P	24,827			L
Consumables & Expendables P	<u>10,273</u>			L
	35,100	1,770,726		
TVA-HED - Central Command	<u>76,274</u>			L
	76,274	1,847,000		
FES Engr - Phase 1(Sunk)	367,000	49,306 % @	42.00 A	8,738
Parsons Engr - Phase 1(Sunk)	122,000	16,391 % @	42.00 A	2,905
FES Engr - Phase 1(Remaining)	72,000	9,673 % @	42.00 A	1,714
Parsons Engr - Ph 1(Remaining)	<u>96,000</u>	12,688 % @	42.00 A	2,286
	657,000	2,504,900		
FES Engr - Phase 3	22,000	2,856 % @	42.00 A	524
Parsons Engr - Phase 3	<u>30,000</u>	4,031 % @	42.00 A	714
	52,000	2,556,000		
Contingency Total Project	<u>200,000</u>			L
	200,000	2,756,000		
<b>Total</b>		<b>2,756,000</b>		

**Haber, Stanley M**

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**From:** Toney, Calvin L.  
**Sent:** Monday, May 23, 2005 9:51 AM  
**To:** Haber, Stanley M.  
**Subject:** French Drain Estimate Comparison Summary Sheets  
**Attachments:** CES vs HED Estimate Comparison.xls

Attached is the file for the above subject per your request.

If you have any comments or questions please e-mail me or call me at x7666.

**Calvin L. Toney**  
**LP 2P-C**  
**Cost Estimator**  
**Phone 751-7666**  
**Fax 751- 4295**

**KINGSTON DREDGE CELL FRENCH DRAINS ESTIMATE COMPARISON**

**CES Original Phase 1 Cost Estimate**

**HED Phase 3 Cost Estimate**

<u>Item</u>	<u>Dollars</u>
Engineering	\$15,000
Partner (Non-Manual)	
Other / Other Organizations	\$0
<b><u>Total Phase I</u></b>	<b><u>\$15,000</u></b>
Engineering	\$112,258
Long Lead Procurement	\$0
Partner ( Non-Manual )	
Other / Other Organizations	\$0
<b><u>Total Phase II</u></b>	<b><u>\$112,258</u></b>
Permanent Material	\$469,106
Labor ( T&L ) 21,187 Mh's	\$515,453
Labor ( Non-Manual ) 2,650 Mh's	\$132,500
Equipment	\$214,019
Subcontracts	\$85,700
Partner Fee	\$32,398
Partner Insurance	\$19,439
Escalation	\$0
Construction Risk Dollars	\$0
Other	\$34,127
Total Construction Cost	\$1,502,742
Engineering	\$23,000
Direct plant support + TVA Other Costs	\$0
Project Risk Dollars	\$0
Other / Other Organizations	\$0
<b><u>Total Phase III</u></b>	<b><u>\$1,525,742</u></b>
Construction Partner 23,837 Mh's	\$1,502,742
Long Lead Procurement	\$0
Engineering	\$150,258
Other / Other Organizations	\$0
Total Risk Dollars	\$0
<b><u>Total Project Costs</u></b>	<b><u>\$1,653,000</u></b>

<u>Item</u>	<u>Dollars</u>
Engineering	\$15,000
Partner (Non-Manual)	
Other / Other Organizations	\$0
<b><u>Total Phase I</u></b>	<b><u>\$15,000</u></b>
Engineering	\$112,258
Long Lead Procurement	\$0
Partner ( Non-Manual )	
Other / Other Organizations	\$0
<b><u>Total Phase II</u></b>	<b><u>\$112,258</u></b>
Permanent Material	\$518,009
Labor ( T&L ) 17,122 Mh's	\$576,510
Labor ( Non-Manual ) 600 Mh's	\$27,600
Equipment	\$222,397
Subcontracts	\$386,010
TVA-HED - Central Command	\$75,663
Partner Insurance	\$0
Escalation	\$0
Construction Risk Dollars	\$0
Other	\$40,200
Total Construction Cost	\$1,846,389
Engineering	\$23,000
Direct plant support + TVA Other Costs	\$0
Project Risk Dollars	\$0
Other / Other Organizations	\$0
<b><u>Total Phase III</u></b>	<b><u>\$1,869,389</u></b>
Construction Partner 17,722 Mh's	\$1,846,389
Long Lead Procurement	\$0
Engineering	\$150,258
Other / Other Organizations	\$0
Total Risk Dollars	\$0
<b><u>Total Project Costs</u></b>	<b><u>\$1,996,647</u></b>

## Haber, Stanley M

---

**From:** Petty, Harold L.  
**Sent:** Tuesday, May 17, 2005 10:31 AM  
**To:** Haber, Stanley M.  
**Cc:** Purkey, Ronald E.  
**Subject:** FW: TDEC's Approval of KIF Dredge Cell Repair

Stan:

Are you up on all this chain of e-mails?

Thanks  
Lynn

-----Original Message-----

**From:** Bowers, Larry C  
**Sent:** Monday, May 16, 2005 12:07 PM  
**To:** Baugh, James S.; Purkey, Ronald E.; Petty, Harold L.; Petty, Randal L; Radford, Larry D.  
**Subject:** RE: TDEC's Approval of KIF Dredge Cell Repair

Please do from my perspective. As I stated earlier I think KIF's concerns are valid. Also I think we need to raise the existing dredge cell dikes before we can resume normal dredging in November. If that is correct we need to include this work in the schedule.

-----Original Message-----

**From:** Baugh, James S.  
**Sent:** Monday, May 16, 2005 11:53 AM  
**To:** Bowers, Larry C; Purkey, Ronald E.; Petty, Harold L.; Petty, Randal L; Radford, Larry D.  
**Subject:** RE: TDEC's Approval of KIF Dredge Cell Repair

If it's ok with you guys, I'll take the lead to pull together an integrated schedule. I'll also take an action item to get us together prior to the Kingston meeting on May 25 to make sure that we are all ok with this integrated schedule.

Thanks,

Steve

-----Original Message-----

**From:** Bowers, Larry C  
**Sent:** Monday, May 16, 2005 11:10 AM  
**To:** Baugh, James S.; Purkey, Ronald E.; Petty, Harold L.; Petty, Randal L  
**Subject:** FW: TDEC's Approval of KIF Dredge Cell Repair

Didn't see you guys copied. Seems like a good idea.

-----Original Message-----

**From:** Campbell, Linda F.  
**Sent:** Monday, May 16, 2005 10:56 AM  
**To:** Bowers, Larry C; Radford, Larry D.  
**Cc:** Catlett, James H; Haber, Stanley M.; Settles, James T; Lowery, Kenny R.; Lowery, Kenny R.; Johnson, Lindy P.; Webb, Cynthia O.  
**Subject:** RE: TDEC's Approval of KIF Dredge Cell Repair

Hey Larry and Larry,

I'm a bit concerned that all the obligations associated with the ash pond can not be met in a timely manner. There are several projects that I know of that will be overlapping. One is the fix below, then there is raising the dike on the interim pond, the Kennedy Weir Replacement, developing the new borrow area, and all the additional storm water requirement, plus any others I may not be aware of. As a project develops, there is usually some additional time consuming tasks that were unforeseen. If Jim is to be the lead in all of these projects, I'm concerned he will get overloaded and some tasks may not get completed.

Earl Deskins & I would like to see some timeline for all the projects associated with the ash pond for the next few months. This should include a responsible person for each, approximate time of completion and approximate number of personnel on each project. Earl would prefer a meeting to discuss, but a written plan would probably satisfy him.

Mike Crane, KIF Procurement, will have a contractor here tomorrow to estimate chipping the trees that will need to be removed from the new borrow area.

Thanks,  
Linda

-----Original Message-----

**From:** Bowers, Larry C  
**Sent:** Friday, May 13, 2005 4:40 PM  
**To:** Catlett, James H; Baugh, James S.; Haber, Stanley M.; Hedgecoth, Melissa A.; Lankford, Brian S.; Purkey, Ronald E.; Petty, Harold L.; Petty, Randal L; Settles, James T; Radford, Larry D.; Knox, Robert; 'Smith, Daniel R (Reading)'  
**Cc:** Johnson, Lindy P.; Campbell, Linda F.; Smith, Amos L; Park, Gordon G  
**Subject:** TDEC's Approval of KIF Dredge Cell Repair

We have received TDEC's approval of our solid waste permit minor modification request. However TDEC has placed two conditions on that approval that were unexpected. Construction must begin by June 1, 2005 and must be complete by August 31, 2005. Evidently they are very interested in TVA fixing the leak quickly. I have discussed this with Lindy and we can install the wells prior to the stormwater permit being issued so the first date should not be an issue. My question is can we meet the second date. Please let me know your thoughts...

Larry C. Bowers  
Senior Solid Waste Specialist  
Environmental Affairs  
1101 Market Street, LP 5D  
Chattanooga, Tn 37402-2801  
423-751-4947 Fax: 423-751-7011  
Pager: 1-800-283-0028,2421  
lcbowers@tva.gov

**Haber, Stanley M**

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**From:** Knox, Robert  
**Sent:** Wednesday, April 20, 2005 4:06 PM  
**To:** Haber, Stanley M.  
**Cc:** Radford, Larry D.; Lowery, Kenny R.; Jones, Sonja R.; Lankford, Brian S.  
**Subject:** KIF Dredge Cell - Seepage Repair Quantities by HED

Stan,

The materials for the KIF Dredge Cell - Seepage Repair are listed below. Many of the items listed will require additional time to complete the procurement bidding process (approx. 3 weeks). I have marked the items on the list below. A material specification will be required to start the procurement process. Please give me a call if we can provide anything further.

Item	Quantity	Unit	
silt fence	5700	LF	
dewatering structure (CMP)	1	EA	
geotextile/staples non-woven	11500	SY	bid
D50 riprap	19034	TON	bid
curlex	3000	SY	
1032 stone	1760	TON	bid
6" pipe bollards	36	EA	
8" dia. Non-perf. HDPE	2339	LF	bid
8" dia. Perf. HDPE	15760	LF	bid
crushed stone	78	TON	bid
1081 stone	3243	TON	bid
geotextile woven monofilament	12258	SY	bid
composite geonet	32700	SY	unknown
submersible pump	1	EA	unknown
60" dia. Precast manhole	1	EA	unknown
8" dia. Force Main HDPE	2400	LF	bid
electrical power	1	LS	contract to utility?
3" stone	440	TN	bid
chain link fence	4500	LF	bid
personal gate	2	EA	bid
swing gate	2	EA	bid

Thank you,

---

**Robert F. Knox**, Civil Engineer  
 Tennessee Valley Authority  
 Heavy Equipment Division  
 cell: (423) 580-0958  
 office: (423) 751-3808  
 fax: (423) 751-3432

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03/14/2009

## Haber, Stanley M

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**From:** Petty, Harold L.  
**Sent:** Thursday, April 07, 2005 7:48 AM  
**To:** 'Smith, Daniel R'  
**Cc:** Hughes, Michael; Baugh, James S.; Haber, Stanley M.  
**Subject:** RE: Draft Phase 2 engineering schedule for seep remediation at KIF

The Primavera schedule is in the system but is not correct. It will look very similar to the one attached to my e-mail except the discussion Stan and I was having about the need for the CEC being complete before we ask for phase 2/3 approval could have an impact on the way the schedule looks. It will not impact time wise what you or I are doing on the engineering aspect.

Thanks,  
Lynn

-----Original Message-----

From: Smith, Daniel R [mailto:Daniel.R.Smith@worleyparsons.com]  
Sent: Wednesday, April 06, 2005 7:30 PM  
To: Petty, Harold L.  
Cc: Hughes, Michael; Baugh, James S.; Haber, Stanley M.  
Subject: RE: Draft Phase 2 engineering schedule for seep remediation at KIF

Please advise when the primavera schedule will be completed. Is it going to be substantially different?

Dan

-----Original Message-----

From: Petty, Harold L. [mailto:hlpetty@tva.gov]  
Sent: Wednesday, April 06, 2005 11:57 AM  
To: Smith, Daniel R; Baugh, James S.; Haber, Stanley M.  
Cc: Hughes, Michael  
Subject: RE: Draft Phase 2 engineering schedule for seep remediation at KIF

Dan:

This is a later version of the schedule than the one attached to your e-mail. Really the one that counts is the Primavera version.

Thanks,  
Lynn

-----Original Message-----

From: Smith, Daniel R [mailto:Daniel.R.Smith@worleyparsons.com]  
Sent: Wednesday, April 06, 2005 11:07 AM  
To: Baugh, James S.; Haber, Stanley M.  
Cc: Petty, Harold L.; Hughes, Michael  
Subject: Draft Phase 2 engineering schedule for seep remediation at KIF

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## Haber, Stanley M

---

**From:** Smith, Daniel R [Daniel.R.Smith@worleyparsons.com]  
**Sent:** Wednesday, April 06, 2005 7:30 PM  
**To:** Petty, Harold L.  
**Cc:** Hughes, Michael; Baugh, James S.; Haber, Stanley M.  
**Subject:** RE: Draft Phase 2 engineering schedule for seep remediation at KIF

Please advise when the primavera schedule will be completed. Is it going to be substantially different?

Dan

-----Original Message-----

**From:** Petty, Harold L. [mailto:hlpetty@tva.gov]  
**Sent:** Wednesday, April 06, 2005 11:57 AM  
**To:** Smith, Daniel R; Baugh, James S.; Haber, Stanley M.  
**Cc:** Hughes, Michael  
**Subject:** RE: Draft Phase 2 engineering schedule for seep remediation at KIF

Dan:

This is a later version of the schedule than the one attached to your e-mail. Really the one that counts is the Primavera version.

Thanks,  
Lynn

-----Original Message-----

**From:** Smith, Daniel R [mailto:Daniel.R.Smith@worleyparsons.com]  
**Sent:** Wednesday, April 06, 2005 11:07 AM  
**To:** Baugh, James S.; Haber, Stanley M.  
**Cc:** Petty, Harold L.; Hughes, Michael  
**Subject:** Draft Phase 2 engineering schedule for seep remediation at KIF

<html>  
<font face="Arial" style="font-size: 8pt;">\*\*\* WorleyParsons Group Notice \*\*\*  
"This email is confidential. If you are not the intended recipient, you must not disclose or use the information contained in it. If you have received this email in error, please notify us immediately by return email and delete the email and any attachments. Any personal views/ opinions expressed by the writer may not necessarily reflect the views/ opinions of the company."  
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</font>  
</html>



## Haber, Stanley M

---

**From:** Petty, Harold L.  
**Sent:** Wednesday, April 06, 2005 11:57 AM  
**To:** 'Smith, Daniel R'; Baugh, James S.; Haber, Stanley M.  
**Cc:** Hughes, Michael  
**Subject:** RE: Draft Phase 2 engineering schedule for seep remediation at KIF

**Attachments:** KIF - French Drain Schedule.xls



KIF - French Drain  
Schedule.xl...

Dan:

This is a later version of the schedule than the one attached to your e-mail. Really the one that counts is the Primavera version.

Thanks,  
Lynn

-----Original Message-----

**From:** Smith, Daniel R [mailto:Daniel.R.Smith@worleyparsons.com]  
**Sent:** Wednesday, April 06, 2005 11:07 AM  
**To:** Baugh, James S.; Haber, Stanley M.  
**Cc:** Petty, Harold L.; Hughes, Michael  
**Subject:** Draft Phase 2 engineering schedule for seep remediation at KIF

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</html>

## Haber, Stanley M

---

**From:** Smith, Daniel R [Daniel.R.Smith@worleyparsons.com]  
**Sent:** Wednesday, April 06, 2005 11:07 AM  
**To:** Bough, James S.; Haber, Stanley M.  
**Cc:** Petty, Harold L.; Hughes, Michael  
**Subject:** Draft Phase 2 engineering schedule for seep remediation at KIF

**Attachments:** Draft Phase 2 engineering schedule for seep remediation at KIF



Draft Phase 2  
engineering sche...

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</font>  
</html>

## Haber, Stanley M

---

**From:** Smith, Daniel R [Daniel.R.Smith@worleyparsons.com]  
**Sent:** Wednesday, April 06, 2005 11:07 AM  
**To:** Baugh, James S.; Haber, Stanley M.  
**Cc:** Petty, Harold L.; Hughes, Michael  
**Subject:** Draft Phase 2 engineering schedule for seep remediation at KIF

**Attachments:** KIF - French Drain Schedule.xls

This is the draft put together by Lynn Petty - FYI

Please advise of any changes.



KIF - French Drain  
Schedule.xl...

**Please note my new email address: Daniel.R.Smith@worleyparsons.com**

Daniel R. (Dan) Smith, P.E.

Parsons E & C

633 Chestnut St, Suite 400

Chattanooga, TN 37932

Phone: (423) 757-8088

Fax: (423) 266-0922

Cell: (423) 364-1679

Email: Daniel.R.Smith@worleyparsons.com

SEC Activity ID	Forecast Start	Forecast Finish	Target	Resp Engr	Prin Engr	Res ID	Bdgt Mhrs	Activity Name
-----------------	----------------	-----------------	--------	-----------	-----------	--------	-----------	---------------

**KIF530A - French Drains - Dredge Cell Repair**

--	--	--	--	--	--	--	--	--

**Preliminary Engineering (Phase 1)**

		28-Mar-05						Quantities to Calvin Toney
35		29-Mar-05						Initiate CEC for French Drains
35	28-Mar-05	30-Mar-05	CT					Prepare and complete Estimate for Phase 2 & 3
		30-Mar-05						Conduct Phase I Study (French Drains)
		01-Apr-05						FPEP Phase 2/3 approval

**Final Engineering (Phase 2)**

35		07-Apr-05						Submit DRAFT SWPPP to Envr Affairs
35		15-Apr-05						Submit SWPPP to TDEC
35		01-Apr-05						Prepare DCN KIF-05-XXXX
35		07-Apr-05						Send Preliminary (10%) Sketches to Plant
35								10% DCN Design Review MTG
35		01-May-05						Meet with TDEC
35		07-May-05						Receive TDEC Approval
35								
35								

35																				
										13-May-05									Send Preliminary (50/100%) Sketches to Plant	
										20-May-05									50/100% DCN Design Review MTG	
										31-May-05									Review Cost Estimate (compare PH 2/3 est)	
																			Complete CEC for French Drains	
																			ERU Assemble and Distribute KIF -05-XXX	
									31-May-05										DCN KIF-05-XXX Issued	
									31-May-05										Final Engineering Complete	
									<b>Implementation (Phase 3)</b>											
									01-Jun-05	31sep05									Ph 3 Project Support Mhrs (Hammock)	
										01-Jun-05									Issue HED PA	
									01-Jun-05	31sep05									Implementation Field Support	
									01-Jun-05	31sep05									Implementation and Construction Period	
										31sep05									DCN KIF-05-XXX RTOP Project Turnover	
									01-Oct-05	15-Nov-05									Closure Process of DCN KIF-05-XXX	
										18-Nov-05									ERU Assemble and Distribute KIF-05-XXX	
										19-Nov-05									DCN KIF-05-XXX Closed	
										31-Dec-05									Verify Benefits and Close Project	




## Haber, Stanley M

---

**From:** Petty, Harold L.  
**Sent:** Thursday, March 31, 2005 3:51 PM  
**To:** Purkey, Ronald E.; Haber, Stanley M.  
**Subject:** FW: Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell

**Attachments:** Project Summary Sheet(05359R1).rtf; 05359R1.pdf

Here is the estimate revised per Dan's comments.

Thanks,  
Lynn

-----Original Message-----

**From:** Toney, Calvin L.  
**Sent:** Thursday, March 31, 2005 2:05 PM  
**To:** 'Smith, Daniel R'  
**Cc:** Melton, Gary; Petty, Harold L.; Hughes, Michael  
**Subject:** RE: Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell



Project Summary Sheet(05359R1)... 05359R1.pdf (32 KB)

Attached are the revised files per Dan's comments.

-----Original Message-----

**From:** Smith, Daniel R [<mailto:Daniel.R.Smith@worleyparsons.com>]  
**Sent:** Wednesday, March 30, 2005 7:40 AM  
**To:** Toney, Calvin L.  
**Cc:** Melton, Gary; Petty, Harold L.; Hughes, Michael  
**Subject:** Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell

Comments are directed at the detailed estimate (location) except where noted.

02 - Access Road - this is an allowance to address wear and tear on the existing road.

05 - Place additional riprap - this quantity should be 4000 tons, not 9450 tons.

06 - Add additional cost of transformer replacement (see attachment)

Also, for phase 3 engineering cost, assume 3% of construction cost (10% is too high).

An additional comment would be that the phase 1 and phase 2 costs are already appropriated. I'll defer to Lynn/Mike as to whether these should be included in the estimate or not. If they want to recoup the costs for engineering spent (or appropriated to be spent) already during this FY, they have that information. Or, if they want to leave what you have as an allowance, ok by me.

Please contact me if you have any questions.

<< Message: RE: KIF French Drains Cost Estimate >>

Please note new email address: [Daniel.R.Smith@worleyparsons.com](mailto:Daniel.R.Smith@worleyparsons.com)

Daniel R. (Dan) Smith, P.E.

Parsons E & C

633 Chestnut St, Suite 400

Chattanooga, TN 37450

Phone: (423) 757-8088

Fax: (423) 266-0922

Cell: (423) 364-1679

Email: [Daniel.R.Smith@worleyparsons.com](mailto:Daniel.R.Smith@worleyparsons.com)



**KINGSTON FOSSIL PLANT  
(KIF530) DREDGE CELL FRENCH DRAINS  
(SEEPAGE REPAIR)**

<b>Estimate Number</b> 05359R1	<b>Option:</b> 0	<b>PCN Number:</b> KIF530
<b>Plant:</b> KIF	<b>Revision:</b> 1	<b>Estimate Type:</b> Conceptual
<b>Cost Engineer:</b> C. L. Toney	<b>Unit #:</b>	<b>Estimate Accuracy:</b> +/- 30%
<b>Requesting Engr:</b> S. M. Haber	<b>Phase:</b> 1	<b>Estimate Issue Date</b> 3/31/2005

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering		\$15,000
Partner (Non-Manual)		
Other / Other Organizations		\$0
<b><u>Total Phase I</u></b>		<b><u>\$15,000</u></b>
<u>Phase II</u>		
Engineering		\$112,258
Long Lead Procurement		\$0
Partner ( Non-Manual )		
Other / Other Organizations		\$0
<b><u>Total Phase II</u></b>		<b><u>\$112,258</u></b>
<u>Phase III</u>		
Construction ( Partner )		
Permanent Material		\$469,106
Labor ( T&L )	21,186.85	\$515,453
Labor ( Non-Manual )	2,650.00	\$132,500
Equipment		\$214,019
Subcontracts		\$85,700
Partner Fee		\$32,398
Partner Insurance		\$19,439
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$34,127
Total Construction Cost		\$1,502,742
Engineering		\$23,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$0
Other / Other Organizations		\$0
<b><u>Total Phase III</u></b>		<b><u>\$1,525,742</u></b>
<u>All Phases</u>		
Construction Partner	23,836.85	\$1,502,742
Long Lead Procurement		\$0
Engineering		\$150,258
Other / Other Organizations		\$0
Total Risk Dollars		\$0
<b><u>Total Project Costs</u></b>	<b><u>23,836.85</u></b>	<b><u>\$1,653,000</u></b>
<b><u>For Information only Total Environmental</u></b>		<b><u>\$0</u></b>
<b><u>For Information only Total Demolition Costs</u></b>		<b><u>\$0</u></b>

**KINGSTON FOSSIL PLANT  
(KIF30) DREDGE CELL FRENCH DRAINS  
(SEEPAGE REPAIR)**

Project name KIF/05359R1/FRENCH DRAINS

Engineer DAN SMITH

Estimator C. L. Toney

Labor rate table KIF 40 ST 2005

Equipment rate table TVA Equipment

Project  
Plant French Drains  
Estimate # KIF  
PCN # 05359R1  
Requesting Engr KIF530  
S. M. Haber  
Revision 0  
Revision 1  
Phase 1  
Estimate Type Conceptual  
Estimate Accuracy +/- 30%  
Est. Issue Date 3/31/2005  
Funding Type Capital  
Outage(Y/N) N

Notes Estimate Assumptions:

All costs are based in 2005 dollars.

Single phase power for pump installed for dredge cell seepage recirc.  
3-phase power is assumed not to be required.

Existing pumps will be reused.

Engineering (including TVA over sight, subcontracts, and additional geotechnical investigation) - assumes 10% of construction costs.

Estimate has been revised to reflect comments from Dan Smith e-mail on March 30, 2005.

Report format Sorted by \* Location/Activity  
Detail Summary

Spreadsheet Report  
KIF/05359R1/FRENCH DRAINS

Location	Activity	Description	Takeoff Quantity	Labor Productivity	Labor Quantity	Labor Amount	Percent Amount	Equip. Amount	Equip. Amount	Total Cost/Unit	Total Amount
01	Erosion Controls/S P	Erect Sill Fence	4,500.00 lf	0.069	308.57 mh	7,532	2,223		1,399	2.48	11,154
		Strip 1 Foot Soil Off Of Slope (Temporary Stockpile)	911.00 cy	0.025	22.78 mh	591			710	1.43	3,288
		Excavate 3:1 Slope In Ash Slope To Provide Space For Pond	800.00 cy	0.120	96.00 mh	2,408			860	4.11	4,982
		Excavate For Temporary Sediment Pond / Permanent Pond	1,000.00 cy	0.103	144.00 mh	3,612			1,320	3.52	4,164
		Place Temporary Geotextile Stack To Side Of Pond Next To Drainage Coll.	1.00 ea	64.000	64.00 mh	1,600			39	5.7	3,402
		1500 6" Riprap For Temporary Check Dams	611.00 sy	0.095	30.72 mh	851			99	2.32	2,382
		Replaces 1 Foot On Slope Adjacent To Pond	84.00 in	0.400	33.60 mh	644			530	5.48	4,982
		Seed And Mulch Replaced Soil	911.00 sy	0.160	145.32 mh	3,656			780	2,703.15	2,703
		Conex Bladder	1.00 ac	36.000	36.00 mh	923			150	0.97	2,506
		Erosion Controls/S P	3,000.00 sy	0.020	60.00 mh	1,438			150	7.610	41,247
						23,834			7,510		41,247
02	Access Road (Gravel)										
		Allowance To Maintain Wear And Tear On Existing Road	1.00 lot							0.00	0
03	Access Road (Gravel)	1032 Crushed Stone Base 3' Depth (110 cph)	1,760.00 tn	0.120	211.20 mh	5,834	15,708		2,033	13.36	23,545
		Access Road (Gravel)			211.20 hrs	5,804	15,708		2,033		23,545
04	Instl Drns/Swan Pond	6" Dia Pipe Bolards	35.00 ea	1.500	54.00 mh	1,307	7,200		360	246.32	8,867
		Strip 1 Foot Cover (Drainage System Installation)	11,745.00 sy	0.020	234.90 mh	6,098			7,941	1.14	13,439
		6" Dia Non-Perf HDPE Congregated Tubing Lateral Outlet Pipes (EL. 775)	632.00 lf	0.200	126.40 mh	2,890	1,194		526	7.28	4,610
		Crushed Stone, Bedding 6" Depth	21.00 tn	0.500	10.50 mh	254	198		36	23.13	486
		6" Dia Non-Perf HDPE Congregated Tubing Lateral Outlet Pipes (EL. 780)	779.00 lf	0.200	155.80 mh	3,852	1,472		649	7.30	5,662
		Crushed Stone, Bedding 6" Depth	26.00 tn	0.500	13.00 mh	315	243		43	23.13	601
		6" Dia Non-Perf HDPE Congregated Tubing Lateral Outlet Pipes (EL. 795)	928.00 lf	0.200	185.60 mh	4,443	1,754		773	7.30	6,769
		Crushed Stone, Bedding 6" Depth	31.00 tn	0.500	15.50 mh	375	290		52	23.13	717
		Cut For 8" Dia Non-Perforated HDPE (1,003 boy)	1,300.00 sy	0.200	260.00 mh	6,205			2,167	8.99	8,481
		Backfill For 8" Dia Non-Perforated HDPE (758 boy)	910.00 sy	0.250	227.50 mh	5,508			2,675	8.183	8,183
		Cut For 8" Dia Perforated HDPE (7,286 boy)	8,755.00 sy	0.200	1,751.00 mh	42,392			14,592	6.51	56,984
		Backfill For 8" Dia Perforated HDPE (5,107 boy)	6,129.00 sy	0.250	1,532.25 mh	37,096			18,019	8.99	55,115
		6" Dia Perforated HDPE Perimeter Underdrain (EL. 765)	4,275.00 lf	0.200	855.00 mh	19,545	8,080		3,559	7.30	31,184
		1081 Crushed Stone	889.00 tn	0.150	121.20 mh	2,834			1,010	13.01	11,156
		Geotextile Woven Monofilament	3,325.00 sy	0.021	68.40 mh	1,637	6,620		228	2.55	8,485
		1081 Crushed Stone	785.00 tn	0.150	114.75 mh	2,778	6,828		956	13.81	20,506
		Geotextile Woven Monofilament	3,146.00 sy	0.021	64.71 mh	1,549	6,264		216	2.55	8,028
		1081 Crushed Stone	3,800.00 sy	0.200	760.00 mh	17,374	7,182		3,164	7.30	27,719
		Geotextile Woven Monofilament	2,955.00 sy	0.150	40.70 mh	2,607	6,408		368	9.913	7,943
		6" Dia Perforated HDPE Perimeter Underdrain (EL. 765)	3,650.00 lf	0.021	68.00 mh	1,455	3,885		203	2.55	7,544
		1081 Crushed Stone	688.00 tn	0.200	137.60 mh	10,542	6,860		3,030	7.30	26,552
		Geotextile Woven Monofilament	2,631.00 sy	0.021	58.23 mh	1,394	5,637		194	2.55	7,225
		Instl Drns/Swan Pond			8,417.45 hrs	199,241	93,130		64,917		357,288
				8,417.45 hrs	199,241	93,130		64,917		357,288	
05	Instal Comp Geonet										
		Between 765 & 775 Bench	1.00 lot							0.00	0
		Strip 1 Foot Soil And Stockpile	10,000.00 cy	0.020	200.00 mh	5,192			6,250	1.14	11,442
		Place Composite Geonet	32,700.00 sy	0.050	1,635.00 mh	39,134	181,865		4,088	6.27	205,096
		Place 1 Foot Soil	600.00 cy	0.060	60.00 mh	15,050			5,500	2.06	20,550
		Place Thickened Soil Layer At Top To Tie Into Ditch	1,000.00 cy	0.100	100.00 mh	2,508			917	3.43	4,425
		Seed And Mulch Replaced Soil	6.00 ac	36.000	216.00 mh	5,539	6,000		1,680	2,703.15	16,219
		Instal Comp Geonet			2,751.00 hrs	67,433	167,865		21,434		266,722
					2,751.00 hrs	67,423	167,865		21,434		266,722
	06	Instal Riprap Ditches	Final Grading Of Ditches (Allowance)	250.00 cy	0.096	24.00 mh	581			200	3.12
		Over Excavate Ditch For Riprap	8,040.00 sy	0.200	1,608.00 mh	39,530			20,109	7.94	59,639
		Install Non-Woven Needlepunched Geotextile, 8 oz	1,000.00 sy	0.016	16.00 mh	383	1,375		53	1.61	238,344
		Place D50 9" Riprap	9,580.00 tn	0.320	3,046.00 mh	76,885	114,000		47,979	26.09	400,351
		Place Additional Riprap At Toe	4,000.00 tn	0.320	1,280.00 mh	32,154	48,000		20,202	25.09	400,351
	Instal Riprap Ditches			5,968.00 hrs	148,412	163,375		88,534		400,321	
	Const Permanent Pond	Submersible Pumping Station Equipment Package	1.00 lot							0.00	0

Location	Activity	Description	Takeoff Quantity	Units	Material	Material Amount	Sub-Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount
	Const Permanent Pond	Relocate Submersible Pumps	2.00 ea		80.00 mh	2,016	-	596	-	1,587.79	3,176
		Install New Submersible Pump	1.00 ea		30.00 mh	992	-	209	-	2,729.84	2,730
		Remove Existing Temporary Dewatering Structure	1.00 ls		48.00 mh	1,216	-	440	-	1,655.80	1,656
		60" Diameter Precast Concrete Manhole (15 Ft Depth)	1.00 ea		60.00 mh	1,523	-	458	-	4,980.96	4,981
		Cut For 6" Dia Forced Main HDPE (1,111 Bys)	1,333.00 cy		296.95 mh	6,454	-	2,222	-	6.51	8,676
		8" Dia Forced Main HDPE Perimeter Underdrain (EL. 763)	2,400.00 lf		490.00 mh	10,873	-	1,988	-	7.30	17,507
		1061 Crushed Stone	284.00 in		39.60 mh	959	-	330	-	13.81	3,645
		Backfill For 6" Dia Forced Main HDPE (778 by)	934.00 cy		233.50 mh	5,653	-	2,748	-	15,000.00	8,399
		Allowance For Electrical Scope Of Pumps Relocation	1.00 lot		-	-	15,000	-	-	15,000.00	15,000
		Geotextile (Lime Pond To Minimize Erosion)	899.00 sy		16.00 mh	383	-	40	-	1.90	1,597
		3" Stone (Lime Pond To Minimize Erosion)	440.00 lf		42.24 mh	1,121	-	660	-	12.97	5,708
		Chain Link Fence (5' Fence With 3 Strands Of Barbed Wire Along Top)	4,500.00 lf		-	-	67,500	-	-	15.00	67,500
		Personal Gates	2.00 ea		-	-	700	-	-	350.00	700
		Swing Gates	2.00 ea		-	-	2,500	-	-	1,250.00	2,500
07	Const Permanent Pond	Const Permanent Pond			1,295.94 hrs	31,884	16,532	85,700	9,658	-	143,774
		06			1,295.94 hrs	31,884	16,532	85,700	9,658	-	143,774
	Erosion Control/PH	Erect Silt Fence	1,200.00 lf		82.28 mh	2,039	593	-	373	2.48	2,974
		Final Staking	2.00 ac		72.00 mh	1,646	2,000	-	1,560	2,703.15	5,406
		Erosion Control/PH			194.28 hrs	3,855	2,993	-	1,933	-	8,381
	07				154.28 hrs	3,855	2,993	-	1,933	-	8,381
xCONST FACILITY	Construct Facilities	Mobile, Drug Test, Misc Other, & Demobilize	1.00 ls		1,438.55 mh	35,000	-	18,000	0	53,000.00	53,000
		Construct Facilities			1,438.55 hrs	35,000	-	18,000	0	53,000.00	53,000
	xCONST FACILITY				1,438.55 hrs	35,000	-	18,000	0	53,000.00	53,000
zNON MANUAL	Non-Manual	Non-Manual	1.00 ls		2,650.00 mh	132,500	-	-	-	132,500.00	132,500
		zNON MANUAL			2,650.00 hrs	132,500	-	-	-	132,500.00	132,500
		zNON MANUAL			2,650.00 hrs	132,500	-	-	-	132,500.00	132,500

Estimate Totals

Labor	647,953								
Material	489,106								
Subcontract	85,700								
Equipment	214,019								
	<u>1,416,778</u>	1,416,778							
Small Tools Expense	9,534								
Consumables & Expendables	20,616								
Other Supplies & Expense	3,825								
	34,127	1,450,905							
Partner Insurance (FY05)	19,439								
Partner Award Fee (FY05)	32,396								
	51,837	1,502,742							
Fossil Engineering - Phase 1	15,000								
	15,000	1,517,742							208
Fossil Engineering - Phase 2	112,268								
	112,268	1,630,000							1,559
Fossil Engineering - Phase 3	23,000								
	23,000	1,653,000							319
Rounding									
		1,653,000							L
<b>Total</b>		<b>1,653,000</b>							



## Haber, Stanley M

---

**From:** Smith, Daniel R [Daniel.R.Smith@worleyparsons.com]  
**Sent:** Wednesday, March 30, 2005 9:09 AM  
**To:** Haber, Stanley M.  
**Subject:** FW: Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell

**Attachments:** FW: Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell



FW: Review of cost  
estimate fo...

```
<html>  
<font face="Arial" style="font-size: 8pt;">*** WorleyParsons Group Notice ***  
"This email is confidential. If you are not the intended recipient, you must not disclose  
or use the information contained in it. If you have received this email in error, please  
notify us immediately by return email and delete the email and any attachments. Any  
personal views/ opinions expressed by the writer may not necessarily reflect the views/  
opinions of the company."  
</font>  
</html>
```

## Haber, Stanley M

---

**From:** Smith, Daniel R [Daniel.R.Smith@worleyparsons.com]  
**Sent:** Wednesday, March 30, 2005 9:09 AM  
**To:** Haber, Stanley M.  
**Subject:** FW: Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell

**Attachments:** RE: KIF French Drains Cost Estimate

Stan, here is the attachment.

Dan

-----Original Message-----

**From:** Smith, Daniel R  
**Sent:** Wednesday, March 30, 2005 7:40 AM  
**To:** 'Toney, Calvin'  
**Cc:** Melton, Gary; 'Petty, H. L.'; 'Hughes, Mike'  
**Subject:** Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell

Comments are directed at the detailed estimate (location) except where noted.

02 - Access Road - this is an allowance to address wear and tear on the existing road.

05 - Place additional riprap - this quantity should be 4000 tons, not 9450 tons.

06 - Add additional cost of transformer replacement (see attachment)

Also, for phase 3 engineering cost, assume 3% of construction cost (10% is too high).

An additional comment would be that the phase 1 and phase 2 costs are already appropriated. I'll defer to Lynn/Mike as to whether these should be included in the estimate or not. If they want to recoup the costs for engineering spent (or appropriated to be spent) already during this FY, they have that information. Or, if they want to leave what you have as an allowance, ok by me.

Please contact me if you have any questions.



RE: KIF French  
Drains Cost Est...

Please note new email address: [Daniel.R.Smith@worleyparsons.com](mailto:Daniel.R.Smith@worleyparsons.com)

Daniel R. (Dan) Smith, P.E.

Parsons E & C

Phone: (423) 757-8088

633 Chestnut St, Suite 400 Fax: (423) 266-0922

Chattanooga, TN 37450

Cell: (423) 364-1679

Email: [Daniel.R.Smith@worleyparsons.com](mailto:Daniel.R.Smith@worleyparsons.com)

**Haber, Stanley M**

---

**From:** Tolen, Ronald [Ronald.Tolen@worleyparsons.com]  
**Sent:** Monday, March 28, 2005 4:04 PM  
**To:** Smith, Daniel R  
**Subject:** RE: KIF French Drains Cost Estimate  
**Attachments:** KIF 3-28-05.doc

Dan,

The attached memo is documenting my conversation with Steve Ladd (HUB) on the cost of the transformer changeout it required. It appears that the transformer in place will be sufficient though. Anyway the price is \$498 (see Memo)

Ron

---

**From:** Smith, Daniel R  
**Sent:** Monday, March 28, 2005 11:08 AM  
**To:** Melton, Gary; Tolen, Ronald  
**Subject:** FW: KIF French Drains Cost Estimate

Please review the appropriate sections of the cost estimate relative to your discipline. I need your comments by the COB today.

thanks

Dan

-----Original Message-----

**From:** Toney, Calvin L. [mailto:ctoney@tva.gov]  
**Sent:** Friday, March 25, 2005 3:05 PM  
**To:** Petty, Harold L.; Hughes, Michael; Smith, Daniel R  
**Subject:** KIF French Drains Cost Estimate

Please review and if you have any comments or questions call me at x7666 or e-mail me.

**Calvin L. Toney**  
**LP 2P-C**  
**Cost Estimator**  
**Phone 751-7666**  
**Fax 751- 4295**

03/14/2009

TVA-00028202

**PARSONS E & C**  
**TELEPHONE AND CONFERENCE MEMORANDUM**

**PROJECT: KIF Seepage Intercept Project**

**DATE: 3-28-05**

**BY: Ron Tolen**

**JOB NO.: 51020101**

**PAGE: 1 OF 1**

**Phone No.: 865-882-3242 x235**

**FILE NO:**

**TELEPHONE CALL**

**CONFERENCE:**

**WITH: Steve Ladd**

**ORGANIZATIONS: Harriman Utilities (HUB)**

**SUBJECT: 240/120Vac Transformer powering Seepage Intercept Project & Nextel Tower**

---

I talked with Steve about the transformer that is currently powering the Sump Pumps. Steve did confirm that it was a 15kVA and would be sufficient to power a 200A service (we have a 100A panel installed now). This should be sufficient for our system, even if we doubled the number of pumps that we now have. In the instance we did upsize the installation beyond that, Steve said the only charge would be for a 25kVA transformer and he quoted a budgetary price of \$498. There is a good possibility that they will not charge anything, but we should use the budgetary quote in case they have a charge.

## Haber, Stanley M

---

**From:** Petty, Harold L.  
**Sent:** Wednesday, March 30, 2005 9:04 AM  
**To:** Haber, Stanley M.  
**Cc:** Melton, Gary; Hughes, Michael; 'Smith, Daniel R'; Toney, Calvin L.  
**Subject:** RE: Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell

Stan:

Here are Dan's comments.

Thanks,  
Lynn

-----Original Message-----

**From:** Smith, Daniel R [<mailto:Daniel.R.Smith@worleyparsons.com>]  
**Sent:** Wednesday, March 30, 2005 7:40 AM  
**To:** Toney, Calvin L.  
**Cc:** Melton, Gary; Petty, Harold L.; Hughes, Michael  
**Subject:** Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell

Comments are directed at the detailed estimate (location) except where noted.

02 - Access Road - this is an allowance to address wear and tear on the existing road.

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Also, for phase 3 engineering cost, assume 3% of construction cost (10% is too high).

An additional comment would be that the phase 1 and phase 2 costs are already appropriated. I'll defer to Lynn/Mike as to whether these should be included in the estimate or not. If they want to recoup the costs for engineering spent (or appropriated to be spent) already during this FY, they have that information. Or, if they want to leave what you have as an allowance, ok by me.

Please contact me if you have any questions.

<< Message: RE: KIF French Drains Cost Estimate >>

Please note new email address: [Daniel.R.Smith@worleyparsons.com](mailto:Daniel.R.Smith@worleyparsons.com)

Daniel R. (Dan) Smith, P.E.

Parsons E & C

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Chattanooga, TN 37450

Cell: (423) 364-1679

Email: [Daniel.R.Smith@worleyparsons.com](mailto:Daniel.R.Smith@worleyparsons.com)

**Haber, Stanley M**

---

**From:** Petty, Harold L.  
**Sent:** Wednesday, March 30, 2005 9:02 AM  
**To:** Haber, Stanley M.  
**Subject:** FW: KIF French Drains Cost Estimate  
**Attachments:** Project Summary Sheet(05359).rtf; 05359.pdf

-----Original Message-----

**From:** Toney, Calvin L.  
**Sent:** Friday, March 25, 2005 3:05 PM  
**To:** Petty, Harold L.; Hughes, Michael; Smith, Daniel R.  
**Subject:** KIF French Drains Cost Estimate

Please review and if you have any comments or questions call me at x7666 or e-mail me.

**Calvin L. Toney**  
**LP 2P-C**  
**Cost Estimator**  
**Phone 751-7666**  
**Fax 751- 4295**

03/14/2009

TVA-00028205

**KINGSTON FOSSIL PLANT  
(KIF530) DREDGE CELL FRENCH DRAINS  
(SEEPAGE REPAIR)**

<b>Estimate Number</b> 05359	<b>Option:</b> 0	<b>PCN Number:</b> KIF530
<b>Plant:</b> KIF	<b>Revision:</b> 0	<b>Estimate Type:</b> Conceptual
<b>Cost Engineer:</b> C. L. Toney	<b>Unit #:</b>	<b>Estimate Accuracy:</b> +/- 30%
<b>Requesting Engr:</b> S. M. Haber	<b>Phase:</b> 1	<b>Estimate Issue Date</b> 3/25/2005

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering		\$17,000
Partner (Non-Manual)		
Other / Other Organizations		\$0
<b><u>Total Phase I</u></b>		<b><u>\$17,000</u></b>
<u>Phase II</u>		
Engineering		\$125,704
Long Lead Procurement		\$0
Partner ( Non-Manual )		
Other / Other Organizations		\$0
<b><u>Total Phase II</u></b>		<b><u>\$125,704</u></b>
<u>Phase III</u>		
Construction ( Partner )		
Permanent Material		\$534,506
Labor ( T&L )	23,050.31	\$562,262
Labor ( Non-Manual )	2,880.00	\$144,000
Equipment		\$243,544
Subcontracts		\$83,300
Partner Fee		\$35,313
Partner Insurance		\$21,188
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$37,183
Total Construction Cost		\$1,661,296
Engineering		\$24,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$0
Other / Other Organizations		\$0
<b><u>Total Phase III</u></b>		<b><u>\$1,685,296</u></b>
<u>All Phases</u>		
Construction Partner	25,930.31	\$1,661,296
Long Lead Procurement		\$0
Engineering		\$166,704
Other / Other Organizations		\$0
Total Risk Dollars		\$0
<b><u>Total Project Costs</u></b>	<b><u>25,930.31</u></b>	<b><u>\$1,828,000</u></b>
<b><u>For Information only Total Environmental</u></b>		<b><u>\$0</u></b>
<b><u>For Information only Total Demolition Costs</u></b>		<b><u>\$0</u></b>

**KINGSTON FOSSIL PLANT  
(KIF530) DREDGE CELL FRENCH DRAINS  
(SEEPAGE REPAIR)**

Project name KIF05359/FRENCH DRAINS

Engineer DAN SMITH

Estimator C. L. Toney

Labor rate table KIF 40 ST 2005

Equipment rate table TVA Equipment

Project French Drains

Plant KIF

Estimate # 03359

PCN # KIF530

Requesting Engr S. M. Haber

Option 0

Revision 0

Phase 1

Estimate Type Conceptual

Estimate Accuracy +/- 30%

Est. Issue Date 3/24/2005

Funding Type Capital

Outager(Y/N) N

Notes Estimate Assumptions:

All costs are based in 2005 dollars.

Single phase power for pump installed for dredge cell seepage retrofit.  
3-phase power is assumed not to be required.

Existing pumps will be reused.

Engineering (including TVA over sight, subcontracts, and additional geotechnical investigation) - assumes 10% of construction costs.

Report format

Sorted by Location/Activity  
Detail summary



Spreadsheet Report  
KIF/03559/FRENCH DRAINS

Location	Activity	Description	Sheet Quantity	Labour Productivity	Labour Quantity	Labour Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount			
01	Erosion Controls/S P	Erod Sill Fence	4,500.00 lf	0.069	308.57 mh	7,532	2,223	-	1,399	-	-	2.48	11,154		
		Strip 1 Foot Soil Off Of Slope (Temporary Stockpile)	911.00 cy	0.025	22.78 mh	591	719	-	719	-	-	1.43	1,303		
		Excavate 3:1 Slope In Ash Slope To Provide Space For Pond	500.00 cy	0.120	96.00 mh	406	680	-	-	680	-	4.11	3,288		
		Excavate For Temporary Sediment Pond / Permanent Pond	1,400.00 cy	0.103	144.00 mh	1,860	2,000	-	-	1,320	-	3.52	4,932		
		Install Temporary Pond Dewatering Structure	1.00 ea	84,000	84,000 mh	1,860	2,000	-	-	304	-	4,184.34	4,184		
		Place Temporary Geotextile/Stack To Side Of Pond Next To Erodge Coll	611.00 sy	0.085	39.72 mh	651	2,352	-	-	99	-	5.97	3,402		
		D50 6" Riprap For Temporary Check Dams	84.00 tn	0.400	33.60 mh	644	1,008	-	-	536	-	28.36	2,392		
		Replace 1 Foot Of Soil On Slope Adjacent To Pond	811.00 cy	0.100	143.76 mh	3,656	1,008	-	-	1,336	-	5.48	4,992		
		Seed And Mutch Replaced Soil	1.00 ac	36,000	36,000 mh	923	1,000	-	-	780	-	2,703.15	2,703		
		Cover Blanket	3,000.00 sy	0.020	60.00 mh	1,436	1,320	-	-	150	-	0.97	2,906		
		Erosion Controls/S P	950.42 hrs	23,834	9,903	23,834	9,903	-	-	7,510	-	41,247	41,247		
		02	Access Road (Gravel)	1032 Crushed Stone Base 3" Depth (110 pct)	1,780.00 tn	0.120	211.20 mh	5,804	15,708	-	2,033	-	-	13.38	23,546
				Access Road (Gravel)	211.20 hrs	5,804	15,708	-	-	2,033	-	-	-	23,546	
					2,033	15,708	-	-	2,033	-	-	-	-	23,545	
		03	Instl Dms/Swan Pond	6" Dia Pipe Belards	36.00 ea	1.500	54.00 mh	1,307	7,200	-	360	-	-	246.32	8,867
				Strip 1 Foot Cover (Drainage System Installation)	11,745.00 cy	0.020	234.90 mh	6,098	7,341	-	7,341	-	-	1.14	13,459
				6" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL 775)	632.00 lf	0.200	126.40 mh	2,890	1,194	-	-	526	-	7.28	4,610
				Crushed Stone, Bedding 6" Depth	21.00 tn	0.500	10.50 mh	254	196	-	-	35	-	23.13	486
				6" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL 780)	779.00 lf	0.200	155.80 mh	3,552	1,472	-	-	648	-	7.30	5,632
				Crushed Stone, Bedding 6" Depth	26.00 tn	0.500	13.00 mh	315	243	-	-	43	-	23.13	601
				6" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL 796)	928.00 lf	0.200	185.60 mh	4,343	1,754	-	-	773	-	7.30	6,769
Crushed Stone, Bedding 6" Depth	31.00 tn			0.500	15.50 mh	375	290	-	-	52	-	23.13	717		
Cut For 6" Dia Non-Perforated HDPE (1,083 boy)	1,300.00 lf			0.250	260.00 mh	6,298	2,500	-	-	2,167	-	6.51	8,461		
Backfill For 6" Dia Non-Perforated HDPE (736 boy)	910.00 cy			0.200	182.00 mh	5,298	2,000	-	-	2,675	-	6.96	8,183		
Cut For 6" Dia Perforated HDPE (726 boy)	8,755.00 cy			0.300	1,751.00 mh	42,932	14,582	-	-	14,582	-	8.91	56,984		
Backfill For 6" Dia Perforated HDPE (5,107 boy)	6,129.00 cy			0.250	1,532.25 mh	37,968	13,920	-	-	18,019	-	9.89	55,115		
1081 Crushed Stone	868.00 tn			0.150	85.50 mh	19,545	7,330	-	-	3,559	-	7.30	31,484		
Geotextile Woven Monofilament	3,325.00 sy			0.021	68.40 mh	1,637	7,211	-	-	1,019	-	13.61	11,198		
6" Dia Perforated HDPE Penstems Underdrain (EL 765)	4,045.00 lf			0.300	809.00 mh	18,944	7,845	-	-	228	-	2.85	8,485		
1081 Crushed Stone	765.00 tn			0.150	114.75 mh	2,776	6,628	-	-	956	-	13.61	29,508		
Geotextile Woven Monofilament	3,165.00 sy			0.021	64.71 mh	1,449	5,294	-	-	218	-	10.562	10,562		
6" Dia Perforated HDPE Penstems Underdrain (EL 780)	3,960.00 lf			0.200	780.00 mh	17,374	6,408	-	-	1,164	-	2.85	8,028		
1081 Crushed Stone	718.00 tn	0.150	107.70 mh	2,807	6,408	-	-	898	-	7.30	27,719				
Geotextile Woven Monofilament	2,988.00 sy	0.021	60.80 mh	1,455	5,885	-	-	203	-	2.85	7,544				
6" Dia Perforated HDPE Penstems Underdrain (EL 796)	3,640.00 lf	0.200	728.00 mh	16,642	6,880	-	-	3,030	-	2.85	26,552				
1081 Crushed Stone	689.00 tn	0.150	103.20 mh	2,888	6,140	-	-	660	-	13.61	9,499				
Geotextile Woven Monofilament	2,831.00 sy	0.021	58.23 mh	1,384	5,637	-	-	184	-	2.85	7,225				
Instl Dms/Swan Pond	8,417.45 hrs	199,241	93,130	199,241	93,130	-	-	64,917	-	-	357,288				
	8,417.45 hrs	199,241	93,130	199,241	93,130	-	-	64,917	-	-	357,288				
04	Instal Comp Geonrt	Between 765 & 775 Bench	1.00 lot	-	-	-	-	-	-	-	0.00	0			
		Strip 1 Foot Soil And Stockpile	10,000.00 cy	0.020	200.00 mh	5,182	-	-	6,250	-	-	1.44	11,442		
		Place Composite Geonrt	32,700.00 sy	0.050	1,635.00 mh	39,134	161,855	-	-	4,088	-	6.27	265,086		
		Place 1 Foot Soil	10,000.00 cy	0.060	600.00 mh	15,660	-	-	5,500	-	-	2.06	20,550		
		Place Thickened Soil Layer At Toe To Tie Into Ditch	1,000.00 cy	0.100	100.00 mh	2,688	-	-	917	-	-	3.425	3,425		
		Seed And Mutch Replaced Soil	6.00 ac	36,000	216.00 mh	5,538	6,000	-	-	4,680	-	2,703.15	16,219		
		Instal Comp Geonrt	2,751.00 hrs	67,423	167,865	21,434	67,423	-	-	21,434	-	-	256,722		
			2,751.00 hrs	67,423	167,865	21,434	67,423	-	-	21,434	-	-	256,722		
		05	Instal Riprap Ditches	Final Grading Of Ditches (Allowance)	250.00 cy	0.096	24.00 mh	581	-	-	200	-	-	3.12	761
				Over Excavate Ditch For Riprap	8,000.00 cy	0.200	1,600.00 mh	38,500	-	-	20,100	-	-	7.34	99,030
Instal Non-Woven Needlepunched Geotextile, 8.0z	1,000.00 sy			0.016	16.00 mh	383	1,375	-	-	53	-	1.81	1,811		
Place D50 6" Riprap	9,500.00 tn			0.320	3,040.00 mh	76,365	114,000	-	-	47,979	-	25.08	236,344		
Place Additional Riprap At Toe	9,450.00 tn			0.320	3,024.00 mh	75,983	113,400	-	-	47,726	-	25.08	236,344		
Instal Riprap Ditches	7,712.00 hrs			192,221	228,775	192,221	228,775	-	-	118,058	-	-	537,055		
	7,712.00 hrs	192,221	228,775	192,221	228,775	-	-	118,058	-	-	537,055				
06	Const Permanent Pond	Submersible Pumping Station Equipment Package	1.00 lot	-	-	-	-	-	-	-	0.00	0			
		Relocate Submersible Pumps	2.00 ea	40,000	80.00 mh	2,619	-	-	556	-	-	1,687.9	3,176		
		Instal New Submersible Pump	1.00 ea	30,000	30.00 mh	982	1,539	-	-	209	-	2,729.84	2,730		

Location	Activity	Description	Material Quantity	Labor Productivity	Labor Quantity	Material Amount	Equip Amount	Other Needs	Total Cost/Unit	Total Amount
	<b>Const Permanent Pond</b>									
		Remove Existing Temporary Dewatering Structures	1.00 ls	45.000	45.00 mh	1,216	-	440	1,955.80	1,956
		60" Diameter Precast Concrete Manholes (5 Ft Depth)	1.00 ea	60.000	60.00 mh	1,523	3,000	-	4,980.96	4,981
		Call For 6" Dia Forced Main HDPE (1.11 D59)	1,333.00 cy	0.200	266.60 mh	6,454	-	2,222	6.51	6,876
		8" Dia Forced Main HDPE Perimeter Underdrain (EL. 763)	2,400.00 lf	0.200	480.00 mh	10,973	4,536	-	7.30	17,507
		1081 Crushed Stone	264.00 tn	0.150	39.60 mh	959	-	330	13.81	3,645
		Backfill For 8" Dia Forced Main HDPE (778 bcy)	894.00 cy	0.250	223.50 mh	5,653	-	2,748	8.99	8,399
		Allowance For Electrical Slope Of Pumps Relocation	1.00 lot	-	-	-	12,600	-	12,600.00	12,600
		Geotextile (Lime Pond To Minimize Erosion)	689.00 sy	0.018	16.00 mh	383	-	40	1.80	1,997
		3" Stone (Lime Pond To Minimize Erosion)	440.00 tn	0.096	42.24 mh	1,121	-	660	12.97	5,708
		Chain Link Fence (5' Fence With 3 Strands Of Barbed Wire Along Top)	4,500.00 lf	-	-	-	67,500	-	15.00	67,500
		Personal Gates	2.00 ea	-	-	-	700	-	350.00	700
		Swing Gates	2.00 ea	-	-	-	2,500	-	1,250.00	2,500
	<b>Const Permanent Pond</b>									
	<b>06</b>									
		Const Permanent Pond			<b>1,295.94 hrs</b>	<b>31,884</b>	<b>16,532</b>	<b>9,658</b>		<b>141,374</b>
					<b>1,295.94 hrs</b>	<b>31,884</b>	<b>16,532</b>	<b>9,658</b>		<b>141,374</b>
	<b>07</b>									
		Erect Silt Fence	1,200.00 lf	0.069	82.28 mh	2,099	-	373	2.48	2,974
		Final Seeding	2.00 ac	36.000	72.00 mh	1,846	-	1,860	2,703.15	5,406
		Erosion Control Pits			<b>154.28 hrs</b>	<b>3,856</b>	<b>2,593</b>			<b>6,381</b>
	<b>07</b>				<b>154.28 hrs</b>	<b>3,856</b>	<b>2,593</b>			<b>6,381</b>
		Construct Facilities								
	<b>XCONST FACILITY</b>									
		Mobilize, Drag Test, Misc Other, & Demobilize	1.00 ls	1,558.016	1,558.02 mh	39,000	-	20,000	58,000.00	58,000
		Construct Facilities			<b>1,558.02 hrs</b>	<b>39,000</b>	<b>20,000</b>	<b>0</b>		<b>58,000</b>
	<b>XCONST FACILITY</b>				<b>1,558.02 hrs</b>	<b>39,000</b>	<b>20,000</b>	<b>0</b>		<b>58,000</b>
	<b>ZNON MANUAL</b>									
		Non-Manual	1.00 ls	2,880.000	2,880.00 mh	144,000	-	-	144,000.00	144,000
		Non-Manual			<b>2,880.00 hrs</b>	<b>144,000</b>	<b>144,000</b>			<b>144,000</b>
	<b>ZNON MANUAL</b>				<b>2,880.00 hrs</b>	<b>144,000</b>	<b>144,000</b>			<b>144,000</b>

Estimate Totals

Labor	706,282	25,930,308	hrs	
Material	534,506			
Subcontract	83,300			
Equipment	243,544	8,573,470	hrs	
	<u>1,567,612</u>	<u>1,567,612</u>		
Small Tools Expense	10,373		0.450 \$/hr	H
Consumables & Expendables	22,490		4.000 %	C
Office Supplies & Expense	4,320		3.000 %	C
	<u>37,183</u>	<u>1,604,795</u>		
Partner Insurance (FY05)	21,188		3.000 %	C
Partner Award Fee (FY05)	35,313		5.000 %	C
	<u>56,501</u>	<u>1,661,296</u>		
Fossil Engineering - Phase 1	17,000		0.911 % @ 72.00 A	236
	<u>17,000</u>	<u>1,678,296</u>		
Fossil Engineering - Phase 2	125,704		6.733 % @ 72.00 A	1,746
	<u>125,704</u>	<u>1,804,000</u>		
Fossil Engineering - Phase 3	24,000		1.286 % @ 72.00 A	333
	<u>24,000</u>	<u>1,828,000</u>		
Rounding				L
		<u>1,828,000</u>		
<b>Total</b>		<b>1,828,000</b>		

**Haber, Stanley M**

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**From:** Haber, Stanley M.  
**Sent:** Saturday, March 12, 2005 9:55 AM  
**To:** Purkey, Ronald E.; Petty, Harold L.  
**Cc:** Waldrep, Roger T.; Smith, H. Michael  
**Subject:** KIF530 (French Drains): Review of PCR  
**Attachments:** KIF530 PCR 002 R0.doc

Ron and Lynn,

I have attached a draft PCR for moving the target date associated with Preliminary Engineering Complete. I plan on discussing this in Waterfall on Monday. Please look over this PCR and let me know Monday morning if you have any comments.

Thanks.

Stan

03/14/2009

TVA-00028211

# CHANGE REQUEST

CR # KIF530 002 R0

## PART 1: General Information

### PART 1A: PROJECT & INITIATOR INFORMATION

Project Title: KIF530: Develop Dry Fly Ash/Bottom Ash Capacity      Location /Units: Yard  
 DCN # NA      PA #      PCN # KIF530      WO #      Other Ref

Check One:  Capital    Job Order    O&M    Other:

Comments:

Initiator Name: Stan Haber      Position: PROJECT ENG      Date: 03/12/05

### PART 1B: REQUESTED CHANGE

Move the target date associated with the activity "Preliminary Engineering Complete (French Drain)" as indicated below.

### PART 1C: CAUSE FOR CHANGE

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Constructability Issue (Interference) | <input type="checkbox"/> Insufficient Craft Labor              | <input type="checkbox"/> Inadequate Resource Planning/Dedication |
| <input type="checkbox"/> Design Deficiency or Error            | <input type="checkbox"/> Improve Operability / Maintainability | <input checked="" type="checkbox"/> Other                        |
| <input type="checkbox"/> Rework                                | <input type="checkbox"/> Inadequate Scope Definition           |  |

Other Cause or Explanation : French drain study requires data collection that will not be collected or analyzed in a manner that supports the present target date.

### PART 1D: JUSTIFICATION

Engineering of French Drains will not be complete until April 29, 2005.

### PART 1E: CLASSIFICATION

Change Is:  Elective    Required      Has Work Associated With This Change Begun?    No    Yes (Explain Below)

Is Limited Approval Needed Prior To Full Approval: No    Yes -Amount Needed:      Date Needed:

Comment / Explanation: Project is in the study phase.

## PART 2: Initiating Organization Approval

Line Manager: Roger Waldrep      Date:      Department Manager : Dennis Lundy      Date:

## PART 3: Impacts

### PART 3A: SCHEDULE IMPACT

Targeted Milestones Affected By This Change:	Current Date	Requested Date
Activity LDKAK530PC (Preliminary Engineering Complete)	31 MAR 05	29 APR 05

### PART 3 B: COST IMPACT

Change In Manhours: 0      Change In \$: \$0       Detail Est and/or Org Breakdown Info Attached

Comments:

### PART 3C: OTHER IMPACTS

- |   |  |  |  |  |  |
|---|--|--|--|--|--|
| <input type="checkbox"/> Claimed Benefit  | <input type="checkbox"/> EDR, EA, or EIS | <input type="checkbox"/> Field Support     | <input type="checkbox"/> O&M Manpower  | <input type="checkbox"/> Permits       | <input type="checkbox"/> Subcontractor |
| <input type="checkbox"/> Constructability | <input type="checkbox"/> Engineering     | <input type="checkbox"/> Material Contract | <input type="checkbox"/> ORI Milestone | <input type="checkbox"/> Project Churn | <input type="checkbox"/> Other         |
| <input type="checkbox"/> Craft Labor      | <input type="checkbox"/> Equipment Life  | <input type="checkbox"/> O&M Cost          | <input type="checkbox"/> Performance   | <input type="checkbox"/> Safety        |  |

Comments / Explanation:

## PART 4: Final Approval

FPEP Approval Required :  No   Yes    Date Obtained

Approve    Approved (No Additional Funding)    Limited Approval (See Comments)    Reject

Authorizing Signature:      Title:      Date:

Comments:

# CHANGE REQUEST

CR # KIF530 002 R0

PART 5: Review (Optional)						
PART 5A: RECOMMENDED ACTION						
Name	Job Title	Approve	Reject <sup>1</sup>	Limited Approval <sup>1</sup>	Date	
1- Stan Haber	Project Engineer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2-	Principal Engineer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3- Roger Waldrep	Manager, Project Engineering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4- Dennis Lundy	Manager, FE&TS EDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5-		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6-		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7-		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
8-		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/> Information Attached		1 - Provide Comments If Rejected or Limited Approval				

PART 5B: COMMENTS
Reviewer 1
Reviewer 2
Reviewer 3
Reviewer 4
Reviewer 5
Reviewer 6
Reviewer 7
Reviewer 8

PART 6: Cost Breakdown (Optional)									
PART 6A: CONSTRUCTION PARTNER									
PA #	Work Order #		PCS:			PM/PE:			
Cost Type	MHs	Dollars	Cost Type	MHs	Dollars	Cost Type	MHs	Dollars	
Craft Labor			Heavy Equipment			Consumables			
Staff			Tagged Tools			Office Supplies			
Travel/Living Expenses			Small Tools			TVA Subs			
Partner Subcontracts			Materials			OCIP			
Fee			Other-See Estimate						
PART 6B: ENGINEERING									
TVA Engineering			Engineering Partner			Other			
MHs	Dollars		MHs	Dollars		MHs	Dollars	Dollars	
Mechanical			Mechanical			Long Lead Material			
Electrical			Electrical			Other:			
Civil			Civil			Other:			
Other:			Other:			Other:			
Other:			Other:			Other:			

## Haber, Stanley M

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**From:** Petty, Harold L.  
**Sent:** Monday, February 14, 2005 11:26 AM  
**To:** Bowers, Larry C; Haber, Stanley M.; Purkey, Ronald E.  
**Subject:** FW: KIF peninsula area #2 PDF files

**Attachments:** KIF\_gypsomPile\_homesView.pdf

Here is one

-----Original Message-----

**From:** Holmquist, Kenneth W.  
**Sent:** Friday, February 11, 2005 12:24 PM  
**To:** Petty, Harold L.  
**Cc:** McCollough, Major C.  
**Subject:** RE: KIF peninsula area #2 PDF files

Lynn,

Here is the image. This image is a theoretical view looking from the houses across the river toward the pile. The pile that is depicted here is based on the proposed pile as shown in "SK PR0637 C09.dwg". The maximum elevation is about 950'.

Please let me know if this does not meet the need. What short code should I charge this work to?



KIF\_gypsomPile\_homesView.pdf (...)

Thanks,  
Ken

-----Original Message-----

**From:** Petty, Harold L.  
**Sent:** Monday, February 07, 2005 9:50 AM  
**To:** Holmquist, Kenneth W.  
**Cc:** Robinson, Dave W; Purkey, Ronald E.; McCollough, Major C.  
**Subject:** RE: KIF peninsula area #2 PDF files

My Bad.... I forgot to attach the pdf file.

Thanks,  
Lynn << File: kingston view desired.pdf >>

-----Original Message-----

**From:** Petty, Harold L.  
**Sent:** Monday, February 07, 2005 8:56 AM  
**To:** Holmquist, Kenneth W.  
**Cc:** Robinson, Dave W; Purkey, Ronald E.; McCollough, Major C.  
**Subject:** RE: KIF peninsula area #2 PDF files

This is a neat view and now that I have seen it I want it in addition to what we are really looking for!

What we really need is something like this but viewed from the houses across the lake.

Please see the attached pdf file. The red arrow shows the view desired.

I understand that a photo from across the lake was taken and this has been done before somewhere.

Thanks,  
Lynn

-----Original Message-----

**From:** Holmquist, Kenneth W.  
**Sent:** Friday, February 04, 2005 5:20 PM  
**To:** Petty, Harold L.  
**Cc:** Robinson, Dave W; Purkey, Ronald E.; McCollough, Major C.  
**Subject:** RE: KIF peninsula area #2 PDF files

Lynn,

I created the attached image using ArcGIS software and the proposed CAD drawing of the pile. Please let me know if this image is what you need of if you need something else.

<< File: KIF\_3dView.gif >>

Thanks,  
Ken

-----Original Message-----

**From:** Petty, Harold L.  
**Sent:** Friday, February 04, 2005 3:00 PM  
**To:** Holmquist, Kenneth W.  
**Cc:** Robinson, Dave W; Purkey, Ronald E.  
**Subject:** RE: KIF peninsula area #2 PDF files

Ken:

I have been asked to run a photo and I believe one of your guys can help me find it. Dave gave me your name as a possible source.

I understand that a photo of the peninsula at Kingston was taken and the Gypsum Stack was drawn in as a projection of what it would look like upon completion. This is a view from the lake or from across the lake and not an aerial photo with contour lines.

Your help in running this down would be appreciated.

Thanks,  
Lynn

-----Original Message-----

**From:** Robinson, Dave W  
**Sent:** Friday, February 04, 2005 12:26 PM  
**To:** Petty, Harold L.  
**Subject:** FW: KIF peninsula area #2 PDF files

This the best that I have. This is the area that was looked at for cultural resources and wetlands. Ken may have what you are looking for.

-----Original Message-----

**From:** Holmquist, Kenneth W.  
**Sent:** Friday, August 09, 2002 3:14 PM  
**To:** Carter, Roy V.; Robinson, Dave W; Smith, Amos L  
**Cc:** Mccollough, Major C.  
**Subject:** KIF peninsula area #2 PDF files

All,

Attached are PDF files of the second area of interest on the Kingston peninsula that I mistakenly left out of the group of files I sent out Tuesday of this week.

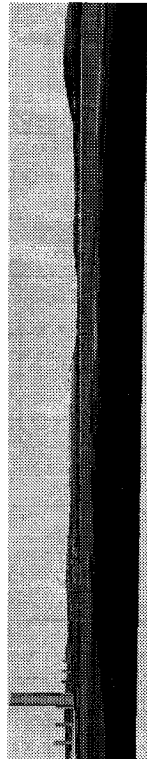
<< File: BRF\_KIF\_penninsula-2\_DRG.pdf >> << File: BRF\_KIF\_penninsula-2\_image.pdf >>

Thank you,

Ken Holmquist -- TVA Geographic Information and Engineering  
Email: kwholmquist@tva.gov



Telephone: 423-751-2720 FAX: 423-751-2463  
TVA Mail Stop: MR 2T-C  
1101 Market St., Chattanooga, TN 37402-2801



**Haber, Stanley M**

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**From:** Purkey, Ronald E.  
**Sent:** Friday, February 11, 2005 2:24 PM  
**To:** Petty, Harold L.; Haber, Stanley M.; Smith, Daniel R.  
**Subject:** FW: KIF budget

fyi

-----Original Message-----

**From:** Purkey, Ronald E.  
**Sent:** Friday, February 11, 2005 10:26 AM  
**To:** Baugh, James S.  
**Subject:** RE: KIF budget

Steve,

For capital money I propose the following for Option 1-1

2005 - 2850k	2100 for french drain	550 for engineering	100 for soil exploration	100 misc
2006 - 300k	300 for engineering/hydrogeo/permitting etc			
2007 - 200k	200 for engineering and permitting			
2008 - 4500k	4500 for gypsum stack const and piping/misc			

As phase 2 progresses on the Pennensula, we will be able to see clearer what the economics are.  
Ron

-----Original Message-----

**From:** Baugh, James S.  
**Sent:** Friday, February 11, 2005 8:47 AM  
**To:** Purkey, Ronald E.  
**Subject:** KIF budget

Per our conversation this morning, the KIF budget is as follows:

2005 - 1625k  
2006 - 1505k  
2007 - 5045k  
2008 - 8000k

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

03/14/2009

TVA-00028218

**Haber, Stanley M**

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**From:** Short, James L. Jr.  
**Sent:** Friday, January 21, 2005 1:56 PM  
**To:** Haber, Stanley M.  
**Subject:** Revised Order of Magnitude Estimate and Summary Sheet for KIF530, Develop Dry Fly Ash, Gypsum, and Bottom Ash Disposal  
**Attachments:** 04542R1.pdf; 04542R1.doc

Stan,  
Attached are the revised estimate and summary sheet for the above named project.  
Please call if you have comments and/or questions.

*James L. Short*  
Cost Estimator  
LP 2P - C  
(423) 751-2747  
Fax (423) 751-4295  
jlshort@TVA.gov

**Kingston Fossil Plant  
Develop Fly Ash, Gypsum, and Bottom Ash Storage  
Revision 1**

Project name Kingston  
 Engineer Stan Haber  
 Estimator James Short  
 Project Plant Ash & Gypsum Storage  
 Estimate # KIF  
 PCN # 04542R1  
 Requesting Engr KIF530  
 Stan Haber  
 Option 0  
 Revision 0  
 Phase 1  
 Estimate Type Order Of Magnitude  
 Estimate Accuracy +/- 50%  
 Est. Issue Date 1/21/2005  
 Funding Type Capital  
 Outage(Y/N) N

Notes  
 Cost based on information supplied by the project engineer.  
 Estimate accuracy level as determined by the project engineer.  
 Do not use the craft manhours shown in this estimate for any purpose.  
 They are DUMMY NUMBERS required for the calculation of engineering costs.

Report format  
 Sorted by 'Location/Activity'  
 'Detail' summary

Location	Activity	Description	Takeoff Quantity	Labor Men Hrs	Labor Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount
<b>PHASE 2</b>												
	Long Lead Materials											
	Materials - 1		1.00 ls				400,000				400,000.00	400,000
	Materials - 2		1.00 ls				6,500,000				6,500,000.00	6,500,000
	Long Lead Materials						6,900,000					6,900,000
	Partner									15,000	15,000.00	15,000
	GUBMK / HED (Estimate)		1.00 ls							15,000	15,000.00	15,000
	Partner						6,900,000			15,000		6,915,000
<b>PHASE 3</b>												
	Implementation											
	GUBMK Installation		1.00 ls			40,000					40,000.00	40,000
	Turnkey Installation		1.00 ls					#####			7,605,000.00	7,605,000
	DUMMY ITEM		1.00 ls	1,000,000	1,000.00	0					0.01	0
	Implementation				1,000.00	40,000			7,605,000			7,645,000
	PHASE 3				1,000.00	40,000		#####				7,645,000

Estimate Totals

			1,000,000	hrs		
Labor	40,000					
Material	6,900,000					
Subcontract	7,605,000					
Other	15,000					
	<u>14,560,000</u>					
Engineered Materials - Ph 2	6,900,000		100.000 %		C	
Adjustment - Engr Materials	(6,900,000)		(100.000) %		C	
						14,560,000
FPG Proj Engr - Phase 1	6,300		14.887 % @		42.32 A	149
FPG Civil Engr - Phase 1	40,950		97.500 % @		42.00 A	975
Non-TVA Engr - Phase 1	394,992		269.619 % @		146.50 A	2,696
FPG Proj Cntrls - Sch - Ph 1	5,040		12.000 % @		42.00 A	120
FPG Proj Cntrls - Cost - Ph 1	5,040		12.000 % @		42.00 A	120
FPG Cost Estimating - Phase 1	5,250		12.500 % @		42.00 A	125
Phase 1 Project Discovery	39,984				L	
Phase 1 Plant Support	5,000				L	
	<u>502,556</u>					15,062,556
FPG Proj Engr - Phase 2	69,960		20.000 % @		349.80 A	200
FPG Mech Engr - Phase 2	8,400		20.000 % @		42.00 A	200
FPG Elec Engr - Phase 2	8,400		20.000 % @		42.00 A	200
FPG Civil Engr - Phase 2	12,600		30.000 % @		42.00 A	300
Non-TVA Engr - Phase 2	370,560		600.000 % @		61.76 A	6,000
FPG Proj Controls - Phase 2	3,360		8.000 % @		42.00 A	80
FPG Cost Estimating - Phase 2	1,008		2.400 % @		42.00 A	24
FPG Engr Records - Phase 2	672		1.600 % @		42.00 A	16
Phase 2 Plant Support	3,000				L	
	<u>477,960</u>					15,540,516
FPG Proj Engr - Phase 3	97,310		22.000 % @		442.32 A	220
FPG Mech Engr - Phase 3	8,400		20.000 % @		42.00 A	200
FPG Elec Engr - Phase 3	8,400		20.000 % @		42.00 A	200
FPG Civil Engr - Phase 3	12,600		30.000 % @		42.00 A	300
Non-TVA Engr - Phase 3	425,558		575.000 % @		74.01 A	5,750
FPG Proj Controls - Phase 3	1,680		4.000 % @		42.00 A	40
FPG Engr Records - Phase 3	1,008		2.400 % @		42.00 A	24
Phase 3 Plant Support	80,000				L	
	<u>634,956</u>					16,175,472
Phase 1 Sunk Cost	200,000				L	
	<u>200,000</u>					16,375,472
Rounding	(472)				L	
	<u>(472)</u>					16,375,000
<b>Total</b>						<b>16,375,000</b>

**Kingston Fossil Plant  
Develop Fly Ash, Gypsum, and Bottom Ash Storage**

**Revision 1**

<b>Estimate</b>	04542R1	<b>Option:</b> 0	<b>PCN Number:</b>	KIF530
<b>Plant:</b>	KIF	<b>Revision:</b> 0	<b>Estimate Type:</b>	Order Of Magnitude
<b>Cost Engineer:</b>	James Short	<b>Unit #:</b>	<b>Estimate Accuracy:</b>	+/- 50%
<b>Requesting</b>	Stan Haber	<b>Phase:</b> 1	<b>Estimate Issue</b>	1/21/2005

<b><u>Phase I</u></b>	<b><u>Hours</u></b>	<b><u>Dollars</u></b>
Engineering		\$457,572
Partner (Non-Manual)		
Other / Other Organizations		\$244,984
<b><u>Total Phase I</u></b>		<b><u>\$702,556</u></b>

<b><u>Phase II</u></b>		
Engineering		\$474,960
Long Lead Procurement		\$6,900,000
Partner ( Non-Manual )		\$15,000
Other / Other Organizations		\$3,000
<b><u>Total Phase II</u></b>		<b><u>\$7,392,960</u></b>

<b><u>Phase III</u></b>		
Construction ( Partner )		
Permanent Material		\$0
Labor ( T&L )	1,000.00	\$40,000
Labor ( Non-Manual )		
Equipment		\$0
Subcontracts		\$7,605,000
Partner Fee		\$0
Partner Insurance		\$0
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$0
Total Construction Cost		\$7,645,000
Engineering		\$554,956
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		(\$472)
Other / Other Organizations		\$80,000
<b><u>Total Phase III</u></b>		<b><u>\$8,279,484</u></b>

<b><u>All Phases</u></b>		
Construction Partner	1,000.00	\$7,660,000
Long Lead Procurement		\$6,900,000
Engineering		\$1,487,488
Other / Other Organizations		\$327,984
Total Risk Dollars		(\$472)
<b><u>Total Project Costs</u></b>	<b><u>1,000.00</u></b>	<b><u>\$16,375,000</u></b>
<b><u>For Information only Total Environmental</u></b>		<b><u>\$0</u></b>
<b><u>For Information only Total Demolition Costs</u></b>		<b><u>\$0</u></b>



**Haber, Stanley M**

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**From:** Franklin, Thomas  
**Sent:** Friday, January 21, 2005 1:41 PM  
**To:** Haber, Stanley M.  
**Subject:** KIF530.xls

**Attachments:** KIF530.xls



KIF530.xls (55 KB)

Your files are attached and ready to send with this message.

**KINGSTON FOSSIL PLANT**  
**KIF-DEVELOP FLY ASH, GYPSUM, & BOTTOM ASH DISPOSAL CAPACITY**

PCN: KIF630  
 CURRENT PHASE: 1  
 OUTAGE: N/A  
 EST. TYPE:  
 EST. ACCURACY:

Responsible Unit: 18758  
 Location/Unit: 4500  
 Functional Account: EC0681

PHASE I	WORK PACKAGE	ACTIVE SHORT CODES	PHASE I (STUDY)	FORECAST												TOTAL
				P-Yrs	FY05	FY06	FY07	FY08								
PHASE I	KIF530A-01	001D9/R	FES	200	239									0	439	
	KIF530A-02		PLANT SUPPORT	0	5									0	5	
	KIF530A-03		PARSONS	0	218									0	218	
	KIF530A-04		PROJECT DISCOVERY	0	40									0	40	
TOTAL STUDY PHASE				200	502	0	0	0	0	0	0	0	0	0	702	
PHASE II	PHASE II (DESIGN)															
	KIF530B-01		FES		50	95	330							0	475	
	KIF530B-02		PARSONS		0									0	0	
	KIF530B-03		PARTNER ESTIMATE		15									0	15	
	KIF530B-04		PLANT SUPPORT		3									0	3	
	KIF530B-06		LONG LEAD MTLs		200	200	2,500	4,000	6,900					0	6,900	
CONTINGENCY				0	0								0	0		
TOTAL PHASE II				0	268	235	2,830	4,000	7,393					0	7,393	
PHASE III	PHASE III															
	KIF530C-01		FES		50	55	215	235	555					0	50	
	KIF530C-02		INSTALLATION (TURNKEY)		785	1,135	1,980	3,725	7,605					0	7,605	
	KIF530C-03		PLANT SUPPORT		20	20	20	20	80					0	80	
	KIF530C-04		CUBNIK		0	0	20	20	40					0	40	
KIF530C-05		CONTINGENCY		0	0	0	0	0					0	0		
TOTAL PHASE III				0	855	1,210	2,215	4,000	8,280					0	8,280	
TOTAL PROJECT				200	1,625	1,505	5,045	8,000	16,375					0	16,375	

Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total	
					108	89	12	10	10	10		239	
				1	1	1	1	1	1			5	
		60	60	60	38							218	
					10	10	10	10	10	10		40	
	10	10	10	10	10	10						50	
												0	
						15						15	
			3									3	
								50			150	200	
									10	10	10	10	50
							55	180	180	180	180	785	
							4	4	4	4	4	20	
												0	
												0	
0	0	10	73	71	179	163	92	265	214	204	354	1,625	

**Haber, Stanley M**

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**From:** Haber, Stanley M.  
**Sent:** Friday, September 17, 2004 9:12 AM  
**To:** Auguste, Myriam B.  
**Cc:** Halicks, David R.; Long, S. Scott; Davis, Michael D; Hedgecoth, Melissa A.; Baugh, James S.; Purkey, Ronald E.; Petty, Harold L.; Rehberg, Robert L.; Holmes, James B.; Catlett, James H; Tolliver, Sherry D.  
**Subject:** KIF530 (Develop Ash capacity): Request for PA  
**Attachments:** KIF530 Input for Cost Estimate Summary 2004 09 09 R0.xls; KIF530 CPJSForm 2004 09 16 r1.pdf; Project Summary Sheet(04513) 2004 08 16.rtf; Estimate(04513) 2004 08 16.pdf

Myriam,

Please prepare a revised PA for KIF530. I have attached the PJ (revision 1), my cost input sheet, the cost estimate, and the cost rollup for your use.

Stan

03/14/2009

TVA-00028226

KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage										
Phase/Activity	FY04	FY05	FY06	FY07	FY08	Totals	Prv Yrs			
1										
2										
3										
4										
5										
6	200	195				395				
7		12				12				
8		5				5				
9						0				
10										
11	200	212	0	0	0	412				
12										
13										
14										
15	0	30	70	300	0	400				
16										
17	0	20	25	30	0	75				
18										
19	0	15	0	0	0	15				
20	0	3	0	0	0	3				
21										
22										
23	<i>blank</i>	200	200		0	400				
24	<i>blank</i>	0	0	2500	4000	6500				
25	<i>total LLM</i>	0	200	200	4000	6900				
26										
27	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	<b>Phase 3</b>									
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)									

# Capital Project Justification Form

**Project Name**

KIF--DEVELOP FLY ASH, GYPSUM &amp; BOTTOM ASH DISPOSAL CAPACITY

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

**Project ID**

KIF530

**Rev#**

1

## 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-Svc 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**

R1: Change in project cost (R0 was based on a dry fly ash system, no construction until FY07). New project cash flow represents development of ash and gypsum disposal capacities with design and construction starting in FY05.

# 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#**

1

**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#**

1

## II. Project Economic Evaluation

**COST**

**ECONOMIC INDICATORS**

SUNK CAPITAL PROJECTS: \$0

NPV: \$8,579.0

SUNK O&M PROJECTS: \$0

PI: 1.825

REMAINING COST: \$15,942

IRR: 42.0

TOTAL COST: \$15,942

SIMPLE PAYBACK: 6

ESTIMATE TYPE: Conceptual

BASE YEAR: 2004

Year	Capital Cost	O&M Cost	Total Benefit	O&M Base Increase	Environmental Cost
<b>SUNK</b>	0	0	0	0	
<b>OUT YEARS</b>	0	0	0	0	
2004	200	0	0	0	0
2005	1,625	0	0	0	0
2006	1,505	0	0	0	0
2007	5,045	0	5,000	0	0
2008	7,567	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#**

1

## II. Project Economic Evaluation

**Cost Assumptions**

1. \$7,805K engineering and procurement cost.
2. \$8,132K Implementation cost.
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

**Risks**

- No similar projects.
- Conceptual estimate (no similar projects)
- 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**

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.

**Risks**

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**

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

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

**Project ID**

KIF530

**Rev#**

1

## II. Project Economic Evaluation

### Project EconEval

Benefit Input Section

Unit: 70

Base Calc Year: 2004

Fiscal Year	Heat Rate Imprvmn	Forced Outage Hours	Forced Derating MW	Forced Derating HRS	MWHL	O&M Base Increase (\$000's)	O&M Base Savings (\$000's)	Other Benefits Savings (\$000's)	Outage Duration Reduction (HRS)	Project Cost (\$000's)
2004	0	0	0	0	0	0	0	0	0	200
2005	0	0	0	0	0	0	0	0	0	2,058
2006	0	0	0	0	0	0	0	0	0	1,505
2007	0	0	0	0	0	0	0	5,000	0	5,045
2008	0	0	0	0	0	0	0	5,000	0	7,567
2009	0	0	0	0	0	0	0	5,000	0	0
2010	0	0	0	0	0	0	0	5,000	0	0
2011	0	0	0	0	0	0	0	5,000	0	0
2012	0	0	0	0	0	0	0	5,000	0	0
2013	0	0	0	0	0	0	0	5,000	0	0
2014	0	0	0	0	0	0	0	5,000	0	0
2015	0	0	0	0	0	0	0	5,000	0	0
2016	0	0	0	0	0	0	0	5,000	0	0
2017	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	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#**

1

## II. Project Economic Evaluation

### Project EconEval(continued)

Benefit Value Section

Unit: 70

Base Calc Year: 2004

Fiscal Year	Heat Rate Benefit	MWH Improve In (000's)	Unit EFOR Impact	System EFOR Impact	O&M Base Savings (\$000's)	Other Benefits Savings	Outage Redctns Savings In (\$000's)	Benefit Value In (\$000's)
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	5,000	0	5,000
2008	0	0	0	0	0	5,000	0	5,000
2009	0	0	0	0	0	5,000	0	5,000
2010	0	0	0	0	0	5,000	0	5,000
2011	0	0	0	0	0	5,000	0	5,000
2012	0	0	0	0	0	5,000	0	5,000
2013	0	0	0	0	0	5,000	0	5,000
2014	0	0	0	0	0	5,000	0	5,000
2015	0	0	0	0	0	5,000	0	5,000
2016	0	0	0	0	0	5,000	0	5,000
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0

**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

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering		\$270,000
Partner (Non-Manual)		
Other / Other Organizations		\$5,000
<b><u>Total Phase I</u></b>		<b><u>\$275,000</u></b>
<u>Phase II</u>		
Engineering		\$425,000
Long Lead Procurement		\$8,000,000
Partner ( Non-Manual )		\$35,000
Other / Other Organizations		\$25,000
<b><u>Total Phase II</u></b>		<b><u>\$8,485,000</u></b>
<u>Phase III</u>		
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
<b><u>Total Phase III</u></b>		<b><u>\$7,615,000</u></b>
<u>All Phases</u>		
Construction Partner		\$7,160,000
Long Lead Procurement		\$8,000,000
Engineering		\$1,145,000
Other / Other Organizations		\$70,000
Total Risk Dollars		\$0
<b><u>Total Project Costs</u></b>		<b><u>\$16,375,000</u></b>
<b><u>For Information only Total Environmental</u></b>		<b><u>\$0</u></b>
<b><u>For Information only Total Demolition Costs</u></b>		<b><u>\$0</u></b>

**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 Is		8,000,000				8,000,000
		Craft Labor (GUMBK)	1.00 Is	40,000					40,000
		GUMBK (Ph II)	1.00 Is					35,000	35,000
		Plant Support (Ph III)	1.00 Is					40,000	40,000
		Turnkey Installation	1.00 Is			7,085,000			7,085,000

Estimate Totals

		1,086,366	hrs	
Labor	40,000			
Material	8,000,000			
Subcontract	7,085,000			
Other	75,000			
	<u>15,200,000</u>			
Engineered Materials - Ph 2	8,000,000	100.000 %		C
Adjustment - Engr Materials	(8,000,000)	(100.000) %		C
	<u>15,200,000</u>			
Environmental Costs		100.000 %		C
Adjustment Environmental		(100.000) %		C
	<u>15,200,000</u>			
Demolition Costs		100.000 %		C
Adjustment Demolition		(100.000) %		C
	<u>15,200,000</u>			
FPG Engineering - Phase 1	250,000	547.917 % @	5,952	42.00 A
FPG Proj Engr - Phase 1	17,312	37.942 % @	412	42.00 A
FPG Estimating - Phase 1	1,008	2.209 % @	24	42.00 A
FPG Proj Contlr - Phase 1	1,680	3.682 % @	40	42.00 A
Plant Support - Phase 1	<u>5,000</u>			L
	275,000			
FPG Engineering - Phase 2	370,000	810.917 % @	8,810	42.00 A
FPG Proj Engr - Phase 2	49,960	109.496 % @	1,190	42.00 A
FPG Estimating - Phase 2	1,008	2.209 % @	24	42.00 A
FPG Proj Contlr - Phase 2	3,360	7.364 % @	80	42.00 A
FPG Records - Phase 2	672	1.473 % @	16	42.00 A
Plant Support - Phase 2	<u>25,000</u>			L
	450,000			
FPG Engineering - Phase 3	400,000	876.667 % @	9,524	42.00 A
FPG Proj Engr - Phase 3	47,312	103.692 % @	1,126	42.00 A
FPG Proj Contlr - Phase 3	1,680	3.682 % @	40	42.00 A
FPG Records - Phase 3	<u>1,008</u>	2.209 % @	24	42.00 A
	450,000			
<b>Total</b>	<b>16,375,000</b>			

**Haber, Stanley M**

---

**From:** Toney, Calvin L.  
**Sent:** Monday, September 13, 2004 2:19 PM  
**To:** Haber, Stanley M.  
**Cc:** Harless, J. Larry  
**Subject:** RE: Cost Rollup for KIF530 (Develop Ash Disposal capacity)  
**Attachments:** Project Summary Sheet(04542).rtf; 04542.pdf

Please find attached the estimate summary sheet and pdf formatted cost estimate for the above subject.

Please review and if you have any comments or questions call me at x7666 or e-mail me.

-----Original Message-----

**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)

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



**KINGSTON FOSSIL PLANT  
DEVELOP FLY ASH, GYPSUM, AND BOTTOM ASH STORAGE  
(KIF530) PHASE 1 APPROVAL COST ESTIMATE**

Estimate Number 04542      Option: 0      PCN Number: KIF530  
 Plant: KIF      Revision: 0      Estimate Type: Order Of Magnitude  
 Cost Engineer: C. L. Toney      Unit #:      Estimate Accuracy: +/- 50%  
 Requesting Engr: S. Haber      Phase: 1      Estimate Issue Date 09/13/2004

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering		\$407,000
Partner (Non-Manual)		
Other / Plant Support		\$5,000
<b><u>Total Phase I</u></b>		<b><u>\$412,000</u></b>
<u>Phase II</u>		
Engineering		\$475,000
Long Lead Procurement		\$6,900,000
Partner ( Non-Manual )		\$15,000
Other / Plant Support		\$3,000
<b><u>Total Phase II</u></b>		<b><u>\$7,393,000</u></b>
<u>Phase III</u>		
Construction ( Partner )		
Permanent Material		\$0
Labor ( T&L )	1,000.00	\$40,000
Labor ( Non-Manual )		
Equipment		\$0
Subcontracts (Turnkey)		\$7,895,000
Partner Fee		\$0
Partner Insurance		\$0
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$0
Total Construction Cost		\$7,935,000
Engineering		\$555,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$0
Other / Plant Support		\$80,000
<b><u>Total Phase III</u></b>		<b><u>\$8,570,000</u></b>
<u>All Phases</u>		
Construction Partner	1,000.00	\$7,950,000
Long Lead Procurement		\$6,900,000
Engineering		\$1,437,000
Other / Plant Support		\$88,000
Total Risk Dollars		\$0
<b><u>Total Project Costs</u></b>	<b><u>1,000.00</u></b>	<b><u>\$16,375,000</u></b>
<b><u>For Information only Total Environmental</u></b>		<b><u>\$0</u></b>
<b><u>For Information only Total Demolition Costs</u></b>		<b><u>\$0</u></b>

**KINGSTON FOSSIL PLANT  
DEVELOP ELY ASH, GYPSUM, AND BOTTOM ASH STORAGE  
(KIF530) PHASE 1 APPROVAL COST ESTIMATE**

Project name KIF04542/ASH STORAGE

Engineer Stan Haber

Estimator C. L. Toney

Ash

KIF

04542

KIF530

S. Haber

0

0

1

Order Of Magnitude

+/- 50%

09/13/2004

Capital

Notes All cost for this estimate was provided by (PE) Stan Haber.

Report format Sorted by 'Location/Activity'

'Detail' summary

Location	Activity	Description	Takeoff Quantity	Unit	Productivity	Labor Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Est	Total Amount
<b>PHASE 2</b>	Long Lead Materials												
		Materials - 1	1.00	ls				400,000				400,000.00	400,000
		Materials - 2	1.00	ls				6,500,000				6,500,000.00	6,500,000
		Long Lead Materials		hrs				6,900,000				6,900,000.00	6,900,000
	Partner	GUBNK / HED (Estimate)	1.00	ls							15,000	15,000.00	15,000
		<b>PHASE 2</b>						<b>6,900,000</b>			<b>15,000</b>		<b>6,915,000</b>
<b>PHASE 3</b>	Implementation												
		GUBNK Installation	1.00	ls	1,000,000		40,000					40,000.00	40,000
		Turkey Installation	1.00	ls					7,895,000			7,895,000.00	7,935,000
		<b>PHASE 3</b>											<b>7,995,000</b>

Estimate Totals

		1,000,000	hrs		
Labor	40,000				
Material	6,900,000				
Subcontract	7,895,000				
Other	15,000				
	14,850,000	14,850,000			
Engineered Materials - Ph 2	6,900,000	100,000 %			
Adjustment - Engr Materials	(6,900,000)	(100,000) %			
	14,850,000				
FPG Proj Engr - Phase 1	9,310	22,000 % @	220	42.32 A	
FPG Mech Engr - Phase 1	4,200	10,000 % @	100	42.00 A	
FPG Elec Engr - Phase 1	4,200	10,000 % @	100	42.00 A	
FPG Civil Engr - Phase 1	10,080	24,000 % @	240	42.00 A	
Non-TVA Engr - Phase 1	376,505	257,000 % @	2,570	146.50 A	
FPG Proj Controls - Phase 1	1,660	4,000 % @	40	42.00 A	
FPG Cost Estimating - Phase 1	1,008	2,400 % @	24	42.00 A	
	466,983	15,256,983			
FPG Proj Engr - Phase 2	69,960	20,000 % @	200	349.80 A	
FPG Mech Engr - Phase 2	8,400	20,000 % @	200	42.00 A	
FPG Elec Engr - Phase 2	8,400	20,000 % @	200	42.00 A	
FPG Civil Engr - Phase 2	12,600	30,000 % @	300	42.00 A	
Non-TVA Engr - Phase 2	370,560	600,000 % @	6,000	61.76 A	
FPG Proj Controls - Phase 2	3,360	8,000 % @	80	42.00 A	
FPG Cost Estimating - Phase 2	1,008	2,400 % @	24	42.00 A	
FPG Engr Records - Phase 2	672	1,800 % @	16	42.00 A	
	474,960	15,731,943			
FPG Proj Engr - Phase 3	97,310	22,000 % @	220	442.32 A	
FPG Mech Engr - Phase 3	8,400	20,000 % @	200	42.00 A	
FPG Elec Engr - Phase 3	8,400	20,000 % @	200	42.00 A	
FPG Civil Engr - Phase 3	12,600	30,000 % @	300	42.00 A	
Non-TVA Engr - Phase 3	425,568	575,000 % @	5,750	74.01 A	
FPG Proj Controls - Phase 3	1,660	4,000 % @	40	42.00 A	
FPG Engr Records - Phase 3	1,008	2,400 % @	24	42.00 A	
	554,956	16,286,899			
Phase 1 Plant Support	5,000				L
	5,000	16,291,899			
Phase 2 Plant Support	3,000				L
	3,000	16,294,899			
Phase 3 Plant Support	80,000				L
	80,000	16,374,899			
<b>Total</b>		<b>16,374,899</b>			

**Haber, Stanley M**

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**From:** Haber, Stanley M.  
**Sent:** Tuesday, August 31, 2004 4:09 PM  
**To:** Petty, Harold L.  
**Subject:** FW: KIF530 Input for Cost Estimate Summary 2004 08 26 R0.xls  
**Attachments:** KIF530 Input for Cost Estimate Summary 2004 08 26 R0.xls

**Tracking:**     **Recipient**     **Delivery**  
                  Petty, Harold L. Delivered: 08/31/2004 4:09 PM

Lynn,

I guess that we need to talk about this. I would think that the other disciplines would get a chance to provide a number for their support of this phase 1.

Stan

-----Original Message-----

**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

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

Ron

1	KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage												
2	Phase/Activity	FY04	FY05	FY06	FY07	FY08	Totals	Prv Yrs					
3													
4													
5	<b>Phase 1</b>												
6	Engineering	200	70				270						
7	PE/PC/PS		20				20						
8	Plant Support		5				5						
9	PSS - Inspection						0						
10													
11	Total Phase 1	200	95	0	0	0	295						
12													
13	<b>Phase 2</b>												
14													
15	Engineering (Systems and EDS)	0	150	70	300	0	520						
16													
17	PE/PC/PS	0	25	25	30	0	80						
18													
19	GUBMK/HED (estimate)	0	0		35	0	35						
20	Plant Support	0	0	5	20	0	25						
21													
22	Long Lead Material (LLM)												
23	<i>blank</i>	0	0			0	0						
24	<i>blank</i>	0	0		4000	4000	8000						
25	<i>total LLM</i>	0	0	0	4000	4000	8000						
26													
27	Total Phase 2	0	175	100	4385	4000	8660						
28													



**Haber, Stanley M**

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**From:** Haber, Stanley M.  
**Sent:** Thursday, August 26, 2004 12:00 PM  
**To:** Purkey, Ronald E.  
**Cc:** Petty, Harold L.; Powell, Ronald D.  
**Attachments:** KIF530 Input for Cost Estimate Summary 2004 08 26 R0.xls

**Tracking:**

<b>Recipient</b>	<b>Delivery</b>
Purkey, Ronald E.	Delivered: 08/26/2004 12:00 PM
Petty, Harold L.	Delivered: 08/26/2004 12:00 PM
Powell, Ronald D.	Delivered: 08/26/2004 12:00 PM

Ron,

Attached is the cost input sheet that I would like to revise to capture our proposed cash flow.

Stan



1	KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage	FY04	FY05	FY06	FY07	FY08	Totals	Prv Yrs
2	Phase/Activity							
3								
4								
5	<b>Phase 1</b>							
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								
13	<b>Phase 2</b>							
14								
15	Engineering (Systems and EDS)	0	0	70	300	0	370	
16								
17	PE/PC/PS	0	0	25	30	0	55	
18								
19	GUBMK/HED (estimate)	0	0		35	0	35	
20	Plant Support	0	0	5	20	0	25	
21								
22	Long Lead Material (LLM)							
23	<i>blank</i>	0	0			0	0	
24	<i>blank</i>	0	0		4000	4000	8000	
25	<i>total LLM</i>	0	0	0	4000	4000	8000	
26								
27	Total Phase 2	0	0	100	4385	4000	8485	
28								

1	KIF530: Develop Fly Ash, Gypsum, and Bottom Ash Storage	FY04	FY05	FY06	FY07	FY08	Totals	Prv Yrs
2	Phase/Activity							
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								
52	Total: All Phases	200	75	100	8000	8000	16375	
	<b>Assumptions:</b>							
	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**

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**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,

03/14/2009

TVA-00028250

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

03/14/2009

TVA-00028251

**Haber, Stanley M**

---

**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  
**Attachments:** KIF530 CPJSForm. 2004 05 19pdf.pdf; KIF531 CPJSForm 2004 05 11.pdf

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

# Capital Project Justification Form

**Project Name**

KIF--DEVELOP FLY ASH, GYPSUM &amp; 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: HEDGE COTH, 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-Svc 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**

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

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

**Project ID**

KIF530

**Rev#**

0

**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: \$16,300

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

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

1. Engineering = \$200k in FY 04; \$100k in FY 06.
2. Implementation (Develop by-product handling system.)= \$8,000k in FY 07; \$8,000k in FY 08.
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
4. The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.

### Risks

- Based on similar projects.
- Conceptual estimate for turn-key system.
- Based on historical data (ash) and similar projects (gypsum).
- Support of plant business plan.

### Benefit Assumptions

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.

### Risks

- 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**

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

**Project**

Type: Capital

Cat: REGULATORY

Prgm: No Program

**Location**

Loc: Kingston Fossil Plant

**Estimated Actual****Technical Contact**

Name: HEDGE COTH, MELISSA A

Phone: 423/751-6426

Start Date: 10/01/2004

In-Svc Date: 09/30/2005

Outage Date:

**Responsible Mgr**

Name: DAVIS, MICHAEL D

Phone: 423/751-7864

**Problem Description**

The weirs that discharge from the active ash pond to the stilling pond are 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 discharge side of the weirs 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 existing weirs 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. No water surges that result in dike overtopping and REEs as measured for the first 120 days following implementation. No reportable employee safety incidents as measured by the first 120 days following project implementation.

**Other Options/Alternatives**

Continue to manually operate the system as-is, placing employees at risk should equipment fail, and risking water surges that might overtop the dike and result in REEs.

**Reason For Change**

New project.

**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**

**ECONOMIC INDICATORS**

SUNK CAPITAL PROJECTS: \$0

NPV: -\$250.0

SUNK O&M PROJECTS: \$0

PI: 0

REMAINING COST: \$250

IRR: 0.0

TOTAL COST: \$250

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	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**

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.

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## II. Project Economic Evaluation

**Cost Assumptions**

1. Abandon existing weirs in place; design, procure materials, and install TVA standard Design Weirs - \$250k
2. Assumes that an additional \$150K of funding for this scope is provided by the FGD program.

**Risks**

Based upon similar project costs.

**Benefit Assumptions**

1. Ash pond free water volume accurately determined and reported.
2. No water surges leading to dike overtopping and REEs as measured by the first 120 days following project implementation.
3. No reportable employee safety incidents associated with operation or maintenance of the system as measured by the first 120 days following project implementation.

**Risks**

**Haber, Stanley M**

---

**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  
**Attachments:** KIF530 CPJSForm. 2004 05 19pdf.pdf; KIF531 CPJSForm 2004 05 11.pdf

<b>Tracking:</b>	<b>Recipient</b>	<b>Delivery</b>	<b>Read</b>
	Baugh, James S.	Delivered: 06/09/2004 1:10 PM	
	Bowers, Larry C	Delivered: 06/09/2004 1:10 PM	
	Petty, Harold L.	Delivered: 06/09/2004 1:10 PM	
	Hedgecoth, Melissa A.	Delivered: 06/09/2004 1:10 PM	
	Davis, Michael D	Delivered: 06/09/2004 1:10 PM	Read: 06/09/2004 1:42 PM
	Rehberg, Robert L.	Delivered: 06/09/2004 1:10 PM	
	Holmes, James B.	Delivered: 06/09/2004 1:10 PM	
	Tolliver, Sherry D.	Delivered: 06/09/2004 1:10 PM	

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

03/14/2009

TVA-00028260

# Capital Project Justification Form

**Project Name**

KIF--DEVELOP FLY ASH, GYPSUM &amp; 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: HEDGE COTH, 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-Srv 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**

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

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

**Project ID**

KIF530

**Rev#**

0

**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: \$16,300

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**

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**

1. Engineering = \$200k in FY 04; \$100k in FY 06.
  
2. Implementation (Develop by-product handling system.)= \$8,000k in FY 07; \$8,000k in FY 08.
  
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
  
4. The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.

**Risks**

- Based on similar projects.
- Conceptual estimate for turn-key system.
- Based on historical data (ash) and similar projects (gypsum).
- Support of plant business plan.

**Benefit Assumptions**

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.

**Risks**

- 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**

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

**Project**

Type: Capital

Cat: REGULATORY

Prgm: No Program

**Location**

Loc: Kingston Fossil Plant

**Estimated Actual****Technical Contact**

Name: HEDGE COTH, MELISSA A

Phone: 423/751-6426

Start Date: 10/01/2004

In-Svc Date: 09/30/2005

Outage Date:

**Responsible Mgr**

Name: DAVIS, MICHAEL D

Phone: 423/751-7864

**Problem Description**

The weirs that discharge from the active ash pond to the stilling pond are 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 discharge side of the weirs 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 existing weirs 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. No water surges that result in dike overtopping and REEs as measured for the first 120 days following implementation. No reportable employee safety incidents as measured by the first 120 days following project implementation.

**Other Options/Alternatives**

Continue to manually operate the system as-is, placing employees at risk should equipment fail, and risking water surges that might overtop the dike and result in REEs.

**Reason For Change**

New project.

**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**

**ECONOMIC INDICATORS**

SUNK CAPITAL PROJECTS: \$0

NPV: -\$250.0

SUNK O&M PROJECTS: \$0

PI: 0

REMAINING COST: \$250

IRR: 0.0

TOTAL COST: \$250

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	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**

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 Assumptions**

1. Abandon existing weirs in place; design, procure materials, and install TVA standard Design Weirs - \$250k
2. Assumes that an additional \$150K of funding for this scope is provided by the FGD program.

**Risks**

Based upon similar project costs.

**Benefit Assumptions**

1. Ash pond free water volume accurately determined and reported.
2. No water surges leading to dike overtopping and REEs as measured by the first 120 days following project implementation.
3. No reportable employee safety incidents associated with operation or maintenance of the system as measured by the first 120 days following project implementation.

**Risks**

**Haber, Stanley M**

---

**From:** Long, S. Scott  
**Sent:** Monday, May 17, 2004 11:19 AM  
**To:** Haber, Stanley M.  
**Subject:** RE: KIF466: Request for PA

sorry these comments apply to KIF530

Scott Long  
Manager, Project Development  
Strategic Project Planning, FPG  
LP 2R-C  
423-751-7282

-----Original Message-----

**From:** Haber, Stanley M.  
**Sent:** Monday, May 17, 2004 10:42 AM  
**To:** Long, S. Scott  
**Subject:** RE: KIF466: Request for PA

Scott,

Are you refererring to KIF466 or to KIF531?

Stan

-----Original Message-----

**From:** Long, S. Scott  
**Sent:** Monday, May 17, 2004 10:20 AM  
**To:** Haber, Stanley M.  
**Subject:** RE: KIF466: Request for PA

Need program code assigned.  
Change perf measurement dates to "end of FY06 and end of FY08"  
Payback is 6 years.  
Cost assumption states yearly production of ash in CUBIC YARDS but benefits talk about same production numbers in TONS. Reverify units to make sure benefits align with cost philosophy.

Scott Long  
Manager, Project Development  
Strategic Project Planning, FPG  
LP 2R-C  
423-751-7282

-----Original Message-----

**From:** Haber, Stanley M.  
**Sent:** Friday, May 14, 2004 3:23 PM  
**To:** Auguste, Myriam B.  
**Cc:** Rehberg, Robert L.; Aslinger, Randy T.; Deskins, Earl L; Halicks, David R.; Holmes, James B.; Tolliver, Sherry D.; Gray, Deming; Long, S. Scott  
**Subject:** KIF466: Request for PA

03/14/2009

TVA-00028268

Myriam,

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

Thanks.

Stan  
751.3838

03/14/2009

TVA-00028269

## Haber, Stanley M

---

**From:** Bowers, Larry C  
**Sent:** Tuesday, May 11, 2004 3:20 PM  
**To:** Haber, Stanley M.  
**Subject:** FW: Requested Information about CPJ's KIF 530&531

FYI

-----Original Message-----

**From:** Bowers, Larry C  
**Sent:** Tuesday, May 11, 2004 3:14 PM  
**To:** Campbell, Linda F.  
**Cc:** Petty, Harold L.; Baugh, James S.; Smith, Amos L; Park, Gordon G; Johnson, Lindy P.  
**Subject:** Requested Information about CPJ's KIF 530&531

As we discussed, the CPJ for Project KIF530 is for \$200,000 to fund the Yards' share of the cost for design and permitting of the lateral expansion of the landfill operations into the active ash cell. This expansion will include the interim dredge cell, future ash capacity and future gypsum capacity. The FGD project will play for the balance of this work. This project will provide permitted capacity for both ash and gypsum until 2025 to 2030.

KIF531 is for replacement of the "Kennedy" weir. The justification for this project from the CPJ is given below:

"The weirs that discharges from the active ash pond to the stilling pond are 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 discharge side of the weirs 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."

The things that I would add to the above would be the following:

1. The lateral expansion discussed in KIF530 will necessitate the raising of the dike between the ash and stilling ponds and the replacement of this weir.
2. The method used to raise and lower the water level, i.e., adjusting the guillotine value at the weir outfall is not sound engineering practice and greatly increases the chance of weir failure.
3. Given how close we are on FWV, it is critical that we are allowed to count any available water volume. The EPA guidance on FWV did not anticipate that a weir like this would be in use because in most cases the top of the weir is only slightly below the water surface elevation not a matter of feet as is the case with this weir.

Larry C. Bowers  
Senior Solid Waste Specialist  
Environmental Affairs  
1101 Market Street, LP 5D  
Chattanooga, Tn 37402-2801  
423-751-4947 Fax: 423-751-7011  
Pager: 1-800-283-0028,2421  
lcbowers@tva.gov

## Haber, Stanley M

---

**From:** Bowers, Larry C  
**Sent:** Tuesday, May 11, 2004 3:20 PM  
**To:** Haber, Stanley M.  
**Subject:** FW: Requested Information about CPJ's KIF 530&531

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-----Original Message-----

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**Sent:** Tuesday, May 11, 2004 3:14 PM  
**To:** Campbell, Linda F.  
**Cc:** Petty, Harold L.; Baugh, James S.; Smith, Amos L; Park, Gordon G; Johnson, Lindy P.  
**Subject:** Requested Information about CPJ's KIF 530&531

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The things that I would add to the above would be the following:

1. The lateral expansion discussed in KIF530 will necessitate the raising of the dike between the ash and stilling ponds and the replacement of this weir.
2. The method used to raise and lower the water level, i.e., adjusting the guillotine value at the weir outfall is not sound engineering practice and greatly increases the chance of weir failure.
3. Given how close we are on FWV, it is critical that we are allowed to count any available water volume. The EPA guidance on FWV did not anticipate that a weir like this would be in use because in most cases the top of the weir is only slightly below the water surface elevation not a matter of feet as is the case with this weir.

Larry C. Bowers  
Senior Solid Waste Specialist  
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1101 Market Street, LP 5D  
Chattanooga, Tn 37402-2801  
423-751-4947 Fax: 423-751-7011  
Pager: 1-800-283-0028,2421  
lcbowers@tva.gov



**Haber, Stanley M**

---

**From:** Hedgecoth, Melissa A.  
**Sent:** Wednesday, April 28, 2004 2:47 PM  
**To:** Haber, Stanley M.  
**Subject:** RE: Emailing: KIF530 New Ash Pond capacity CPJSForm 2004 04 24.pdf

Looks good to me.

-----Original Message-----

**From:** Haber, Stanley M.  
**Sent:** Wednesday, April 28, 2004 10:17 AM  
**To:** Hedgecoth, Melissa A.  
**Cc:** Petty, Harold L.; Davis, Michael D  
**Subject:** Emailing: KIF530 New Ash Pond capacity CPJSForm 2004 04 24.pdf

Missy,

I have reviewed the CPJ that you prepared for this project and have made some editorial adjustments. I would like you to review my comments. Please look over the attached file by close-of-business today and let me know if I need to adjust any of my changes to make this CPJ accurate.

Thanks for your help.

## Haber, Stanley M

---

**From:** Haber, Stanley M.  
**Sent:** Wednesday, April 28, 2004 10:17 AM  
**To:** Hedgecoth, Melissa A.  
**Cc:** Petty, Harold L.; Davis, Michael D  
**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...

Missy,

I have reviewed the CPJ that you prepared for this project and have made some editorial adjustments. I would like you to review my comments. Please look over the attached file by close-of-business today and let me know if I need to adjust any of my changes to make this CPJ accurate.

Thanks for your help.

# 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-Svc 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**

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

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

**Project ID**

KIF530

**Rev#**

0

**News Release**

No Information Available

# 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: \$16,300

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**

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**

1. Engineering = \$200k in FY 04; \$100k in FY 06.
  
2. Implementation (Develop by-product handling system.)= \$8,000k in FY 07; \$8,000k in FY 08.
  
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
  
4. The existing dredge cells and ponds shall be utilized to the extent possible to obtain an additional ten years of disposal capacity.

**Risks**

- Based on similar projects.
- Conceptual estimate for turn-key system.
- Based on historical data (ash) and similar projects (gypsum).
- Support of plant business plan.

**Benefit Assumptions**

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.

**Risks**

- 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:** Monday, April 26, 2004 9:14 AM  
**To:** Deskins, Earl L.; Gray, Deming; Holmes, James B.; Nelson, Gary R.; Campbell, Linda F.; Rehberg, Robert L.; Nale, Leslie W.  
**Cc:** Keller, Darlene; Petty, Harold L.; Powell, Ronald D.; Miller, Evelyn C.; Hedgecoth, Melissa A.; Smith, Daniel R.  
**Subject:** Kingston Ash Pond-Related Projects (Draft EMPs for KIF530 and KIF531)  
**Attachments:** KIF530 EMP\_Appendix H.doc; KIF531 EMP\_Appendix H.doc

<b>Tracking:</b>	<b>Recipient</b>	<b>Delivery</b>
	Deskins, Earl L.	Delivered: 04/26/2004 9:15 AM
	Gray, Deming	Delivered: 04/26/2004 9:15 AM
	Holmes, James B.	Delivered: 04/26/2004 9:15 AM
	Nelson, Gary R.	Delivered: 04/26/2004 9:15 AM
	Campbell, Linda F.	Delivered: 04/26/2004 9:15 AM
	Rehberg, Robert L.	Delivered: 04/26/2004 9:15 AM
	Nale, Leslie W.	Delivered: 04/26/2004 9:15 AM
	Keller, Darlene	Delivered: 04/26/2004 9:14 AM
	Petty, Harold L.	Delivered: 04/26/2004 9:14 AM
	Powell, Ronald D.	Delivered: 04/26/2004 9:14 AM
	Miller, Evelyn C.	Delivered: 04/26/2004 9:14 AM
	Hedgecoth, Melissa A.	Delivered: 04/26/2004 9:14 AM
	Smith, Daniel R.	

Last Friday in our monthly projects meeting we discussed the upcoming FGD projects. Two related project scopes that we discussed are the replacement of the ash pond weirs (KIF531) and the development of dry fly ash storage (KIF530). At this point in time I think that the draft EMPs give a clearer picture of the proposed scope than the PJs do. I am attaching the draft EMPs for these two projects for your information and comment.

Please let me know if you have any questions.

Stan Haber  
751.3838  
423.580.4830

03/14/2009

TVA-00028278

**Appendix A**

Page 1 of 6

**Project Environmental Management Plan Outline**

Prepared by: S.M. Haber/R. D. Powell Date: 4/15/04

**1. Detail Description of Project:**

KIF530: 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.)

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



**Appendix A**

**Project Environmental Management Plan Outline**

		<b>Environmental Concern?</b>		<b>Control Measures to be used</b>
		<b><u>YES</u></b>	<b><u>NO</u></b>	
5e.	Stream on the Nationwide Rivers Inventory:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5f.	Wetlands, Waterflow, Stream Channels, ditches or Stream Banks:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5g.	100-Year Floodplain:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5h.	Unique or Aquatic Habitat:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
6.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>C. Solid Waste</b>				
1.	Garbage:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Construction/Demolition Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Clearing Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
4.	Sandblasting Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.	Oil Contaminated Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
6.	Other (e.g., sand, glass, etc.): _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>D. Hazardous Waste</b>				
1.	Painting Waste (solvents, etc.):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Sandblasting Waste (Hazardous):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Degreasing Solvents:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
4.	Corrosive Wastes (acids, caustics):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.	Pesticides:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
6.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>E. Asbestos</b>				
1.	Insulation Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Roofing Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Floor Tile Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

**Appendix A**

**Project Environmental Management Plan Outline**

		<u>Environmental Concern?</u>		<u>Control Measures to be used</u>
		<u>YES</u>	<u>NO</u>	
4.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>F. PCB</b>				
1.	Handling & Storage:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Liquid Waste Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Equipment Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
4.	Contaminated Debris Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.	Other (capacitors, transformers, etc.): _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>G. SPCC/BMP</b>				
1.	Fuel/Lube/Insulating oil Storage:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Oil Transfer (Procedure):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>H. Underground Storage Tanks (UST's)</b>				
1.	Contaminated Soil:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Tank Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>I. Above-ground Storage Tanks (AST's)</b>				
1.	Contaminated Soil:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Tank Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>J. Plant or Animal</b>				
1.	Potentially affect:			
	Endangered, threatened ,or Special Status Species:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
	Migratory bird populations:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

**Appendix A**

**Project Environmental Management Plan Outline**

		<b>Environmental Concern?</b>		<b>Control Measures to be used</b>
		<b><u>YES</u></b>	<b><u>NO</u></b>	
	Unique or important terrestrial habitat:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Potentially take prime or unique farmland out of production:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Contribute to the spread of exotic or invasive species:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>K.</b>	<b>Other:</b>			
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:	<input type="checkbox"/>		_____
	Historic structures, historic sites, Native American religious or Cultural properties, or archaeological sites:	<input type="checkbox"/>		_____

**Appendix A**

**Project Environmental Management Plan Outline**

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

4.	Employee Training	Required?		Provided / Verified
		Y	N	
A.	Hazardous Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
B.	Asbestos Competent Person	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
C.	Emergency Spill/ Prevention	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
D.	OSHA 1910.120	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
E.	Other (e.g., Ammonia Awareness): _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

**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**

Page 6 of 6

**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

\_\_\_\_\_

**Appendix A**

**Project Environmental Management Plan Outline**

Prepared by: S.M. Haber/R. D. Powell Date: 4/15/04

**1. Detail Description of Project:**

KIF531: Scope includes replacement of existing weirs (total of 2; skimmer structure to be removed where applicable, and the weirs sealed and abandoned in place). The water level in the pond will need to be drawn down such that the top of the weir is exposed.

It also includes the design and installation of a new weir system. The new system will use a standard TVA weir/skimmer design. Provisions will be made to route the existing lime injection system to the new weir system. Weirs for the new system will be located in the southeast corner of the main ash pond, close to the stilling pond. The height of the stilling basin weirs will need to be raised as part of this project (final height TBD). Piping (permanent) will be installed across the dike separating the main ash pond from the stilling basin to allow the main ash pond to drain into the stilling basin.

The need for an emergency overflow weir in the dike between the main ash pond and the stilling basin, and an emergency weir on the outer dike from the stilling basin to the intake structure will be assessed.

Sheet piling (temporary) will be installed to allow the area where the new weirs will be installed to be pumped out. The existing weirs and limestone injection system will be left in service until the replacement system is installed and functional.

<b>Environmental Concern?</b>		<b>Control Measures to be used</b>
<b>YES</b>	<b>NO</b>	

**2. Potential environmental issues**

**A. Air**

- |                        |                          |                                     |       |
|------------------------|--------------------------|-------------------------------------|-------|
| 1. Fugitive Emissions: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 2. Open Burning:       | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 3. New Source Review:  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 4. Other: _____        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |

**B. Water**

- |                            |                          |                                     |       |
|----------------------------|--------------------------|-------------------------------------|-------|
| 1. Site / Erosion Control: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 2. Sewage:                 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 3. Contaminated Runoff:    | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |

**Appendix A**

**Project Environmental Management Plan Outline**

		<b>Environmental Concern?</b>		<b>Control Measures to be used</b>
		<b><u>YES</u></b>	<b><u>NO</u></b>	
4.	Process Wastewater (adding pollutants or rerouting flows):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.	Potentially affect:			
5a.	Surface Water:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5b.	Groundwater:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5c.	Drinking Water Supply or Potable Water:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5d.	Wild or Scenic Rivers or Their Tributaries:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5e.	Stream on the Nationwide Rivers Inventory:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5f.	Wetlands, Waterflow, Stream Channels, ditches or Stream Banks:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5g.	100-Year Floodplain:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5h.	Unique or Aquatic Habitat:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
6.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>C.</b>	<b>Solid Waste</b>			
1.	Garbage:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Construction/Demolition Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Clearing Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
4.	Sandblasting Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.	Oil Contaminated Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
6.	Other (e.g., sand, glass, etc.): _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>D.</b>	<b>Hazardous Waste</b>			
1.	Painting Waste (solvents, etc.):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Sandblasting Waste (Hazardous):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Degreasing Solvents:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

Appendix A

Project Environmental Management Plan Outline

		<u>Environmental Concern?</u>		<u>Control Measures to be used</u>
		<u>YES</u>	<u>NO</u>	
4.	Corrosive Wastes (acids, caustics):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.	Pesticides:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
6.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>E. Asbestos</b>				
1.	Insulation Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Roofing Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Floor Tile Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
4.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>F. PCB</b>				
1.	Handling & Storage:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Liquid Waste Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Equipment Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
4.	Contaminated Debris Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.	Other (capacitors, transformers, etc.): _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>G. SPCC/BMP</b>				
1.	Fuel/Lube/Insulating oil Storage:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Oil Transfer (Procedure):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>H. Underground Storage Tanks (UST's)</b>				
1.	Contaminated Soil:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Tank Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>I. Above-ground Storage Tanks (AST's)</b>				



**Appendix A**

**Project Environmental Management Plan Outline**

		<b>Environmental Concern?</b>		<b>Control Measures to be used</b>
		<b><u>YES</u></b>	<b><u>NO</u></b>	
1.	Contaminated Soil:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Tank Disposal:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>J. Plant or Animal</b>				
1.	Potentially affect:			
	Endangered, threatened, or Special Status Species:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
	Migratory bird populations:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
	Unique or important terrestrial habitat:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.	Potentially take prime or unique farmland out of production:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.	Contribute to the spread of exotic or invasive species:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
<b>K. Other:</b>				
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:	<input type="checkbox"/>		_____
	Historic structures, historic sites, Native American religious or Cultural properties, or archaeological sites:	<input type="checkbox"/>		_____

**Appendix A**

**Project Environmental Management Plan Outline**

3.	Environmental Permits/Notifications	Permit Received?		Type	Date of Notification
		Y	N		
A.	Air:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
B.	Water:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	<u>Discharge point to stilling pool only changed</u>
C.	Hazardous Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
D.	Asbestos:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
E.	PCB:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
F.	UST's / AST's:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
G.	Solid Waste:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
H.	Other (i.e., Spill Notification): _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____

4.	Employee Training	Required?		Provided / Verified
		Y	N	
A.	Hazardous Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
B.	Asbestos Competent Person	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
C.	Emergency Spill/ Prevention	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
D.	OSHA 1910.120	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
E.	Other (e.g., Ammonia Awareness): _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

**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**

Page 6 of 6

**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**

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**From:** Hedgecoth, Melissa A.  
**Sent:** Wednesday, March 31, 2004 2:38 PM  
**To:** Haber, Stanley M.  
**Subject:** KIF530 - Develop fly ash, gypsum and bottom ash disposal capacity

Stan,  
Just wanted to let you know that I added the subject CPJ to the yard projects for FY04.  
Thanks,  
Missy