NUVEEN MISSOURI PREMIUM INCOME MUNICIPAL FUND Form N-Q October 30, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM N-O

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-7616

Nuveen Missouri Premium Income Municipal Fund (Exact name of registrant as specified in charter)

Nuveen Investments 333 West Wacker Drive, Chicago, Illinois 60606 (Address of principal executive offices) (Zip code)

Kevin J. McCarthy
Vice President and Secretary
333 West Wacker Drive, Chicago, Illinois 60606
(Name and address of agent for service)

Registrant's telephone number, including area code: 312-917-7700

Date of fiscal year end: 5/31

Date of reporting period: 8/31/13

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (§§ 239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after the close of the first and third fiscal quarters, pursuant to rule 30b1-5 under the Investment Company Act of 1940 (17 CFR 270.30b1-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. § 3507.

Item 1. Schedule of Investments

Portfolio of Investments (Unaudited)

Nuveen Missouri Premium Income Municipal Fund (NOM) August 31, 2013

Principal		Optional Call		
Amount (000)	Description (1)	Provisions (2)	Ratings (3) Value	2
	Consumer Staples – 3.5% (2.2% of Total			
	Investments)			
	Missouri Development Finance Board, Solid			
	Waste Disposal Revenue Bonds, Procter and			
\$ 1,010	Gamble	No Opt. Call	AA- \$	1,055,006
	Inc., Series 1999, 5.200%, 3/15/29 (Alternative	2		
	Minimum Tax)			
	Education and Civic Organizations – 16.6%			
	(10.2% of Total Investments)			
	Fort Zumwalt School District, Callaway			
	County, Missouri, General Obligation Bonds,			
600	Series	3/22 at 100.00	AA+	554,064
	2013C, 4.000%, 3/01/32			
	Guam International Airport Authority,			
	Revenue Bonds, Series 2013B, 5.500%,	10/23 at		
335	10/01/33 (WI/DD,	100.00	AA-	333,372
	Settling 9/12/13) – AGM Insured			
	Joplin, Missouri, General Obligation Bonds,			
	School Building, Direct Deposit Program			
670	Series	3/23 at 100.00	AA+	683,206
	2013, 5.000%, 3/01/33			
	Lincoln University, Missouri, Auxiliary			
	System Revenue Bonds, Series 2007, 5.125%,			
250	6/01/37 –	6/17 at 100.00	AA–	246,793
	AGC Insured			
	Missouri Health and Educational Facilities			
	Authority, Educational Facilities Revenue	10/22 at		
600	Bonds,	100.00	BBB-	543,456
	Southwest Baptist University Project, Series			
	2012, 5.000%, 10/01/33			
	Missouri Health and Educational Facilities			
60 0	Authority, Revenue Bonds, A.T. Still	10/21 at		607 0 7 0
630	University of	100.00	A–	635,859
	Health Sciences, Series 2011, 5.250%,			
	10/01/41			
	Missouri Health and Educational Facilities	10/10		
700	Authority, Revenue Bonds, Rockhurst	10/18 at	DDD	757.000
700	University,	103.00	BBB-	757,330

	Series 2011A, 6.500%, 10/01/35 Missouri Health and Educational Facilities Authority, Revenue Bonds, Washington	11/21 at		
550	University, Series 2011B, 5.000%, 11/15/37 Missouri Health and Educational Facilities Authority, Revenue Bonds, Webster	100.00	AAA	575,966
600	University, Series 2011, 5.000%, 4/01/36	4/21 at 100.00	A2	602,226
4,935	Total Education and Civic Organizations Health Care – 33.2% (20.5% of Total Investments) Cape Girardeau County Industrial Development Authority, Missouri, Health			4,932,272
525	Facilities Revenue Bonds, Saint Francis Medical Center, Series 2009A, 5.750%, 6/01/39 Cape Girardeau County Industrial Development Authority, Missouri, Health	6/19 at 100.00	AA-	537,973
760	Facilities Revenue Bonds, Southeast Missouri Hospital Association, Series 2007, 5.000%, 6/01/27	6/17 at 100.00	BBB+	742,406
930	Cass County, Missouri, Hospital Revenue Bonds, Series 2007, 5.625%, 5/01/38 Clinton County Industrial Development Authority, Missouri, Revenue Bonds, Cameron	11/16 at 100.00 12/17 at	BBB-	865,551
480	Regional Medical Center, Series 2007, 5.000%, 12/01/37 Joplin Industrial Development Authority, Missouri, Health Facilities Revenue Bonds,	100.00	N/R	388,176
750	Freeman Health System, Series 2004, 5.500%, 2/15/29 Joplin Industrial Development Authority, Missouri, Health Facilities Revenue Bonds,	2/15 at 102.00	BBB+	751,733
200	Freeman Health System, Series 2011, 5.500%, 2/15/31 Missouri Health and Educational Facilities Authority, Health Facilities Revenue Bonds,	2/21 at 100.00 11/20 at	BBB+	199,438
540	Capital Region Medical Center, Series 2011, 5.000%, 11/01/27 Missouri Health and Educational Facilities	100.00	A3	545,092
335	Authority, Health Facilities Revenue Bonds, Heartland Regional Medical Center, Series 2012, 5.000%, 2/15/37 Missouri Health and Educational Facilities Authority, Health Facilities Revenue Bonds,	2/22 at 100.00	A1	327,526
750	Mercy Health, Series 2012, 4.000%, 11/15/42	No Opt. Call	AA-	585,525
500	Missouri Health and Educational Facilities Authority, Health Facilities Revenue Bonds,	12/21 at 100.00	A+	521,125

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	St. Luke's Episcopal and Presbyterian Hospitals,			
	Series 2011, 5.000%, 12/01/25			
	Missouri Health and Educational Facilities	11/20 at		
2,000	Authority, Health Facility Revenue Bonds, St.	100.00	A+	2,020,960
_,,,,,	Luke's Health System, Series 2010A, 5.000%,			_,,,,
	11/15/30			
	Missouri State Health and Educational			
	Facilities Authority, Health Facilities Revenue	11/23 at		
1,430	Bonds,	100.00	A2	1,345,072
	CoxHealth, Series 2013A, 5.000%, 11/15/44			
	Saline County Industrial Development			
	Authority, Missouri, Health Facilities Revenue	12/20 at		
720	Bonds,	100.00	BBB-	743,299
	John Fitzgibbon Memorial Hospital Inc., Series 2010, 5.600%, 12/01/28			
	St. Louis County Industrial Development			
	Authority, Missouri, Healthcare Facilities	11/16 at		
350	Revenue	100.00	N/R	315,578
	Bonds, Ranken-Jordan Project, Refunding			
	Series 2007, 5.000%, 11/15/27			
10,270	Total Health Care			9,889,454
	Housing/Multifamily – 1.2% (0.8% of Total			
	Investments)			
	Missouri Housing Development Commission,			
	Multifamily Housing Revenue Bonds, Series	12/13 at		
95	2001II,	100.00	AA	95,394
	5.250%, 12/01/16			
	Northwest Missouri State University, Housing			
350	System Revenue Bonds, Refunding Series	No Ont Call	A3	275 107
330	2012, 3.125%, 6/01/29	No Opt. Call	A3	275,107
445	Total Housing/Multifamily			370,501
773	Housing/Single Family – 1.5% (0.9% of Total			370,301
	Investments)			
	Missouri Housing Development Commission,			
	Single Family Mortgage Revenue Bonds,			
195	Homeownership	9/16 at 100.00	AA+	196,673
	Loan Program, Series 2007A-1, 4.700%,			,
	9/01/27 (Alternative Minimum Tax)			
	Missouri Housing Development Commission,			
	Single Family Mortgage Revenue Bonds,			
245	Homeownership	3/17 at 100.00	AA+	245,132
	Loan Program, Series 2007C-1, 4.800%,			
	9/01/38 (Alternative Minimum Tax)			
440	Total Housing/Single Family			441,805
	Long-Term Care – 13.5% (8.3% of Total			
	Investments)			
	Bridgeton Industrial Development Authority,			
250	Missouri, Senior Housing Revenue Bonds, The	5/10 of 100 00	NT/D	214 (15
250	Sarah	5/18 at 100.00	N/R	214,615

	Community Project, Series 2013, 4.500%, 5/01/28			
1,750	Cole County Industrial Development Authority, Missouri, Revenue Bonds, Lutheran Senior Services – Heisinger Project, Series 2004, 5.500%, 2/01/35	2/14 at 100.00	BBB+	1,676,693
500	Joplin Industrial Development Authority, Missouri, Revenue Bonds, Christian Homes Inc., Series 2007F, 5.750%, 5/15/31	5/17 at 100.00	BBB-	504,345
475	Lees Summit Industrial Development Authority, Missouri, Revenue Bonds, John Knox Village Obligated Group, Series 2007A, 5.125%, 8/15/32	8/17 at 100.00	BBB-	426,070
250	Missouri Health and Educational Facilities Authority, Revenue Bonds, Lutheran Senior Services Projects, Series 2011, 6.000%, 2/01/41	2/21 at 100.00	BBB+	255,305
100	St. Louis County Industrial Development Authority, Missouri, Revenue Bonds, Friendship Village of Chesterfield, Series 2012, 5.000%, 9/01/42 St. Louis County Industrial Development	No Opt. Call	BBB-	82,952
425	Authority, Missouri, Revenue Bonds, Friendship Village of Sunset Hills, Series 2012, 5.000%, 9/01/42 St. Louis County Industrial Development	9/22 at 100.00	A	371,909
500	Authority, Missouri, Revenue Bonds, Friendship Village of West County, Series 2007A, 5.500%, 9/01/28	9/17 at 100.00	BBB-	481,955
4,250	Total Long-Term Care Tax Obligation/General – 18.2% (11.2% of Total Investments)			4,013,844
600	Branson Reorganized School District R-4, Taney County, Missouri, General Obligation Bonds, School Building Series 2012, 4.375%, 3/01/32 Camdenton Reorganized School District R3,	3/22 at 100.00	A+	562,656
1,500	Camden County, Missouri, General Obligation Bonds, Series 2005, 5.250%, 3/01/24 – AGM Insured Independence School District, Jackson County,	3/15 at 100.00	AA-	1,595,985
1,685	Missouri, General Obligation Bonds, Series 2010, 5.000%, 3/01/27	3/20 at 100.00	AA+	1,786,269
500	Missouri School Boards Association, Lease Participation Certificates, Clay County School	3/17 at 100.00	AA-	536,575

	District 53 Liberty, Series 2007, 5.250%, 3/01/27 – AGM Insured Puerto Rico, General Obligation and Public Improvement Bonds, Series 2002A, 5.500%,			
1,000	7/01/20 – NPFG Insured	No Opt. Call	A	937,020
5,285	Total Tax Obligation/General Tax Obligation/Limited – 28.9% (17.8% of Total Investments) Bi-State Development Agency of the			5,418,505
910	Missouri-Illinois Metropolitan District, Mass Transit Sales Tax Appropriation Bonds, Refunding Combined Lien Series 2013A, 5.000%, 10/01/33	10/22 at 100.00	AA+	934,707
600	Chesterfield, Missouri, Certificates of Participation, Series 2005, 5.000%, 12/01/24 – FGIC Insured Fenton, Missouri, Tax Increment Revenue	12/15 at 100.00	Aa1	652,266
90	Bonds, Gravois Bluffs Redevelopment Project, Series 2006, 4.500%, 4/01/21 Fulton, Missouri, Tax Increment Revenue	4/14 at 100.00	BBB+	90,419
315	Bonds, Fulton Commons Redevelopment Project, Series 2006, 5.000%, 6/01/28	6/16 at 100.00	N/R	232,646
455	Government of Guam, Business Privilege Tax Bonds, Series 2012B-1, 5.000%, 1/01/42 Howard Bend Levee District, St. Louis County, Missouri, Levee District Improvement Bonds,	1/22 at 100.00	A	434,420
	Series 2013B:			
180	4.875%, 3/01/33	3/23 at 100.00	BBB+	162,261
115	5.000%, 3/01/38 Jackson County, Missouri, Special Obligation	3/23 at 100.00 12/21 at	BBB+	101,272
485	Bonds, Truman Medical Center Project, Series 2011B, 4.350%, 12/01/23 Kansas City Industrial Development Authority,	100.00	Aa3	501,078
300	Missouri, Downtown Redevelopment District Revenue Bonds, Series 2011A, 5.000%, 9/01/32 Kansas City Tax Increment Financing		AA-	292,104
475	Commission, Missouri, Tax Increment Revenue Bonds, Briarcliff West Project, Series 2006A, 5.400%, 6/01/24	6/14 at 102.00	N/R	480,781
100	Kansas City Tax Increment Financing Commission, Missouri, Tax Increment Revenue Bonds, Shoal Creek Parkway Project, Series 2011, 5.000%, 6/01/21	6/16 at 100.00	N/R	100,455

360	Missouri Development Finance Board, Infrastructure Facilities Revenue Bonds, Branson Landing Project, Series 2005A, 5.000%, 6/01/35	6/15 at 100.00	A	353,416
300	Missouri Development Finance Board, Infrastructure Facilities Revenue Bonds, City of Independence, Crackerneck Creek Project, Series 2006C, 5.000%, 3/01/28	3/16 at 100.00	A-	286,296
245	Monarch-Chesterfield Levee District, St. Louis County, Missouri, Levee District Improvement Bonds, Series 1999, 5.750%, 3/01/19 – NPFG Insured	3/14 at 100.00	A	245,936
500	Osage Beach, Missouri, Tax Increment Revenue Bonds, Prewitts Point Transportation Development District, Series 2006, 5.000%, 5/01/23 Puerto Rico Sales Tax Financing Corporation,	5/14 at 100.00	N/R	454,430
1,750	Sales Tax Revenue Bonds, First Subordinate Series	8/19 at 100.00	A+	1,559,688
225	2009A, 6.000%, 8/01/42 Puerto Rico Sales Tax Financing Corporation, Sales Tax Revenue Bonds, Senior Series 2011C, 0.000%, 8/01/41	No Opt. Call	AA-	29,747
1,500	Puerto Rico Sales Tax Financing Corporation, Sales Tax Revenue Bonds, Series 2007A, 0.000%, 8/01/41 – NPFG Insured	No Opt. Call	AA-	196,740
600	Riverside, Missouri, L-385 Levee Redevelopment Plan Tax Increment Revenue Bonds, Series 2004, 5.250%, 5/01/20 St. Joseph Industrial Development Authority, Missouri, Tax Increment Bonds, Shoppes at North	5/15 at 100.00	A	618,366
340	Village Project, Series 2005A: 5.375%, 11/01/24	11/14 at 100.00	N/R	324,183
400	5.500%, 11/01/27	11/14 at 100.00	N/R	370,968
200	St. Joseph Industrial Development Authority, Missouri, Tax Increment Bonds, Shoppes at North	11/14 at 100.00	N/R	185,484
10,445	Village Project, Series 2005B, 5.500%, 11/01/27 Total Tax Obligation/Limited Transportation – 13.0% (8.1% of Total			8,607,663
1,000	Investments) St. Louis, Missouri, Airport Revenue Bonds, Lambert-St. Louis International Airport, Series	No Opt. Call	A	1,161,080

	2005, 5.500%, 7/01/18 - NPFG Insured			
2,500	St. Louis, Missouri, Airport Revenue Bonds, Lambert-St. Louis International Airport, Series	7/17 at 100.00	AA-	2,726,597
3,500	2007A, 5.000%, 7/01/21 – AGM Insured Total Transportation			3,887,677
3,300	U.S. Guaranteed – 10.9% (6.8% of Total			3,007,077
	Investments) (4)			
80	Cottleville, Missouri, Certificates of	9/1/Lat 100 00	N/R (4)	92 605
80	Participation, Series 2006, 5.250%, 8/01/31 (Pre-refunded 8/01/14)	8/14 at 100.00	N/K (4)	83,695
	Missouri Health and Educational Facilities			
7 00	Authority, Revenue Bonds, Lake Regional	0/14 - 100 00	DDD (4)	510 415
500	Health	2/14 at 100.00	BBB+ (4)	512,415
	System, Series 2003, 5.700%, 2/15/34 (Pre-refunded 2/15/14)			
	Springfield Public Building Corporation,			
	Missouri, Lease Revenue Bonds, Jordan Valley			
1,395	Park	100.00	N/R (4)	1,715,948
	Projects, Series 2000A, 6.125%, 6/01/21 – AMBAC Insured (ETM)			
	St. Louis County Pattonville School District			
	R3, Missouri, General Obligation Bonds,			
	Series 2004:			
0.0	5.250%, 3/01/20 (Pre-refunded 3/01/14) – AGN			02.022
80	Insured 5.250%, 3/01/20 (Pre-refunded 3/01/14) – AGN	3/14 at 100.00	AA-(4)	82,023
250	Insured	3/14 at 100.00	AA-(4)	256,323
	5.250%, 3/01/20 (Pre-refunded 3/01/14) - AGM	1		
20	Insured	3/14 at 100.00	AA-(4)	20,509
	St. Louis County, Missouri, GNMA Collateralized Mortgage Revenue Bonds,			
500	Series 1993D, 5.650%,	No Opt. Call	AA+ (4)	590,645
200	7/01/20 (Alternative Minimum Tax) (ETM)	rio opi. cum	1111 (1)	270,012
2,825	Total U.S. Guaranteed			3,261,558
	Utilities – 4.8% (2.9% of Total Investments)			
	Missouri Joint Municipal Electric Utility			
110	Commission, Iatan 2 Power Project Revenue Bonds,	1/16 at 100.00	A2	113,550
110	Series 2006A, 4.125%, 1/01/21 – AMBAC	1,10 at 100.00	112	113,550
	Insured			
	Missouri Joint Municipal Electric Utility			
500	Commission, Plum Point Project, Revenue Bonds,	1/16 at 100.00	A	491,820
300	Series 2006, 5.000%, 1/01/34 – NPFG Insured	1/10 at 100.00	A	491,020
	Missouri Joint Municipal Electric Utility			
	Commission, Power Supply System Revenue			
	Bonds, MoPEP			
400	Facilities, Series 2012: 5.000%, 1/01/32	1/21 at 100.00	A2	398,072
425	5.000%, 1/01/37	1/21 at 100.00	A2 A2	412,441
1,435	Total Utilities			1,415,883

	Water and Sewer – 16.8% (10.3% of Total Investments)			
	Carroll County Public Water Supply District 1,			
	Missouri, Water System Revenue Bonds,			
600	Refunding	3/18 at 100.00	A	624,168
000	Series 2009, 6.000%, 3/01/39	3/16 at 100.00	A	024,108
	Kansas City, Missouri, Water Revenue Bonds,	12/21 at		
410	Series 2013A, 4.000%, 12/01/37	100.00	AA+	364,888
410	Metropolitan St. Louis Sewerage District,	100.00	7 17 1	304,000
	Missouri, Wastewater System Revenue Bonds,			
200	Series	5/17 at 100.00	AAA	202,634
200	2006C, 5.000%, 5/01/36 – NPFG Insured	3/1/ at 100.00	7 11 17 1	202,03-
	Metropolitan St. Louis Sewerage District,			
	Missouri, Wastewater System Revenue Bonds,			
1,000	Series	5/22 at 100.00	AAA	1,029,670
-,	2012A, 5.000%, 5/01/42			-,,,-,-
	Missouri Environmental Improvement and			
	Energy Resources Authority, Water Facility	12/16 at		
2,965	Revenue	100.00	AA+	2,771,890
•	Bonds, Missouri-American Water Company,			
	Series 2006, 4.600%, 12/01/36 – AMBAC			
	Insured			
	(Alternative Minimum Tax) (UB) (5)			
5,175	Total Water and Sewer			4,993,250
\$ 50,015	Total Investments (cost \$49,189,194) – 162.1%			48,287,418
	Floating Rate Obligations – (7.5)%			(2,225,000)
	MuniFund Term Preferred Shares, at			
	Liquidation Value $-(60.0)\%$ (6)			(17,880,000)
	Other Assets Less Liabilities – 5.4%			1,614,970
	Net Assets Applicable to Common Shares –			
	100%		\$	29,797,388

Fair Value Measurements

Fair value is defined as the price that the Fund would receive upon selling an investment or transferring a liability in an orderly transaction to an independent buyer in the principal or most advantageous market for the investment. A three-tier hierarchy is used to maximize the use of observable market data and minimize the use of unobservable inputs and to establish classification of fair value measurements for disclosure purposes. Observable inputs reflect the assumptions market participants would use in pricing the asset or liability. Observable inputs are based on market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability. Unobservable inputs are based on the best information available in the circumstances. The following is a summary of the three-tiered hierarchy of valuation input levels.

Level 1 – Inputs are unadjusted and prices are determined using quoted prices in active markets for identical securities.

Level 2 – Prices are determined using other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3 – Prices are determined using significant unobservable inputs (including management's assumptions in determining the fair value of investments).

The inputs or methodologies used for valuing securities are not an indication of the risks associated with investing in those securities. The following is a summary of the Fund's fair value measurements as of the end of the reporting period:

	Level 1	Level 2	Level 3	Total
Long-Term Investments:				
Municipal Bonds	\$ —	\$48,287,418	\$ —	\$48,287,418

Income Tax Information

The following information is presented on an income tax basis. Differences between amounts for financial statement and federal income tax purposes are primarily due to timing differences in recognizing taxable market discount, timing differences in recognizing certain gains and losses on investment transactions and the treatment of investments in inverse floating rate securities reflected as financing transactions, if any. To the extent that differences arise that are permanent in nature, such amounts are reclassified within the capital accounts on the Statement of Assets and Liabilities presented in the annual report, based on their federal tax basis treatment; temporary differences do not require reclassification. Temporary and permanent differences do not impact the net asset value of the Fund.

As of August 31, 2013, the cost of investments was \$46,910,874.

Gross unrealized appreciation and gross unrealized depreciation of investments as of August 31, 2013, were as follows:

Gross unrealized:

Appreciation \$1,338,336
Depreciation (2,186,415)
Net unrealized appreciation (depreciation) of investments \$(848,079)

(1)

- All percentages shown in the Portfolio of Investments are based on net assets applicable to common shares unless otherwise noted.
- (2) Optional Call Provisions: Dates (month and year) and prices of the earliest optional call or redemption. There may be other call provisions at varying prices at later dates. Certain mortgage-backed securities may be subject to periodic principal paydowns.
- (3) Ratings: Using the highest of Standard & Poor's Group ("Standard & Poor's"), Moody's Investors Service, Inc. ("Moody's") or Fitch, Inc. ("Fitch") rating. Ratings below BBB by Standard & Poor's, Baa by Moody's or BBB by Fitch are considered to be below investment grade. Holdings designated N/R are not rated by any of these national rating agencies.
- (4) Backed by an escrow or trust containing sufficient U.S. Government or U.S. Government agency securities, which ensure the timely payment of principal and interest. Certain bonds backed by U.S. Government or agency securities are regarded as having an implied rating equal to the rating of such securities.
- (5) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in inverse floating rate transactions.
- (6) MuniFund Term Preferred Shares, at Liquidation Value as a percentage of Total Investments is 37.0%. WI/DD Investment, or portion of investment, purchased on a when-issued or delayed delivery basis.

(ETM) Escrowed to maturity.

(UB) Underlying bond of an inverse floating rate trust reflected as a financing transaction.

Item 2. Controls and Procedures.

- a. The registrant's principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act") (17 CFR 270.30a-3(c))) are effective, as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the controls and procedures required by Rule 30a-3(b) under the 1940 Act (17 CFR 270.30a-3(b)) and Rule 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934 (17 CFR 240.13a-15(b) or 240.15d-15(b)).
- b. There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act (17 CFR 270.30a-3(d)) that occurred during the registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 3. Exhibits.

File as exhibits as part of this Form a separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the 1940 Act (17 CFR 270.30a-2(a)), exactly as set forth below: See EX-99 CERT attached hereto.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) Nuveen Missouri Premium Income Municipal Fund

By (Signature and Title) /s/ Kevin J. McCarthy
Kevin J. McCarthy
Vice President and Secretary

Date: October 30, 2013

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Gifford R. Zimmerman

Chief Administrative Officer (principal executive officer)

Date: October 30, 2013

By (Signature and Title) /s/ Stephen D. Foy

Stephen D. Foy

Vice President and Controller (principal financial officer)

Date: October 30, 2013