NUVEEN MISSOURI PREMIUM INCOME MUNICIPAL FUND Form N-Q October 30, 2014

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 811-07616

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: 8/31/14

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, 2014

Principal Amount (000)	Description (1) LONG-TERM INVESTMENTS – 156.0% (100.0% of Total Investments)	Optional Call Provisions (2)	Ratings (3)	Value
	MUNICIPAL BONDS – 156.0% (100.0% of Total Investments)			
\$ 1,055	Consumer Staples – 3.8% (2.5% of Total Investments) Missouri Development Finance Board, Solid Waste Disposal Revenue Bonds, Procter and Gamble Inc., Series 1999, 5.200%, 3/15/29 (Alternative Minimum Tax) Education and Civic Organizations – 20.8% (13.3% of Total Investments)	No Opt. Call	AA-	\$ 1,270,790
300	Curators of the University of Missouri, System Facilities Revenue Bonds, Refunding Series 2012A, 4.000%, 11/01/33	11/24 at 100.00	AA+	324,618
250	Lincoln University, Missouri, Auxiliary System Revenue Bonds, Series 2007, 5.125%, 6/01/37 – AGC Insured	6/17 at 100.00	AA	262,013
410	Missouri Health and Educational Facilities Authority, Educational Facilities Revenue Bonds, Kansas City University of Medicine and Biosciences,	6/23 at 100.00	A1	449,048
750	Series 2013A, 5.000%, 6/01/33 Missouri Health and Educational Facilities Authority, Educational Facilities Revenue Bonds, Saint Louis College of Pharmacy, Series 2013,	5/23 at 100.00	BBB+	822,780
600	5.500%, 5/01/43 Missouri Health and Educational Facilities Authority, Educational Facilities Revenue Bonds, Southwest Baptist University Project, Series	10/22 at 100.00	BBB-	630,720
725	2012, 5.000%, 10/01/33		A	808,716

	Missouri Health and Educational Facilities Authority, Educational Facilities Revenue	10/23 at 100.00		
	Bonds, University of Central Missouri, Series 2013C2,			
	5.000%, 10/01/34 Missouri Health and Educational Facilities			
	Authority, Revenue Bonds, A.T. Still	10/21 at		
630	University of Health	100.00	A–	694,298
	Sciences, Series 2011, 5.250%, 10/01/41			
	Missouri Health and Educational Facilities Authority, Revenue Bonds, A.T. Still	10/23 at		
510	University of Health	100.00	A-	558,904
210	Sciences, Series 2014, 5.000%, 10/01/39	100.00	11	330,301
	Missouri Health and Educational Facilities			
	Authority, Revenue Bonds, Rockhurst	10/18 at		
700	University, Series	103.00	BBB-	788,641
	2011A, 6.500%, 10/01/35			
	Missouri Health and Educational Facilities			
550	Authority, Revenue Bonds, Washington	11/21 at		625.224
550	University,	100.00	AAA	625,224
	Series 2011B, 5.000%, 11/15/37 Missouri Health and Educational Facilities			
	Authority, Revenue Bonds, Webster			
600	University, Series	4/21 at 100.00	A2	654,930
000	2011, 5.000%, 4/01/36	721 at 100.00	112	021,520
	Northwest Missouri State University, Housing			
	System Revenue Bonds, Refunding Series			
250	2012,	No Opt. Call	A3	236,903
	3.125%, 6/01/29			
6,275	Total Education and Civic Organizations			6,856,795
	Health Care – 36.1% (23.1% of Total			
	Investments)			
	Cape Girardeau County Industrial			
525	Development Authority, Missouri, Health Facilities Revenue	6/19 at 100.00	AA-	572,460
323	Bonds, Saint Francis Medical Center, Series	0/17 at 100.00	AA-	372,400
	2009A, 5.750%, 6/01/39			
	Cape Girardeau County Industrial			
	Development Authority, Missouri, Health			
	Facilities Revenue			
	Bonds, Southeast Missouri Hospital			
	Association, Series 2007:			
760 560	5.000%, 6/01/27	6/17 at 100.00	BBB+	776,408
560	5.000%, 6/01/36	6/17 at 100.00	BBB+	568,882
930	Cass County, Missouri, Hospital Revenue Bonds, Series 2007, 5.625%, 5/01/38	11/16 at 100.00	BBB-	946,349
930	Clinton County Industrial Development	100.00	DDD-	940,349
	Authority, Missouri, Revenue Bonds, Cameron	12/17 at		
480	Regional	100.00	N/R	482,899
	Medical Center, Series 2007, 5.000%, 12/01/37		- 1,	,
750		2/15 at 102.00	BBB+	770,003

	Joplin Industrial Development Authority,			
	Missouri, Health Facilities Revenue Bonds,			
	Freeman Health System, Series 2004, 5.500%, 2/15/29			
	Joplin Industrial Development Authority,			
	Missouri, Health Facilities Revenue Bonds,			
200	Freeman	2/21 at 100.00	BBB+	217,284
	Health System, Series 2011, 5.500%, 2/15/31			
	Missouri Health and Educational Facilities			
500	Authority, Health Facilities Revenue Bonds, SSM Health	6/24 at 100.00	AA-	570 175
300	Care, Series 2014A, 5.000%, 6/01/31	0/24 at 100.00	AA-	572,175
	Missouri Health and Educational Facilities			
	Authority, Health Facilities Revenue Bonds,	11/20 at		
540	Capital	100.00	A3	587,088
	Region Medical Center, Series 2011, 5.000%,			
	11/01/27			
	Missouri Health and Educational Facilities	11/22		
1,730	Authority, Health Facilities Revenue Bonds, CoxHealth,	11/23 at 100.00	A2	1,880,164
1,730	Series 2013A, 5.000%, 11/15/44	100.00	AΔ	1,000,104
	Missouri Health and Educational Facilities			
	Authority, Health Facilities Revenue Bonds,			
335	Heartland	2/22 at 100.00	A1	362,028
	Regional Medical Center, Series 2012,			
	5.000%, 2/15/37			
	Missouri Health and Educational Facilities			
250	Authority, Health Facilities Revenue Bonds, Mercy	No Opt. Call	AA-	250,423
230	Health, Series 2012, 4.000%, 11/15/42	No Opt. Can	AA-	230,423
	Missouri Health and Educational Facilities			
	Authority, Health Facilities Revenue Bonds,	12/21 at		
500	Saint Luke's	100.00	A+	561,795
	Episcopal and Presbyterian Hospitals, Series 2011, 5.000%, 12/01/25			
	Missouri Health and Educational Facilities			
	Authority, Health Facility Revenue Bonds, St.			
	Luke's			
	Health System, Series 2010A:			
40	5.05000 1145405	11/20 at		45 100
40	5.250%, 11/15/25	100.00 11/20 at	A+	45,130
2,000	5.000%, 11/15/30	100.00	A+	2,191,780
2,000	Saline County Industrial Development	100.00	7 . 1	2,171,700
	Authority, Missouri, Health Facilities Revenue	12/20 at		
720	Bonds, John	100.00	BBB-	798,516
	Fitzgibbon Memorial Hospital Inc., Series			
	2010, 5.600%, 12/01/28			
	St. Louis County Industrial Development	11/16		
250	Authority, Missouri, Healthcare Facilities Revenue Bonds,	11/16 at	N/R	250 502
350	Revenue donas,	100.00	IN/K	350,592

11,170	Ranken-Jordan Project, Refunding Series 2007, 5.000%, 11/15/27 Total Health Care Housing/Single Family – 0.8% (0.5% of Total Investments)			11,933,976
165	Missouri Housing Development Commission, Single Family Mortgage Revenue Bonds, Homeownership Loan Program, Series 2007A-1, 4.700%, 9/01/27 (Alternative Minimum Tax)	9/16 at 100.00	AA+	168,930
100	Missouri Housing Development Commission, Single Family Mortgage Revenue Bonds, Homeownership Loan Program, Series 2007C-1, 4.800%, 9/01/38 (Alternative	3/17 at 100.00	AA+	100,056
265	Minimum Tax) Total Housing/Single Family Long-Term Care – 12.6% (8.1% of Total Investments)			268,986
250	Bridgeton Industrial Development Authority, Missouri, Senior Housing Revenue Bonds, The Sarah Community Project, Series 2013, 4.500%, 5/01/28 Joplin Industrial Development Authority,	5/18 at 100.00	N/R	244,245
500	Missouri, Revenue Bonds, Christian Homes Inc., Series 2007F, 5.750%, 5/15/31 Lees Summit Industrial Development	5/17 at 100.00	BBB-	515,875
475	Authority, Missouri, Revenue Bonds, John Knox Village Obligated Group, Series 2007A, 5.125%, 8/15/32	8/17 at 100.00	BBB-	484,386
250	Lees Summit Industrial Development Authority, Missouri, Revenue Bonds, John Knox Village Obligated Group, Series 2014A, 5.250%, 8/15/39	No Opt. Call	BBB-	251,923
250	Missouri Health and Educational Facilities Authority, Revenue Bonds, Lutheran Senior Services Projects, Series 2011, 6.000%, 2/01/41 Missouri Health and Educational Facilities	2/21 at 100.00	BBB+	276,573
500	Authority, Revenue Bonds, Lutheran Senior Services Projects, Series 2014A, 5.000%, 2/01/44 St. Louis County Industrial Development	2/24 at 100.00	BBB+	529,645
100	Authority, Missouri, Revenue Bonds, Friendship Village of Chesterfield, Series 2012, 5.000%, 9/01/42 St. Louis County Industrial Development Authority, Missouri, Revenue Bonds,	No Opt. Call	BBB-	101,782

	Friendship Village of			
250	Sunset Hills, Series 2012: 5.000%, 9/01/32	No Opt Coll	A-	268,043
425	5.000%, 9/01/32	No Opt. Call 9/22 at 100.00	A– A–	446,437
423	St. Louis County Industrial Development	9122 at 100.00	Α-	440,437
	Authority, Missouri, Revenue Bonds,			
430	Friendship Village of	9/23 at 100.00	A-	469,388
150	Sunset Hills, Series 2013A, 5.875%, 9/01/43	7725 dt 100.00	71	100,500
	St. Louis County Industrial Development			
	Authority, Missouri, Revenue Bonds,			
570	Friendship Village of	9/17 at 100.00	BBB-	588,280
	West County, Series 2007A, 5.500%, 9/01/28			,
4,000	Total Long-Term Care			4,176,577
	Tax Obligation/General – 15.4% (9.9% of Tota	1		
	Investments)			
	Branson Reorganized School District R-4,			
	Taney County, Missouri, General Obligation			
500	Bonds,	3/22 at 100.00	A+	533,935
	School Building Series 2012, 4.375%, 3/01/32			
	Camdenton Reorganized School District R3,			
1.500	Camden County, Missouri, General Obligation	2/15 + 100.00		1 527 000
1,500	Bonds,	3/15 at 100.00	AA	1,537,890
	Series 2005, 5.250%, 3/01/24 – AGM Insured			
	Independence School District, Jackson County, Missouri, General Obligation Bonds, Series			
1,685	2010,	3/20 at 100.00	AA+	1,897,647
1,003	5.000%, 3/01/27	3/20 at 100.00	7 17 1	1,077,047
	Jackson County Reorganized School District 4,			
	Blue Springs, Missouri, General Obligation			
500	Bonds,	3/21 at 100.00	AA	567,075
	School Building Series 2013A, 5.000%,			
	3/01/31			
	Missouri School Boards Association, Lease			
	Participation Certificates, Clay County School			
500	District	3/17 at 100.00	AA	546,170
	53 Liberty, Series 2007, 5.250%, 3/01/27 –			
4.605	AGM Insured			5 000 717
4,685	Total Tax Obligation/General			5,082,717
	Tax Obligation/Limited – 19.3% (12.4% of Total Investments)			
	Bi-State Development Agency of the			
	Missouri-Illinois Metropolitan District, Mass	10/22 at		
910	Transit Sales	100.00	AA+	1,038,083
,	Tax Appropriation Bonds, Refunding			-,,
	Combined Lien Series 2013A, 5.000%,			
	10/01/33			
	Fulton, Missouri, Tax Increment Revenue			
	Bonds, Fulton Commons Redevelopment			
315	Project, Series	6/16 at 100.00	N/R	279,500
450	2006, 5.000%, 6/01/28			
430		1/22 at 100.00	A	457,795

	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,			
180	Series 2013B:	3/23 at 100.00	BBB+	197 762
115	4.875%, 3/01/33 5.000%, 3/01/38	3/23 at 100.00 3/23 at 100.00	BBB+	187,763 119,562
113	Jackson County, Missouri, Special Obligation	3/23 dt 100.00	DDD I	117,502
	Bonds, Truman Medical Center Project, Series	12/21 at		
485	2011B,	100.00	Aa3	539,165
	4.350%, 12/01/23			
200	Kansas City Industrial Development Authority,	0.00		224 762
300	Missouri, Downtown Redevelopment District Revenue Bonds, Series 2011A, 5.000%, 9/01/32	9/21 at 100.00	AA-	331,569
	Kansas City Tax Increment Financing			
	Commission, Missouri, Tax Increment			
475	Revenue Bonds,	6/16 at 100.00	N/R	485,099
	Briarcliff West Project, Series 2006A, 5.400%, 6/01/24			
	Kansas City, Missouri, Special Obligation Bonds, Downtown Redevelopment District,			
325	Series	9/23 at 100.00	AA-	361,979
323	2014C, 5.000%, 9/01/33	7123 dt 100.00	7171	301,777
	Missouri Development Finance Board,			
	Infrastructure Facilities Revenue Bonds,			
360	Branson Landing	6/15 at 100.00	A	369,313
	Project, Series 2005A, 5.000%, 6/01/35			
	Monarch-Chesterfield Levee District, St. Louis			
245	County, Missouri, Levee District Improvement Bonds,	9/14 at 100.00	AA-	246,041
273	Series 1999, 5.750%, 3/01/19 – NPFG Insured	7/14 at 100.00	AA-	240,041
	Osage Beach, Missouri, Tax Increment			
	Revenue Bonds, Prewitts Point Transportation	11/14 at		
500	Development	100.00	N/R	500,175
	District, Series 2006, 5.000%, 5/01/23			
	Puerto Rico Sales Tax Financing Corporation,			
1.500	Sales Tax Revenue Bonds, Series 2007A,	No Opt Call	A A	264 555
1,500	0.000%, 8/01/41 – NPFG Insured	No Opt. Call	AA–	264,555
	Saint Louis County Industrial Development			
	Authority, Missouri, Sales Tax Revenue			
250	Bonds,	7/24 at 100.00	N/R	251,960
	Chesterfield Blue Valley Community			
	Improvement District Project, Series 2014A, 5.250%, 7/01/44			
	St. Joseph Industrial Development Authority,			
	Missouri, Tax Increment Bonds, Shoppes at			
	North Village Project, Series 2005A:			
	village Froject, Selles 2003A.			

		11/14 at		
340	5.375%, 11/01/24	100.00	N/R	340,119
	,	11/14 at		,
400	5.500%, 11/01/27	100.00	N/R	400,084
	St. Joseph Industrial Development Authority,			
	Missouri, Tax Increment Bonds, Shoppes at	11/14 at		
200	North	100.00	N/R	200,320
	Village Project, Series 2005B, 5.500%,			
	11/01/27			
7,330	Total Tax Obligation/Limited			6,373,082
	Transportation – 13.0% (8.3% of Total			
	Investments)			
	Guam International Airport Authority,			
	Revenue Bonds, Series 2013B, 5.500%,	10/23 at		
335	10/01/33 –	100.00	AA	380,202
	AGM Insured			
	St. Louis, Missouri, Airport Revenue Bonds,			
1 000	Lambert-St. Louis International Airport, Series			4.467.440
1,000	2005,	No Opt. Call	AA–	1,165,140
	5.500%, 7/01/18 – NPFG Insured			
	St. Louis, Missouri, Airport Revenue Bonds,			
2.500	Lambert-St. Louis International Airport, Series 2007A,	7/17 at 100.00	AA	2 751 149
2,500	5.000%, 7/01/21 – AGM Insured	//1/ at 100.00	AA	2,751,148
3,835	Total Transportation			4,296,490
3,033	U.S. Guaranteed – 10.8% (6.9% of Total			4,270,470
	Investments) (4)			
	Chesterfield, Missouri, Certificates of			
	Participation, Series 2005, 5.000%, 12/01/24	12/15 at		
600	(Pre-refunded	100.00	Aa1 (4)	636,042
	12/01/15) – FGIC Insured		· · · · · · · · · · · · · · · · · · ·	,
	Riverside, Missouri, L-385 Levee			
	Redevelopment Plan Tax Increment Revenue			
600	Bonds, Series 2004,	5/15 at 100.00	A (4)	620,502
	5.250%, 5/01/20 (Pre-refunded 5/01/15)			
	Springfield Public Building Corporation,			
	Missouri, Lease Revenue Bonds, Jordan Valley			
1,395	Park	100.00	N/R (4)	1,700,017
	Projects, Series 2000A, 6.125%, 6/01/21 –			
	AMBAC Insured (ETM)			
	St. Louis County, Missouri, GNMA			
= 00	Collateralized Mortgage Revenue Bonds,			60 2 00 7
500	Series 1993D, 5.650%,	No Opt. Call	AA+(4)	603,005
2.005	7/01/20 (Alternative Minimum Tax) (ETM)			2.550.566
3,095	Total U.S. Guaranteed			3,559,566
	Utilities – 13.8% (8.9% of Total Investments)			
	Missouri Environmental Improvement and	12/16 at		
2,965	Energy Resources Authority, Water Facility Revenue	12/16 at 100.00	AA+	3,051,578
4,703	Bonds, Missouri-American Water Company,	100.00	AAT	3,031,370
	Series 2006, 4.600%, 12/01/36 – AMBAC			
	Scres 2000, 7.000 /0, 12/01/30 - AMBAC			

110	Insured (Alternative Minimum Tax) (UB) (5) Missouri Joint Municipal Electric Utility Commission, Power Project Revenue Bonds, Iatan 2 Project Series 2006A, 4.125%, 1/01/21 – AMBAC Insured Missouri Joint Municipal Electric Utility Commission, Power Supply System Revenue Bonds, MoPEP Facilities, Series 2012:	1/16 at 100.00	A2	114,898
400	5.000%, 1/01/32	1/21 at 100.00	A2	433,000
425	5.000%, 1/01/37	1/21 at 100.00	A2	454,334
	Missouri Joint Municipal Electric Utility Commission, Revenue Bonds, Plum Point			·
500	Project, Series 2006, 5.000%, 1/01/34 – NPFG Insured	1/16 at 100.00	AA–	519,945
4,400	Total Utilities			4,573,755
	Water and Sewer – 9.6% (6.1% of Total Investments) Carroll County Public Water Supply District Missouri, Water System Revenue Bonds,			
600	Refunding Series 2009, 6.000%, 3/01/39 Metropolitan St. Louis Sewerage District, Missouri, Wastewater System Revenue Bonds	3/18 at 100.00 s,	A	669,528
200	Series 2006C, 5.000%, 5/01/36 – NPFG Insured Metropolitan St. Louis Sewerage District, Missouri, Wastewater System Revenue Bonds		AAA	217,798
2,000	Series 2012A, 5.000%, 5/01/42	5/22 at 100.00	AAA	2,267,096
2,800	Total Water and Sewer Total Long-Term Investments (cost			3,154,422
\$ 48,910	\$48,175,539) Floating Rate Obligations – (6.7)% MuniFund Term Preferred Shares, at			51,547,156 (2,225,000)
	Liquidation Value – (54.1)% (6)			(17,880,000)
	Other Assets Less Liabilities – 4.8% Net Assets Applicable to Common Shares –			1,590,521
	100%			\$ 33,032,677

Fair Value Measurements

Fair value is defined as the price that would be received 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	\$ —	\$51,547,156	\$ —	\$51,547,156

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 as detailed below. Temporary differences do not require reclassification. Temporary and permanent differences do not impact the net asset value of the Fund.

As of August 31, 2014, the cost of investments was \$45,882,603.

Gross unrealized appreciation and gross unrealized depreciation of investments as of August 31, 2014, were as follows:

Gross unrealized:

Appreciation \$3,586,466

Depreciation (147,089)

Net unrealized appreciation (depreciation) of investments \$3,439,377

- (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 34.7%.
- (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, 2014

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.

By (Signature and Title) /s/ Gifford R. Zimmerman

Gifford R. Zimmerman

Chief Administrative Officer (principal executive officer)

Date: October 30, 2014

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

Stephen D. Foy

Vice President and Controller (principal financial officer)

Date: October 30, 2014