

FILE

12/

**BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Ohio :  
Power Company and Columbus Southern :  
Power Company for Authority to Merge and : Case No. 10-2376-EL-UNC  
Related Approvals. :

In the Matter of the Application of Columbus :  
Southern Power Company and Ohio Power :  
Company for Authority to Establish a : Case Nos. 11-346-EL-SSO  
Standard Service Offer Pursuant to : 11-348-EL-SSO  
§4928.143, Ohio Rev. Code, in the Form of :  
an Electric Security Plan. :

In the Matter of the Application of Columbus :  
Southern Power Company and Ohio Power :  
Company for Approval of Certain : Case Nos. 11-349-EL-AAM  
Accounting Authority. : 11-350-EL-AAM

In the Matter of the Application of Columbus :  
Southern Power Company to Amend its :  
Emergency Curtailment Service Riders. : Case No. 10-343-EL-ATA

In the Matter of the Application of Ohio :  
Power Company to Amend its Emergency :  
Curtailment Service Riders. : Case No. 10-344-EL-ATA

In the Matter of the Commission Review of :  
the Capacity Charges of Ohio Power :  
Company and Columbus Southern Power : Case No. 10-2929-EL-UNC  
Company. :

In the Matter of the Application of Columbus :  
Southern Power Company for Approval of a :  
Mechanism to Recover Deferred Fuel Costs : Case No. 11-4920-EL-RDR  
Ordered Under Ohio Revised Code :  
4928.144. :

In the Matter of the Application of Ohio :  
Power Company for Approval of a :  
Mechanism to Recover Deferred Fuel Costs : Case No. 11-4921-EL-RDR  
Ordered Under Ohio Revised Code 4928.144 :

RECEIVED-DOCKETING DIV  
2011 SEP 13 PM 4:57

PUCCO

This is to certify that the images appearing are an  
accurate and complete reproduction of a case file  
document delivered in the regular course of business.  
Technician AN Date Processed SEP 13 2011

**PREFILED TESTIMONY  
OF  
ROBERT B. FORTNEY  
UTILITIES DEPARTMENT  
RATES AND TARIFFS DIVISION**

**STAFF EX. \_\_\_\_\_**

**September 13, 2011**

1     1.     Q.     Please state your name and business address.

2           A.     My name is Robert B. Fortney. My business address is 180 E. Broad  
3                 Street, Columbus, Ohio 43215.

4  
5     2.     Q.     By whom are you employed and in what capacity?

6           A.     I am employed by the Public Utilities Commission of Ohio (PUCO) as a  
7                 Public Utilities Administrator 3 in the Rates and Tariffs Division of the  
8                 Utilities Department.

9  
10    3.     Q.     Please outline your educational background and work experience.

11          A.     I received a Bachelor of Science Degree in Business Administration from  
12                 Ball State University, Muncie, Indiana, in 1971. I received a Master of  
13                 Business Administration Degree from the University of Dayton, Dayton,  
14                 Ohio, in 1979. I have been with the Commission staff for 26 years,  
15                 involved in all aspects of electric utility rates, rules and regulations.

16  
17    4.     Q.     What is the purpose of your testimony at this time?

18          A.     I am testifying in support of the Stipulation and Recommendation filed on  
19                 September 7, 2011. I will briefly address the elements of the Commission's  
20                 three-prong test criteria for adopting a stipulation. I will also present a  
21                 quantitative analysis which compares the results of the stipulation to the  
22                 projected results of a market rate offer.

1 5. Q. Is the Stipulation a product of serious bargaining among capable and know-  
2 ledgeable parties?

3 A. Yes. The bargaining process included various parties (or their representa-  
4 tives), including Staff, who are considered to be experts in each of their  
5 respective fields. They also have an extensive history of participation and  
6 experience in matters before the Commission. I might also add that in  
7 addition to being “serious,” the bargaining was also “extensive” and  
8 “lengthy.”  
9

10 6. Q. Taken as a package, does the Stipulation benefit ratepayers and is it in the  
11 public interest?

12 A. Yes, the key phrase being “taken as a package.” It is important to remem-  
13 ber that the Stipulation is an integrated settlement. The focus in my testi-  
14 mony is on the quantitative benefits of the Stipulation as compared to the  
15 alternative of a market rate offer. Other witnesses will focus more on the  
16 qualitative benefits.  
17

18 7. Q. Does the Stipulation violate any important regulatory principle or practice?

19 A. No. The Stipulation is consistent with the long-established regulatory  
20 principles in Ohio and it is also consistent with the principles set forth for  
21 Electric Security Plans that are embodied in Senate Bill 221. The Stipula-  
22 tion results in fair and reasonably priced rates which support the provision

1 of safe and reliable service. It gives customers effective choices that ensure  
2 diversity of electric supply and suppliers. It calls for a transition to market  
3 based pricing. It results in rates that allow large industrial customers to  
4 better compete in the global marketplace. It includes a mechanism to retain  
5 current jobs, and create new construction jobs while promoting the use of  
6 Ohio shale gas. It provides for shareholder funding of economic develop-  
7 ment for business customers through the Ohio Growth Fund and provides  
8 benefits to low income customers through the Partnership With Ohio initia-  
9 tive.

10  
11 8. Q. You have mentioned that your testimony includes a quantitative analysis  
12 and that other witnesses will focus more on qualitative benefits. What do  
13 you mean?

14 A. The alternative to an Electric Service Plan, as embodied by the stipulation,  
15 is a Market Rate Option (MRO). As I see it, an MRO is limited to the  
16 matter of determining the price of generation service for SSO customers  
17 through a competitive procurement. This stipulation provides solutions to  
18 a wider variety of issues outside that narrow framework. Other witnesses  
19 will speak to those issues and how the stipulation brings reasonable resolu-  
20 tions. My analysis focuses on the quantitative benefits of the stipulation  
21 when compared to an MRO. That analysis is shown on Attachment A to

1 my testimony. I compare the results of the stipulation to the MRO rate as  
2 determined by Staff witness Dan Johnson.

3  
4 9. Q. Aside from the rates which are quantified in the stipulation, did you make  
5 any assumptions?

6 A. The stipulation has implicit base generation rates; so, there is a need for  
7 assumptions in only one area. I have estimated the rates which will result  
8 from the Generation Resource Rider.

9  
10 10. Q. How did you determine a market rate offer to compare with the stipulation?

11 A. The analysis takes into account a blending of the market rate with a stand-  
12 ard service offer. Section 4928.142 (D) of Senate Bill 221 indicates to me  
13 that a company's first application for a MRO requires a proportionate  
14 blending of that market rate with the generation service price equal to the  
15 utility's most recent standard service offer which can be adjusted by the  
16 Commission for known and measurable changes (including fuel) in that  
17 most recent standard service offer. In order to determine the most recent  
18 standard service offer, I adjusted the fuel component from \$0.03033/kWh  
19 to \$0.03310/kWh. I also included in the current rate the current POLR rate  
20 of \$0.00307/kWh. While the Commission can determine the blending per-  
21 centages, the statute suggests a blending of 10%/90%, 20%/80% and  
22 30%/70% for the first three years.

1 As stated, the market rate to be blended comes from the testimony of Mr.  
2 Johnson. I believe it is important to note that, while actual ESP rates can be  
3 determined with some degree of objectivity, the market rate is subject to  
4 significant uncertainty due to the volatility of forward contract prices. Mr.  
5 Johnson's direct testimony highlights that uncertainty.

6  
7 11. Q. Can you summarize the results of the analysis?

8 A. The following chart summarizes the results:  
9

Description	Average Rate in cents per kWh
2012 Stipulation	5.992
2012 Staff Blended Market Rate	6.009
2013 Stipulation	6.116
2013 Staff Blended Market Rate	6.046
2014 Stipulation	6.270
2014 Staff Blended Market Rate	6.424

10  
11  
12 12. Q. What do you conclude?

13 A. Mr. Johnson did not provide a comparable market rate for beyond 2014;  
14 therefore, my analysis only incorporates year one (2012) through year three

(2014). The following table summarizes the average rates per kWh over that three-year term.

Description	Average Rate in cents/kWh Over the Term
Stipulation	$(5.992+6.116+6.270)/3 = 6.126$
Staff Blended MRO	$(6.009+6.046+6.424)/3 = 6.160$

For the three-year period shown, the stipulation is slightly more favorable. However, since the trend of Mr. Johnson's comparable market rate is upward, and there would be no further increase to the generation rates, one could reasonably conclude that the stipulation would provide additional quantitative benefits for the period from January 1, 2015 through May 31, 2015, in addition to the qualitative benefits. There will be a competitive bidding process for the SSO obligation for delivery beginning June 1, 2015 through May 31, 2016.

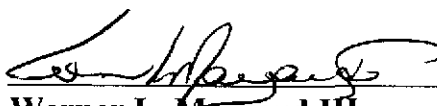
13. Q. Does this conclude your testimony?

A. Yes, it does. However, I reserve the right to supplement my testimony as new information subsequently becomes available or in response to positions taken by other parties.



## PROOF OF SERVICE

I hereby certify that a true copy of the foregoing **Prefiled Testimony of Robert B. Fortney**, submitted on behalf of the Staff of the Public Utilities Commission of Ohio, was served by regular U.S. mail, postage prepaid, or hand-delivered, upon the following Parties of Record, this 13<sup>th</sup> day of September, 2011.



---

**Werner L. Margard III**  
Assistant Attorney General

### **Parties of Record:**

**Matthew J. Satterwhite**  
**Steven T. Nourse**  
American Electric Power  
1 Riverside Plaza  
Columbus, OH 43215  
[mjsatterwhite@aep.com](mailto:mjsatterwhite@aep.com)  
[stnourse@aep.com](mailto:stnourse@aep.com)

**Daniel Conway**  
Porter, Wright, Morris & Arthur  
41 South High Street  
Columbus, OH 4321  
[dconway@porterwright.com](mailto:dconway@porterwright.com)

**On Behalf of Columbus Southern Power  
Company and Ohio Power Company**

**Colleen L. Mooney**  
Ohio Partners for Affordable Energy  
231 West Lima Street  
Findlay, OH 45840  
[cmooney2@columbus.rr.com](mailto:cmooney2@columbus.rr.com)

**On Behalf of Ohio Partners for Affordable  
Energy**

**Dorothy Corbett**  
Duke Energy Ohio  
139 East Fourth Street  
Suite 1303  
P.O. Box 960  
Cincinnati, OH 45201  
[dorothy.corbett@duke-energy.com](mailto:dorothy.corbett@duke-energy.com)

**Philip P. Sineneng**  
Thompson Hine  
41 South High Street, Suite 1700  
Columbus, OH 43215  
[phillip.sineneng@thompsonhine.com](mailto:phillip.sineneng@thompsonhine.com)

**On Behalf of Duke Energy Retail Sales**

**Michael Smalz**  
Joseph Maskovyak  
Ohio Poverty Law Center  
555 Buttrick Avenue  
Columbus, OH 43215-1137  
[msmalz@ohiopoverlaw.org](mailto:msmalz@ohiopoverlaw.org)  
[jmaskovyak@ohiopoverlaw.org](mailto:jmaskovyak@ohiopoverlaw.org)

**On Behalf of The Appalachian Peace and  
Justice Network**

**David Boehm**

**Michael L. Kurtz**

Boehm Kurtz & Lowry  
36 East Seventh Street  
Suite 1510  
Cincinnati, OH 45202  
[dboehm@bkllawfirm.com](mailto:dboehm@bkllawfirm.com)  
[mkurtz@bkllawfirm.com](mailto:mkurtz@bkllawfirm.com)

**On Behalf of The Ohio Energy Group**

**John Bentine**

**Mark Yurick**

Chester Willcox & Saxbe  
65 East State Street  
Suite 100  
Columbus, OH 43215  
[jbentine@cwslaw.com](mailto:jbentine@cwslaw.com)  
[myurick@cwslaw.com](mailto:myurick@cwslaw.com)

**On Behalf of The Kroger Co.**

**Lisa G. McAlister**

**Matthew W. Warnock**

Bricker & Eckler  
100 South Third Street  
Columbus, OH 43215-4291  
[lmcalister@bricker.com](mailto:lmcalister@bricker.com)  
[mwarnock@bricker.com](mailto:mwarnock@bricker.com)

**On Behalf of OMA Energy Group**

**Jay E. Jadwin**

American Electric Power Service Corp.  
1 Riverside Plaza, 29<sup>th</sup> Floor  
Columbus, OH 43215  
[jedjadwin@aep.com](mailto:jedjadwin@aep.com)

**On Behalf of AEP Retail Energy Partners**

**Terry Etter**

**Maureen R. Grady**

Assistant Consumers' Counsel  
Office of the Ohio Consumers' Counsel  
10 West Broad Street, Suite 1800  
Columbus, OH 43215  
[etter@occ.state.oh.us](mailto:etter@occ.state.oh.us)  
[grady@occ.state.oh.us](mailto:grady@occ.state.oh.us)

**On Behalf of The Office of The Ohio  
Consumers' Counsel**

**Richard L. Sites**

Ohio Hospital Association  
155 East Broad Street, 15<sup>th</sup> Floor  
Columbus, OH 43215  
[ricks@ohanet.com](mailto:ricks@ohanet.com)

**Thomas J. O'Brien**

Bricker & Eckler  
100 South Third Street  
Columbus, OH 43215-4291  
[tobrien@bricker.com](mailto:tobrien@bricker.com)

**On Behalf of Ohio Hospital Association**

**Terrence O'Donnell**

**Christopher Montgomery**

Bricker & Eckler  
100 South Third Street  
Columbus, OH 43215  
[todonnell@bricker.com](mailto:todonnell@bricker.com)  
[cmontgomery@bricker.com](mailto:cmontgomery@bricker.com)

**On Behalf of Paulding Wind Farm II and  
The Distributed Wind Energy Association**

**Gregory Poulos**  
EnerNOC, Inc.  
101 Federal Street  
Suite 1100  
Boston, MA 02110  
[gpoulos@enernoc.com](mailto:gpoulos@enernoc.com)

**On Behalf of EnerNOC, Inc.**

**Tara Santarelli**  
Environmental Law & Policy Center  
1207 Grandview Avenue  
Suite 201  
Columbus, OH 43212  
[tsantarelli@elpc.org](mailto:tsantarelli@elpc.org)

**On Behalf of The Environmental Law & Policy Center**

**Glen Thomas**  
1060 First Avenue  
Suite 400  
King of Prussia, PA 19406  
[gthomas@gtpowergroup.com](mailto:gthomas@gtpowergroup.com)

**Laura Chappelle**  
4218 Jacob Meadows  
Okemos MI 48864  
[laurac@chappellconsulting.net](mailto:laurac@chappellconsulting.net)

**On Behalf of PJM Power Providers Group**

**William L. Massey**  
Covington & Burling  
1201 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
[wmassey@cov.com](mailto:wmassey@cov.com)

**Joel Malina**  
Compete Coalition  
1317 F Street, N.W.  
Washington, D.C. 2004  
[malina@wexlerwalker.com](mailto:malina@wexlerwalker.com)

**On Behalf of The Compete Coalition**

**Mark A. Hayden**  
FirstEnergy Corp.  
76 South Main Street  
Akron, OH 44308  
[haydenm@firstenergycorp.com](mailto:haydenm@firstenergycorp.com)

**James F. Lang**  
**Laura McBride**  
**N. Trevor Alexander**  
Calfee Halter & Griswold  
800 Superior Avenue  
Cleveland, OH 44114  
[jlang@calfee.com](mailto:jl原因@calfee.com)  
[lmcbride@calfee.com](mailto:lmcbride@calfee.com)  
[talexander@calfee.com](mailto:talexander@calfee.com)

**David Kutik**  
Jones Day  
North Point  
901 Lakeside Avenue  
Cleveland, OH 44114  
[dakutik@jonesday.com](mailto:dakutik@jonesday.com)

**Allison E. Haedt**  
Jones Day  
P.O. Box 165017  
Columbus, OH 43216-5017  
[aehaedt@jonesday.com](mailto:aehaedt@jonesday.com)

**On Behalf of FirstEnergy Solutions Corp.**

**M. Howard Petricoff**  
**Stephen M. Howard**  
Vorys, Sater, Seymour and Pease  
52 East Gay Street  
P.O. Box 1008  
Columbus, OH 43215-1008  
[mhpetricoff@vorys.com](mailto:mhpetricoff@vorys.com)  
[smhoward@vorys.com](mailto:smhoward@vorys.com)

**On Behalf of Pjm Power Providers Group  
and The Retail Energy Supply Association**

**Douglas G. Bonner**  
**Emma F. Hand**  
**Keith C. Nusbaum**  
Sonnenschein Nath & Rosenthal  
1301 K Street, N.W.  
Suite 600 East Tower  
Washington, D.C. 20005  
[doug.bonner@snrdenton.com](mailto:doug.bonner@snrdenton.com)  
[emma.hand@snrdenton.com](mailto:emma.hand@snrdenton.com)  
[keith.nusbaum@snrdenton.com](mailto:keith.nusbaum@snrdenton.com)

**On Behalf of Ormet Primary Aluminum Corporation**

**M. Howard Petricoff**  
**Michael J. Settineri**  
Vorys, Sater, Seymour and Pease  
52 East Gay Street  
P.O. Box 1008  
Columbus, OH 43215-1008  
[mhpetricoff@vorys.com](mailto:mhpetricoff@vorys.com)  
[mjsettineri@vorys.com](mailto:mjsettineri@vorys.com)

**On Behalf of Constellation NewEnergy, Inc.,  
Constellation Energy Commodities Group,  
Inc., and The Compete Coalition**

**Samuel C. Randazzo**  
**Frank P. Darr**  
**Joseph E. Oliker**  
McNees Wallace & Nurick  
21 East State Street, 17<sup>th</sup> Floor  
Columbus, OH 43215  
[sam@mcwncmh.com](mailto:sam@mcwncmh.com)  
[fdarr@mwncmh.com](mailto:fdarr@mwncmh.com)  
[joliker@mwncmh.com](mailto:joliker@mwncmh.com)

**On Behalf of Industrial Energy Users-Ohio**

**Henry W. Eckhart**  
1200 Chambers Road  
Suite 106  
Columbus, OH 43212  
[henryeckhart@aol.com](mailto:henryeckhart@aol.com)

**Shannon Fisk**  
Natural Resources Defense Council  
2 North Riverside Plaza, Suite 2250  
Chicago, IL 60606  
[sfisk@nrdc.org](mailto:sfisk@nrdc.org)

**On Behalf of The Natural Resources  
Defense Council and The Sierra Club**

**David Fein**  
**Cynthia Fonner Brady**  
Constellation Energy Resources  
550 West Washington Boulevard  
Suite 300  
Chicago, IL 60661  
[david.fein@constellation.com](mailto:david.fein@constellation.com)  
[cynthia.brady@constellation.com](mailto:cynthia.brady@constellation.com)

**On Behalf of Constellation NewEnergy, Inc.  
and Constellation Energy Commodities  
Group, Inc.**

**Barth Royer**  
Bell & Royer  
33 South Grant Avenue  
Columbus, OH 43215-3927  
[barthroyer@aol.com](mailto:barthroyer@aol.com)

**Gary A. Jeffries**  
Dominion Resources Services, Inc.  
501 Martindale Street, Suite 400  
Pittsburgh, PA 15212-5817  
[gary.a.jeffries@aol.com](mailto:gary.a.jeffries@aol.com)

**On Behalf of Dominion Retail**

**Pamela A. Fox/C. Todd Jones**  
**Steven J. Smith/Christopher Miller**  
**Gregory Dunn/Asim Haque**  
Schottenstein Zox and Dunn  
250 West Street, Suite 500  
Columbus, OH 43215  
[pfox@szd.com](mailto:pfox@szd.com)  
[cmiller@szd.com](mailto:cmiller@szd.com)  
[gdunn@szd.com](mailto:gdunn@szd.com)  
[ahaque@szd.com](mailto:ahaque@szd.com)

**On Behalf of The City of Hilliard, Ohio, The  
City of Grove City, Ohio, and The  
Association of Independent Colleges and  
Universities of Ohio**

**Kenneth P. Kreider**  
Keating Muething & Klekamp  
One East Fourth Street  
Suite 1400  
Cincinnati, OH 45202  
[kpkreider@kmklaw.com](mailto:kpkreider@kmklaw.com)

**Holly Rachel Smith**  
Hitt Business Center  
3803 Rectortown Road  
Marshall, VA 20115-3338  
[holly@raysmithlaw.com](mailto:holly@raysmithlaw.com)

**Steve W. Chriss**  
Wal-Mart Stores, Inc.  
Bentonville, AR 72716-0550  
[stephen.chriss@wal-mart.com](mailto:stephen.chriss@wal-mart.com)

**On Behalf of Wal-Mart Stores East and  
Sam's East**

**Sandy Grace**  
Exelon Business Services Company  
101 Constitution Avenue, N.W.  
Suite 400 East  
Washington, D.C. 20001  
[sandy.grace@exeloncorp.com](mailto:sandy.grace@exeloncorp.com)

**Jesse A. Rodriguez**  
Exelon Generation Company  
300 Exelon Way  
Kennett Square, PA 19348  
[jesse.rodriguez@exeloncorp.com](mailto:jesse.rodriguez@exeloncorp.com)

**M. Howard Petricoff**  
Vorys, Sater, Seymour and Pease  
52 East Gay Street  
P.O. Box 1008  
Columbus, OH 43215-1008  
[mhpetricoff@vorys.com](mailto:mhpetricoff@vorys.com)

**David M. Stahl**  
**Arin C. Aragona**  
**Scott C. Solberg**  
Elmer Stahl Klevorn & Solberg  
224 South Michigan Avenue  
Suite 1100  
Chicago, IL 60604

**Anastasia Polek-O'Brien**  
Exelon Generation Company  
10 South Dearborn Street, 49<sup>th</sup> Floor  
Chicago, IL 60603

**On Behalf of Exelon Generation Company**

**Nolan Moser**  
**Trent A. Dougherty**  
Ohio Environmental Council  
1207 Grandview Avenue  
Suite 201  
Columbus, OH 43212-3449  
[nolan@theoec.org](mailto:nolan@theoec.org)  
[trent@theoec.org](mailto:trent@theoec.org)

**On Behalf of The Ohio Environmental  
Council**

**Attachment A: ESP v. MRO cents per kWh**

Aug 26, 2011 document

Category	Current	2012 Stipulation Proposed ESP	2012 Incr	2012 Staff Projected MRO	2013 Stipulation Proposed ESP	2013 Incr	2013 Staff Projected MRO	2014 Stipulation Proposed ESP	2014 Staff Projected MRO	2014 Incr
Base Generation		2.102	2.450		2.570	2.570		2.720		
Transmission Adjustment		0.214	0.214		0.214			0.214		
Fuel		3.033	3.310		3.310			3.310		
EICC		0.09	0		0			0		
Market Comparable Total Generation	5.439	5.974		5.885	6.094		6.138	6.244	7.359	
Things that are part of the ESP but would not be in an MRO (or are already included in the MRO price #):										
Standard Offer Generation Service #		2.450	\$ 151,392,180		2.570	\$ 52,204,200		2.720		\$ 65,255,250
Fuel Adjustment Clause #		3.310	\$ 120,504,695		3.310			3.310		
Environmental Investment carrying Cost Rider (EICC) #		0	\$ (39,153,150)		0			0		
Provider of Last resort (POLR)		0	\$ (133,555,745)		0			0		
Generation Resource Rider (GRR) Turning Point		0.018	\$ 7,830,630		0.022	\$ 1,740,140		0.026		\$ 1,740,140
Generation NERC Compliance Cost Recovery (NERCR)		0			0			0		
Facility Closure Cost Recovery Rider (FCCR)		0			0			0		
Carbon Capture & Sequestration Rider (CCSR)		0			0			0		
Green Power Portfolio Rider (GPPR)		0			0			0		
Pool Termination Modification Provision		Unknown			Unknown			Unknown		
Plug-In Vehicle Tariff (PEV)		0			0			0		
Sub Total		5.778	\$ 107,018,610		5.902	\$ 53,944,340		6.056		\$ 66,995,390
Plus: Transmission Adj to Compare to MRO #		0.214		5.885	0.214		6.138	0.214		
Total to compare		5.992			6.116			6.270	7.359	

Current rate\* 90%  
Market rate 10%  
Comparable MRO

\*Current rate = 5.439-3.033+3.310+ current POLR of 0.307  
6.023

1,000,000 / 43503500009 = \$ 0.0000230  
0.0230 cents

kwh 43,503,500,009

ESP Benefits that may not be part of an MRO.

PIRR from WACC to LTD

Partnership with Ohio Funds - Low Income

2012 \$3 million

2013 \$3 million

2014 \$3 million

Ohio Growth Fund: Businesses

2012 \$5 million

2013 \$5 million

2014 \$5 million

ATTACHMENT A

2012 \$ (7,482,602)  
2013 \$ 30,452,450  
2014 \$ (66,908,383)  
\$ (43,938,535)

48.184  
12.276  
60.46  
6.046

80%  
20%

70%  
30%

42.161  
22.077  
64.238  
6.046