Simplification and Financial Repositioning

February 8, 2018

Note: We have revised slides 10 & 11, as described in the footnotes thereto, to clarify our basis of presentation

Investor Notice

In connection with the proposed merger, Nustar Energy, L.P. (“NS”) will file with the Securities and Exchange Commission (the “SEC”) a registration statement on Form S-4 that will include a proxy statement of NuStar GP Holdings, LLC (“NSH”) and other materials. INVESTORS AND SECURITY HOLDERS OF NSH ARE URGED TO READ THE PROXY STATEMENT/PROSPECTUS AND OTHER RELEVANT DOCUMENTS THAT WILL BE FILED WITH THE SEC CAREFULLY AND IN THEIR ENTIRETY WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION. Investors and unitholders will be able to obtain free copies of the proxy statement/prospectus and other documents containing important information about NS and NSH once such documents are filed with the SEC, through the website maintained by the SEC at http://www.sec.gov. Copies of the documents filed with the SEC by NS will be available free of charge on NS’s website at www.nustarenergy.com under the tab “Investors” or by contacting NS’s investor relations department at 210-918-3507. Copies of the documents filed with the SEC by NSH will be available free of charge on NSH’s website at www.nustargpholdings.com under the tab “Investors” or by contacting NSH’s investor relations department at 210-918-3507.

NS, its general partner, the directors and certain of the executive officers of NuStar GP, LLC (the general partner of NSH’s general partner) and NSH and its directors and certain of its executive officers, may be deemed to be participants in the solicitation of proxies from the unitholders of NSH in connection with the proposed merger. Information about the directors and executive officers of NuStar GP, LLC is set forth in NS’s Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with the SEC on February 23, 2017, and subsequent statements of changes in beneficial ownership on file with the SEC. Information about the directors and executive officers of NSH is set forth in NSH’s Proxy Statement for the 2017 annual meeting of unitholders, which was filed with the SEC on March 9, 2017, and subsequent statements of changes in beneficial ownership on file with the SEC. These documents can be obtained free of charge from the sources listed above. Other information regarding the participants in the proxy solicitation and a description of their direct and indirect interests, by security holdings or otherwise, will be contained in the proxy statement/prospectus and other relevant materials to be filed with the SEC when they become available.

Forward Looking Statements

This presentation includes “forward-looking statements” as defined by the SEC. Statements contained in this presentation other than statements of historical fact are forward-looking statements. While these forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect NS’s and NSH’s current judgment regarding the direction of its business, actual results will likely vary, sometimes materially, from any estimates, predictions, projections, assumptions or other future performance metrics presented or suggested in this presentation. These forward-looking statements can generally be identified by words such as “anticipates,” “believes,” “expects,” “plans,” “intends,” “estimates,” “forecasts,” “budgets,” “projects,” “could,” “should,” “may,” “preliminary” and similar expressions. These statements reflect NS’s and NSH’s current views with regard to future events and are subject to various risks, uncertainties and assumptions that may cause actual results to differ materially, including the possibility that the merger will not be completed prior to the August 8, 2018 outside termination date, the possibility that NSH will not obtain the required approvals by NSH unitholders, the possibility that the anticipated benefits from the proposed merger cannot be fully realized, the possibility that costs or difficulties related to the merger will be greater than expected and other risk factors included in the reports filed with the SEC by NS and NSH. Investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates. Except as required by law, neither NS or NSH intend to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.

We use financial measures in this presentation that are not calculated in accordance with generally accepted accounting principles (“non-GAAP”) and our reconciliations of non-GAAP financial measures to GAAP financial measures are located in the appendix to this presentation. These non-GAAP financial measures should not be considered an alternative to GAAP financial measures.

Transaction Summary: Creates Single $7.9 Billion Enterprise Value Partnership; Lowers Cost of Funding

NuStar's simplification of its partnership structure, elimination of Incentive Distribution Rights ("IDRs") and enhanced distribution coverage repositions NuStar within the MLP space by improving its capital structure and access to capital markets, facilitating sustainable, long-term growth

Merger of NS and NSH

- **NuStar Energy L.P. (NS) and NuStar GP Holdings, LLC (NSH) to combine via merger**
  - NSH unitholders to exchange all of their outstanding units for 0.55 NS units per NSH unit
    - All 43 million of NSH's outstanding units will be exchanged for 23.6 million NS units
    - 23.6 million NS units replaces 10.2 million NS units previously owned by NSH
  - Represents a 1.7% premium to NSH unitholders
- **Combination permanently eliminates IDRs and 2% general partner interest converted to a non-economic interest**
- **Upon completion of the merger, former NSH unitholders will own approximately 22% of the combined entity**

Reset of NS Distributions

- **Concurrent with the merger, NS will reduce its distribution to $0.60 per unit quarterly beginning in Q1 2018 ($2.40 annualized)**
  - Expected to allow NS to cover estimated 2018 distributions by approximately 1.20x, higher thereafter

Subsequent Actions

- **Continue to pursue disciplined growth strategy focused on high-quality/high-return projects**
- **Pursue alternatives to achieve growth and manage leverage:**
  - Potential to access capital markets or issue additional equity or debt
  - Identifying non-strategic assets for sale

Timing

- **Transaction is expected to close in Q2 2018**
- **Requires approval from NSH unitholders**
  - William E. Greehey has agreed to vote the NSH units he controls (approximately 21%) in favor of the transaction

Strong Transaction Rationale

Reduced Cost of Capital

- **Lowers NuStar's cost of capital through the elimination of IDRs**
  - ❑ Allows NuStar to compete with a greater number of MLPs when pursuing growth opportunities

Improved Coverage / Debt Metrics

- **Expected 2018 distribution coverage in the range of 1.10x to 1.20x with long-term target of 1.30x to 1.40x**
  - ❑ Additional coverage to be utilized to internally fund growth capital expenditures reducing the need to raise capital

Increased Growth Outlook

- **As early as 2019, allows NuStar to grow annual distributions in the mid to high single digit percent range for the foreseeable future**
  - ❑ Ability to finance current growth opportunities with reduced cost of capital and to pursue additional high-quality growth opportunities in a disciplined manner

Valuation Impact

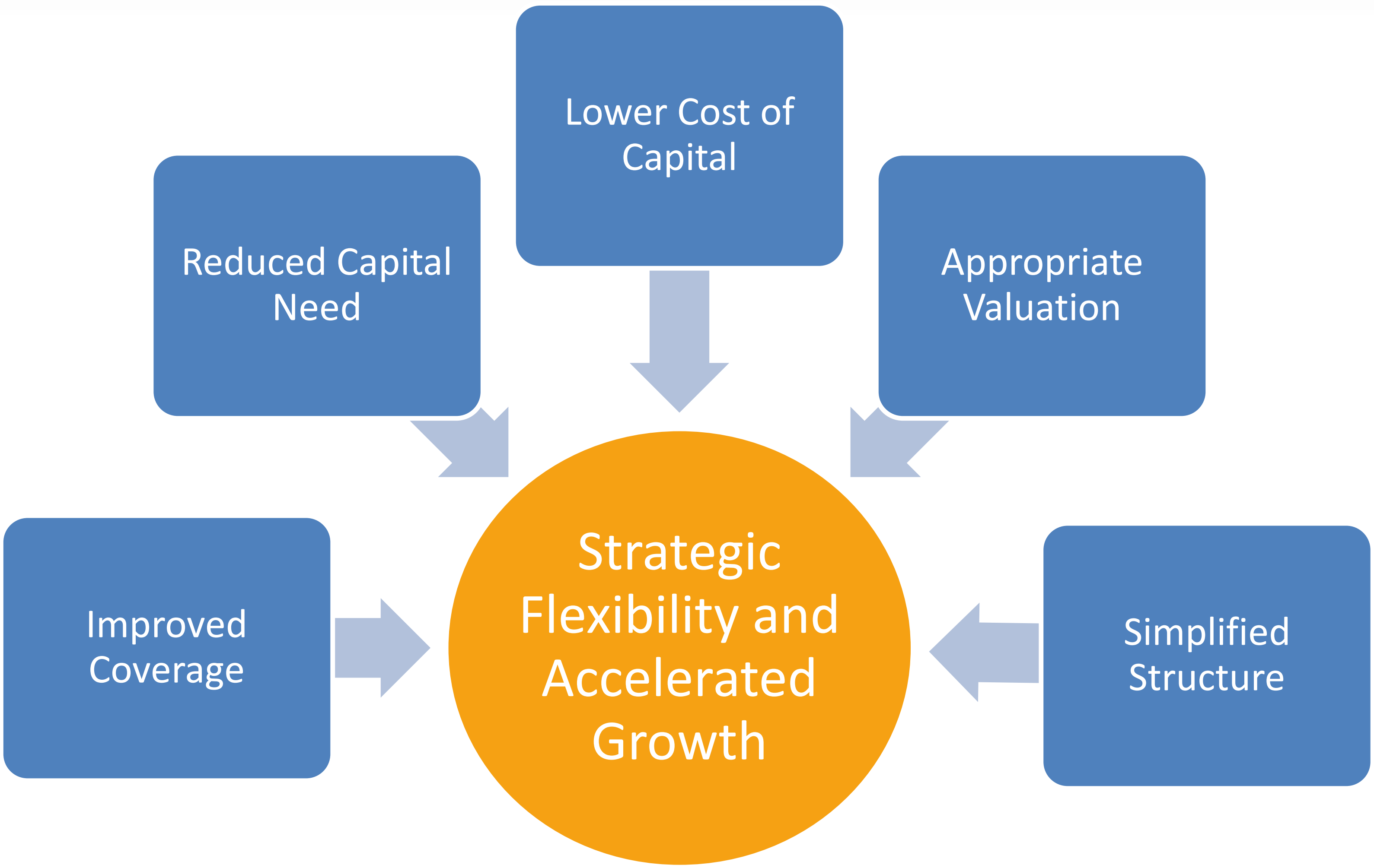
- **Aligns economic returns and incentives between NS and NSH unitholders**
- **Improved trading yield and anticipated distribution growth**

Key Transaction Highlights

	Pre-Simplification and Reset	Post-Simplification and Reset
Coverage Ratio (2018-2020)	2018 ~0.55x to 0.65x Thereafter ~0.7x to 0.9x	2018 ~ 1.1x to 1.2x Thereafter ~ 1.3x to 1.4x
Debt to EBITDA Ratio (2018-2020)[1]	2018 ~ 4.9x Thereafter ~4.6x to 4.9x	2018 ~ 4.8X Thereafter ~4.0x to 4.3x
Annual Distribution Growth	Flat / No Growth	Mid to High Single Digit Percent Range potentially starting as early as 2019
Funding Needs (2018)	~ $600 million	~ $300 to 500 million
Cost of Equity	~ 14% to 16%	?
Trading Yield	~ 12% to 14%	?
Annual Distribution	$460 million	$250 million

1. *As calculated per NS financial covenants*

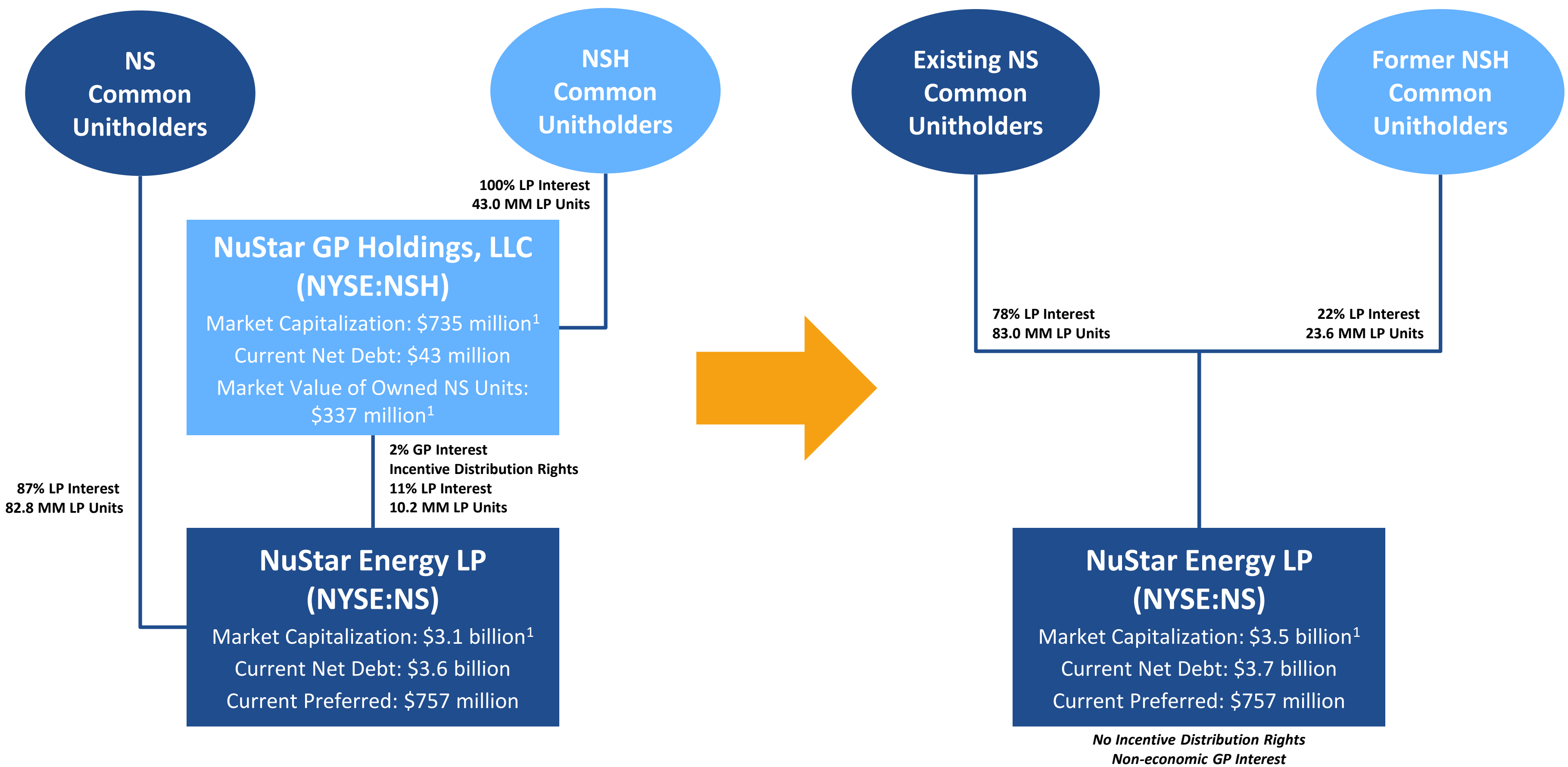
NS and NSH – A Transformative Merger



New Simplified Structure

Pre-Simplification

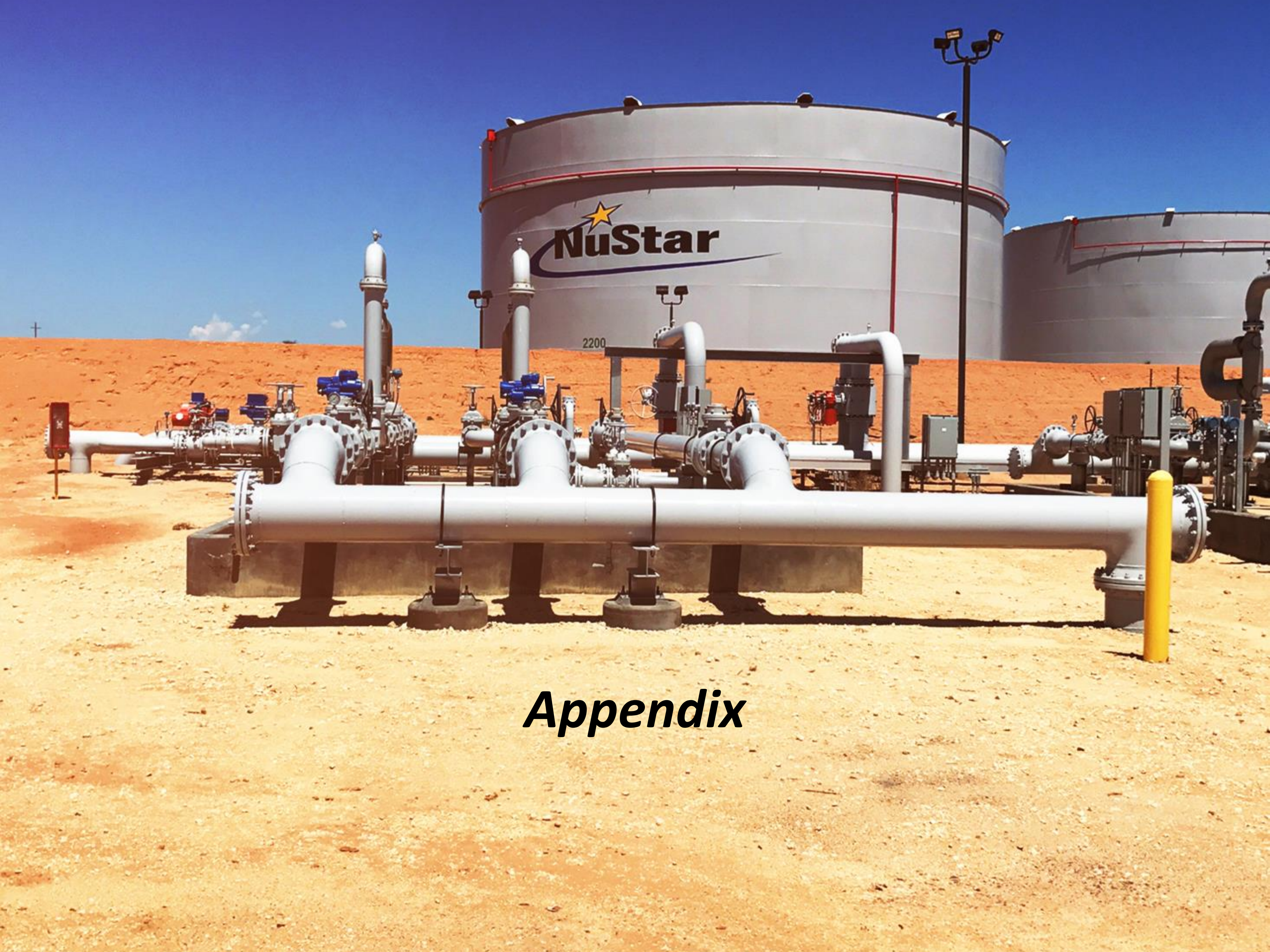
Post-Simplification



1. *Assumes NS and NSH unit prices as of February 6, 2018*

2018 Guidance Summary

($ in Millions)	Annual EBITDA	G&A Expenses	Reliability Capital Spending	Strategic Capital Spending
Initial 2018 Guidance	$675 - $725	$100 - $110	$65 - $85	$360 - $390
Estimated 1st Quarter 2018 gain from hurricane proceeds	$85			
Reduced EBITDA primarily due to issues at St. Eustatius storage terminal	($75)			
Increased spending primarily to repair damage caused by hurricanes in 2017, partially offset by reduced spending on Ammonia System replacement project			$15	
Current 2018 Guidance	$685 - $735	$100 - $110	$80 - $100	$360 - $390
Estimated 1st Quarter 2018 gain from hurricane proceeds	($85)			
Adjusted Current 2018 Guidance	$600 - $650	$100 - $110	$80 - $100	$360 - $390



Appendix

Reconciliation of Non-GAAP Financial Information - Revised

NuStar Energy L.P. utilizes financial measures, such as earnings before interest, taxes, depreciation and amortization (EBITDA), distributable cash flow (DCF) and distribution coverage ratio, which are not defined in U.S. generally accepted accounting principles (GAAP). Management believes these financial measures provide useful information to investors and other external users of our financial information because (i) they provide additional information about the operating performance of the partnership's assets and the cash the business is generating, (ii) investors and other external users of our financial statements benefit from having access to the same financial measures being utilized by management and our board of directors when making financial, operational, compensation and planning decisions and (iii) they highlight the impact of significant transactions.

Our board of directors and management use EBITDA and/or DCF when assessing the following: (i) the performance of our assets, (ii) the viability of potential projects, (iii) our ability to fund distributions, (iv) our ability to fund capital expenditures and (v) our ability to service debt. In addition, our board of directors uses a distribution coverage ratio, which is calculated based on DCF, as one of the factors in its determination of the company-wide bonus and the vesting of performance units awarded to management. DCF is a widely accepted financial indicator used by the master limited partnership (MLP) investment community to compare partnership performance. DCF is used by the MLP investment community, in part, because the value of a partnership unit is partially based on its yield, and its yield is based on the cash distributions a partnership can pay its unitholders.

None of these financial measures are presented as an alternative to net income, or for any period presented reflecting discontinued operations, income from continuing operations. They should not be considered in isolation or as substitutes for a measure of performance prepared in accordance with GAAP. For purposes of segment reporting, we do not allocate general and administrative expenses to our reported operating segments because those expenses relate primarily to the overall management at the entity level. Therefore, EBITDA reflected in the segment or project reconciliations exclude any allocation of general and administrative expenses consistent with our policy for determining segmental operating income, the most directly comparable GAAP measure.

The following are reconciliations of projected net income to projected EBITDA to projected DCF (in thousands of dollars, except ratio data):

	Pre-Simplification and Reset (See Note 1 below)			Post-Simplification and Reset		
	Year Ended December 31,			Year Ended December 31,		
	2018	2019	2020	2018	2019	2020
Projected net income	$ 205,000 - 235,000	$ 185,000 - 215,000	$ 220,000 - 250,000	$ 205,000 - 235,000	$ 190,000 - 225,000	$ 235,000 - 265,000
Projected interest expense, net	185,000 - 190,000	190,000 - 200,000	210,000 - 220,000	185,000 - 190,000	185,000 - 190,000	195,000 - 205,000
Projected income tax expense	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000
Projected depreciation and amortization expense	290,000 - 300,000	310,000 - 320,000	320,000 - 340,000	290,000 - 300,000	310,000 - 320,000	320,000 - 340,000
Projected EBITDA	685,000 - 735,000	690,000 - 745,000	755,000 - 820,000	685,000 - 735,000	690,000 - 745,000	755,000 - 820,000
Projected interest expense, net	(185,000) - (190,000)	(190,000) - (200,000)	(210,000) - (220,000)	(185,000) - (190,000)	(185,000) - (190,000)	(195,000) - (205,000)
Projected reliability capital expenditures	(80,000) - (100,000)	(70,000) - (90,000)	(60,000) - (80,000)	(80,000) - (100,000)	(70,000) - (90,000)	(60,000) - (80,000)
Projected income tax expense	(5,000) - (10,000)	(5,000) - (10,000)	(5,000) - (10,000)	(5,000) - (10,000)	(5,000) - (10,000)	(5,000) - (10,000)
Projected unit-based compensation (a)	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000
Preferred unit distributions	(95,000) - (105,000)	(115,000) - (120,000)	(110,000) - (120,000)	(90,000) - (100,000)	(100,000) - (110,000)	(90,000) - (100,000)
Projected gain from hurricane insurance proceeds	(85,000)	-	-	(85,000)	-	-
Projected other items	-	-	5,000 - 15,000	-	-	5,000 - 15,000
Projected hurricane-related spending	30,000 - 45,000	5,000 - 20,000	5,000 - 15,000	30,000 - 45,000	5,000 - 20,000	5,000 - 15,000
Projected DCF	270,000 - 300,000	320,000 - 355,000	385,000 - 430,000	275,000 - 305,000	340,000 - 375,000	420,000 - 465,000
Less projected DCF available to general partner	50,000 - 55,000	55,000 - 57,500	60,000 - 65,000	-	-	-
Projected DCF available to common limited partners	$ 220,000 - 245,000	$ 265,000 - 297,500	$ 325,000 - 365,000	$ 275,000 - 305,000	$ 340,000 - 375,000	$ 420,000 - 465,000
Projected distributions applicable to common limited partners	$ 405,000 - 410,000	$ 410,000 - 415,000	$ 410,000 - 415,000	$ 250,000 - 255,000	$ 255,000 - 260,000	$ 270,000 - 280,000
Projected distribution coverage ratio (b)	0.55x - 0.65x	0.7x	0.8x - 0.9x	1.1x - 1.2x	1.3x - 1.4x	1.5x - 1.6x

(a) This adjustment represents the non-cash expense related to the vestings of equity-based awards with the issuance of our common units. Certain awards include distribution equivalent rights (DERs). Payments made in connection with DERs are deducted from DCF.

(b) Distribution coverage ratio is calculated by dividing projected DCF by projected distributions applicable to common limited partners.

Note 1 – The previous Non-GAAP reconciliations of the pre-simplification amounts for 2018 and 2019 were based on the earnings guidance we provided on our 3rd quarter 2017 earnings call. However, post-simplification amounts were prepared using our 4th quarter 2017 earnings call guidance. In order to improve the comparability of the pre- and post- simplification amounts, we revised the 2018 and 2019 pre-simplification reconciliations to be on the same basis as the post-simplification amounts. In addition, we have added pre- and post- simplification guidance for 2020.

Reconciliation of Non-GAAP Financial Information – Revised (continued)

The following are reconciliations of projected net income to projected EBITDA to adjusted projected EBITDA (in thousands of dollars):

	Year Ended December 31, 2018	
	Current Guidance	Previous Guidance
Projected net income	$ 205,000 - 235,000	$ 195,000 - 225,000
Projected interest expense, net	185,000 - 190,000	180,000 - 185,000
Projected income tax expense	5,000 - 10,000	5,000 - 10,000
Projected depreciation and amortization expense	290,000 - 300,000	295,000 - 305,000
Projected EBITDA	$ 685,000 - 735,000	$ 675,000 - 725,000
Estimated gain from hurricane proceeds	(85,000)	
Adjusted projected EBITDA	$ 600,000 - 650,000	

The following is the non-GAAP reconciliation for the calculation of our projected Consolidated Debt Coverage Ratio, as defined in our $1.75 billion revolving credit agreement (the Revolving Credit Agreement) (in thousands of dollars, except ratio

	Pre-Simplification and Reset (See Note 1 below)			Post-Simplification and Reset		
	For the Four Quarters Ended December 31,			For the Four Quarters Ended December 31,		
	2018	2019	2020	2018	2019	2020
Projected net income	$ 205,000 - 235,000	$ 185,000 - 215,000	$ 220,000 - 250,000	$ 205,000 - 235,000	$ 190,000 - 225,000	$ 235,000 - 265,000
Projected interest expense, net	185,000 - 190,000	190,000 - 200,000	210,000 - 220,000	185,000 - 190,000	185,000 - 190,000	195,000 - 205,000
Projected income tax expense	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000	5,000 - 10,000
Projected depreciation and amortization expense	290,000 - 300,000	310,000 - 320,000	320,000 - 340,000	290,000 - 300,000	310,000 - 320,000	320,000 - 340,000
Projected EBITDA	685,000 - 735,000	690,000 - 745,000	755,000 - 820,000	685,000 - 735,000	690,000 - 745,000	755,000 - 820,000
Projected other income	(85,000)	-	-	(85,000)	-	-
Projected equity awards (a)	10,000 - 15,000	10,000 - 15,000	10,000 - 15,000	10,000 - 15,000	10,000 - 15,000	10,000 - 15,000
Projected material project adjustments (b)	5,000 -10,000	10,000 - 15,000	10,000 - 15,000	5,000 -10,000	10,000 - 15,000	10,000 - 15,000
Projected Consolidated EBITDA, as defined in the Revolving Credit Agreement	$ 615,000 - 675,000	$ 710,000 - 775,000	$ 775,000 - 850,000	$ 615,000 - 675,000	$ 710,000 - 775,000	$ 775,000 - 850,000
Total projected consolidated debt	$ 3,450,000 - 3,750,000	$ 3,700,000 - 4,250,000	$ 4,000,000 - 4,600,000	$ 3,400,000 - 3,650,000	$ 3,300,000 - 3,750,000	$ 3,500,000 - 4,000,000
Projected NuStar Logistics' 7.625% fixed-to-floating rate subordinated notes	(402,500)	(402,500)	(402,500)	(402,500)	(402,500)	(402,500)
Projected proceeds held in escrow associated with the GoZone Revenue Bonds	(41,500)	(41,500)	(41,500)	(41,500)	(41,500)	(41,500)
Projected Consolidated Debt, as defined in the Revolving Credit Agreement	$ 3,006,000 - 3,306,000	$ 3,256,000 - 3,806,000	$ 3,556,000 - 4,156,000	$ 2,956,000 - 3,206,000	$ 2,856,000 - 3,306,000	$ 3,056,000 - 3,556,000
Projected Consolidated Debt Coverage Ratio (Projected Consolidated Debt to Projected Consolidated EBITDA)	4.9x	4.6x - 4.9x	4.6x - 4.9x	4.8x	4.0x - 4.3x	4.0x - 4.2x

(a) This adjustment represents the non-cash expense related to the vestings of equity-based awards with the issuance of our common units.
(b) This adjustment represents the percentage of the projected Consolidated EBITDA attributable to any Material Project, as defined in the Revolving Credit Agreement, based on the current completion percentage.

Note 1 – The previous Non-GAAP reconciliations of the pre-simplification amounts for 2018 and 2019 were based on the earnings guidance we provided on our 3rd quarter 2017 earnings call. However, post-simplification amounts were prepared using our 4th quarter 2017 earnings call guidance. In order to improve the comparability of the pre- and post-simplification amounts, we revised the 2018 and 2019 pre-simplification reconciliations to be on the same basis as the post-simplification amounts. In addition, we have added pre- and post- simplification guidance for 2020.