



**Duff & Phelps  
Select Energy MLP Fund Inc.**

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## SEMIANNUAL REPORT

**Not FDIC Insured  
No Bank Guarantee  
May Lose Value**

May 31, 2018

## MESSAGE TO SHAREHOLDERS

Dear Duff & Phelps Select Energy MLP Fund Inc. Shareholder:

I am pleased to share with you the semiannual report for the Duff & Phelps Select Energy MLP Fund Inc. (DSE) that discusses performance for the six months ended May 31, 2018. The report includes commentary from the portfolio management team at Duff & Phelps Investment Management, which discusses the U.S. energy market and the fund's performance during the period.

For the six months ended May 31, 2018, the fund's net asset value (NAV) increased 14.16%, including \$0.37 in reinvested distributions, and its market price increased 16.39%. For the same period, the Alerian MLP Index returned 5.71% and the average NAV of the constituents of the Broadridge Energy MLP Closed-End Fund category increased 8.58%<sup>1</sup>, including reinvested dividends.

On behalf of the investment professionals at Duff & Phelps, I welcome new investors to the fund and thank all of our shareholders for entrusting your assets to us. If you have any questions, our customer service team is available to assist you at 1-866-270-7788 or through the closed-end fund section of our website, [www.virtus.com](http://www.virtus.com).

Sincerely,



George R. Aylward  
President, Chief Executive Officer, and Director  
Duff & Phelps Select Energy MLP Fund Inc.

July 2018

*Performance data quoted represents past results. Past performance is no guarantee of future results and current performance may be higher or lower than the performance shown above. Any market index referenced herein is unmanaged; its returns do not reflect any fees, expenses, or sales charges; and is not available for direct investment.*

<sup>1</sup> Average NAV performance as calculated for the Broadridge Energy MLP Closed-End Peer Group may differ from any constituent fund's stated performance.

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**MANAGER'S DISCUSSION OF FUND PERFORMANCE (Unaudited)**  
**MAY 31, 2018**

**About the Fund**

The Duff & Phelps Select Energy MLP Fund Inc. (NYSE: DSE) (the "Fund" or "DSE") invests at least 80% of its Managed Assets in energy master limited partnerships ("MLPs"). The Fund's "Managed Assets" are equal to its net assets plus any outstanding preferred stock and/or borrowings made for the purpose of leverage. The Fund may invest up to 20% of its Managed Assets in securities of issuers either: (i) in the energy sector and that are not MLPs or (ii) that produce products that are primarily for the use of companies in the energy sector (such as sand miners, certain chemical companies, and coking coal processors). The Fund's investment objective is to seek a high level of total return resulting from a combination of current tax-deferred distributions and capital appreciation. *There is no guarantee that the Fund will achieve its investment objective.*

The use of leverage is currently accretive to the Fund's earnings as the aggregate cost of the Fund's leverage is less than the income generated by the investments made with the proceeds from the Fund's use of leverage. As of May 31, 2018, the Fund's leverage consisted of \$35 million in outstanding Fixed Rate Mandatory Redeemable Preferred Shares ("MRP Shares") and \$50 million of borrowings made pursuant to a line of credit which combined represented approximately 35% of the Fund's total assets.

**Portfolio Review – Duff & Phelps Investment Management Co. ("DPIM")**

The Duff & Phelps Select Energy MLP Fund Inc. is subadvised by Duff & Phelps Investment Management Co., and managed by a team of two dedicated MLP investment professionals with average industry experience of more than 19 years: David D. Grumhaus, Jr., Senior Portfolio Manager, and Charles Georgas, CFA, Portfolio Manager. The following commentary is provided by the portfolio management team at DPIM, and covers the period from December 1, 2017 through May 31, 2018.

**How did the equity markets and MLPs perform during the fiscal six-month period ended May 31, 2018?**

Midstream energy and MLPs went on a roller coaster ride for the first six months of the fiscal year. While the sector has seen considerable volatility over the past few years, this period was extreme. The sector, as measured by Alerian MLP Index, got off to a great start, gaining 10.8% in the first two months of the fiscal year. However, MLPs reversed course in February and March 2018, and fell 16.0% during that time period. The sector rallied in the spring, jumping 13.6% for April and May. Ultimately, MLPs (as measured by the Alerian MLP Index) gained 5.71% for the six months ended May 31, 2018, outperforming the broader market (as measured by the S&P 500 Index) by 2.57%.

A major driver of the volatility is the fact that the sector continues to struggle to attract new sources of capital. On the one hand, strong fundamentals are enticing investors, but at the same time, industry-specific concerns are causing investors to be hesitant. In terms of fundamentals, oil prices continue to be a bright spot. As measured by the West Texas Intermediate (WTI), oil reached \$72.24 per barrel in May before closing the month at \$67.04, a 16.8% jump from the beginning of the fiscal year. The combination of continued robust global demand and strict compliance by OPEC to its agreed production levels has brought global inventories into balance, leaving the market more concerned about shortages than excess supply. The U.S. has been the

For information regarding the indexes and certain investment terms, see Key Investment Terms on page 7.

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**MANAGER'S DISCUSSION OF FUND**  
**PERFORMANCE (Unaudited) (Continued)**  
**MAY 31, 2018**

major beneficiary of these trends. Driven by shale technology, U.S. oil production has jumped more than 28% from its nadir of 8.4 million barrels per day (b/d) in July 2016 to over 10.8 million b/d as of June 1, 2018. This oil production growth, combined with similar strong production growth in natural gas and natural gas liquids, has been a great tailwind for midstream energy. Many existing midstream assets have reached full capacity, and new assets are being built to accommodate the higher volumes.

While investors are excited about the midstream secular growth story, the path for MLPs has remained bumpy. The sector as a whole has made a lot of progress, but there are still a number of MLPs that need to restructure due to excessive leverage, weak distribution coverage ratios, and burdensome incentive distribution rights payable to their general partners. In the fiscal six-month period, we saw more companies take steps to address these issues. While companies tend to perform well after the restructurings, stock prices generally suffer before and during the restructuring. Compounding the issue for MLPs during the reporting period was an unexpected ruling in mid-March by the Federal Energy Regulatory Commission (FERC) regarding tax disallowances on natural gas pipelines. While the ruling only materially impacted a handful of MLPs, the unexpected nature of the announcement and its complexity sent the sector spiraling downward, with MLPs falling 8% in the last two weeks of March.

Clearly, most of the sector recovered from the FERC announcement in May and June. Nevertheless, one of its effects was to make it more disadvantageous for general partners to hold natural gas pipelines inside of MLPs. The expectation was that this might lead to an acceleration of general partners buying in their MLPs. The expectation was realized on May 17, 2018, which became known as "Simplification Thursday," Williams Company announced that it would buy-in Williams Partners, and Enbridge Inc. announced that it would buy-in both Spectra Energy Partners and Enbridge Energy Partners. The FERC decision was clearly a negative for the sector, but it may accelerate further restructurings, which would be a positive development.

**What factors affected the Fund's performance during the fiscal six months?**

The Fund enjoyed a strong first half of the fiscal year. For the first six months, the Fund was up 14.16% on a NAV basis and 16.39% on a market basis, handily outperforming the Alerian MLP Index. As we have said before, the Fund's use of leverage tends to amplify outperformance in an up market and hurt us in a down market. The Fund also benefitted from strong stock picking in the first half.

The top positive contributor to returns was Energy Transfer Partners, the Fund's largest position. The stock rallied over 21% as the company placed the majority of its long-awaited Rover Pipeline into service and continued to benefit from its strong position in the Permian basin. The second largest contributor was DCP Midstream, a gathering and processing MLP, which benefitted from rising commodity prices and the strength of its processing business in the Permian and Denver-Julesberg basins. Crestwood Equity Partners was the third largest contributor as the stock jumped 46% during the period. Crestwood was a turnaround story that the Fund has held since its restructuring in late 2015. Cheniere Energy Partners was the next strongest contributor. Cheniere declared double-digit distribution increases in both February and May and, along with its parent, continued to be the best way to play the growing U.S. liquid natural gas (LNG) story. Rounding out the top five contributors was Williams Partners. The Fund's second biggest position, Williams jumped in May after its parent announced it would buy it in.

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**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**MANAGER'S DISCUSSION OF FUND**  
**PERFORMANCE (Unaudited) (Continued)**  
**MAY 31, 2018**

Many of the top detractors for the Fund were MLPs that were significantly impacted by the March 15 FERC announcement. Enbridge Energy Partners, TC Pipelines and Spectra Energy Partners were the first, second and fifth largest detractors during the period. All were relatively small positions, but each fell precipitously on the FERC news. The third worst contributor was NuStar Energy LP. In January, NuStar announced a merger between itself and its general partner, along with a significant distribution cut. The restructuring and cut were widely expected by the market, but the market was surprised by the level of capital that NuStar said it still needed to raise after it cut the distribution. The fourth weakest contributor was Sunoco Inc. Although Sunoco had been the second-best contributor to the Fund in the previous year, the stock has pulled back so far this year on fears that higher oil prices might impact the company's gasoline margins.

*The preceding information is the opinion of portfolio management only through the end of the period of the report as stated on the cover. Any such opinions are subject to change at any time based upon market conditions and should not be relied upon as investment advice.*

*The Fund's portfolio holdings are subject to change and may not be representative of the portfolio managers' current or future investments. The mention of individual securities held by the Fund is for informational purposes only and should not be construed as a recommendation to purchase or sell any securities. Investors seeking financial advice regarding the appropriateness of investing in any securities or investment strategies discussed should consult their financial professional.*

**Equity Securities:** The market price of equity securities may be adversely affected by financial market, industry, or issuer-specific events. Focus on a particular style or on small or medium-sized companies may enhance that risk.

**MLPs:** Investments in Master Limited Partnerships may be adversely impacted by tax law changes, regulation, or factors affecting underlying assets. The Fund has elected to be treated as a "C" corporation, for United States federal and state income tax purposes. Accordingly, the Fund may pay federal and applicable state corporate taxes.

**Leverage:** When a fund leverages its portfolio, the value of its shares may be more volatile and all other risks may be compounded.

**Energy Sector Concentration:** The Fund's investments are concentrated in the energy sector and may present more risks than if the Fund were broadly diversified over numerous sectors of the economy.

**Market Price/NAV:** Shares of closed-end funds often trade at a discount to their net asset value, which may increase investors' risk of loss. At the time of sale, an investor's shares may have a market price that is above or below the Fund's NAV.

**Fundamental Risk of Investing:** There can be no assurance that the Fund will achieve its investment objectives. An investment in the shares of the Fund is subject to loss of principal; shares may decrease in value.

## OUR PRIVACY COMMITMENT

Duff & Phelps Select Energy MLP Fund Inc. recognizes that protecting the privacy and security of the confidential personal information we collect about you is an important responsibility. The following information will help you understand our privacy policy and how we will handle and maintain confidential personal information as we fulfill our obligations to protect your privacy. "Personal information" refers to the nonpublic financial information obtained by us in connection with providing you a financial product or service.

### Information We Collect

We collect personal information to help us serve your financial needs, offer new products or services, provide customer service and fulfill legal and regulatory requirements. The type of information that we collect varies according to the products or services involved, and may include:

- Information we receive from you on applications and related forms (such as name, address, social security number, assets and income); and
- Information about your transactions and relationships with us, our affiliates, or others (such as products or services purchased, account balances and payment history).

### Information Disclosed in Administering Products and Services

We will not disclose personal information about current or former customers to non-affiliated third parties except as permitted or required by law. We do not sell any personal information about you to any third party. In the normal course of business, personal information may be shared with persons or entities involved in servicing and administering products and services on our behalf, including your broker, financial advisor or financial planner and other service providers and affiliates assisting us.

### Procedures to Protect Confidentiality and Security of Your Personal Information

We have procedures in place that limit access to personal information to those employees and service providers who need to know such information in order to perform business services on our behalf. We educate our employees on the importance of protecting the privacy and security of confidential personal information. We also maintain physical, electronic and procedural safeguards that comply with federal and state regulations to guard your personal information.

We will update our policy and procedures where necessary to ensure that your privacy is maintained and that we conduct our business in a way that fulfills our commitment to you. If we make any material changes in our privacy policy, we will make that information available to customers through our website and/or other communications.

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**PORTFOLIO HOLDINGS SUMMARY WEIGHTINGS (Unaudited)**  
**MAY 31, 2018**

The following tables present the portfolio holdings within certain sectors or countries as a percentage of total investments as of May 31, 2018.

<u>Sector Weightings</u>	
Traditional Midstream	85%
Downstream/Other	7
Marine/Shipping	7
Other (includes short-term investment)	<u>1</u>
Total	<u>100%</u>

<u>Country Weightings</u>	
United States (includes short-term investment)	93%
Marshall Islands	<u>7</u>
Total	<u>100%</u>

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**KEY INVESTMENT TERMS (Unaudited)**  
**MAY 31, 2018**

***Alerian MLP Index***

The Alerian MLP Index is the leading gauge of large- and mid-cap energy Master Limited Partnerships (MLPs). The float-adjusted, capitalization-weighted index, which includes 50 prominent companies and captures approximately 75% of available market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis. The index is unmanaged, its returns do not reflect any fees, tax assets or liabilities, expenses, or sales charges, and it is not available for direct investment.

***Broadridge Energy MLP Closed-End Fund Average***

The Broadridge Energy MLP Closed-End Fund Average is the average net asset value (NAV) performance of all funds within the Lipper fund classification of Energy MLP closed-end funds, which invest primarily in Master Limited Partnerships (MLPs) engaged in the transportation, storage, and processing of minerals and natural resources. Returns include the reinvestment of all distributions, including returns of capital, if any, calculated among the funds.

***Federal Energy Regulatory Commission (“FERC”)***

The Federal Energy Regulatory Commission (FERC) is the United States federal agency that regulates the transmission and wholesale sale of electricity and natural gas in interstate commerce and regulates the transportation of oil by pipeline in interstate commerce.

***London Interbank Offered Rate (“LIBOR”)***

A benchmark rate that some of the world’s leading banks charge each other for short term loans and that serves as the first step to calculating interest rates on various loans throughout the world.

***Master Limited Partnerships (“MLPs”)***

Entities commonly referred to as “MLPs” are generally organized under state law as limited partnerships or limited liability companies. The securities issued by many MLPs are listed and traded on a securities exchange. An MLP typically issues general partner and limited partner interests, or managing member and member interests. The general partner or managing member manages and often controls, has an ownership stake in, and is normally eligible to receive incentive distribution payments from, the MLP. If publicly traded, MLPs must derive at least 90% of their gross income from qualifying sources as described in the Internal Revenue Code in order to be treated as partnerships for United States federal income tax purposes.

***Organization of the Petroleum Exporting Countries (“OPEC”)***

The Organization of the Petroleum Exporting Countries was originally organized in September 1960 with 5 member countries and there are currently 12 member countries. The organization’s objective is to co-ordinate and unify petroleum policies among member countries, in order to secure fair and stable prices for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the industry.

***S&P 500® Index***

The S&P 500® Index is a free-float market capitalization-weighted index of 500 of the largest U.S. companies. The index is calculated on a total return basis with dividends reinvested. The index is unmanaged, its returns do not reflect any fees, expenses, or sales charges, and it is not available for direct investment.

***West Texas Intermediate (“WTI”)***

WTI is a light sweet crude oil that is produced, refined and consumed in North America and is one of the three primary benchmarks used for oil pricing.



**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**SCHEDULE OF INVESTMENTS (Unaudited)**  
**MAY 31, 2018**

(\$ reported in thousands)

	SHARES/ UNITS	VALUE		SHARES/ UNITS	VALUE
<b>COMMON STOCKS—12.1%</b>				<b>Natural Gas Pipelines—19.9%</b>	
<b>Diversified—2.7%</b>				Tallgrass Energy Partners LP	230,000 \$ 10,044
ONEOK, Inc.	62,201	\$ 4,240		Williams Partners LP	523,914 20,852
<b>Gathering/Processing—9.4%</b>					<u>30,896</u>
Targa Resources Corp.	301,375	14,656		<b>Petroleum Transportation &amp; Storage—21.9%</b>	
<b>TOTAL COMMON STOCKS</b>				Andeavor Logistics LP	205,922 8,834
<b>(Identified Cost \$10,584)</b>			<b>18,896</b>	BP Midstream Partners LP	130,000 2,778
<b>MASTER LIMITED PARTNERSHIPS AND RELATED COMPANIES—140.6%</b>				Enbridge Energy Partners LP	395,000 3,891
<b>Diversified—39.2%</b>				Genesis Energy LP	285,000 6,259
Energy Transfer Partners LP	1,275,853	24,228		NuStar Energy LP	175,000 4,277
Enterprise Products Partners LP	443,000	12,803		Plains All American Pipeline LP	345,000 8,107
MPLX LP	543,499	19,517			<u>34,146</u>
NGL Energy Partners LP	415,000	4,441		<b>TOTAL MASTER LIMITED PARTNERSHIPS AND RELATED COMPANIES</b>	
		<u>60,989</u>		<b>(Identified Cost \$252,749) 218,923</b>	
<b>Downstream/Other—10.3%</b>				<b>TOTAL LONG-TERM INVESTMENTS—152.7%</b>	
Cheniere Energy Partners LP	240,000	8,635		<b>(Identified Cost \$263,333) 237,819</b>	
Sunoco LP	278,000	7,395		<b>SHORT-TERM INVESTMENT—2.0%</b>	
		<u>16,030</u>		<b>Money Market Mutual Fund—2.0%</b>	
<b>Gathering/Processing—39.2%</b>				BlackRock Liquidity Funds	
CNX Midstream Partners LP	140,000	2,623		FedFund Portfolio –	
Crestwood Equity Partners LP	221,783	7,452		Institutional Shares	
DCP Midstream LP	336,000	14,082		(seven-day effective	
Enable Midstream Partners LP	475,000	7,856		yield 1.644%) <sup>(1)</sup>	3,109,311 3,109
EnLink Midstream Partners LP	791,399	13,533		<b>TOTAL SHORT-TERM INVESTMENT</b>	
Hess Midstream Partners LP	196,361	4,116		<b>(Identified Cost \$3,109) 3,109</b>	
Rice Midstream Partners LP	89,500	1,653		<b>TOTAL INVESTMENTS—154.7%</b>	
Western Gas Partners LP	189,000	9,766		<b>(Identified Cost \$266,442) 240,928<sup>(2)</sup></b>	
		<u>61,081</u>		Other assets and liabilities,	
<b>Marine/Shipping—10.1%</b>				net—(54.7)%	<u>(85,147)</u>
GasLog Partners LP	321,830	7,869		<b>NET ASSETS—100.0% 155,781</b>	
Golar LNG Partners LP	145,000	2,431			
KNOT Offshore Partners LP	261,000	5,481			
		<u>15,781</u>			

**Footnote Legend:**

- <sup>(1)</sup> Shares of this fund are publicly offered, and its prospectus and annual report are publicly available.
- <sup>(2)</sup> All or a portion of the portfolio is segregated as collateral for borrowings.

See Notes to Financial Statements

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**SCHEDULE OF INVESTMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

(\$ reported in thousands)

The following table provides a summary of inputs used to value the Fund's investments as of May 31, 2018 (see Security Valuation Note 2A in the Notes to Financial Statements):

	Total Value at May 31, 2018	Level 1 Quoted Prices
Equity Securities:		
Common Stocks	\$ 18,896	\$ 18,896
Master Limited Partnerships and Related Companies	218,923	218,923
Short-Term Investment	3,109	3,109
Total Investments	<u>\$240,928</u>	<u>\$240,928</u>

There were no securities valued using significant observable inputs (Level 2) or significant unobservable inputs (Level 3) at May 31, 2018.

There were no transfers between Level 1, Level 2, or Level 3 related to securities held at May 31, 2018.

See Notes to Financial Statements

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**STATEMENT OF ASSETS AND LIABILITIES (Unaudited)**  
**MAY 31, 2018**

(Reported in thousands except shares and per share amounts)

<b>Assets</b>	
Investment in securities at value (Identified cost \$266,442) .....	\$ 240,928
Receivables	
Dividends .....	7
Deferred tax asset, net (Note 5) .....	25
Prepaid directors' retainer .....	4
Prepaid expenses .....	36
	<hr/>
Total assets .....	241,000
	<hr/>
<b>Liabilities</b>	
Cash overdraft .....	— <sup>(1)</sup>
Bank Borrowings (Note 9) .....	50,000
Fixed rate mandatory redeemable preferred shares (liquidation preference \$35,000, net of deferred offering costs of \$474) (Note 8) .....	34,526
Payables	
Investment advisory fees .....	199
Administration and accounting fees .....	36
Interest expense on fixed rate mandatory redeemable preferred shares (Note 8) .....	262
Professional fees .....	120
Interest expense on borrowings (Note 9) .....	4
Transfer agent fees and expenses .....	4
Other accrued expenses .....	68
	<hr/>
Total liabilities .....	85,219
	<hr/>
<b>Net Assets</b> .....	<b>\$ 155,781</b>
	<hr/> <hr/>
<b>Net Assets Consist of:</b>	
Common stock (\$0.001 par value 100,000,000 shares authorized) .....	\$ 26
Capital paid in on shares of beneficial interest, net of taxes .....	391,448
Accumulated undistributed net investment income (loss), net of taxes .....	(17,326)
Accumulated undistributed net realized gain (loss), net of taxes .....	(192,853)
Net unrealized appreciation (depreciation) on investments, net of taxes .....	(25,514)
	<hr/>
<b>Net Assets</b> .....	<b>\$ 155,781</b>
	<hr/> <hr/>
<b>Net Asset Value Per Share</b>	
(Net assets/shares outstanding) Shares outstanding 26,208,607 .....	\$ 5.94
	<hr/> <hr/>

<sup>(1)</sup> Amount is less than \$500.

See Notes to Financial Statements

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**STATEMENT OF OPERATIONS (Unaudited)**  
**SIX MONTHS ENDED MAY 31, 2018**

(\$ reported in thousands)

<b>Investment Income</b>	
Dividends and distributions .....	\$ 10,066
Less return of capital distributions (Note 2C) .....	(10,127)
Total investment income (loss) .....	<u>(61)</u>
<b>Expenses</b>	
Investment advisory fees .....	1,169
Administration and accounting fees .....	157
Professional fees .....	86
Directors' fees and expenses .....	101
Printing fees and expenses .....	39
Amortization of offering costs on mandatory redeemable preferred shares (Note 8) .....	37
Transfer agent fees and expenses .....	8
Custodian fees .....	2
Miscellaneous expenses .....	59
Total expenses before interest expense .....	<u>1,658</u>
Interest expense on mandatory redeemable preferred shares (Note 8) .....	785
Interest expense on borrowings (Note 9) .....	629
Total expenses after interest expense .....	<u>3,072</u>
Net investment income (loss) before income taxes .....	(3,133)
Net tax benefit (expense) .....	<u>—</u>
<b>Net investment income (loss) .....</b>	<b><u>(3,133)</u></b>
<b>Net Realized and Unrealized Gain (Loss) on Investments</b>	
Net realized gain (loss) on investments before income taxes .....	(11,663)
Net tax benefit (expense) .....	<u>—</u>
Net realized gain (loss) on investments .....	<u>(11,663)</u>
Net change in unrealized appreciation (depreciation) on investments before income taxes .....	34,950
Deferred tax benefit (expense) .....	<u>—</u>
Net change in unrealized appreciation (depreciation) .....	<u>34,950</u>
<b>Net realized and unrealized gain (loss) on investments after income taxes .....</b>	<b><u>23,287</u></b>
<b>Net increase (decrease) in net assets resulting from operations .....</b>	<b><u>\$ 20,154</u></b>

See Notes to Financial Statements

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**STATEMENTS OF CHANGES IN NET ASSETS**

(\$ reported in thousands)

	Six Months Ended May 31, 2018 (Unaudited)	Year Ended November 30, 2017
<b>INCREASE (DECREASE) IN NET ASSETS</b>		
<b>From Operations</b>		
Net investment income (loss) .....	\$ (3,133)	\$ (5,215)
Net realized gain (loss) .....	(11,663)	(16,360)
Net change in unrealized appreciation (depreciation) .....	<u>34,950</u>	<u>(3,828)</u>
<b>Increase (decrease) in net assets resulting from operations .....</b>	<u>20,154</u>	<u>(25,403)</u>
<b>From Distributions to Shareholders</b>		
Return of capital .....	<u>(9,680)<sup>(1)</sup></u>	<u>(22,970)</u>
<b>Distributions to shareholders .....</b>	<u>(9,680)</u>	<u>(22,970)</u>
<b>From Capital Share Transactions</b>		
Reinvestment of distributions resulting in the issuance of common stock (60,763 and 71,683 shares, respectively) .....	<u>352</u>	<u>468</u>
<b>Increase (decrease) in net assets from capital share transactions ...</b>	<u>352</u>	<u>468</u>
<b>Net increase (decrease) in net assets .....</b>	10,826	(47,905)
<b>Net Assets</b>		
Beginning of period .....	<u>144,955</u>	<u>192,860</u>
<b>End of period .....</b>	<u><b>\$155,781</b></u>	<u><b>\$144,955</b></u>
Accumulated undistributed net investment income (loss) at end of period .....	\$ (17,326)	\$ (14,193)

<sup>(1)</sup> Please note that the tax status of our distributions is determined at the end of the tax year. However, based on interim data as of May 31, 2018, we estimate 100% of the distributions will represent return of capital.

See Notes to Financial Statements

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**STATEMENT OF CASH FLOWS (Unaudited)**  
**FOR THE SIX MONTHS ENDED MAY 31, 2018**

(\$ reported in thousands)

**Increase (Decrease) in cash**

**Cash Flows Provided by (Used for) Operating Activities:**

Net increase (decrease) in net assets resulting from operations . . . . . \$ 20,154

**Adjustments to reconcile net increase (decrease) in net assets resulting from operations to net cash provided by (used for) operating activities:**

Proceeds from sales of long-term investments . . . . .	22,386
Purchases of long-term investments . . . . .	(22,180)
Net (purchases) or sales of short-term securities . . . . .	2,197
Net change in unrealized (appreciation)/depreciation on investments . . . . .	(34,950)
Net realized (gains)/loss on investments . . . . .	11,663
Return of capital distributions on investments . . . . .	10,127
Amortization of deferred offering costs . . . . .	37
(Increase) Decrease in dividends receivable . . . . .	(2)
(Increase) Decrease in prepaid expenses . . . . .	(27)
(Increase) Decrease in prepaid directors' retainer . . . . .	11
Increase (Decrease) in interest payable on borrowings . . . . .	1
Increase (Decrease) in interest payable on fixed rate mandatory redeemable preferred shares . . . . .	3
Increase (Decrease) in affiliated expenses payable . . . . .	10
Increase (Decrease) in non-affiliated expenses payable . . . . .	(16)

Cash provided by (used for) operating activities . . . . . 9,414

**Cash provided by (used for) financing activities:**

Cash dividends paid to shareholders . . . . .	(9,328)
Increase (Decrease) in bank overdraft . . . . .	(86)

Cash provided by (used for) financing activities . . . . . (9,414)

**Net increase (decrease) in cash . . . . .** —

Cash:

Cash at beginning of period . . . . . —

**Cash at end of period . . . . .** \$ —

Supplemental cash flow information:

Reinvestment of dividends and distributions . . . . .	\$ 352
Cash paid during the period for interest expense on borrowings . . . . .	628
Cash paid during the period for interest expense on fixed rate mandatory redeemable preferred shares . . . . .	782

See Notes to Financial Statements

# DUFF & PHELPS SELECT ENERGY MLP FUND INC.

## FINANCIAL HIGHLIGHTS

### SELECTED PER SHARE DATA AND RATIOS FOR A SHARE OUTSTANDING THROUGHOUT EACH PERIOD

	Six Months Ended	For the Year Ended			From Inception <sup>(1)</sup>
	May 31, 2018 (Unaudited)	November 30, 2017	November 30, 2016	November 30, 2015	to November 30, 2014
<b>PER SHARE DATA:</b>					
Net asset value, beginning of period	\$ 5.54	\$ 7.40	\$ 7.47	\$ 17.35	\$ 19.10 <sup>(1)(2)</sup>
<b>Income from investment operations:</b>					
Net investment income (loss) <sup>(3)</sup>	(0.12)	(0.20)	(0.10)	(0.15)	(0.09)
Net realized and unrealized gain (loss)	0.89	(0.78)	0.91	(8.15)	(1.30)
Total from investment operations	0.77	(0.98)	0.81	(8.30)	(1.39)
<b>Dividends and/or Distributions to Shareholders:</b>					
Return of capital	(0.37)	(0.88)	(0.88)	(1.58)	(0.32)
Total dividends and distributions to shareholders	(0.37)	(0.88)	(0.88)	(1.58)	(0.32)
Offering costs charged to paid in capital	—	—	—	—	(0.04)
Net asset value, end of period	\$ 5.94	\$ 5.54	\$ 7.40	\$ 7.47	\$ 17.35
Market value, end of period <sup>(4)</sup>	\$ 5.87	\$ 5.37	\$ 7.47	\$ 7.29	\$ 15.80
Total return, net asset value <sup>(5)</sup>	14.16% <sup>(7)</sup>	(14.36)%	13.58%	(50.79)%	(7.64)% <sup>(7)</sup>
Total return, market value <sup>(5)</sup>	16.39% <sup>(7)</sup>	(17.77)%	17.48%	(47.24)%	(19.72)% <sup>(7)</sup>
<b>RATIOS/SUPPLEMENTAL DATA:</b>					
Ratio of total expenses after interest expense to average net assets <sup>(6)</sup>	4.12% <sup>(8)</sup>	3.40%	2.52%	2.28%	2.02% <sup>(8)(9)</sup>
Ratio of net investment income (loss) to average net assets	(4.20)% <sup>(6)</sup>	(2.86)%	(1.59)%	(1.20)%	(1.16)% <sup>(8)(9)</sup>
Portfolio turnover rate	10% <sup>(7)</sup>	20%	28%	20%	22% <sup>(7)</sup>
Net assets, end of period (000's)	\$155,781	\$144,955	\$192,860	\$194,066	\$448,635
Borrowings, end of period (000's)	\$ 50,000	\$ 50,000	\$ 78,000	\$ 94,500	\$193,500
Mandatory redeemable preferred shares, end of period (000's)	\$ 35,000	\$ 35,000	\$ —	\$ —	\$ —
Asset coverage per \$1,000 principal amount of borrowings <sup>(10)</sup>	\$ 4,816	\$ 4,599	\$ 3,473	\$ 3,054	\$ 3,319
Asset coverage ratio on total leverage (borrowings and preferred shares) <sup>(11)</sup>	283%	271%	—%	—%	—%
Asset coverage, per \$25 liquidation preference per share of mandatory redeemable preferred shares <sup>(12)</sup>	\$ 71	\$ 68	\$ —	\$ —	\$ —

<sup>(1)</sup> The Fund commenced operations on June 25, 2014, the date which its initial public offering shares were issued.

See Notes to Financial Statements

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**FINANCIAL HIGHLIGHTS (Continued)**  
**SELECTED PER SHARE DATA AND RATIOS FOR A SHARE OUTSTANDING**  
**THROUGHOUT EACH PERIOD**

- <sup>(2)</sup> Initial public offering price of \$20.00 per share less sales load of \$0.90.
- <sup>(3)</sup> Calculated based on average shares outstanding.
- <sup>(4)</sup> Closing Price – New York Stock Exchange.
- <sup>(5)</sup> Total return on market value is calculated assuming a purchase of common shares on the opening of the first day and sale on the closing of the last day of each period reported. Dividends and distributions are assumed, for purposes of this calculation, to be reinvested at prices obtained under the Fund's Automatic Reinvestment and Cash Purchase Plan. Total return on market value is not annualized for periods of less than one year. Brokerage commissions that a shareholder may pay are not reflected. Total return on market value does not reflect the deduction of taxes that a shareholder may pay on fund distributions or the sale of fund shares. Total return on net asset value uses the same methodology, but with use of net asset value for the beginning, ending and reinvestment values.
- <sup>(6)</sup> Ratio of operating expenses to average net assets, before interest expense and before tax benefit (expense) was 2.22%, 2.09%, 1.97%, 1.84%, and 1.73% for the periods ended May 31, 2018, November 30, 2017, November 30, 2016, November 30, 2015, and November 30, 2014, respectively.
- <sup>(7)</sup> Not annualized.
- <sup>(8)</sup> Annualized.
- <sup>(9)</sup> Ratio is calculated starting June 30, 2014, the date the Fund began accruing expenses.
- <sup>(10)</sup> Represents value of net assets applicable to common stock plus the borrowings and mandatory redeemable preferred shares at the end of the period divided by the borrowings at the end of the period multiplied by \$1,000.
- <sup>(11)</sup> Represents value of net assets applicable to common stock plus the borrowings and mandatory redeemable preferred shares at the end of the period divided by the borrowings and mandatory redeemable preferred shares at the end of the period.
- <sup>(12)</sup> Represents value of net assets applicable to common stock plus the borrowings and mandatory redeemable preferred shares at the end of the period divided by the borrowings and mandatory redeemable preferred shares at the end of the period multiplied by \$25.

See Notes to Financial Statements



**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited)**  
**MAY 31, 2018**

**Note 1. Organization**

Duff & Phelps Select Energy MLP Fund Inc. (the “Fund”) is organized as a non-diversified, closed-end management investment company registered under the Investment Company Act of 1940, as amended (the “1940 Act”). The Fund was incorporated as a Maryland corporation on March 28, 2014. The Fund’s initial public offering was on June 25, 2014, and the Fund commenced investment operations on June 30, 2014. The Fund’s investment objective is to seek a high level of total return resulting from a combination of current tax-deferred distributions and capital appreciation. *There can be no assurance that the Fund will achieve its investment objective.*

**Note 2. Significant Accounting Policies**

The Fund is an investment company that follows the accounting and reporting guidance of Accounting Standards Codification Topic 946 applicable to Investment Companies.

The following is a summary of significant accounting policies consistently followed by the Fund in the preparation of its financial statements. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of increases and decreases in net assets from operations during the reporting period. Actual results could differ from those estimates, and those differences could be significant.

**A. Security Valuation**

Security valuation procedures for the Fund, which include nightly price variance, as well as back-testing items such as bi-weekly unchanged price, monthly secondary source and transaction analysis, have been approved by the Board of Directors of the Fund (the “Board”, or the “Directors”). All internally fair valued securities are approved by a valuation committee appointed by the Board (the “Valuation Committee”). The Valuation Committee is comprised of certain members of management as identified to the Board and convenes independently from portfolio management. All internally fair valued securities are updated daily and reviewed in detail by the Valuation Committee monthly unless changes occur within the period. The Valuation Committee reviews the validity of any model inputs and any changes to the model. Fair valuations are reviewed by the Board at least quarterly.

The Fund utilizes a fair value hierarchy which prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The Fund’s policy is to recognize transfers between levels at the end of the reporting period.

- Level 1 – quoted prices in active markets for identical securities (security types generally include listed equities).
- Level 2 – prices determined using other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).
- Level 3 – prices determined using significant unobservable inputs (including the Valuation Committee’s own assumptions in determining the fair value of investments).

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

A description of the valuation techniques applied to the Fund's major categories of assets and liabilities measured at fair value on a recurring basis is as follows:

Equity securities are valued at the official closing price (typically last sale) on the exchange on which the securities are primarily traded or, if no closing price is available, at the last bid price and are categorized as Level 1 in the hierarchy. Restricted equity securities and private placements that are illiquid, or are internally fair valued by the Valuation Committee, are generally categorized as Level 3 in the hierarchy.

Certain non-U.S. securities may be fair valued in cases where closing prices are not readily available or are deemed not reflective of readily available market prices. For example, significant events (such as movement in the U.S. securities market, or other regional and local developments) may occur between the time that non-U.S. markets close (where the security is principally traded) and the time that the Fund calculates its net asset value ("NAV") (at the close of regular trading on the New York Stock Exchange ("NYSE"), generally 4 p.m. Eastern time) that may impact the value of securities traded in these non-U.S. markets. In such cases the Fund fair values non-U.S. securities using an independent pricing service which considers the correlation of the trading patterns of the non-U.S. security to the intraday trading in the U.S. markets for investments such as American Depositary Receipts, financial futures, Exchange-Traded Funds, and certain indexes, as well as prices for similar securities. Such fair valuations are categorized as Level 2 in the hierarchy. Because the frequency of significant events is not predictable, fair valuation of certain non-U.S. common stocks may occur on a frequent basis.

Debt securities, including restricted securities, are valued based on evaluated quotations received from independent pricing services or from dealers who make markets in such securities. For most bond types, the pricing service utilizes matrix pricing that considers one or more of the following factors: yield or price of bonds of comparable quality, coupon, maturity, current cash flows, type, and current day trade information, as well as dealer supplied prices. These valuations are generally categorized as Level 2 in the hierarchy. Structured debt instruments, such as mortgage-backed and asset-backed securities, may also incorporate collateral analysis and utilize cash flow models for valuation and are generally categorized as Level 2 in the hierarchy. Pricing services do not provide pricing for all securities and therefore indicative bids from dealers are utilized which are based on pricing models used by market makers in the security and are generally categorized as Level 2 in the hierarchy. Debt securities that are internally fair valued by the Valuation Committee are generally categorized as Level 3 in the hierarchy.

Listed derivatives that are actively traded are valued based on quoted prices from the exchange and are categorized as Level 1 in the hierarchy. Over-the-counter derivative contracts, which include forward currency contracts and equity-linked instruments, do not require material subjectivity as pricing inputs are observed from actively quoted markets and are categorized as Level 2 in the hierarchy.

Investments in open-end mutual funds are valued at NAV. Investments in closed-end funds are valued as of the close of regular trading on the NYSE each business day. Both are categorized as Level 1 in the hierarchy.

A summary of the inputs used to value the Fund's net assets by each major security type is disclosed at the end of the Schedule of Investments for the Fund. The inputs or

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

**B. Security Transactions and Investment Income**

Security transactions are recorded on the trade date. Realized gains and losses from the sales of securities are determined on the identified cost basis. Dividend income is recognized on the ex-dividend date or, in the case of certain foreign securities, as soon as the Fund is notified. Interest income is recorded on the accrual basis. The Fund amortizes premiums and accretes discounts using the effective interest method.

**C. Investment Income and Return of Capital Estimates**

The Fund invests in master limited partnerships (“MLPs”) which make distributions that are primarily attributable to return of capital. The Fund records investment income and return of capital in the Statement of Operations using management’s estimate of the percentage of income included in the distributions received from each MLP based on historical information from the MLPs and other industry sources. These estimates may be adjusted based on information received from the MLPs after the tax and fiscal year ends.

The return of capital portion of the MLP distributions is a reduction to investment income and a reduction in the cost basis of each investment which increases net realized gain (loss) and net change in unrealized appreciation (depreciation). If the return of capital distributions exceed its cost basis, the distributions are treated as realized gains. The actual amounts of income and return of capital are only determined by each MLP after its fiscal year-end and may differ from the estimated amounts. For the period ended May 31, 2018, the Fund estimates that 97.4% of the MLP distributions received will be treated as a return of capital.

**D. Federal and State Income Taxes**

Due to the fact that the Fund invests primarily in MLPs, it cannot qualify as a Regulated Investment Company under current tax laws. Thus, the Fund is treated as a regular corporation, or “C” corporation, for U.S. income tax purposes. Accordingly, the Fund generally is subject to U.S. federal income tax on its taxable income at statutory rates applicable to “C” corporations at a flat rate of 21%. For the period ended May 31, 2018, the Fund may also be subject to a 20% alternative minimum tax (AMT) to the extent that alternative minimum tax exceeds the Fund’s regular income tax liability. In addition, as a “C” corporation, the Fund is subject to various state income taxes due to its investments in MLPs (state effective rate currently estimated at 2.50%, net of federal tax benefit). As a limited partner in the MLPs, the Fund includes its distributable share of the MLP’s taxable income in computing its own taxable income.

**E. Income Tax Accounting Policy**

The Fund applies Accounting Standards Codification (ASC) 740 (Income Taxes) in computing the income tax provision. The Fund records deferred income taxes to reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Such temporary differences are principally: (i) taxes on unrealized gains (losses), which are attributable to the temporary difference between fair market value and tax basis, and (ii) the net tax benefit of accumulated net operating losses and capital

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

loss carryforwards. Deferred tax assets and liabilities are measured using effective tax rates expected to apply to taxable income in the years such temporary differences are realized or otherwise settled. To the extent the Fund has a deferred tax asset, consideration is given to whether or not a valuation allowance is required. The determination of whether a valuation allowance is required is based upon whether it is more likely than not that some portion or all of the deferred tax asset will not be realized. The Fund considers all positive and negative evidence in assessing any valuation allowance including the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carryforward periods and the associated risk that operating and capital loss carryforwards may expire unused. The Fund also accrues additional tax expense relating to uncertain tax positions and includes interest and penalties on such positions as a component of tax expense.

**F. Distributions to Shareholders**

Distributions to shareholders are declared and paid on a quarterly basis and are recorded on the ex-dividend date. The Fund uses a cash flow-based distribution approach in amounts based on the Fund's net cash flow received from portfolio investments, i.e., cash distributions received from the Fund's investments in MLPs less expenses.

The estimated character of the distributions paid will either be dividends (ordinary income eligible to be treated as qualified dividend income) or returns of capital. Distributions made from current or accumulated earnings and profits of the Fund will be taxable to shareholders as dividend income. Distributions that are in amounts greater than the Fund's current and accumulated earnings and profits will represent returns of capital to the extent of a shareholder's basis in their common shares, and such distributions will correspondingly increase the realized gain upon the sale of their common shares (or decrease the realized loss). Additionally, distributions not paid from current or accumulated earnings and profits that exceed a shareholder's tax basis in their common shares will generally be taxed as a capital gain. This estimate is based on the Fund's operating results during the period. The Fund is unable to make a final determination as to the tax character of distributions until after the end of the calendar year when the Fund can determine earnings and profits for federal income tax purposes.

The Fund will inform shareholders of the final tax character of its distributions on Form 1099-DIV in February 2019. For the period ended May 31, 2018, we currently estimate that 100% of the distributions will be considered returns of capital for federal income tax purposes.

**G. Foreign Currency Transactions**

Non-U.S. investment securities and other assets and liabilities denominated in foreign currencies are translated into U.S. dollar amounts at the foreign currency exchange rate effective at the end of the reporting period. Cost of investments is translated at the currency exchange rate effective at the trade date. The gain or loss resulting from a change in currency exchange rates between the trade and settlement date of a portfolio transaction is treated as a gain or loss on foreign currency. Likewise, the gain or loss resulting from a change in currency exchange rates between the date income is accrued and the date it is paid is treated as a gain or loss on foreign currency. The Fund does not isolate that portion of the results of operations arising from changes in

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

foreign exchange rates on investments from the fluctuations arising from changes in the market prices of securities held. Such fluctuations are included with the net realized and unrealized gain or loss on investments.

**H. Expenses**

Expenses incurred together by the Fund and other affiliated open- and closed-end funds are allocated in proportion to the net assets of each such fund, except where allocation of direct expenses to each fund or an alternative allocation method can be more appropriately used.

In addition to the net annual operating expenses that the Fund bears directly, the shareholders of the Fund indirectly bear the Fund's pro-rata expenses of any underlying mutual funds in which the Fund invests.

**Note 3. Investment Advisory Fees and Related Party Transactions**  
**(\$ reported in thousands)**

**A. Adviser**

Virtus Alternative Investment Advisers, Inc. (the "Adviser"), an indirect wholly-owned subsidiary of Virtus Investment Partners, Inc. ("Virtus"), is the investment adviser of the Fund. The Adviser supervises the Fund's investment program and general operations of the Fund, including the Fund's subadviser. As compensation for its services to the Fund, the Adviser receives a monthly fee at an annual rate of 1.00% of the Fund's average daily Managed Assets. "Managed Assets" is defined as the value of the total assets of the Fund minus the sum of all accrued liabilities of the Fund (other than the aggregate amount of any outstanding preferred stock, borrowings or other indebtedness entered into for the purpose of leverage).

**B. Subadviser**

Duff & Phelps Investment Management Co. ("DPIM"), an indirect wholly-owned subsidiary of Virtus, is the subadviser of the Fund. The subadviser is responsible for the day-to-day portfolio management of the Fund for which they are paid a fee by the Adviser.

**C. Administration Services**

Virtus Fund Services, LLC ("VFS"), an indirect wholly-owned subsidiary of Virtus, serves as the administrator to the Fund. For the services provided by the administrator under the Administration Agreement, the Fund pays the administrator a monthly asset-based fee calculated on the Fund's average daily Managed Assets.

For the period ended May 31, 2018, the Fund incurred administration fees totaling \$119 which are included in the Statement of Operations within the line item "Administration and accounting fees."

**D. Directors Fee**

For the period ended May 31, 2018, the Fund incurred Directors' fees totaling \$85 which are included in the Statement of Operations within the line item "Directors' fees and expenses."

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

**E. Affiliated Shareholder**

As of May 31, 2018, affiliates of Virtus Investment Partners, Inc. held 8,497 shares of the Fund, which represent 0.03% of shares of common stock outstanding. The shares may be sold at any time.

**Note 4. Purchases and Sales of Securities**

(\$ reported in thousands)

Purchases and sales of securities (excluding U.S. Government and agency securities, and short term investments) during the period ended May 31, 2018, were as follows:

<u>Purchases</u>	<u>Sales</u>
\$22,180	\$22,386

There were no purchases or sales of long-term U.S. Government and agency securities during the period ended May 31, 2018.

**Note 5. Income Tax Information**

(\$ reported in thousands)

The Fund's taxes include current and deferred income taxes. Current income taxes reflect the estimated income tax liability of the Fund as of the period ended May 31, 2018. Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting and tax purposes. The Fund's tax expense or benefit is recognized on the Statement of Operations based on the component of income or gains (losses) to which such expense or benefit relates.

The Fund's income tax provision consists of the following as of May 31, 2018:

	<u>Current Tax expense (benefit)</u>	<u>Deferred tax expense (benefit)</u>	<u>Valuation Allowance expense (benefit)</u>	<u>Total Tax expense (benefit)</u>
Federal tax expense (benefit) . . . . .	\$—	\$38,881	\$(38,881)	\$—
State tax expense (benefit) . . . . .	—	661	(661)	—
Total tax expense (benefit) . . . . .	\$—	\$39,542	\$(39,542)	\$—

The reconciliation between the federal statutory income tax rate of 21% and the effective tax rate on net investment income (loss) and realized and unrealized gain (loss) is as follows:

	<u>Amount</u>	<u>Rate</u>
Application of statutory income tax rate . . . . .	\$ 4,232	21.00%
State income taxes, net of federal benefit . . . . .	504	2.50%
Permanent differences, net . . . . .	152	0.76%
Effect of tax rate change* . . . . .	34,633	171.85%
Return to provision and other . . . . .	21	0.10%
Effect of valuation allowance . . . . .	(39,542)	-196.21%
Total income tax expense (benefit) . . . . .	\$ —	0.00%

\* The tax rate change listed in the table above is reflective of the change in deferred tax assets and liabilities due to the federal corporate tax rate change enacted by the Tax Reform Bill as of December 22, 2017 (date of enactment). For tax years beginning after December 31, 2017, corporations will be taxed at a flat rate of 21% and no longer subject to the alternative minimum tax.

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

Components of the Fund's net deferred tax asset (liability) as of May 31, 2018, are as follows:

**Deferred Tax Asset:**

Capital loss carryforward (tax basis) .....	\$ 45,431
Net operating loss carryforward (tax basis) .....	19,340
AMT credit carryforward .....	25
Charitable contribution carryforward .....	22

**Deferred Tax Liabilities:**

Unrealized gain .....	(9,642)
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**Net deferred tax asset before valuation allowance** .....

	55,176
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Less: Valuation allowance .....	(55,151)
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<b>Net deferred tax asset (liability)</b> .....	\$ 25
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The Fund may rely, to some extent, on information provided by the MLPs, which may not necessarily be timely, to estimate taxable income allocable to MLP units held, and to estimate their associated deferred tax benefit/liability. Such estimates are made in good faith. From time to time, as new information becomes available, the Fund will modify its estimates or assumptions regarding its tax benefit/liability which may have a material impact on the Fund's net asset value. Realization of the deferred tax assets and carryforwards are dependent, in part, on generating sufficient taxable income of the appropriate character prior to expiration of the loss carryforwards.

At the period ended May 31, 2018, the Fund had net operating loss carryforwards ("NOL") available for federal income tax purposes of \$82,290. The Tax Reform Bill eliminated the net operating loss carryback ability and replaced the 20 year carryforward period with an indefinite carryforward period for any net operating losses arising in tax years ending after December 31, 2017. Therefore, net operating losses that may be generated by the Fund in the future are eligible to be carried forward indefinitely to offset income generated by the Fund in those years but are no longer eligible to be carried back. The Tax Reform Bill also established a limitation for any net operating losses generated in tax years beginning after December 31, 2017 to the lesser of the aggregate of available net operating losses or 80% of taxable income before any net operating loss utilization. Additionally, as of May 31, 2018, the Fund had capital loss carryforwards of \$193,309 which may be carried forward for 5 years. If not utilized, the capital loss will expire in years 2019 through 2023. The Fund has recorded a valuation allowance of \$55,151 for the net deferred tax asset at May 31, 2018, except for the portion related to the AMT credit. Due to the Tax Reform Bill, starting with years beginning after December 31, 2017, AMT paid in prior years will either be refunded or be available as a credit against future income taxes.

For all open tax years and all major taxing jurisdictions, management of the Fund has concluded that there are no significant uncertain tax positions that would require recognition in the financial statements. All tax years since inception remain open and subject to examination by tax jurisdictions. Currently, the Fund is not under IRS examination. Furthermore, management of the Fund is not aware of any tax positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly change in the next twelve months.

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

At May 31, 2018, federal tax cost and aggregate gross unrealized appreciation (depreciation) of securities held is as follows:

<u>Federal Tax Cost</u>	<u>Unrealized Appreciation</u>	<u>Unrealized (Depreciation)</u>	<u>Net Unrealized Appreciation (Depreciation)</u>
\$199,891	\$52,386	\$(11,349)	\$41,037

The differences between the book basis and tax basis of unrealized appreciation (depreciation) and the cost of investments is primarily attributable to MLP earnings and basis adjustments.

**Note 6. Indemnifications**

Under the Fund's organizational documents, its officers and Directors are indemnified against certain liabilities arising out of the performance of their duties to the Fund. In addition, in the normal course of business, the Fund enters into contracts that provide a variety of indemnifications to other parties. The Fund's maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Fund and that have not occurred. However, the Fund has not had prior claims or losses pursuant to such arrangements and expects the risk of loss to be remote.

**Note 7. Capital Transactions**

At May 31, 2018, the Fund had one class of common stock, par value \$0.001 per share, of which 100,000,000 shares are authorized and 26,208,607 shares are outstanding. Registered shareholders may elect to have all distributions paid by check mailed directly to the shareholder by Computershare as dividend paying agent. Pursuant to the Automatic Reinvestment and Cash Purchase Plan (the "Plan"), shareholders not making such election will have all such amounts automatically reinvested by Computershare, as the Plan agent, in whole or fractional shares of the Fund, as the case may be. During the periods ended May 31, 2018, and November 30, 2017, there were 60,763 and 71,683 shares issued pursuant to the Plan, respectively.

**Note 8. Fixed Rate Mandatory Redeemable Preferred Shares**

On February 8, 2017, the Fund issued 1,400,000 Mandatory Redeemable Preferred Shares ("MRP Shares") in two series each with a liquidation preference of \$25.00 per share. Proceeds from the issuances were used to reduce the size of the Fund's outstanding loan under its credit agreement and to make additional investments.

Key terms of each series of MRP Shares at May 31, 2018, are as follows:

<u>Series</u>	<u>Shares Outstanding</u>	<u>Liquidation Preference</u>	<u>Rate</u>	<u>Mandatory Redemption Date</u>
A	400,000	\$10,000,000	4.02%	2/08/2022
B	1,000,000	25,000,000	4.65%	2/08/2027
Total	<u>1,400,000</u>	<u>\$35,000,000</u>		

The Fund incurred costs in connection with the issuance of the MRP Shares. These costs were recorded as a deferred charge and are being amortized over the respective life of each series of MRP Shares. Amortization expense of these deferred offering costs of \$36,522 is included under the caption "Amortization of offering costs on preferred shares" on the



**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

Statement of Operations and the unamortized balance is deducted from the carrying amount of the MRP Shares under the caption "Fixed rate mandatory redeemable preferred shares" on the Statement of Assets and Liabilities.

Holders of the MRP Shares are entitled to receive quarterly cumulative cash dividend payments on the first business day following each quarterly dividend date which is the last day of each of March, June, September and December. These dividend payments are shown on the Statement of Operations under the caption "Interest expense on mandatory redeemable preferred shares."

MRP Shares are subject to optional and mandatory redemption by the Fund in certain circumstances. The redemption price per share is equal to the sum of the liquidation preference per share plus any accumulated but unpaid dividends plus, in some cases, an early redemption premium (which varies based on the date of redemption). The MRP Shares are not listed on any exchange or automated quotation system. The fair value of the MRP Shares is estimated to be their liquidation preference. The MRP Shares are categorized as Level 2 within the fair value hierarchy. The Fund is subject to certain restrictions relating to the MRP Shares such as maintaining certain asset coverage, effective leverage ratio and overcollateralization ratio requirements. Failure to comply with these restrictions could preclude the Fund from declaring any distributions to common shareholders and could trigger the mandatory redemption of the MRP Shares at liquidation value.

In general, the holders of the MRP Shares and of the Common Stock have equal voting rights of one vote per share. The holders of the MRP Shares are entitled to elect two members of the Board of Directors, and separate class votes are required on certain matters that affect the respective interests of the MRP Shares and the Common Stock.

**Note 9. Bank Borrowings**

**(\$ reported in thousands)**

On July 21, 2017, the Fund renewed its Credit Agreement (the "Agreement") with a commercial bank (the "Bank") that allows the Fund to borrow cash from the Bank, up to a limit of \$66,000 ("Commitment Amount"). Borrowings under the Agreement are collateralized by investments of the Fund. The Agreement results in the Fund being subject to certain covenants including asset coverage and portfolio composition (among others). If the Fund fails to meet or maintain certain covenants as required under the Agreement, the Fund may be required to repay immediately, in part or in full, the loan balance outstanding under the Agreement, necessitating the sale of securities at potentially inopportune times. Interest is charged at LIBOR plus an additional percentage rate on the amount borrowed. Commitment fees are charged on the undrawn balance, if less than 75% of the Commitment Amount is outstanding as a loan to the Fund. There were no commitment fees paid or accrued for the period ended May 31, 2018. The Agreement has a term of 364 days and is renewable by the Fund with the Bank's consent and the approval of the Board. The Agreement can also be converted into a 179 day fixed term facility, one time at the Fund's option. For the period ended May 31, 2018, the average daily borrowings under the Agreement and the weighted daily average interest rate were \$50,000 and 2.489%, respectively. At May 31, 2018, the amount of such outstanding borrowings was as follows:

<u>Outstanding Borrowings</u>	<u>Interest Rate</u>
\$50,000	2.815%

**DUFF & PHELPS SELECT ENERGY MLP FUND INC.**  
**NOTES TO FINANCIAL STATEMENTS (Unaudited) (Continued)**  
**MAY 31, 2018**

**Note 10. Credit Risk and Asset Concentrations**

The Fund may invest a high percentage of its assets in specific sectors of the market in the pursuit of its investment objective. Fluctuations in these sectors of concentration may have a greater impact on the Fund, positive or negative, than if the Fund did not concentrate its investments in such sectors.

The Fund's investments are concentrated in the energy sector and may present more risks than if the Fund were broadly diversified over numerous sectors of the economy. A downturn in the energy sector would have a larger impact on the Fund than on an investment company that does not concentrate in the sector. The performance of the securities in the energy sector may lag the performance of other industries or the broader market as a whole.

The Fund borrows through its line of credit for the purpose of leveraging its portfolio. While leverage presents opportunities for increasing the Fund's total return, it also has the effect of potentially increasing losses. Accordingly, any event which adversely affects the value of an investment held by the Fund would be magnified to the extent the Fund is leveraged.

**Note 11. Regulatory Matters and Litigation**

From time to time, the Adviser, DPIM and/or their respective affiliates may be involved in litigation and arbitration as well as examinations and investigations by various regulatory bodies, including the Securities and Exchange Commission, involving compliance with, among other things, securities laws, client investment guidelines, laws governing the activities of broker-dealers and other laws and regulations affecting their products and other activities. At this time, the Adviser believes that the outcomes of such matters are not likely, either individually or in aggregate, to be material to these financial statements.

**Note 12. Subsequent Events**

Management has evaluated the impact of all subsequent events on the Fund through the date the financial statements were available for issuance, and has determined that there are no subsequent event requiring recognition or disclosure in these financial statements.

## CERTIFICATION

The Fund's Chief Executive Officer ("CEO") will file the required annual CEO certification regarding compliance with the NYSE's listing standards no more than 30 days after the Fund's annual shareholder meeting. The Fund also has included the certifications of the Fund's CEO and Principal Financial Officer required by Section 302 of the Sarbanes-Oxley Act in the Fund's Form N-CSR filed with the SEC for the period of this report.

## KEY INFORMATION

### **Shareholder Relations: 1-866-270-7788**

For general information and literature, as well as updates on net asset value, share price, major industry groups and other key information.

## REINVESTMENT PLAN

The Automatic Reinvestment and Cash Purchase Plan (the "Plan") offers shareholders a convenient way to acquire additional shares of the Fund. Registered holders will be automatically placed in the Plan. If shares are held at a brokerage firm, contact your broker about participation in the Plan.

## REPURCHASE OF SECURITIES

Notice is hereby given in accordance with Section 23(c) of the 1940 Act that the Fund may from time to time purchase its shares of common stock in the open market when Fund shares are trading at a discount from their net asset value.

## PROXY VOTING INFORMATION (FORM N-PX)

The Adviser and subadvisers vote proxies relating to portfolio securities in accordance with procedures that have been approved by the Fund's Board. You may obtain a description of these procedures, along with information regarding how the Fund voted proxies during the most recent 12-month period ended June 30, free of charge, by calling toll-free 1-866-270-7788. This information is also available through the SEC's website at <http://www.sec.gov>.

## FORM N-Q INFORMATION

The Fund files a complete schedule of portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-Q. Form N-Q is available on the SEC's website at <http://www.sec.gov>. Form N-Q may be reviewed and copied at the SEC's Public Reference Room. Information on the operation of the SEC's Public Reference Room can be obtained by calling toll-free 1-800-SEC-0330.

## Report on Annual Meeting of Shareholders

The Annual Meeting of Shareholders of Duff & Phelps Select Energy MLP Fund Inc. was held on May 22, 2018. The meeting was held for purposes of electing two (2) nominees to the Board of Directors and the Fund's Common and Preferred Shares voted together as a single class.

The results were as follows:

<u>Election of Directors</u>	<u>Votes For</u>	<u>Votes Withheld</u>
George R. Aylward . . . . .	24,025,914	725,234
Philip R. McLoughlin . . . . .	23,922,153	828,995

Based on the foregoing, George R. Aylward and Philip R. McLoughlin were re-elected to the Board of Directors. The Fund's other Directors who continue in office are William R. Moyer, James M. Oates, James B. Rogers, Jr., R. Keith Walton, and Brian T. Zino.

## **DUFF & PHELPS SELECT ENERGY MLP FUND INC.**

101 Munson Street  
Greenfield, MA 01301-9668

### **Board of Directors**

George R. Aylward  
Philip R. McLoughlin, Chairman  
William R. Moyer  
James M. Oates  
James B. Rogers, Jr.  
R. Keith Walton  
Brian T. Zino  
William H. Wright II, Advisory Member

### **Officers**

George R. Aylward, President and Chief  
Executive Officer  
Francis G. Waltman, Executive Vice  
President  
W. Patrick Bradley, Executive Vice  
President, Chief Financial Officer and  
Treasurer  
Nancy J. Engberg, Senior Vice President  
and Chief Compliance Officer  
William Renahan, Vice President, Chief  
Legal Officer and Secretary

### **Investment Adviser**

Virtus Alternative Investment Advisers, Inc.  
100 Pearl Street  
Hartford, CT 06103-4506

### **Administrator**

Virtus Fund Services, LLC  
100 Pearl Street  
Hartford, CT 06103-4506

### **Custodian**

Bank of New York Mellon  
240 Greenwich Street  
New York, NY 10286

### **Transfer Agent**

Computershare Trust Company, NA  
P.O. Box 43078  
Providence, RI 02940-3078

### **Fund Counsel**

Sullivan & Worcester LLP  
1666 K Street, NW  
7th Floor  
Washington, DC 20006

### **How to Contact Us**

Shareholder Services 1-866-270-7788  
Website [www.Virtus.com](http://www.Virtus.com)

### **Important Notice to Shareholders**

The Securities and Exchange Commission has modified mailing regulations for semiannual and annual shareholder fund reports to allow mutual fund companies to send a single copy of these reports to shareholders who share the same mailing address. If you would like additional copies, please call Mutual Fund Services at 1-866-270-7788.



**Duff & Phelps**  
**Select Energy MLP Fund Inc.**

c/o Computershare Investor Services  
P.O. Box 43078  
Providence, RI 02940

For more information about  
Virtus Closed-End Funds, please  
contact us at **1-866-270-7788**  
or **[closedendfunds@virtus.com](mailto:closedendfunds@virtus.com)**  
or visit **[Virtus.com](http://Virtus.com)**.