

Capital Program Approval Requisition One Page Summary

Company:	Kentucky Power Company AEP Generation Resources Inc.	Version: 1																																										
Project:	MLU0CTBD - Mitchell Unit 0 - Cooling Tower Blow Down (CTBD) - - Phase 2																																											
Location:	Moundsville, West Virginia																																											
Description:	<p>This project allows for the discontinuation of discharging Cooling Tower Blow Down (CTBD) into the Conner Run Impoundment (CRI). The project consists of increasing the cycles of concentration on the cooling towers which will reduce the CTBD flows to acceptable levels. It will also allow the CTBD to continue to be the water source for bottom ash sluicing. Upgrades will also be made to the cooling tower chemical injection and storage. CTBD will also serve as the water supply to the pyrite boxes and bottom ash hoppers, which requires piping replacement for both systems.</p> <p>Phase 1, which was approved as a standalone IR (000020312) for \$1.9M, approved engineering, design, long lead time material procurement and the cost associated with the 2011 Wastewater Modeling Study.</p> <p>Reason for Revision: Phase 1 is nearing completion, requesting funding for Phase 2, which is the final phase of the project. The revised total estimated cost for all phases is now \$9.1M, a \$0.1M reduction from Version 1's \$9.2M estimate. The reduction is due to scope and estimate refinement.</p>																																											
Phase Description:	Remaining material procurement, construction, start up and commissioning.																																											
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Associated O&M	\$0	\$0	\$0	\$0	\$0																																							
Project Dates:	Start Date : 01/02/2014 In Service Date : 07/15/2015 Completion Date: 07/15/2015																																											
Regulatory Cost Recovery:	<u>Kentucky Power Company</u> -- \$4.42M (49%) <ul style="list-style-type: none"> • \$4.38M (99%) base rate case filing, TYE 9/30/2014 with optional forecasted test year, effective 6/1/2015. • \$0.04M (1%) FERC Annual Formula Rate update, TYE 12/31/15, effective 6/1/16. <u>AEP Generation Resources</u> -- \$4.68M (51%) <ul style="list-style-type: none"> • N/A 																																											
Funding:	Included in IRC Presentation : Yes	Project Funded : Yes																																										
Approved By : Daniel V Lee, Gregory G Pauley, Charles E Zebula	Approved On : 07/15/2014																																											

Capital Program Approval Requisition

Funding and Approval

Direct Cost Funding:		Prior Years	2014	2015	Future Years	Total
	In Forecast \$	\$0	\$4,761,875	\$2,051,586	\$0	\$6,813,461
	Offsets Required	\$0	-\$1,172,237	\$1,945,680	\$0	\$773,443
	Total	\$0	\$3,589,638	\$3,997,266	\$0	\$7,586,904

Required Signatures:		Status	Name	Date
		Approved	Douglas Adams	06/24/2014
		Approved	Kenneth Ecoffey	06/24/2014
		Approved	Timothy V Riordan	06/25/2014
		Bypassed	John A Mazzone	06/25/2014
		Bypassed	Paul W Franklin	06/25/2014
		Bypassed	Gary C Knight	06/25/2014
		Bypassed	Jeffery D Lafleur	06/25/2014
		Bypassed	Elizabeth B Dailey	06/25/2014
		Bypassed	James H Garrett	06/25/2014
		Bypassed	Keith M Darling	06/25/2014
		Approved	Toby L Thomas	06/25/2014
		Bypassed	Jeffery D Lafleur	06/26/2014
		Approved	Robert L Walton	06/26/2014
		Approved	John M McManus	06/26/2014
		Approved	Christian T Beam	06/30/2014
		Approved	Brian K Rupp	07/01/2014
		Approved	Brian K Rupp	07/01/2014
		Approved	Ranie K Wohnhas	07/07/2014
		Bypassed	Daniel V Lee	07/07/2014
		Bypassed	Gregory G Pauley	07/07/2014
	Approved	Michael H Huggett	07/07/2014	
	Approved	Charles E Zebula	07/08/2014	
	Approved	Jenifer L Fischer	07/15/2014	

Project Contacts:		Type	Name
		Detail Provider	HOLIGA, DENISE M
		Project Manager	HOLIGA, DENISE M

Capital Program Approval Requisition

Component CI's

Component ID	Company	Description of Work	Previously Approved (\$)		This Submission (\$)		Total Authorized (\$)		
			Capital	Removal	Capital	Removal	Capital	Removal	Total
000023123	APCO	ML U0 Cooling Tower Blow Down	0	0	4,679,842	0	4,679,842	0	4,679,842
APCO Total :			0	0	4,679,842	0	4,679,842	0	4,679,842
000020312	KYPCO	ML U0 Cooling Tower Blow Down	0	0	4,421,724	0	4,421,724	0	4,421,724
KYPCO Total :			0	0	4,421,724	0	4,421,724	0	4,421,724
000023123	WPCO	ML U0 Cooling Tower Blow Down	0	0	4,679,842	0	4,679,842	0	4,679,842
WPCO Total :			0	0	4,679,842	0	4,679,842	0	4,679,842
Grand Total :			0	0	13,781,408	0	13,781,408	0	13,781,408

Capital Program Approval Requisition

Additional Information

Project Justification:	A number of factors demonstrate that it is in Mitchell plant's long term interests to discontinue disposing of the CTBD into the CRI in parallel with the retirement of Kammer plant (7/2015). Those drivers include 1) Elimination of the cost sharing obligations associated with the ongoing operation of the CRI. 2) Reduction of the O&M costs associated with the pumping of the CTBD to the CRI. 3) Separation from CONSOL pending the transfer of the impoundment. 4) Reduction of the compliance costs associated with the pending CCR and ELG rules. 5) Reduction of the risks associated with CONSOL discontinuing operations. See attachment for Project Update and Details.
Other Alternatives Considered:	A number of alternatives and variations were considered including sending the CTBD flow directly to the river, clear water and/or bottom ash ponds without any reduction in flow. All of these scenarios would not achieve NPDES limits at the permitted outfall. Additional scenarios involving surge holding tanks and utilizing the CTBD flows for FGD makeup water were considered and found not to be feasible.
Conclusion:	The discontinuation of disposing of the CTBD into the CRI is one the best long term water management strategies for Mitchell plant. The proposed option of redirecting the reduced CTBD flows to the bottom ash pond represents the most economical and feasible solution for discontinuing to send the CTBD to the CRI.



Date September 14, 2012

Company Ohio Power		CI/LI/PPP/Program Number 000021257	Version 1
Per Scope Review - Capital, Removal, Lease and O&M classifications appear to be appropriate		Reviewed by CP&B JCF 9-14-12	BU/OPCo has verified funding is in budget. If not in budget, funding has been identified and fund transfer has been received. Reviewed by CP&B JCF 9-14-12
ROUTING:	NAME	INITIALS & DATE RELEASED	COMMENTS
	B. A. MacPherson		
1	D. Lynch	JCF 9/17/12	
	L. L. Dieck		
	C. Zebula		
	B. X. Tierney		
	M. Heyeck		
	B. D. Radous		
	S. Burge		
	L.J. Weber		
	M. C. McCullough		
	D. E. Welch		
	R. P. Powers		
	L. Barton		
	Buckeye Power Approval		
	N. K. Akins		
2	Jenifer Fischer - 28th floor Ext 3032		
		9-25-12	Approved in PeopleSoft
		Sep 2012	Month Included in Board Package

Alternate CP&B Contacts:
 Cathy Warchal - 28th Floor - Ext 1347

Scanned File Name: OPCo 000021257.pdf

Capital Improvement Approval Requisition

Company: Ohio Power Company

Version 1

Project : 000021257 - Mitchell Unit 1 Electrostatic Precipitator Upgrade
 Moundsville, WV

Description: This CI requests funds for improvements to the Mitchell Unit 1 Electrostatic Precipitator (ESP) in order to meet environmental requirements and minimize the impact of flyash carryover on the Flue Gas Desulfurization (FGD) chemistry. In the Mercury and Air Toxics Standards (MATS) regime starting in 2015, the units will be required to demonstrate compliance with each of the limits (mercury (Hg), particulate matter (PM), and sulfur dioxide (SO₂)) on a more frequent basis.

The scope of this project includes:

- Replace Alstom high frequency transformer rectifier (T/R) sets
- Upgrade the voltage controls on 128 T/R sets with new digital controls

This project is included in the budget for 2013 and will be completed during the Spring outage.

Authorization Amount:	Previously Approved Amount	This Submission	Total Amount to be Authorized
Total	\$ -	\$ 5,417,027	\$ 5,417,027

Cash Flow:	Prior Years	2012	2013	Future Years	Total
Capital	\$ -	\$ 1,029,077	\$ 4,387,950	\$ -	\$ 5,417,027
Removal	\$ -	\$ -	\$ -	\$ -	\$ -
Total to be Authorized	\$ -	\$ 1,029,077	\$ 4,387,950	\$ -	\$ 5,417,027
Associated O&M	\$ -	\$ -	\$ 250,000	\$ -	\$ 250,000

Start Date:	9/1/2012	Completion Date:	8/31/2013	In Service Date:	4/14/2013
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Regulatory Cost Recovery: Ohio Power Company – Generation - \$5.4M (100%)

- \$5.2M (96%) Upon approval from State and Federal regulatory authorities, Ohio Power Company's generation fleet will transition into a competitive market. Currently, base generation revenues authorized by the PUCO (approved in March 2009 ESP) are not cost-of-service based, so there is no incremental cost recovery mechanism for new capital investments. As such, new investment carrying costs are deemed a cost of business offsetting ESP authorized revenues.
- \$0.2M (4%) Allocated to WPCo and recovered in current demand charge effective 1/1/10.

Funding:	2012 Control Budget <small>(included in IRC Presentation)</small>	Yes	Offset Source	N/A
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Requested future year funds are included in the last official Forecast.

Approved By: S. Burge/P. Vegas

Approved On: 9/10/2012

Capital Improvement Approval Requisition

Expenditure to be Authorized (fully loaded)

	Capital	Removal	Total
Previously Approved Amount	-	-	-
This Submission	5,417,027	-	5,417,027
Total	\$ 5,417,027	\$ -	\$ 5,417,027


2012 Direct Cost Budget Funding

Budget Offset Source and Amount

In Budget	\$	1,080,000	
Budget Offset	\$	-	

Requested future year funds are included in the last official Forecast.

Required Signatures

Authorization Limits	Title	Approver	Signature	Date
amt ≤ \$ 10m	SVP, Business Unit	Burge, S.	See electronic approval attached	9/10/2012
amt ≤ \$ 10m	Opco President	Vegas, P.	See electronic approval attached	9/10/2012
amt ≤ \$ 20m	EVP & COO/EVP	McCullough, M.		
CP&B Review	Manager, Capital and Lease Improvements	Lynch, D.		9/17/12

Project Contacts

Contact	Name	Telephone
Project Manager	Kristopher Coombs	200-3342
Requisition Detail Provider	Daniel Connor	200-3019

Capital Improvement Approval Requisition

Project Justification

It is necessary to maintain the Electrostatic Precipitators (ESP) in safe, effective working order in order to meet environmental requirements and minimize the impact of flyash carryover on the Flue Gas Desulfurization (FGD) chemistry. Considerable maintenance on the ESP has been deferred in recent years due to uncertainty over the need to install a fabric filter. We now have evidence that a fabric filter will not be required in order to meet ongoing requirements, and it is appropriate to perform work necessary to ensure the safe and effective operation of the primary particulate control device. In the Mercury and Air Toxics Standards (MATS) regime starting in 2015, the units will be required to demonstrate compliance with each of the limits (Hg, PM, and SO₂) on a more frequent basis. The PM limit will need to be demonstrated either on a continuous basis with a PM CEMS or quarterly through a Method 5 PM test. The scope outlined below will allow the plant to perform diagnostic work and make changes to the operation of the ESP while the unit is online. The benefits for each of the proposed improvements are outlined below.

The Alstom high frequency T/R sets have been highly unreliable since their installation at Mitchell and 6 of 32 are currently out of service. Replacing the Alstom SIRs will allow the plant to have more reliable T/R's thereby decreasing O&M cost. The out-of-service Alstom T/R sets are creating empty spaces in the ESP that does not contribute to any collection of particulate. Replacement of the Alstom T/R's will save the Mitchell plant an estimated \$125,000 per year. Upgrading from the factory installed AVCs to the MVC4 controls is necessary due to the fact that the existing controls are more than 30 years old. Replacement parts are hard to find which has made it difficult for the plant to service the controls. Furthermore, within the next few years, the controls will become obsolete, and finding parts will not be possible. The upgrades also will provide for more reliable and accurate control of the T/R sets, improved monitoring and troubleshooting capabilities. With enhanced controls and monitoring, it is expected that the EFOR on the unit will be reduced by 0.5 ppts. Engineering Services predicts a \$100,000 per year reduction in O&M expenses after the AVCs have been upgraded. These upgrades will also help to avoid a 50 MW curtailment due to staying within the Hg limit put forth from the MATS ruling that will start in 2015.

Other Alternatives Considered

The "do nothing" case was not selected as it was determined that operational issues needed to be addressed. A full rebuild of the ESP was also considered. This was ruled out as not cost effective. The proposed improvements will provide the necessary safety and performance improvements at minimal cost.

Conclusion

In order to ensure reliable performance of the ESP, and enhance personnel safety, it is recommended to implement the above improvements. A decrease in EFOR of as much as 0.5 ppts, a decrease in O&M expense of \$250,000 per year, and an avoidance of a 50 MW curtailment is projected.

Associated/Future Projects

Upgrade ESP rapping system – approximately \$5,000,000
Install new hoppers and hopper heaters – approximately \$15,000,000

Capital Program Approval Requisition One Page Summary

Company:	Kentucky Power Company AEP Generation Resources Inc.		Version: 1																																										
Project:	MLU2ESP15 - Mitchell Unit 2 ESP Upgrade -																																												
Location:	Moundsville, WV																																												
Description:	Replace 32 high frequency T/R sets, replace existing automatic voltage controls, replace existing rapper PLC controls and install precipitator optimization system and associated communications.																																												
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Approved By : Daniel V Lee, Gregory G Pauley, Charles E Zebula	Approved On : 03/24/2014																																												

Capital Program Approval Requisition

Funding and Approval

Direct Cost Funding:		Prior Years	2014	2015	Future Years	Total
	In Forecast \$	\$0	\$1,641,962	\$2,684,350	\$0	\$4,326,312
	Offsets Required	\$0	\$0	-\$1,038,675	\$0	-\$1,038,675
	Total	\$0	\$1,641,962	\$1,645,675	\$0	\$3,287,637

Required Signatures:		Status	Name	Date
	Approved	Teresa M Jeffers	03/07/2014	
	Approved	Michael L Belter	03/07/2014	
	Approved	Timothy V Riordan	03/07/2014	
	Approved	Aaron M Sink	03/10/2014	
	Approved	Toby L Thomas	03/10/2014	
	Approved	Robert L Walton	03/10/2014	
	Approved	John M McManus	03/10/2014	
	Bypassed	Christian T Beam	03/12/2014	
	Approved	Brian K Rupp	03/12/2014	
	Approved	Ranie K Wohnhas	03/12/2014	
	Approved	Daniel V Lee	03/13/2014	
	Approved	Gregory G Pauley	03/17/2014	
	Approved	Franz D Messner	03/17/2014	
	Approved	Charles E Zebula	03/18/2014	
Approved	Jenifer L Fischer	03/24/2014		

Project Contacts:		Type	Name
		Detail Provider	ELLIOTT,WILEY J
		Project Manager	ELLIOTT,WILEY J

Capital Program Approval Requisition

Component CI's

Component ID	Company	Description of Work	Previously Approved (\$)		This Submission (\$)		Total Authorized (\$)		
			Capital	Removal	Capital	Removal	Capital	Removal	Total
000023130	GENCO	ML U2 ESP Upgrades	0	0	1,930,167	0	1,930,167	0	1,930,167
GENCO Total :			0	0	1,930,167	0	1,930,167	0	1,930,167
000021259	KYPCO	ML U2 ESP Upgrades	0	0	1,855,484	77,500	1,855,484	77,500	1,932,984
KYPCO Total :			0	0	1,855,484	77,500	1,855,484	77,500	1,932,984
Grand Total :			0	0	3,785,651	77,500	3,785,651	77,500	3,863,151

Capital Program Approval Requisition

Additional Information

Project Justification:	Minimize or eliminate opacity related curtailments and outages.
Other Alternatives Considered:	Do nothing and delay installation.
Conclusion:	Replace 32 high frequency T/R sets, replace existing automatic voltage controls, replace existing rapper PLC controls and install precipitator optimization system and associated communications.



Date September 18, 2012

Company Ohio Power		CI/LI/CP/Program Number ML1MH1201	Version 1
Per Scope Review - Capital, Removal, Lease and O&M classifications appear to be appropriate		Reviewed by CP&B JLF 9-18-12	BU/OPCo has verified funding is in budget. If not in budget, funding has been identified and fund transfer has been received. Reviewed by CP&B JLF 9-18-12
ROUTING:	NAME	INITIALS & DATE RELEASED	COMMENTS
	B. A. MacPherson		
1	D. Lynch	JPL 9/19/12	
	L. L. Dieck		
	C. Zebula		
	B. X. Tierney		
	M. Heyeck		
	B. D. Radous		
	S. Burge		
	L.J. Weber		
	M. C. McCullough		
	D. E. Welch		
	R. P. Powers		
	L. Barton		
	Buckeye Power Approval		
	N. K. Akins		
2	Jenifer Fischer - 28th floor Ext 3032		
		9-25-12	Approved in PeopleSoft
		Sep 2012	Month Included in Board Package

Alternate CP&B Contacts:
 Cathy Warchal - 28th Floor - Ext 1347

Scanned File Name: OPCo ML1MH1201.pdf

Capital Improvement Requisition Presented to the PMRG Board



Mitchell Unit 1: Coal Silo Ventilation Improvement Project

Revision No	Select for Revision				
Unit	Mitchell 1	Funding Numbers	ML1MH1201	Version	2.1
Category Code	Environmental, Safety & Health	Operating Company (s)	Ohio Power Co.	Project Mgr.	Ron Hyatt
Project Description	The purpose of the project is to help maintain a safe work environment by replacing the existing dry coal silo ventilation and dust collection system with a new wet coal silo ventilation and collection system.				
Project Plan	Scope & Objectives	The scope of work for the project is to remove the existing coal silo ventilation and dust collection system of AAF Type D, dry Roto-Clones and replace them with new AAF type W, wet Roto-Clone dust collectors. The objective is to ensure compliance with OSHA safety and health requirements regarding combustible dust and methane hazards. The new equipment will also help maintain environmental permit requirements for minimizing fugitive dust.			
	Project Phase(s) Covered In This Version	All	Total Estimated Cost For All Projected Phases	\$761,828.00	
Schedule	This project is scheduled to be performed in 2012				
Project Justification	Coal dust collection systems are required for the safe operation of the plant coal conveying system and to meet OSHA safety and health requirements for combustible dust and methane hazards. The Roto-Clone equipment was installed as part of the plant's original coal dust collection system. The existing dust collectors are no longer efficient or reliable because they have reached the end of their life. This obsolete technology is no longer supported by any manufacturer. The wet dust collection systems have been successfully used at other AEP plants.				
Alternatives Considered	There is not a feasible alternative to this project. The existing technology is obsolete and is at the end of its operating design life. The equipment is no longer supported by the original manufacturer. Fabrication of replacement parts is impracticable for this scope of work				

Financial Analysis Summary	10 Year IRR	10 Year NPV	Simple Payback (Years)	Discount Rate
Economic Analysis Assumptions	Availability Improvement	Capacity Improvement	Fuel Efficiency	Cost Reduction / Avoided Cost Savings
	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A

* Financial Analysis based on the phase(s) and scope identified on this version versus least cost alternative.

	Year	Prior Years	2012	2013	2014	2015+	Total (\$)
Cash Flow (Requested) Direct Costs (AEP Portion)	Amount Budgeted	\$0	\$0	\$0	\$0	\$0	\$0
	FODA Budget	\$0	\$45,500	\$0	\$0	\$0	\$45,500
	Material	\$0	\$159,500		\$0	\$0	\$159,500
	Labor	\$0	\$357,500		\$0	\$0	\$357,500
	FODA	\$0	\$45,500		\$0	\$0	\$45,500
	Other	\$0	\$42,500		\$0	\$0	\$42,500
	Contingency	\$0	\$100,000		\$0	\$0	\$100,000
	Removal (No 506)	\$0	\$0	\$0	\$0	\$0	\$0
	Total Direct	\$0	\$705,000	\$0	\$0	\$0	\$705,000
	Delta: Budget vs Request	\$0	(\$659,500)	\$0	\$0	\$0	(\$659,500)
Loaded Costs (AEP Portion)	Amount to be Authorized	\$0	\$761,828				\$761,828
	Associated O&M (incl 506 Removal)	\$0	\$0	\$0	\$0	\$0	\$0
Total Loaded Project Costs 100% (AEP + Non-AEP)			\$761,828				\$761,828

Additional Notes:

Current Year Budget Availability/Offset for this Authorization:

Generation CI/LI Approval Routing Document

Status: **GEN Approved**
 Expedite: **No**

Last populated: 08/21/2012 03:55 PM

Plant Mitchell	Unit 1	Funding Project # ML1MH1201	Ver. # 1	Proj Type GWSCS	Authorization Type Project
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Project Title: ML1 MH ROTOCLONE RPL

Outage Code: (if necessary) **Business Reason:** Environmental, Safety & Health
In-service date: 12/31/2012

Brief Description of Project (sufficient to determine that the project is Capital not O&M)
 Replace obsolete dry coal dust ventilation and dust collection system with a new wet coal silo ventilation and collection system

Are any of the following documents attached?

PMRG Form Yes No
 1 Page Summary Form Yes No
 Executive Summary Form Yes No
 Economics Yes No

Company Ohio Power Co.	Amount to be Authorized \$761,828.29	LEG-9 # No
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Originator Douglas E Adams	Project Manager Ronald L Hyatt
Originator Phone No. 8-200-5961 614/716-5961	Project Manager Phone No. 8-200-1869 614/716-1869

Originated 08/21/2012	Expected Sub Company Board 09/25/2012
GEN Approval Required by 09/12/2012	Project Fully Approved & Opened by
Approved by PMRG Board: Not Reviewed	Date Approved by PMRG Board:

Will material become obsolete as a result of this CI? No

If you have questions concerning Obsolete Material, please contact your Supply Chain Representative.

	Prior Years	YR1 2012	YR2 2013	YR3 2014	YR4 2015	YR5+ 2016+	Total
Budget (Direct Costs)							
Capital - Direct	0	0	0	0	0	0	0
Removal - Direct	0	0	0	0	0	0	0
Total Direct Budget	0	0	0	0	0	0	0
Associated O&M	0	0	0	0	0	0	0
Capital - Direct	0	705,000	0	0	0	0	705,000
Removal - Direct	0	0	0	0	0	0	0

Project / CPP / Program Amount Being Authorized

Prior Years	2012	2013	2014	2015	2016+	Total

Capital - Direct	0	705,000	0	0	0	0	705,000
Removal - Direct	0	0	0	0	0	0	0
Total Direct Costs to be Authorized	0	705,000	0	0	0	0	705,000
Capital - Overheads	0	35,250	0	0	0	0	35,250
Removal - Overheads	0	0	0	0	0	0	0
Overheads	0	35,250	0	0	0	0	35,250
AFUDC	0	21,578	0	0	0	0	21,578
Amount Being Authorized	0	761,828	0	0	0	0	761,828
Associated O&M	0	0	0	0	0	0	0
Total Capital	0	761,828	0	0	0	0	761,828
Total Removals	0	0	0	0	0	0	0
Associated O&M	0	0	0	0	0	0	0

Ownership Unit Breakdown

Funding # / Company	*	Prior Years	2012	2013	2014	2015	2016+	Total
ML1MH1201	C	0	761,828	0	0	0	0	761,828
	R	0	0	0	0	0	0	0
Ohio Power Co - Generation		0	761,828	0	0	0	0	761,828
Total								

* C = Total Capital, R = Total Removals

Kenneth J DeLuca
 (GEN Financial Mgrs)

08/22/2012 08:34 AM EDT

Timothy V Riordan
 (VP Engineering Services)

08/22/2012 12:36 PM EDT

John A Mazzone
 (Regional Lead)

08/22/2012 01:07 PM EDT

John M McManus
 (VP Environmental Services)

08/22/2012 01:24 PM EDT

Selwyn J Dias
 (OPCO Regulatory & Finance)

08/23/2012 09:50 AM EDT

Stephen W Burge
 (SVP Fossil & Hydro Generation)

08/23/2012 11:43 AM EDT

Pablo A Vegas
 (OPCO President)

08/23/2012 05:40 PM EDT

Comment

Attachments



ML1MH1201 ML Coal Silo U1 PMRG form.xls

Direct Cost		2012
Original Budget Amount:		\$0
Offset (source & amount):	INCCAPINV	\$660,000
	FODA	\$45,500
	TOTAL	\$705,500

Regulatory Comments:

Twana Banks-Smith - 08/22/2012 09:17:09 AM

Ohio Power Company – \$0.762M (100%); In-Service Date: 12/31/2012

- \$0.732M (96%) Upon approval from State and Federal regulatory authorities, Ohio Power Company's generation fleet will transition into a competitive market. Currently, base generation revenues authorized by the PUCO (approved in March 2009 ESP) are not cost-of-service based, so there is no incremental cost recovery mechanism for new capital investments. As such, new investment carrying costs are deemed a cost of business offsetting ESP authorized revenues.
- \$0.030M (4%) Allocated to WPCo and recovered in current demand charge effective 1/1/10



Date September 18, 2012

Company Ohio Power	CI/LI/PPP/Program Number ML2MH1202	Version 1
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Per Scope Review - Capital, Removal, Lease and O&M classifications appear to be appropriate	Reviewed by CP&B JLF 9-18-12	BU/OPCo has verified funding is in budget. If not in budget, funding has been identified and fund transfer has been received.	Reviewed by CP&B JLF 9-18-12

ROUTING:	NAME	INITIALS & DATE RELEASED	COMMENTS
	B. A. MacPherson		
1	D. Lynch	DPZ 9/19/12	
	L. L. Dieck		
	C. Zebula		
	B. X. Tierney		
	M. Heyeck		
	B. D. Radous		
	S. Burge		
	L.J. Weber		
	M. C. McCullough		
	D. E. Welch		
	R. P. Powers		
	L. Barton		
	Buckeye Power Approval		
	N. K. Akins		
2	Jenifer Fischer - 28th floor Ext 3032		
		9-25-12	Approved in PeopleSoft
		Sep 2012	Month Included in Board Package

Alternate CP&B Contacts:
 Cathy Warchal - 28th Floor - Ext 1347

Scanned File Name: OPCo ML2MH1202.pdf

Capital Improvement Requisition Presented to the PMRG Board



Mitchell Unit 2: Coal Silo Ventilation Improvement Project

Revision No	Select for Revision				
Unit	Mitchell 2	Funding Numbers	ML2MH1202	Version	2.1
Category Code	Environmental, Safety & Health	Operating Company (s)	Ohio Power Co.	Project Mgr.	Ron Hyatt
Project Description	The purpose of the project is to help maintain a safe work environment by replacing the existing dry coal silo ventilation and dust collection system with a new wet coal silo ventilation and collection system.				
Project Plan	Scope & Objectives	The scope of work for the project is to remove the existing coal silo ventilation and dust collection system of AAF Type D, dry Roto-Clones and replace them with new AAF type W, wet Roto-Clone dust collectors. The objective is to ensure compliance with OSHA safety and health requirements regarding combustible dust and methane hazards. The new equipment will also help maintain environmental permit requirements for minimizing fugitive dust.			
	Project Phase(s) Covered In This Version	All	Total Estimated Cost For All Projected Phases	\$761,828.00	
Schedule	This project is scheduled to be performed in 2012				
Project Justification	Coal dust collection systems are required for the safe operation of the plant coal conveying system and to meet OSHA safety and health requirements for combustible dust and methane hazards. The Roto-Clone equipment was installed as part of the plant's original coal dust collection system. The existing dust collectors are no longer efficient or reliable because they have reached the end of their life. This obsolete technology is no longer supported by any manufacturer. The wet dust collection systems have been successfully used at other AEP plants.				
Alternatives Considered	There is not a feasible alternative to this project. The existing technology is obsolete and is at the end of its operating design life. The equipment is no longer supported by the original manufacturer. Fabrication of replacement parts is impracticable for this scope of work				

Financial Analysis Summary	10 Year IRR	10 Year NPV	Simple Payback (Years)	Discount Rate
Economic Analysis Assumptions	Availability Improvement	Capacity Improvement	Fuel Efficiency	Cost Reduction / Avoided Cost Savings
	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A

* Financial Analysis based on the phase(s) and scope identified on this version versus least cost alternative.

	Year	Prior Years	2012	2013	2014	2015+	Total (\$)
Cash Flow (Requested) Direct Costs (AEP Portion)	Amount Budgeted	\$0	\$0	\$0	\$0	\$0	\$0
	FODA Budget	\$0	\$45,500	\$0	\$0	\$0	\$45,500
	Material	\$0	\$159,500		\$0	\$0	\$159,500
	Labor	\$0	\$357,500		\$0	\$0	\$357,500
	FODA	\$0	\$45,500		\$0	\$0	\$45,500
	Other	\$0	\$42,500		\$0	\$0	\$42,500
	Contingency	\$0	\$100,000		\$0	\$0	\$100,000
	Removal (No 506)	\$0	\$0		\$0	\$0	\$0
	Total Direct	\$0	\$705,000	\$0	\$0	\$0	\$705,000
	Delta: Budget vs Request	\$0	(\$659,500)	\$0	\$0	\$0	(\$659,500)
Loaded Costs (AEP Portion)	Amount to be Authorized	\$0	\$761,828				\$761,828
	Associated O&M (incl 506 Removal)	\$0	\$0	\$0	\$0	\$0	\$0
Total Loaded Project Costs 100% (AEP + Non-AEP)			\$761,828				\$761,828

Additional Notes:

Current Year Budget Availability/Offset for this Authorization:

Generation CI/LI Approval Routing Document

Status: GEN Approved
 Expedite: No

Last populated: 08/21/2012 03:58 PM

Plant Mitchell Unit 2 Funding Project # ML2MH1202 Ver. # 1 Proj Type GWSCS Authorization Type Project

Project Title: ML2 MH ROTOCLONE RPL

Outage Code: (if necessary) Business Reason: Environmental, Safety & Health
 In-service date: 12/31/2012

Brief Description of Project (sufficient to determine that the project is Capital not O&M)

Replace obsolete dry coal dust ventilation and dust collection system with a new wet coal silo ventilation and collection system

Are any of the following documents attached?

PMRG Form Yes No
 1 Page Summary Form Yes No
 Executive Summary Form Yes No
 Economics Yes No

Company Ohio Power Co. Amount to be Authorized \$761,828.29 LEG-9 # No

Originator Douglas E Adams Project Manager Ronald L Hyatt
 Originator Phone No. 8-200-5961 Project Manager Phone No. 8-200-1869
 614/716-5961 614/716-1869

Originated 08/21/2012 Expected Sub Company Board 09/25/2012
 GEN Approval Required by 09/12/2012 Project Fully Approved & Opened by
 Approved by PMRG Board: Not Reviewed Date Approved by PMRG Board:

Will material become obsolete as a result of this CI? No

If you have questions concerning Obsolete Material, please contact your Supply Chain Representative.

		YR1	YR2	YR3	YR4	YR5+	
Budget (Direct Costs)	Prior Years	2012	2013	2014	2015	2016+	Total
Capital - Direct	0	0	0	0	0	0	0
Removal - Direct	0	0	0	0	0	0	0
Total Direct Budget	0	0	0	0	0	0	0
Associated O&M	0	0	0	0	0	0	0
Capital - Direct	0	705,000	0	0	0	0	705,000
Removal - Direct	0	0	0	0	0	0	0

Project / CPP / Program Amount Being Authorized

Prior Years	2012	2013	2014	2015	2016+	Total
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Capital - Direct	0	705,000	0	0	0	0	705,000
Removal - Direct	0	0	0	0	0	0	0
Total Direct Costs to be Authorized	0	705,000	0	0	0	0	705,000
Capital - Overheads	0	35,250	0	0	0	0	35,250
Removal - Overheads	0	0	0	0	0	0	0
Overheads	0	35,250	0	0	0	0	35,250
AFUDC	0	21,578	0	0	0	0	21,578
Amount Being Authorized	0	761,828	0	0	0	0	761,828
Associated O&M	0	0	0	0	0	0	0
Total Capital	0	761,828	0	0	0	0	761,828
Total Removals	0	0	0	0	0	0	0
Associated O&M	0	0	0	0	0	0	0

Ownership Unit Breakdown

Funding # / Company	*	Prior Years	2012	2013	2014	2015	2016+	Total
ML2MH1202	C	0	761,828	0	0	0	0	761,828
	R	0	0	0	0	0	0	0
Ohio Power Co - Generation		0	761,828	0	0	0	0	761,828
Total								

* C = Total Capital, R = Total Removals

Kenneth J DeLuca
 (GEN Financial Mgrs)

08/22/2012 08:34 AM EDT

Timothy V Riordan
 (VP Engineering Services)

08/22/2012 12:36 PM EDT

John A Mazzone
 (Regional Lead)

08/23/2012 09:02 AM EDT

John M McManus
 (VP Environmental Services)

08/23/2012 01:04 PM EDT

Selwyn J Dias
 (OPCO Regulatory & Finance)

08/24/2012 01:01 PM EDT

Stephen W Burge
 (SVP Fossil & Hydro Generation)

08/29/2012 08:32 AM EDT

Pablo A Vegas
 (OPCO President)

08/30/2012 11:06 PM EDT

Comment

Attachments



ML2MH1202 ML Coal Silo U2 PMRG form.xls

Current Year Budget Availability/Offset for this Authorization:

Direct Cost		2012
Original Budget Amount:		\$0
Offset (source & amount):	INCCAPINV	\$660,000
	FODA	\$45,500
	TOTAL	\$705,500

Regulatory Comments:

Twana Banks-Smith - 08/22/2012 09:21:35 AM

Ohio Power Company – \$0.762M (100%); In-Service Date: 12/31/2012

- \$0.732M (96%) Upon approval from State and Federal regulatory authorities, Ohio Power Company's generation fleet will transition into a competitive market. Currently, base generation revenues authorized by the PUCO (approved in March 2009 ESP) are not cost-of-service based, so there is no incremental cost recovery mechanism for new capital investments. As such, new investment carrying costs are deemed a cost of business offsetting ESP authorized revenues.
 - \$0.030M (4%) Allocated to WPCo and recovered in current demand charge effective 1/1/10
-