Proposal Number:
WO/JO Number:
Letter Number : PP-5146-SC-C

Scope Change Number: 2A

TENNESSEE VALLEY AUTHORITY, FOSSIL AND HYDRO POWER
TASK ASSIGNMENT ORDER (TAO)

CONTRACT NUMBER: **99PPW-246289**
CONTRACTOR: **Parsons**
TASK NUMBER: **PR - 0176- 1423241**
REVISION NUMBER: **02**

PROJ ENG/TECH REP: **C. Minghini**
TECHNICAL MGR: **Ron E. Purkey**
EFFECTIVE BEGIN DATE: **07/17/2000**
CURRENT END DATE: **05/18/2001**
PHASE:

PLANT: **Kingston Fossil Plant**

PROJECT: **Coal Yard Runoff Pond Discharge Pipe Upgrade, Phase 2**

TASK DESCRIPTION: **Phase 2 Engineering and Design**

DESCRIPTION OF REVISION: **Extend end date to May 18, 2001**

Subcontractor Name:

FEE TYPE APPLICABLE TO THIS TAO:

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

Fixed-Percentage Type

TASK SUMMARY

	Previous Revision		Net Change		Total Task Authorization
Negotiated Estimated Cost	$ 7,459	+	$ 0	=	$ 7,459
Fixed Fee	$ 401	+	$ 0	=	$ 401
Earned Award Fee to Date	$ 0	+	$ 0	=	$ 0
Available Award Fee	$ 0	+	$ 0	=	$ 0
Total Estimated Price	$ 7,860	+	$ 0	=	$ 7,860

TVA SHORT CODE: 0014RTY PCN: KIF259 LOCATION CODE: 0007 PERFORMING UNIT: 17429

NA Appropriated Funds Commit $: $0 Fiscal Year: _____

APPROVED BY:

John W DeRieux for LAW
TVA Contract Administrator

10 Jan 01
Date

E-Mailed 1/10/01

DISTRIBUTION:

Parsons (cc)
Financial Services, Compliance Specialist (cc)
Contract Administrator (Original)
Technical Manager (cc)
Proj Eng/Tech Representative (cc)

P. Rose 1/10/01

01/09/2001

Letter Number : PP-5146-SC-C

Scope Change Number: 2A

PROPOSAL INTERNAL REVIEW SHEET

CONTRACT NUMBER: **99PPW-246289**
CONTRACTOR: **Parsons**
TASK NUMBER: **PR - 0176- 1423241**
PHASE:

PROJ ENG/TECH REP: **C. Minghini**
TECHNICAL MGR: **Ron E. Purkey**
EFFECTIVE BEGIN DATE: **07/17/2000**
CURRENT END DATE: ~~**02/16/2001**~~ 5/18/01

PLANT: **Kingston Fossil Plant**

PROJECT: **Coal Yard Runoff Pond Discharge Pipe Upgrade, Phase 2**

TASK DESCRIPTION: **Phase 2 Engineering and Design**

Subcontractor Name:

FEE TYPE APPLICABLE TO THIS TAO:

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

Fixed-Percentage Type

DESCRIPTION OF REVISION: **Extend end date to May 18, 2001**

Net Change		
Negotiated Estimated Cost	$	0
Fixed Fee	$	0
Available Award Fee	$	0
Total Estimated Price	**$**	0

APPROVAL:

* **Please provide or confirm the above TAO information and short code reference on attached page.**
* **If the attached proposal is to be approved, please complete, sign and return this review sheet to Dianne DeRieux or Patsy Rogers, LP 2R-C, so that the TAO form to be signed by the appropriate Department Manager can be generated.**

RSP Cherie M Minghini — 1/8/01
Date

DISAPPROVAL:

* **If the attached proposal is not acceptable, please contact the Contractor to prepare a revised proposal.**
* **If the attached proposal is to be cancelled and the work is not to be performed by the Contractor, sign below and return to Dianne or Patsy.**

_____ _____
Date

01/04/2001

Short code Attachment list...

CONTRACT NUMBER:TV-**246289** CONTRACTOR: **Parsons**

TASK NUMBER: **PR -0176-1423241**

NOTE: Stanley Blair, X-6840 , LP 1F-C to confirm or obtain short code information

Short Code	PCN	Loc Code	Perf Unit	Commit $ (Approp. Only)	Comments
0014RTY	KIF259	0007	17429		

PARSONS

Parsons Energy & Chemicals Group Inc.
633 Chestnut Street, Suite 400 • Chattanooga, Tennessee 37450-0400 • (423) 757-8020 • Fax: (423) 266-0922 • www.parsons.com

TENNESSEE VALLEY AUTHORITY
TVA CONTRACT 99PPW-246289
KINGSTON FOSSIL PLANT
COAL YARD RUNOFF POND DISCHARGE PIPE UPGRADE, PHASE 2
PR-RTP-0176

January 2, 2001
PP-5146-SC-C
Scope Change: 2A
Requester: C. Minghini

Mr. Lee A. Nash
Manager of Project and Discipline Engineering
Tennessee Valley Authority
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Nash:

The current TAO close date for the subject task is February 16, 2001. We are requesting that this TAO be extended to April 20, 2001 in order to incorporate all red-line construction changes. We understand that there is construction work remaining to be done on this project. If you have any questions, please feel free to contact Mr. Dan Smith at (423) 757-8088 or me at (423) 757-8027.

Very truly yours,

William D. Griffith, P. E.
Manager Chattanooga Operations

P. Rogers 1/4/01

Minghini
2RF4

PARSONS

Parsons Energy & Chemicals Group Inc.
633 Chestnut Street, Suite 400 • Chattanooga, Tennessee 37450-0400 • (423) 757-8027 • Fax: (423) 266-0922 • www.parsons.com

TENNESSEE VALLEY AUTHORITY
TVA CONTRACT 99PPW-246289
KINGSTON FOSSIL PLANT
COAL YARD RUNOFF POND DISCHARGE PIPE UPGRADE, PHASE 2
PR-RTP-0176

January 2, 2001
PP-5146-SC-C
Scope Change: 2A
Requester: C. Minghini

Mr. Lee A. Nash
Manager of Project and Discipline Engineering
Tennessee Valley Authority
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Nash:

The current TAO close date for the subject task is February 16, 2001. We are requesting that this TAO be extended to April 20, 2001 in order to incorporate all red-line construction changes. We understand that there is construction work remaining to be done on this project. If you have any questions, please feel free to contact Mr. Dan Smith at (423) 757-8088 or me at (423) 757-8027.

Very truly yours,

William D. Griffith, P. E.
Manager Chattanooga Operations

Proposal Number:
WO/JO Number:
Letter Number : PP-4981-SC-C

Scope Change Number: 1A

TENNESSEE VALLEY AUTHORITY, FOSSIL AND HYDRO POWER
TASK ASSIGNMENT ORDER (TAO)

CONTRACT NUMBER: **99PPW-246289**
CONTRACTOR: **Parsons**
TASK NUMBER: **PR - 0176- 1423241**
REVISION NUMBER: **01**

PROJ ENG/TECH REP: **C. Minghini**
TECHNICAL MGR: **Ron E. Purkey**
EFFECTIVE BEGIN DATE: **07/17/2000**
CURRENT END DATE: ~~**10/31/2000**~~ 02/16/01
PHASE:

PLANT: **Kingston Fossil Plant**

PROJECT: **Coal Yard Runoff Pond Discharge Pipe Upgrade, Phase 2**

TASK DESCRIPTION: **Phase 2 Engineering and Design**

DESCRIPTION OF REVISION: **Extend end date to February 16, 2001.**

Subcontractor Name:

FEE TYPE APPLICABLE TO THIS TAO:

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

TASK SUMMARY

	Previous Revision		Net Change		Total Task Authorization
Negotiated Estimated Cost	$ 7,459	+	$ 0	=	$ 7,459
Fixed Fee	$ 401	+	$ 0	=	$ 401
Earned Award Fee to Date	$ 0	+	$ 0	=	$ 0
Available Award Fee	$ 0	+	$ 0	=	$ 0
Total Estimated Price	$ 7,860	+	$ 0	=	$ 7,860

TVA SHORT CODE: 0014RTY PCN: KIF259 LOCATION CODE: 0007 PERFORMING UNIT: 17429

NA Appropriated Funds Commit $: $0 Fiscal Year: _____

APPROVED BY:

Lee A Nash
TVA Contract Administrator

9/29/00
Date

DISTRIBUTION:

Parsons (cc)
Contract Administrator (Original)
Proj Eng/Tech Representative (cc)
Financial Services, Compliance Specialist (cc)
Technical Manager (cc)

09/29/2000

Letter Number : PP-4981-SC-C

Scope Change Number: 1A

PROPOSAL INTERNAL REVIEW SHEET

CONTRACT NUMBER: **99PPW-246289**
CONTRACTOR: **Parsons**
TASK NUMBER: **PR - 0176- 1423241**

PROJ ENG/TECH REP: **C. Minghini**
TECHNICAL MGR: **Ron E. Purkey**
EFFECTIVE BEGIN DATE: **07/17/2000**
CURRENT END DATE: **10/31/2000**

PHASE:

PLANT: **Kingston Fossil Plant**

PROJECT: **Coal Yard Runoff Pond Discharge Pipe Upgrade, Phase 2**

TASK DESCRIPTION: **Phase 2 Engineering and Design**

Subcontractor Name:

FEE TYPE APPLICABLE TO THIS TAO:

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

Fixed-Percentage Type

DESCRIPTION OF REVISION: **Extend end date to February 16, 2001.**

Net Change		
Negotiated Estimated Cost	$	0
Fixed Fee	$	0
Available Award Fee	$	0
Total Estimated Price	**$**	0

APPROVAL:

* **Please provide or confirm the above TAO information and short code reference on attached page.**
* **If the attached proposal is to be approved, please complete, sign and return this review sheet to Dianne DeRieux or Patsy Rogers, LP 2R-C, so that the TAO form to be signed by the appropriate Department Manager can be generated.**

/s/ Ron Purkey/HLPOTY

9-29-2K
Date

DISAPPROVAL:

* **If the attached proposal is not acceptable, please contact the Contractor to prepare a revised proposal.**
* **If the attached proposal is to be cancelled and the work is not to be performed by the Contractor, sign below and return to Dianne or Patsy.**

Date

09/26/2000

Short code Attachment list...

CONTRACT NUMBER:TV-246289 CONTRACTOR: **Parsons**

TASK NUMBER: **PR -0176-1423241**

NOTE: Stanley Blair, X-6840 , LP 1F-C to confirm or obtain short code information

Short Code	PCN	Loc Code	Perf Unit	Commit $ (Approp. Only)	Comments
0014RTY	KIF259	0007	17429		

PARSONS

Parsons Energy & Chemicals Group Inc.
633 Chestnut Street, Suite 400 • Chattanooga, Tennessee 37450-0400 • (423) 757-8020 • Fax: (423) 266-0922 • www.parsons.com

TENNESSEE VALLEY AUTHORITY
TVA CONTRACT 99PPW-246289
KINGSTON FOSSIL PLANT
COAL YARD RUNOFF POND DISCHARGE PIPE UPGRADE, PHASE 2
PR-RTP-0176

September 21, 2000
PP-4981-SC-C
Scope Change: 1A
Requester: C. Minghini

Mr. Lee A. Nash
Manager of Project and Discipline Engineering
Tennessee Valley Authority
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Nash:

The current TAO close date for the subject task is October 31, 2000. We are requesting that this TAO be extended to January 15, 2001, in order to incorporate all red-line construction changes. We understand that there is construction work remaining to be done on this project. If you have any questions, please feel free to contact Mr. Dan Smith at (423) 757-8088 or me at (423) 757-8027.

Very truly yours,

William D. Griffith, P. E. VSS
Manager Chattanooga Operations

Proposal Number:
WO/JO Number:
Letter Number : PP-4884-PR-C

Scope Change Number: 0A

TENNESSEE VALLEY AUTHORITY, FOSSIL AND HYDRO POWER
TASK ASSIGNMENT ORDER (TAO)

CONTRACT NUMBER: **99PPW-246289**
CONTRACTOR: **Parsons**
TASK NUMBER: **PR - 0176- 1423241**
REVISION NUMBER: **00**

PROJ ENG/TECH REP: **C. Minghini**
TECHNICAL MGR: **Ron E. Purkey**
EFFECTIVE BEGIN DATE: **07/17/2000**
CURRENT END DATE: **10/31/2000**
PHASE:

PLANT: **Kingston Fossil Plant**

PROJECT: **Coal Yard Runoff Pond Discharge Pipe Upgrade, Phase 2**

TASK DESCRIPTION: **Phase 2 Engineering and Design**

DESCRIPTION OF REVISION: **Initial Authorization**

Subcontractor Name:

FEE TYPE APPLICABLE TO THIS TAO:

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

TASK SUMMARY

	Previous Revision		Net Change		Total Task Authorization
Negotiated Estimated Cost	$ 0	+	$ 7,459	=	$ 7,459
Fixed Fee	$ 0	+	$ 401	=	$ 401
Earned Award Fee to Date	$ 0	+	$ 0	=	$ 0
Available Award Fee	$ 0	+	$ 0	=	$ 0
Total Estimated Price	$ 0	+	$ 7,860	=	$ 7,860

TVA SHORT CODE: 0014RTY PCN: KIF259 LOCATION CODE: 0007 PERFORMING UNIT: 17429

NA Appropriated Funds Commit $: $0 Fiscal Year: ____

APPROVED BY:

Lee A Nace — 7/19/00

TVA Contract Administrator — Date

E-Mailed 7/20/00

DISTRIBUTION:

Parsons (cc)
Financial Services, Compliance Specialist (cc)
Contract Administrator (Original)
Technical Manager (cc)
Proj Eng/Tech Representative (cc) P. Rogers 7/20/00

07/18/2000

Letter Number : PP-4884-PR-C

Scope Change Number: 0A

PROPOSAL INTERNAL REVIEW SHEET

CONTRACT NUMBER: **99PPW-246289**
CONTRACTOR: **Parsons**
TASK NUMBER: **PR - 0176-~~PR0176~~ 1423241**
PHASE:

PROJ ENG/TECH REP: **C. Minghini**
TECHNICAL MGR: **Ron E. Purkey**
EFFECTIVE BEGIN DATE: **07/17/2000**
CURRENT END DATE: **10/31/2000**

PLANT: **Kingston Fossil Plant**

PROJECT: **Coal Yard Runoff Pond Discharge Pipe Upgrade, Phase 2**

TASK DESCRIPTION: **Phase 2 Engineering and Design**

Subcontractor Name:

FEE TYPE APPLICABLE TO THIS TAO:

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

Fixed-Percentage Type

DESCRIPTION OF REVISION: **Initial Authorization**

Net Change		
Negotiated Estimated Cost	$	7,459
Fixed Fee	$	401
Available Award Fee	$	0
Total Estimated Price	**$**	7,860

APPROVAL:

* **Please provide or confirm the above TAO information and short code reference on attached page.**
* **If the attached proposal is to be approved, please complete, sign and return this review sheet to Dianne DeRieux or Patsy Rogers, LP 2L-C, so that the TAO form to be signed by the appropriate Department Manager can be generated.**

SEB 7/17/00

7/17/00
Date

DISAPPROVAL:

* **If the attached proposal is not acceptable, please contact the Contractor to prepare a revised proposal.**
* **If the attached proposal is to be cancelled and the work is not to be performed by the Contractor, sign below and return to Dianne or Patsy.**

Date

07/14/2000

Short code Attachment list...

CONTRACT NUMBER:TV-246289 CONTRACTOR: Parsons

TASK NUMBER: PR -0176-PR0176

NOTE: Stanley Blair, X-6840 , LP 1F-C to confirm or obtain short code information

Short Code	PCN	Loc Code	Perf Unit	Commit $ (Approp. Only)	Comments
0014RTY	KIF259				

PARSONS

Parsons Energy & Chemicals Group Inc.
633 Chestnut Street, Suite 400 • Chattanooga, Tennessee 37450-0400 • (423) 757-8020 • Fax: (423) 266-0922 • www.parsons.com

TENNESSEE VALLEY AUTHORITY
CONTRACT 99PPW-246289
KINGSTON FOSSIL PLANT
KIF 353
COAL YARD RUNOFF POND DISCHARGE PIPE UPGRADE, PHASE 2
PR-RTP-0176

July 13, 2000
PP-4884-PR-C
Scope Change: 0A
Requested Start Date: July 17, 2000
Requester: C. Minghini

Mr. Lee A. Nash
Manager of Fossil Engineering
Tennessee Valley Authority
1101 Market Street
Chattanooga, TN 37402-2801

Dear Mr. Nash:

Parsons is pleased to submit this proposal for providing Phase 2 engineering and design associated with the coal yard runoff pond discharge pipe upgrade at Kingston Fossil Plant.

SCOPE

It is Parsons understanding that TVA intends to install the new piping using the pipe routing drawing prepared by Parsons during Phase 1. The scope of work is as follows:

- Coordinate as needed with TVA electrical engineering and plant personnel regarding the coal runoff pond level for automated pump operation;
- Offer home office design support during installation of piping and coal yard regrading/installation of spillway;
- Incorporate red-line construction changes into the Phase 1 drawings and issue drawings as Phase 2 drawings.

Meetings

We have provided for Parsons' attendance at one meeting (at Chattanooga or Kingston Fossil Plant).

P. Rogers 7/14/00

Assumptions

Redesign of Phase 1 design due to field changes arising from pipe installation or construction of spillway/coal yard regrading is not included.

Deliverables

Phase 2 drawings incorporating red-line changes to the Phase 1 drawings (total of 3 drawings).

ORGANIZATION

All work will be performed under the direction of Mr. Bill Griffith, Manager Chattanooga Operations, who is directly responsible to TVA for the overall quality of the work. Mr. Dan Smith will serve as the Project Manager and Lead Engineer. These individuals will be supported by Parsons engineering and design personnel as required to complete the work.

SCHEDULE

This task can be completed by September 29, 2000 if authorization to proceed is received by July 17, 2000.

PRICING

All work performed will be in accordance with the terms of Contract 99PPW-246289. The estimated engineering cost for the work described here is $7860.

This estimate was prepared assuming no overtime will be required. However, should emergency conditions or schedule constraints occur, Parsons requests the flexibility to use additional overtime under the original authorization provided the total price is not exceeded.

SUMMARY

Parsons is pleased with the opportunity to be of service to TVA and we look forward to the successful completion of this task. If you have any questions, please feel free to contact Mr. Dan Smith at (423) 757-8088 or me at (423) 757-8027.

Very truly yours,

William D. Griffith, P.E. VSS
Manager Chattanooga Operations

Attachment: Proposal Pricing Forms

PARSONS ENERGY & CHEMICALS GROUP INC.
TVA FHP TASK PROPOSAL FORM - CONTRACT 99PPW-246289
KIF 353 Coal Yard Runoff Pond Discharge Pipe Upgrade Phase 2
PR - 0176 SC No.: 0A
13-Jul-00

"LABOR" & "OVERTIME LABOR"

POSITION/ GRADE	ST Billing Rate ($/HR)	ST HOURS	ST COST	OT Billing Rate ($/HR)	OT HOURS	OT COST($)	TOTAL COST($)
Project Management	$87.64	5	$414	$69.47	0	$0	$414
Technical Management	$75.16	2	$162	$59.57	0	$0	$162
Project Services	$62.88	6	$357	$49.84	0	$0	$357
SUBTOTAL SERVICES		13	$ 933		0	$ -	$ 933
Senior Supvervising Engineer (E11)	$84.92	20	$1,698	$67.31	0	$0	$1,698
Supervising Engineer (E10)	$77.15	30	$2,314	$61.15	0	$0	$2,314
Principal Engineer (E09)	$64.52	10	$645	$51.14	0	$0	$645
Senior Engineer (E08)	$63.97	0	$0	$50.71	0	$0	$0
Engineer II (E07)	$50.60	0	$0	$40.11	0	$0	$0
Engineer I (E06)	$42.95	0	$0	$34.04	0	$0	$0
Associate Engineer (E05)	$41.77	0	$0	$33.11	0	$0	$0
Principal Designer (N16)	$58.93	0	$0	$70.07	0	$0	$0
Senior Designer (N14)	$54.78	20	$1,096	$65.13	0	$0	$1,096
Designer II (N12)	$44.45	0	$0	$52.85	0	$0	$0
Senior Drafter (N10)	$35.14	0	$0	$41.78	0	$0	$0
Drafter (N08)	$25.38	0	$0	$30.17	0	$0	$0
Associate Drafter (N06)	$23.05	0	$0	$27.41	0	$0	$0
Technician (N04)	$19.52	0	$0	$23.21	0	$0	$0
Proj. Sect'y II (N05)	$20.83	0	$0	$24.76	0	$0	$0
Proj. Sect'y I (N04)	$19.52	0	$0	$23.21	0	$0	$0
Word Processing (N03)	$17.57	0	$0	$20.89	0	$0	$0
Clerical (N02)	$12.59	0	$0	$14.97	0	$0	$0
SUBTOTAL ENG'G & DESIGN		80	$ 5,753		0	$ -	$ 5,753

SUBTOTAL LABOR	$6,687
TRANSPORTATION & SUBSISTANCE	$18
TEMPORARY ASSIGNMENT LIVING EXPENSES	$0
COMPUTERS, CAD, TELEPHONE, REPRODUCTION	$455
REPROGRAPHICS (OUTSIDE SERVICES)	$0
MISCELLANEOUS EXPENSES	$300
SUBCONTRACTED SERVICES	$0
SUBTOTAL EXPENSES	$772
SUBTOTAL (Labor & Expenses)	$7,459
FIXED FEE @ 6% (APPLIED TO LABOR ONLY)	$401
TOTAL TASK ESTIMATED COST	$7,860

Man-hours by Discipline - Provided for reference only

Project Management	5	Mechanical	20
Technical Management	2	Electrical	0
Project Services	6	Cntr'l Sytms	0
Specialist	0	Structural	60
		TOTAL	93

PARSONS ENERGY & CHEMICALS GROUP INC.
TVA FHP TASK PROPOSAL FORM - CONTRACT 99PPW-246289
KIF 353 Coal Yard Runoff Pond Discharge Pipe Upgrade Phase 2
PR - 0176 SC No.: 0A
13-Jul-00

Project Spend Plan

17-Jul-00 - Project Start

29-Sep-00 - Project Complete

2 - Project Duration - Months

	Hours	Cost
Month 1	53	$4,245
Month 2	40	$3,214
Month 3	0	$0
Month 4	0	$0
Month 5	0	$0
Month 6	0	$0
Month 7	0	$0
Month 8	0	$0
Month 9	0	$0
Month 10	0	$0
Month 11	0	$0
Month 12	0	$0
Month 13	0	$0
Month 14	0	$0
Month 15	0	$0
Month 16	0	$0
Month 17	0	$0
Month 18	0	$0
Month 19	0	$0
Month 20	0	$0
Fee		$401
TOTAL	93	$7,860

PARSONS

Parsons Energy & Chemicals Group Inc.
633 Chestnut Street, Suite 400 • Chattanooga, Tennessee 37450-0400 • (423) 757-8020 • Fax: (423) 266-1922 • www.parsons.com

TENNESSEE VALLEY AUTHORITY
CONTRACT 99PPW-246289
KINGSTON FOSSIL PLANT
KIF 353
COAL YARD RUNOFF POND DISCHARGE PIPE UPGRADE, PHASE I
PR-RTP-0134

May 2, 2000
PP-4752-PR-C
Scope Change: 0A
Requested Start Date: May 9, 2000
Requester: C. Minghini

Mr. Lee A. Nash
Manager of Fossil Engineering
Tennessee Valley Authority
1101 Market Street
Chattanooga, TN 37402-2801

Dear Mr. Nash:

Parsons is pleased to submit this proposal for providing Phase 1 engineering and design associated with the coal yard runoff pond discharge pipe upgrade at Kingston Fossil Plant.

SCOPE

The scope of work is as follows.

Perform a Phase 1 study to determine the detailed scope of the final design (phase 2) activities sufficient to develop construction cost estimates. For phase 1, this will consist of the following activities:

- In concert with TVA Fossil engineering, review rainfall data and determine a design storm event.
- Evaluate the potential for flooding the reclaim tunnels, in concert with pump operation. For phase 1, this will consist of calculations using computer programs to determine the volume of storm water runoff that must be stored. Ascertain the limits of an expanded pond, taking into consideration pump operation and cycling.
- Prepare a phase 1 drawing in autocad format that incorporates new topography of the area, location of the new coal blending facility, new railroad alignment. The drawing will also depict limits of excavation for an expanded pond (based on the results of

PRICING

All work performed will be in accordance with the terms of Contract 99PPW-246289. The estimated engineering cost for the work described here is $28,764.

This estimate was prepared assuming no overtime will be. However, should emergency conditions or schedule constraints occur, Parsons requests the flexibility to use additional overtime under the original authorization provided the total price is not exceeded.

SUMMARY

Parsons is pleased with the opportunity to be of service to TVA and we look forward to the successful completion of this task. If you have any questions, please feel free to contact Mr. Dan Smith at (423) 757-8088 or me at (423) 757-8027.

Very truly yours,

William B. Griffith, P.E.
Manager Chattanooga Operations

Attachment: Proposal Pricing Forms

PARSONS ENERGY & CHEMICALS GROUP INC.
TVA FHP TASK PROPOSAL FORM - CONTRACT 99PPW-246289
KIF 353 Coal Yard Runoff Pond Discharge Pipe Upgrade
PR-RTP- 0134 SC No.: 0A
27-Apr-00

"LABOR" & "OVERTIME LABOR"

POSITION/ GRADE	ST Billing Rate ($/HR)	ST HOURS	ST COST	OT Billing Rate ($/HR)	OT HOURS	OT COST($)	TOTAL COST($)
Project Management	$85.99	19	$1,659	$68.16	0	$0	$1,659
Technical Management	$75.16	9	$664	$59.57	0	$0	$664
Project Services	$62.88	23	$1,460	$49.84	0	$0	$1,460
SUBTOTAL SERVICES		51	$ 3,782		0	$ -	$ 3,782
Senior Supvervising Engineer (E11)	$84.92	0	$0	$67.31	0	$0	$0
Supervising Engineer (E10)	$77.15	124	$9,566	$61.15	0	$0	$9,566
Principal Engineer (E09)	$64.52	36	$2,323	$51.14	0	$0	$2,323
Senior Engineer (E08)	$63.97	87	$5,565	$50.71	0	$0	$5,565
Engineer II (E07)	$50.60	0	$0	$40.11	0	$0	$0
Engineer I (E06)	$42.95	0	$0	$34.04	0	$0	$0
Associate Engineer (E05)	$41.77	0	$0	$33.11	0	$0	$0
Principal Designer (N16)	$58.93	0	$0	$70.07	0	$0	$0
Senior Designer (N14)	$54.78	40	$2,191	$65.13	0	$0	$2,191
Designer II (N12)	$44.45	0	$0	$52.85	0	$0	$0
Senior Drafter (N10)	$35.14	40	$1,406	$41.78	0	$0	$1,406
Drafter (N08)	$25.38	0	$0	$30.17	0	$0	$0
Associate Drafter (N06)	$23.05	0	$0	$27.41	0	$0	$0
Technician (N04)	$19.52	0	$0	$23.21	0	$0	$0
Proj. Sect'y II (N05)	$20.83	0	$0	$24.76	0	$0	$0
Proj. Sect'y I (N04)	$19.52	0	$0	$23.21	0	$0	$0
Word Processing (N03)	$17.57	0	$0	$20.89	0	$0	$0
Clerical (N02)	$12.59	0	$0	$14.97	0	$0	$0
SUBTOTAL ENG'G & DESIGN		327	$ 21,051		0	$ -	$ 21,051

SUBTOTAL LABOR	$24,833
TRANSPORTATION & SUBSISTANCE	$87
TEMPORARY ASSIGNMENT LIVING EXPENSES	$0
COMPUTERS, CAD, TELEPHONE, REPRODUCTION	$2,054
REPROGRAPHICS (OUTSIDE SERVICES)	$0
MISCELLANEOUS EXPENSES	$300
SUBCONTRACTED SERVICES	$0
SUBTOTAL EXPENSES	$2,441
SUBTOTAL (Labor & Expenses)	$27,274
FIXED FEE @ 6% (APPLIED TO LABOR ONLY)	$1,490
TOTAL TASK ESTIMATED COST	$28,764

Man-hours by Discipline - Provided for reference only

Project Management	19	Mechanical	16
Technical Management	9	Electrical	0
Project Services	23	Cntr'l Sytms	0
Specialist	0	Structural	311
		TOTAL	378

PARSONS ENERGY & CHEMICALS GROUP INC.
TVA FHP TASK PROPOSAL FORM - CONTRACT 99PPW-246289
KIF 353 Coal Yard Runoff Pond Discharge Pipe Upgrade
PR-RTP- 0134 SC No.: 0A
27-Apr-00

Project Spend Plan

09-May-00 - Project Start

30-Jun-00 - Project Complete

2 - Project Duration - Months

	Hours	Cost
Month 1	215	$15,521
Month 2	163	$11,754
Month 3	0	$0
Month 4	0	$0
Month 5	0	$0
Month 6	0	$0
Month 7	0	$0
Month 8	0	$0
Month 9	0	$0
Month 10	0	$0
Month 11	0	$0
Month 12	0	$0
Month 13	0	$0
Month 14	0	$0
Month 15	0	$0
Month 16	0	$0
Month 17	0	$0
Month 18	0	$0
Month 19	0	$0
Month 20	0	$0
Fee		$1,490
TOTAL	378	$28,764

COST ESTIMATE REQUEST (CER/RFP)

Date: 7-7-00 RIMS No. B65 000710 253

Those listed

COST ESTIMATE REQUEST (CER/RFP)

PCN/PWD NO: KIF 259 PA Attached? Yes ☐ No ☒

PA NO.: _____ REV NO.: _____ EMPAC NO.: _____

Account No./Short Code: 0014RV1

Location and Unit: KIF X

Funding Source: ☒ Capital ☐ O&M

Project Description: KIF COAL UNLOADING & BLENDING FACILITY
COAL YARD PUMP DISCHARGE PIPING PROJECT

Work Scope (see attachment A)

Project Schedule:	Phase 1 - Study	Phase II - Design	Phase III - Implementation
Start:	5/9/00	7/3/00	7/14/00
Complete:	6/30/00	9/29/00	12/9/00
Purpose:			
FPEP Approval:	6/19/00 Date	6/19/00 Date	6/19/00 Date

Job Order Approval _____ Work Order Approval _____ Other (Explain) _____

Action Items:

Organization	Instructions	Date Required
Engineering:	Engineering Scope and Mnhrs to TVA Est.	
Partner:	Estimate (Ph II or III) to Plant Rep (1)	
Plant Rep (1)	Partner Estimate to TVA Estimating	
Estimating:	Final Estimate to Requester	7/21/00
Others:	List Instructions Here (or see attached ___)	

Comments: Attend project review meeting at _____
Location Time/Date

Requester (Proj/Lead Engineer, etc)

	Name (As Applicable)	Address	Phone No.
Project Engineer:	Steve Brewster	LP 2G-C	423-751-3643
Lead Engineer:	Cherie Minghini	LP 2G-C	423-751-6375
TVA Est. Supervisor:	Larry Harless	LP 2R-C	423-751-3413
Partner Est Manager:			
Plant Rep [1]:	Scott Sims	KFP 1A-KST	865-717-2061
Partner Site/Area Mgr:	Jerry Mounts	KFP 1A-KST	865-717-2031
Others:	Al Mock	SMW 1B-K	865-632-1078
Fossil Engineering			
Fossil Engr Support:			
Power Service Shops:			

cc: Plant Manager
EDMS, WR 4Q-C
[1]Plant Rep = Joint Project Team Lead

COST ESTIMATE REQUEST (CER/RFP)

CER/ RFP CHECKLIST ATTACHMENT

THIS REQUEST INCLUDES THE FOLLOWING:

YES	NO	
☐	☐	CONTRACT ADMINISTRATION (SEE ADMINISTRATION CHECKLIST)
☒	☐	SCOPE OF WORK DOCUMENT (SEE ATTACHMENT)
☒	☐	SPECIFICATIONS AND DRAWINGS (SEE ATTACHMENT)
☒	☐	ESTIMATE OF CONSTRUCTION QUANTITIES (SEE ATTACHMENT)
☐	☐	ORGANIZATIONAL RESPONSIBILITIES (SEE ATTACHMENT)
☐	☐	SPECIAL OR PROJECT SPECIFIC FACILITIES AVAILABLE (SEE ATTACHMENT)
☐	☐	LIST OF ACCOUNTS (SEE ATTACHMENT)
☐	☐	SPECIAL TECHNICAL REQUIREMENTS OR SPECIAL REPORTS/DOCUMENTATION REQUIRED (SEE ATTACHMENT)
☐	☐	LIST OF TYPES AND NUMBERS OF PERSONNEL REQUIRED (SEE ATTACHMENT)
☐	☐	LIST OF TVA SUPPLIED ENGINEERED MATERIALS, EQUIPMENT, SERVICES (SEE ATTACHMENT)
☐	☐	ENVIRONMENTAL DECISION RECORD (EDR) ATTACHED (APPLIED FOR)
☐	☐	KEY DATE SCHEDULE (SEE ATTACHMENT)
☐	☐	OTHER (DESCRIBE) (SEE ATTACHED)

PROPOSAL TO INCLUDE THE FOLLOWING:

YES	NO	
☒	☐	DETAILED REVIEW AND ASSESSMENT
☒	☐	DETAILED ESTIMATE AND SPEND PLAN
☒	☐	DETAILED PROJECT SCHEDULE
☒	☐	STAFFING PLAN
☒	☐	WORK PLAN
☐	☐	SAFETY PLAN (HAZARDOUS MATERIALS, SPECIAL CONDITIONS, OTHER)
☒	☐	ENVIRONMENTAL MANAGEMENT PLAN (HAZARDOUS MATERIALS, SPECIAL CONDITIONS, OTHER)
☐	☐	LISTING OF PROPOSED SUBCONTRACTS, QUALIFICATION, AND EXPERIENCE INFORMATION
☐	☐	SPECIAL LABOR RELATIONS INFORMATION
☒	☐	GENERAL LISTING OF REQUIRED SMALL TOOLS, CONSUMABLE MATERIALS, HEAVY EQUIPMENT
☐	☐	QUALITY CONTROL PLAN
☒	☐	LIST OF ASSUMPTIONS
☐	☐	SCOPE OF WORK DOCUMENT APPROVAL
☐	☐	OTHER (DESCRIBE) LISTING OF ANY COSTS ASSOCIATED WITH ANTICIPATED PLANT SUPPORT OTHER THAN PROCUREMENT IDENTIFIED IN CER/RFP

COST ESTIMATE REQUEST (CER/RFP)

DEFINITIONS FOR THE COST ESTIMATE REQUEST/REQUEST FOR PROPOSAL FORM.

1. ENTER THE DATE OF THE FORM REQUEST OR ORIGINATION.

2. THOSE LISTED REFERS TO THE DISTRIBUTION OF THE FORM AS LISTED IN ITEM 18.

3. THIS FORM NOW SERVES A DUAL FUNCTION, THAT OF A COST ESTIMATE REQUEST AND/OR A REQUEST FOR PROPOSAL. YOU WILL BE ABLE TO USE THE FORM FOR A COST ESTIMATE REQUEST EVEN IF THE RFP FUNCTION IS NOT APPLICABLE. THE CER/RFP NUMBER FUNCTION HAS BEEN ELIMINATED AS IT HAS BEEN DETERMINED THAT THE PWD, PIN, PA, AND EMPAC NUMBERS ARE ADEQUATE FOR IDENTIFICATION. IF ALL THESE NUMBERS ARE UNKNOWN, THE RIMS NUMBER COULD BE USED FOR TRACKING THE CER/RFP UNTIL THE OTHER NUMBERS ARE ASSIGNED.

4. THIS SPACE HAS BEEN PROVIDED FOR THE RIMS NUMBER TO BE APPLIED SIMPLY AS A REMINDER THAT THE RIMS NUMBER WILL BE REQUIRED ON THE DOCUMENT.

5. PLEASE ENTER THE PWD/PIN NUMBER IF KNOWN.

6. CHECK YES OR NO TO THE QUESTION OF PA ATTACHMENT AND ENTER THE PA NUMBER IF KNOWN AND THE PA REVISION NUMBER AS TO WHETHER IT IS 00, 01, ETC.

7. ENTER THE EMPAC NUMBER IF IT IS KNOWN AND APPLICABLE.

8. ENTER THE ACCOUNT/SHORT CODE NUMBER THAT HAS BEEN ASSIGNED TO THIS WORK.

9. ENTER THE PROJECT LOCATION AND UNIT IDENTIFICATION.

10. CHECK THE APPROPRIATE BOX TO INDICATE IF THE FUNDING IS TO BE CAPITAL OR OPERATIONS AND MAINTENANCE.

11. ADD AN ATTACHMENT TO DESCRIBE THE PROJECT AND WORK SCOPE IN ORDER TO PROVIDE MORE DESCRIPTIVE INFORMATION.

12. ENTER THE SCHEDULED START AND FINISH DATES FOR EACH PHASE AS APPROPRIATE. AS A MINIMUM, THE PHASE 1 DATES SHOULD BE KNOWN AND ENTERED. YOU MAY ENTER "NA" FOR NOT AVAILABLE FOR ANY UNKNOWN REMAINING DATES.

13. CIRCLE THE APPROPRIATE PHASE FOR THE CER/RFP AND THE DATE OF THE PAB SUBMITTAL FOR THIS REQUEST.

14. CHECK THE APPROPRIATE BOX IF THIS REQUEST IS TO BE USED FOR JOB ORDER APPROVAL, WORK ORDER APPROVAL, OR OTHER WITH AN EXPLANATION FOR OTHER IF CHECKED.

15. THE ACTION ITEM SECTION IS WHERE THE REQUESTER IDENTIFIES THE REQUIRED DATES OF THE ESTIMATES AND/OR THE PROPOSAL INFORMATION FOR THE VARIOUS GROUPS AS ILLUSTRATED. DEPENDING UPON THE PHASE, ALL ITEMS LISTED MAY NOT BE REQUIRED FOR THIS PARTICULAR REQUEST. ENTER "NR" FOR NOT REQUIRED FOR THE ITEMS NOT APPLICABLE TO THIS REQUEST. IF ADDITIONAL REQUIREMENTS ARE NEEDED, PLEASE ADD THEM TO THIS LISTING AS NECESSARY.

16. IF A MEETING IS REQUIRED, THE REQUESTER CAN USE THIS SECTION TO IDENTIFY THE LOCATION, TIME, AND DATE OF THE MEETING TO BE HELD. IF YOU CAN'T MAKE THE MEETING S REQUESTED, PLEASE CONTACT THE REQUESTER FOR A RESCHEDULING OR RESOLUTION IN THIS REGARD.

17. THOSE WHO TYPICALLY INITIATE CER/RFPs.

18. THIS IS A DISTRIBUTION LIST FOR THE CER/RFP. THE REQUESTER WILL FILL IN THE NAMES, ADDRESS, AND PHONE NO. OF THE APPROPRIATE PERSONNEL TO BE INVOLVED IN ACCORDANCE WITH THE REQUEST.

19. THE REQUESTER MAY USE AN * BY A DISTRIBUTION NAME TO SIGNIFY THAT ESTIMATE DATA IS REQUIRED FROM THEM, OR AN ** TO SIGNIFY THAT THEY ARE INCLUDED FOR INFORMATION ONLY.

20. A CHECKLIST ATTACHMENT IS TO BE INCLUDED WITH EACH CER TO IDENTIFY WHAT DOCUMENTS ARE BEING FURNISHED BY THE REQUESTER. EACH LINE ITEM IS TO BE RESPONDED TO WITH A YES OR A NO AND IF YES, THE DATA MUST BE ATTACHED OR A NOTE EXPLAINING WHEN IT WILL BE PROVIDED.

THE SECOND PART OF THE CHECKLIST ATTACHMENT, THE REQUESTER IDENTIFIES WHAT DOCUMENTATION, ETC., IS REQUIRED OF THE PARTNERS IN THEIR DEVELOPMENT OF AN ESTIMATE. EACH ITEM MUST BE CHECKED EITHER YES OR NO.

KINGSTON FOSSIL PLANT
COAL YARD RUNOFF POND PIPING UPGRADE PROJECT
CONSTRUCTION SCOPE
ATTACHMENT A
July 7, 2000

Background:

The existing coal yard runoff pond system can not handle a significant rainfall event and could cause the new coal handling reclaim facility to flood. Over the years, heavy rains have washed coal fines from the storage area into the pond. Storage has decreased to about 20% of the original volume. The existing fiberglass discharge piping and electrical power feed is deteriorated beyond repair, permanently severed, and is no longer usable. The existing pump controls do not work and the pumps are powered on and off manually.

The project will consist of installation of a new discharge pipeline to the ash pond. The coal yard pond will be dredged to original capacity and enlarged. An overflow spillway will be constructed. New electrical power feed, pump float switches, and warning enunciator will be installed to the existing pumps.

The construction of this project will be divided between HED and GUBMK. GUBMK scope of work is as follows:

Scope of work:

- Install a new power feed (5' direct burial depth) for the Coal Yard Runoff Pond Pumps from the new Rail Unloading and Coal Blending Facility Electrical Building Motor Control Center No.2 to the local control panel for the Coal Yard Runoff Pumps. (see Attachment B)
- Install pump float switches.
- Install flashing warning light on field-mounted metal pole at coal yard runoff pond area to alert of high water levels. Warning light shall be mounted high enough to be viewed from Unloader/Blender facility.
- Install 6"piping, 6"check valves, and connection fittings from pumps to HDPE pipe. (See Attachment D)
- Assure quality of pumps by installing a flow meter and determining flow rate as compared to pump curve.
- Relocate electrical pedestal and electrical cable a minimum of 4 feet below proposed grade in area adjacent to overflow spillway. (see Attachment C)

Assumptions:

- Power source from the new Rail Unloading and Coal Blending Facility Electrical Building Motor Control Center Number 2 is available.
- Existing pumps are in good working condition.

Drawings:

Existing drawings:

25W705-03	Outline & General Arrangement MCC #2
25W748-03	MCC #2 Single Line
25W749-32	MCC #2 Connection Diagram
25W840-24	Underground Conduit Electrical Duct Detail 'D' Sections
25W840-39	Underground Conduit Electrical Duct Detail 'C1' Sections
17W412-1	Chemical Treatment Pond and Coal Pile Drainage
17W412-2	Chemical Treatment Pond and Coal Pile Drainage
17W412-3	Chemical Treatment Pond and Coal Pile Drainage

New drawings/sketches:

Attachment B	Underground Power Cable Route(s)
Attachment C	Partial Plan - Overflow Spillway area
Attachment D	Pump/piping schematic sketch

Material List:

See Attachment E

WSE: 745'
NOTE 30)

LOCATION OF PUMPS

ALTERNATE ROUTE OF UNDERGROUND POWER CABLE

RAMP BY FIELD, 3% ±

FIELD SHALL COORDINATE INSTALLATION OF UNDERGROUND POWER CABLE. PROVIDE WARNING POSTS TO IDENTIFY ROUTING OF CABLE, OR USE ALTERNATE ROUTING AS SHOWN.

STACKING TUBE No. 1

155'-0

PT = 94+35.00

R=80'

S76°36'10"W

N57°00'00"W

54" RECLAIM CONVEYOR BC-13
205'-0

STACKING CONVEYOR BC-13
(SEE NOTE 4)

SD-36"

210'

ELEC. DUCT BANK
Existing Conv. BC-7

AS BUILT
SAMPLER TOWER

SEE NOTE 4

ELECTRICAL SUB STATION

Existing Reclaim BC-8

INV. EL 759.67

N57°00'00"E

COAL YARD RUNOFF POND

SCALE:
1"=100'

SEE ATTACHMENT C

SCALES

KSP 109
KSP 108
KSP 107
KSP 106
KSP 105

ATTACHMENT B-
UNDERGROUND POWER CABLE ROUTE(S)

TVA-00009711

TREES/SHRUBS
NOTES 27 & 29)

℄ NEW SPILLWAY
STA 1+43±

RIP RAP TO COVER
ENTIRE SPILLWAY

N

SCALE:
1"=20'

RELOCATED ELECTRICAL
PEDESTAL

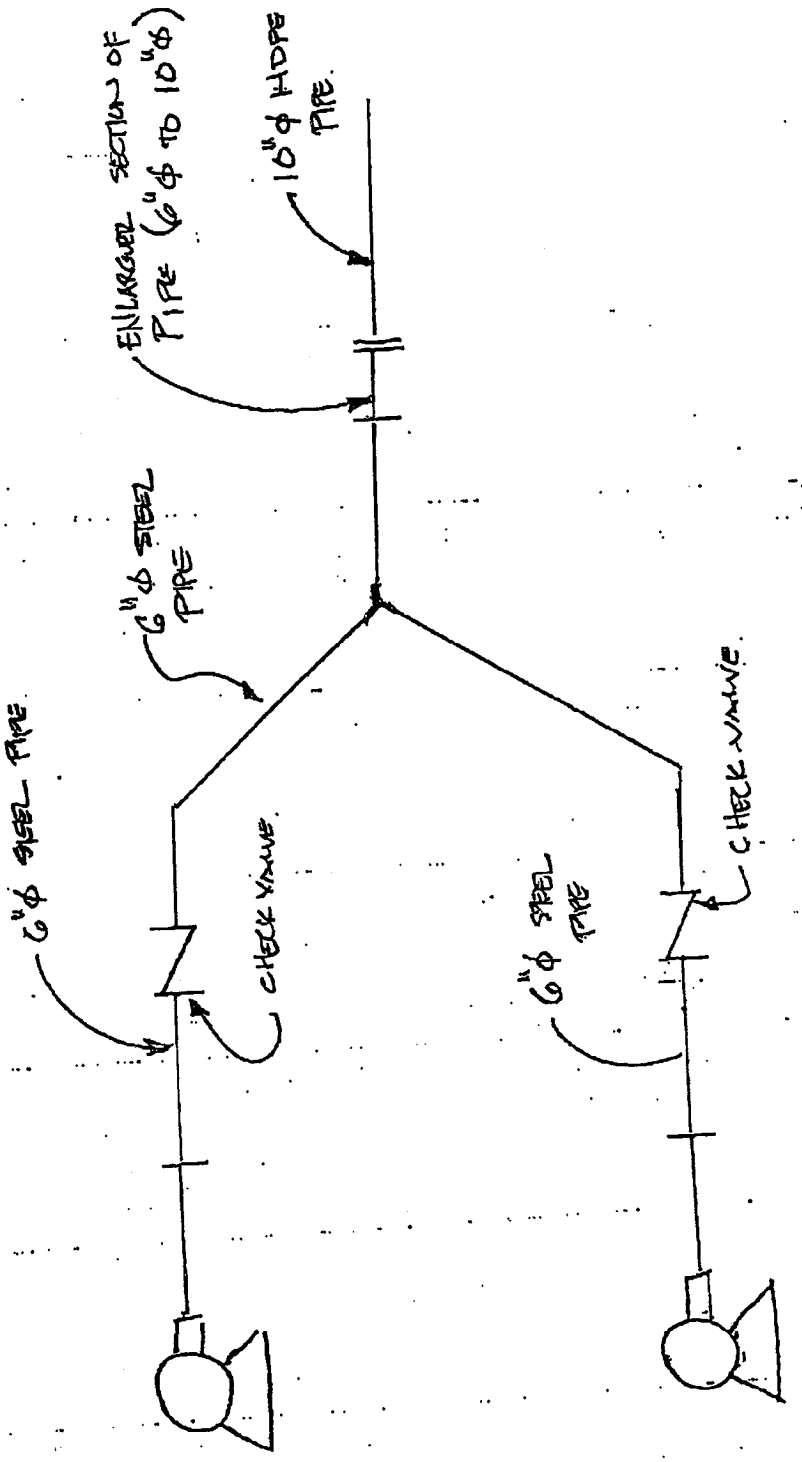
NOTE: RELOCATE ELECTRICAL PEDESTAL AS SHOWN.
BURY ELECTRIC CABLE A MINIMUM OF 4 FEET BELOW
PROPOSED GRADE.

RR Spike 1+30.7
N 550,745.18
E 2,436,701.31

ATTACHMENT C-
PARTIAL PLAN - OVERFLOW SPILLWAY AREA

TVA-00009712

TVA KIF COAL YARD RUNOFF



SKETCH (NTS).

NOTES.
1. ALL LENGTHS BY FIELD.
2. EXISTING VALVE & PIPE SPOOL SECTIONS MAY BE UTILIZED AT FIELD'S OPTION.

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMERICAN

Pump/piping schematic sketch

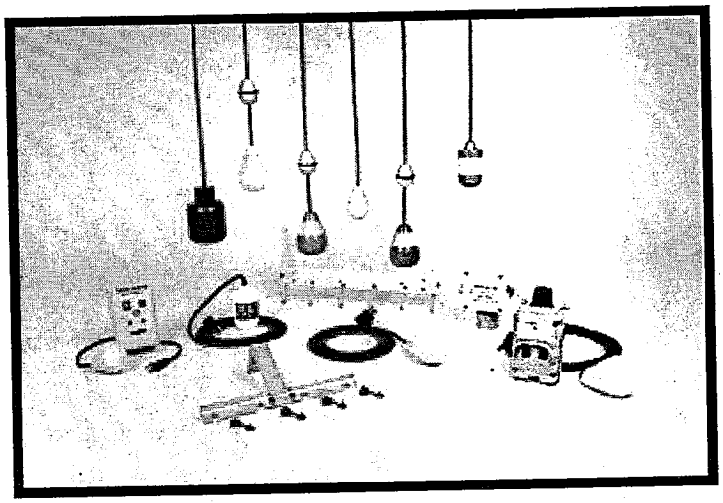
ATTACHMENT D

ATTACHMENT E

Material List
Coal Yard Runoff Pond Piping Upgrade

Material Description	Manufacturer Part No.	Delivery time	Quantity	Units	Cost/Unit	Total
Mercury Float Switch-normally open: cord length - 20 feet; amps - 10; contacts: normally open; weight attached	Conery 2900-B1S1C1	1-2 days	4	ea.	$35.50	$142.00
Float Switch Bracket: Capacity - Holds up to 4 floats and 2 chains or cables; Material - 304 Stainless	Conery 4FBH	1-2 days	1	ea.	$51.00	$51.00
Duplex Junction Box: Size - 8" x 8" x 4"; Nema 4X; Grips - 4 - 3/8", 2 - 3/4"; Hub size - 2" conduit	Conery 8JBD	1-2 days	1	ea.	$141.00	$141.00
Lugs - 4/0, Uninsulated copper compression terminal long barrel	Burndy YA28-2N		3	ea.	$8.85	$26.55
Lugs - 300 kcmil, Uninsulated copper compression terminal long barrel	Burndy YA30-2N		3	ea.	$12.60	$37.80
Shrink tubing - precoated with thermoplastic adhesive-sealant	Raychem WCSM 38/12		3	ea.	$14.00	$42.00
Flashing warning light, red	Whelen IF1120RS		1	ea.		unknown
Cable - Aluminum sheath, 3/C, 4/0, 19X X-OLENE 330, AL - CLX 055-060, 600v W/GRD, MC-HL, P/N 571-31-3224	ElectroWire	3-4 days	1200	ft.	$7.74	$9,288.00

Product Showcase



Float Switches | Mechanical Float Switches | Float Brackets | Alarm Systems | Junction Boxes | Accessories

#2900 Series Narrow Angle Mercury 15^{0} Float Switches

- .86 grams of mercury per sealed switch ... as safe as a 4' fluorescent bulb
- Replaces air bubbler systems, transducers, diaphragm switches, ultrasonic and electrode systems
- Maximum dependability at minimum cost ... most economical system available
- Designed for long service life with over 1,000,000 cycles
- Unique, impact resistant, leakproof, polyurethane float switch housing
- Smooth surface on avocado-shaped housing helps prevent build-up of debris

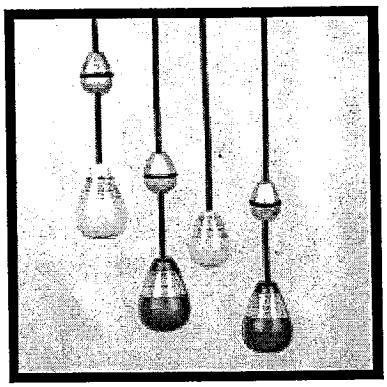
The #2900 series liquid level controls are quality-built for use by demanding commercial, industrial, residential and municipal applications. This polyurethane float has been in use with O.E.M. equipment on sump pumps, grinder pumps, sewage pumps and various other liquid pump applications for 40 years.

These level controls can also be used to signal overflow warnings, the automation of any liquid level-controlled appliance or any application where liquid levels must be controlled or signalled.

The #2900 series liquid level control is available for:

- **Industrial liquid level control as a part of O.E.M. equipment**
- **Use as original equipment for sump, sewage and other pump applications**
- **Aftermarket maintenance, add-on use or replacement for existing sump & sewage installations**

The #2900 series switches replace and improve the outdated electrode, air bubbler, transducer, diaphragm and ultrasonic systems. There are no clamps, vented cords, mechanical switches, support rods or electrodes to fail. Tilt-sensitive mercury switches contained inside housing make liquid level control an easy, trouble-free operation. The normally-closed control is red for easy identification.



Buy Now Online!

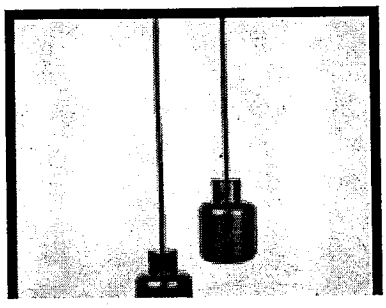
Ordering Guide

#2900 Float Switch

- Reliable hermetically-sealed stainless steel mercury switch
- Reliable mercury-to-mercury contacts
- Standard size 4 3/4" x 3 1/2" for normal use
- Mini size 3 3/8" x 2 1/2" for confined space
- Zinc plated weights are optional
- Control Panel & Alarm Use
- For use with intrinsically safe circuits
- Not sensitive to rotation
- Available with normally-open (yellow) or normally-closed (red) contacts
- 10 Amp switch standard / 20 Amp switch optional
- Max temperature 170°
- Smooth surface avocado shape keeps debris off
- Maximum dependability & economical
- Designed for over 1,000,000 cycles
- Unique impact resistant, leakproof polyurethane housing

Single Pole Double Throw Float Switch

- Same as above except ....
- Color coded blue bulb
- 3 wire, single pole, double throw contacts
- Normally-open or normally-closed depending on wiring
- White wire (common), green wire (open), black wire (closed)
- For use when contacts are unknown



Internal Weighted Floats

- Stainless-steel tube switch
- 10 amp mercury switch, .86 grams
- Max temperature 170°
- Black (normally open), Red (normally closed, not shown)
- Reliable mercury-to-mercury contacts
- Internal cast-iron weight

To: Larry Radford

From: Cherie Minghini, Fossil Engineering Services, LP 2G-C

Date: June 30, 2000

Subject: KIF Coal Yard Runoff Pond Pipe Upgrade
Cost Estimate Request - Phase IIIB (portion of construction)

A cost estimate is requested for a portion of construction for the above-referenced project. The project will be split up into Phase IIIA and Phase IIIB, with construction during Phase IIIB divided between HED and GUBMK. HED's scope for Phase IIIB will consist primarily of dredging the coal yard runoff pond and constructing the overflow spillway.

Enclosed are the following:

1. Two preliminary prints of Drawings SK-01, SK-02, and SK-03.
   (Note: Please refer to this revised set of sketches for the pipe installation also.)
1. A narrative scope of the work.
2. Phase IIIB bill of material.

Please contact me at 751-6375 if you have any questions.

Thank you,

Cherie Minghini

cc: Clark Morris, LP 5E-C
Steve Brewster, LP 2G-C

KINGSTON FOSSIL PLANT
COAL YARD RUNOFF POND PIPE UPGRADE
SCOPE OF WORK
PHASE IIIB

Background:

The existing coal yard runoff pond system can not handle a significant rainfall event and could cause the new coal handling reclaim facility to flood. Over the years, heavy rains have washed coal fines from the storage area into the pond. Storage has decreased to about 20% of the original volume. The existing fiberglass discharge piping and electrical power feed is deteriorated beyond repair, permanently severed, and is no longer usable. The existing pump controls do not work and the pumps are powered on and off manually.

The project will consist of installation of a new discharge pipeline to the ash pond. The coal yard pond will be dredged to original capacity and enlarged. An overflow spillway will be constructed. New electrical power feed, pump float switches, and warning enunciator will be installed to the existing pumps.

The construction of this project will be divided into two parts - Phase IIIA and IIIB. Construction work during Phase IIIB will be performed by HED and GUBMK. HED Phase IIIB scope of work is as follows:

Phase IIIB Scope of work (HED):

- Construct an overflow spillway at the southwest end of the coal yard. Spillway shall be 50 feet wide with 10:1 side slopes (to accommodate traffic), and surfaced with rip rap underlain by geotextile.
- Modify perimeter fence surrounding coal yard at spillway to allow spillway to function. Remove existing fence posts and replace with new posts to match existing. New fence posts shall be embedded a minimum of 2 feet.
- Remove any existing trees or shrubs within the coal yard that are upstream of the new spillway.
- Enlarge coal yard runoff pond and excavate to final contours as shown on SK-01.
- Properly dispose of excavated spoil material to a predetermined location on-site.
- Disturbed grassed areas shall be seeded and mulched to re-establish vegetation.

Bill of Material:

- Excavation in coal yard 6100 cy
- Riprap 600 ton
- Geotextile 800 sy

Fossil&Hydro
Engineering

200' × .5' × 5'

503
$ ~~538~~ K

80K/PIS

423,000 / 5900

$71/FT

~~LAB~~ INST

$34/FT

Petty, Harold L.

From: Jones, Sonja R. on behalf of Radford, Larry D.
Sent: Wednesday, June 07, 2000 10:08 AM
To: Minghini, Cherie M.
Cc: Petty, Harold L.; Purkey, Ronald E.; Morris, Benton C.; Robinson, Jimmy; Galyon, Roy J.
Subject: KIF Coal Yard Runoff Pipe Upgrade - Cost Estimate Request - Phase III A

As requested the Heavy Equipment Division submits the following Estimate based on Phase IIIA Scope of Work and preliminary drawing SK-01 for budget purpose only.

HED will buy and lay 3900lf ' of 10 inch SDR17 HDPE pipe, bore and jack under rail track, place warning tape above HDPE pipe, remove and dispose abandoned pump platform, and return disturbed areas to original conditions (i.e., gravel, concrete, seed etc.) For an estimated cost of
$160,000.00 which also includes removal of temporary pipe being used now.

This Estimate does not include $ for under ground utility survey or allowance for possible utility relocation.

DID NOT INCL CLEAN OUTS.

THRUST BLOCKS

Thank you,

Larry Radford
HED 865
Cell 1-423-805-5462
Pager 1-800-238-0028 (9844)

Sonja R. Jones
Heavy Equip. Division
phone: 865-717-2518
fax: 865-717-2517

15 DAYS

$60K

931-535-2222

5800'

12" PIPE

To: Larry Radford

From: Cherie Minghini, Fossil Engineering Services, LP 2G-C

Date: 5/31/00

Subject: KIF Coal Yard Runoff Pond Pipe Upgrade
Cost Estimate Request - Phase IIIA

A cost estimate is requested for a portion of construction for the above-referenced project. The project will be split up into two portions. Phase IIIA will consist of installing the 10" HDPE pipeline from the coal yard runoff pond to the ash pond and disassembling the existing abandoned pump platform for salvage.

Enclosed are the following:

1. Two preliminary prints of Drawing SK-01.
2. A narrative scope of the work.
3. Phase IIIA bill of material.
4. A draft copy of the EDR for the entire job.

Please contact me at 751-6375 if you have any questions.

Thank you,

Cherie Minghini

cc: Ron Purkey, LP 2G-C
Clark Morris, LP 5E-C

KINGSTON FOSSIL PLANT
COAL YARD RUNOFF POND PIPE UPGRADE
SCOPE OF WORK
PHASE IIIA

Background:

The existing coal yard runoff pond system can not handle a significant rainfall event and could cause the new coal handling reclaim facility to flood. Over the years, heavy rains have washed coal fines from the storage area into the pond. Storage has decreased to about 20% of the original volume. The existing fiberglass discharge piping and electrical power feed is deteriorated beyond repair, permanently severed, and is no longer usable. The existing pump controls do not work and the pumps are powered on and off manually.

The project will consist of installation of a new discharge pipeline to the ash pond. The coal yard pond will be dredged to original capacity and enlarged. An overflow spillway will be constructed. New electrical power feed, pump float switches, and warning enunciator will be installed to the existing pumps.

The construction of this project will be divided into two parts - Phase IIIA and IIIB. Phase IIIA will include installation of the pipeline from the coal yard runoff pond to the ash pond and removal and disposal of the existing pump platform.

Phase IIIA Scope of work:

- Install 3900 LF of 10" SDR 17 HDPE pipe following the attached pipe route from the coal yard runoff pond to the ash pond.
- Perform underground utility survey and allow for possible utility relocation.
- Perform either a single or double jack and bore (location on drawing). Single boring under railroad tracks and plant road can be accomplished with 340 LF of 18"steel casing pipe. If two bores are required, they will be 200 LF (under railroad tracks) and 115 LF (under plant road) respectively.
- Place warning tape above buried pipe for future identification.
- Remove and dispose of existing abandoned pump platform.
- All disturbed areas shall be returned to original condition (i.e., parking lot, gravel roadways, etc.).
- Disturbed areas not to be paved shall be seeded and mulched to re-establish vegetation.

1 BILL OF MATERIAL - KIF Coal Yard Pipe Upgrade - Phase IIIA

The Bill of Material is listed in Table 1.

TABLE 1

Item	Quantity	Units	Comments
Underground utility survey	1	LS	Assume start at sta 19+00 to Sta 39+00 @ 4 ft width. Acreage = 0.2 ac
HDPE Pipe 10 in nom dia SDR 17	3900	LF	ASTM D3350, cell classification 345444C, PE3408
18 in dia Casing pipe (Jack & Bore #1); min wall thickness = 0.313 in.	200	LF	Casing pipe shall have a minimum yield strength of 35,000 psi
18 in dia Casing pipe (Jack & Bore #2); min wall thickness = 0.313 in.	115	Lf	Casing pipe shall have a minimum yield strength of 35,000 psi
If single Jack and Bore is performed, the overall length =	340	LF	
Trench excavation (3 ft deep from station 0+00 to Sta 19+00 ±)	430	BCY	Assume trench width = 2 ft & 3 ft deep
Trench excavation (5.5 ft deep from Sta 19+00 to station 35+00 ±)	660	BCY	Assume trench width = 2 ft x 5.5 ft deep
Backfill (either sand or bottom ash up to 4 in above pipe (Sta 0+00 to Sta 19+00)	220	BCY	Assume one-half the trench excavation volume. Remaining backfill will utilize excavated mat'l
Backfill (either sand or bottom ash up to 4 in above pipe (Sta 19+00 to Sta 39+00)	270	BCY	Assume 40 % of excavation volume. Remainder of backfill shall be crushed stone or bottom ash.
Warning tape	3500	LF	Place above buried pipe for future identification
Allowance for Utility relocation			To be by estimator
Cleanouts (Saddle reducing laterals - 10 x 10 x 6)	4	ea	See note 1

Notes:

1. Saddle reducing laterals (for use as cleanouts) may not be available - contact vendor. Saddle reducing laterals will reduce the allowable pressure for the pipe, and requires further evaluation.

DRAFT

F&HP ENVIRONMENTAL DECISION RECORD

Plant/Project Title KIF Coal Yard Runoff Pond Pipe Upgrade

EDR Tracking Number _____ Project Number KIF 353

I. ASSESSMENT OF POTENTIAL ENVIRONMENTAL CONDITIONS

A. Does the project:

		Yes	No	Unknown
1.	Result in the generation of any new effluents or changes in effluents during construction or after operation begins (this may mean air emissions such as open burning, fugitive dust, conveyor transfer point emissions, sandblasting, organic fumes; vents from tanks, or any other discharge to the atmosphere); wastewater such as contaminated runoff, process wastewater or sewage; or solid waste such as bulky scrap waste, ash, waste not routinely generated, etc.)?	X		
2.	Result in modification of equipment with environmental permit?		X	
3.	Result in addition to or modification to potable water system?		X	
4.	Involve work in water (stream, lakes, wetlands, or floodplain)?	X		
5.	Involve excavation in previously undisturbed areas?		X	
6.	Require sedimentation and erosion control measures?	X		
7.	Involve any materials handling which by its nature might be hazardous (such as asbestos, PCBs, organic solvents, sandblasting waste, etc.)?		X	
8.	Require onsite bulk storage of fuels or other liquids?		X	
9.	Involve removals or modification of equipment greater than 50 years old?		X	
10.	Involve any public controversy?		X	
11.	Result in unusual generation of noise?		X	
12.	Involve any structures greater than 200 feet tall?		X	
13.	Involve any radioactive materials?		X	
14.	Result in significant impacts on transportation?		X	
15.	Involve changes in site land use or changes which are incompatible with adjacent land use?		X	
16.	Result in significant visual impacts?		X	
17.	Does contract or project require TVA Board approval?		X	

B. Discussion The existing coal yard runoff pond system can not handle a significant rainfall event and could cause the new coal handling reclaim facility to flood. This project will consist of installing a new 10" HDPE discharge pipe to the ash pond. The coal yard pond will be dredged to original capacity and enlarged. An overflow spillway ditch will be constructed. A new power feed, pump float switches, and warning enunciator will be installed to the existing pumps.

C. Concurrence with Part I

_____	_____	_____	_____
Project Engineer	*Date*	*Plant Program Administrator (Environmental)*	*Date*

If "Yes" or "Unknown" is checked above, go to Part II. If all questions are answered "No" or if all "Yes" answers are covered by a generic EDR, this project is a Categorical Exclusion pursuant to Section _____ of TVA Instruction IX ENVIRON-5.2

MENTAL REVIEW and Parts II and III are not required.

*Attach project scope.

TVA 30494A [8/95]

II. IDENTIFICATION OF ENVIRONMENTAL EFFECTS AND REQUIREMENTS

	POTENTIAL EFFECTS*						REQUIREMENTS*					
	NONE	INSIGNIFICANT	ADVERSE	CONTROVERSIAL	BENEFICIAL	UNKNOWN	NONE	MODIFICATION	CONSULTATION	PERMIT	PUBLIC REVIEW	INFORMATION SOURCE OR DOCUMENTATION (NOTE NAME OF TECHNICAL MEDIA PERSON PROVIDING INPUT OR REFERENCE DOCUMENT) ADDITIONAL MATERIAL MAY BE ATTACHED. THIS COLUMN SHOULD BE COMPLETED FOR EACH APPLICABLE CATEGORY.
Effect Categories												
WASTE STREAM GENERATION OR ALTERATION												
Air		X							X			BMPs-Water truck as needed
Stormwater/SPCC/BMP		X							X			BMPs; Revise SPCC as needed
Wastewater	X						X					
Solid waste		X							X			Proper disposal of coal fines/excavated earth onsite
Asbestos	X						X					
Hazardous waste	X						X					
PCBs	X						X					
SITE AND LAND DEVELOPMENT												
Changes in site land-use	X						X					
Compatible with adjacent land uses	X						X					
Erosion/sedimentation		X							X			Stormwater BMPs (silt fences, hay bales, etc.)
Stream Modification	X						X					
Historic, cultural, and archeological resources	X											
IMPACTS ON COMMUNITY												
Noise	X						X					
Transportation	X						X					
NATURAL FEATURES												
Groundwater	X						X					
Surface water		X							X			BMPs; revise IPP as needed
Floodplains	X						X					
Wetlands	X						X					
Prime farmland	X						X					
Unique natural features	X						X					
Aquatic Ecology	X						X					
Terrestrial Ecology	X						X					
Protected Species	X						X					
Sensitive Habitat	X						X					
Visual	X						X					
OTHER												

*One or more of these categories may be checked. At least one in each group ***must*** be checked.

ADDITIONAL INFORMATION: _____

F&HP ENVIRONMENTAL DECISION RECORD

EDR Tracking Number _____ Project Number KIF 353

III. LEVEL OF NEPA REVIEW DETERMINATION *(Check One)*

(X) Categorical Exclusion pursuant to Section 5.2 .1 . TVA Instruction IX ENVIRONMENTAL REVIEW (conditions and/or commitments listed below).

( ) Environmental Assessment Required

( ) Environmental Impact Statement Required

Project conditions or commitments related to environmental protection.
(Additional material may be attached)
Stormwater BMPs (silt fences, hay bales, etc.) shall be utilized for sediment/erosion control when construction exposes earth. BMPs (water truck) shall be used as necessary to control dusting during pond excavation. The IPP/SPCC plans will be revised as needed to reflect conditions. On-site solid waste disposal of coal fines/excavated earth will be handled in accordance with TVA procedures. Abandoned pump platform shall be removed and disposed of in accordance with TVA procedures.

Environmental permits for project and required schedule:
Permits - none

_____
Signature, Plant Program Administrator (Environmental)

_____
Date

_____
Signature, Project Engineer

_____
Date

_____
Signature, Advanced Production Technology and Regulatory Integration

_____
Date

Attachments: Yes ( ) No (X) (If yes, number of pages) _____

cc (with any attachments): (To be distributed after ENV AFF approval)

Cherie Minghini, LP 2G-C	Project Engineer (Original)
William H. Ross, BRF-1A-CTT	Plant/Region Environmental Engineer
Greg Askew, WT 8C-K	Manager, National Environmental Policy Act, Environmental Management
Chip Diamond, LP 5D-C	Advanced Production Technology and Regulatory Integration

TVA 30494A [8/95]