FASB TAXONOMY IMPLEMENTATION GUIDE

Version 4.0
March 2017

Notional Amount Disclosures

(Taxonomy Version 2017†)

FASB U.S. GAAP Financial Reporting Taxonomy (Taxonomy)
Implementation Guide Series

† Changes from the 2016 version of this Implementation Guide are included in Appendix A to this Guide.

Financial Accounting Standards Board

The Taxonomy Implementation Guide is not authoritative; rather, it is a document that communicates how the U.S. GAAP Financial Reporting Taxonomy (Taxonomy) is designed. It also provides other information to help a user of the Taxonomy understand how elements and relationships are structured.

Taxonomy Implementation Guide on Modeling Notional Amount Disclosures

Overview

The purpose of this Taxonomy Implementation Guide is to demonstrate the modeling for notional amount disclosures. The examples are not intended to encompass all of the potential modeling configurations or to dictate the appearance and structure of an entity's extension taxonomy. The examples are provided to help users of the Taxonomy understand how the modeling for notional amount disclosures is structured within the Taxonomy. The examples are based on the assumption that the entity meets the criteria for reporting notional amount disclosures under U.S. GAAP and/or SEC authoritative literature. In addition, the reported line items within the examples are not all inclusive and represent only partial statements for illustration purposes.

While constituents may find the information in this guide useful, users looking for guidance to conform to SEC XBRL filing requirements should look to the SEC EDGAR Filer Manual and other information provided on the SEC website at xbrl.sec.gov.

This guide focuses on detail tagging only (Level 4); it does not include any elements for text blocks, policy text blocks, and table text blocks (Levels 1–3).

This Taxonomy Implementation Guide includes the following examples:

- Example 1—Notional Assets and Liabilities
- Example 2—Notional for Unassociated Assets and Liabilities
- Example 3—Nonmonetary Notional Amounts

Modeling Notional Amount Disclosures

The modeling for notional amount disclosures is structured to provide a flexible framework. Below are the primary elements for notional amount disclosures (including underlyings):

Notional Disclosures [Abstract]
Derivative Asset, Notional Amount
Derivative Liability, Notional Amount
Derivative, Notional Amount
Notional Amount of Nonderivative Instruments
Derivative, Nonmonetary Notional Amount, Volume
Derivative, Nonmonetary Notional Amount, Mass
Derivative, Nonmonetary Notional Amount, Energy Measure
Derivative, Nonmonetary Notional Amount, Flow Rate
Underlying, Derivative Asset
Underlying, Derivative Liability
Underlying, Derivative
Underlying, Derivative Volume
Underlying, Derivative Mass
Underlying, Derivative Energy Measure
Underlying, Derivative Flow Rate

The elements provide for the base attributes (such as monetary, volume, mass, and energy; the underlying elements are all modeled as us-types:perUnitItemType).

Further attributes may be applied using the following dimensions and members (not all shown in this illustration):

- Derivative Instrument [Axis]
  - Derivative Contract [Domain]
    - Interest Rate Contract [Member]
    - Foreign Exchange Contract [Member]
    - Cross Currency Interest Rate Contract [Member]
    - Treasury Lock [Member]
    - Equity Contract [Member]
    - Commodity Contract [Member]
    - Energy Related Derivative [Member]

- Hedging Relationship [Axis]
  - Hedging Relationship [Domain]
    - Fair Value Hedging [Member]
    - Cash Flow Hedging [Member]
    - Net Investment Hedging [Member]

- Hedging Designation [Axis]
  - Hedging Designation [Domain]
    - Designated as Hedging Instrument [Member]
    - Not Designated as Hedging Instrument, Economic Hedge [Member]
      - Not Designated as Hedging Instrument, Trading [Member]
      - Not Designated as Hedging Instrument [Member]

- Position [Axis]
  - Position [Domain]
    - Long [Member]
    - Short [Member]

General Information

(1) A legend for dimensions and domain members has been provided to associate with facts contained in the notes to the financial statements. Extension elements are coded using "Ex." Legends specific to the examples are provided in Figure x.2 of each example.

Coding	Standard Label	Element Name
A1	**Hedging Designation [Axis]**	**HedgingDesignationAxis**
	Hedging Designation [Domain]	HedgingDesignationDomain
M1	Designated as Hedging Instrument [Member]	DesignatedAsHedgingInstrumentMember
M2	Not Designated as Hedging Instrument [Member]	NondesignatedMember
M3	Not Designated as Hedging Instrument, Economic Hedge [Member]	NotDesignatedAsHedgingInstrumentEconomicHedgeMember
M33	Not Designated as Hedging Instrument, Trading [Member]	NotDesignatedAsHedgingInstrumentTradingMember
A2	**Position [Axis]**	**PositionAxis**
	Position [Domain]	PositionDomain
M4	Short [Member]	ShortMember
M5	Long [Member]	LongMember
A3	**Derivative Instrument [Axis]**	**DerivativeInstrumentRiskAxis**
	Derivative Contract [Domain]	DerivativeContractTypeDomain
M6	Interest Rate Contract [Member]	InterestRateContractMember
M9	Interest Rate Swap [Member]	InterestRateSwapMember
ExM10	Interest Rate Future and Forward [Member]	InterestRateFutureandForwardMember
ExM11	Interest Rate Option [Member]	InterestRateOptionMember
M7	Foreign Exchange Contract [Member]	ForeignExchangeContractMember
M12	Currency Swap [Member]	CurrencySwapMember
ExM13	Foreign Exchange Future and Forward [Member]	ForeignExchangeFutureandForwardMember
M14	Foreign Exchange Option [Member]	ForeignExchangeOptionMember
M8	Credit Risk Contract [Member]	CreditRiskContractMember
ExM19	Credit Risk Option [Member]	CreditRiskOptionMember
M15	Equity Contract [Member]	EquityContractMember
M16	Equity Swap [Member]	EquitySwapMember
ExM17	Equity Future and Forward [Member]	EquityFutureandForwardMember
M18	Equity Option [Member]	StockOptionMember
ExM20	NYMEX Swap - Natural Gas 20X2 [Member]	NymexSwapNaturalGas20X2Member
ExM21	Basin Specific Swap - Natural Gas 20X2 [Member]	BasinSpecificSwapNaturalGas20X2Member
ExM22	NYMEX Swap - Natural Gas 20X3 [Member]	NymexSwapNaturalGas20X3Member
ExM23	Basin Specific Swap - Natural Gas 20X3 [Member]	BasinSpecificSwapNaturalGas20X3Member
ExM24	NYMEX Swap - Natural Gas 20X4 [Member]	NymexSwapNaturalGas20X4Member
ExM25	Basin Specific Swap - Natural Gas 20X4 [Member]	BasinSpecificSwapNaturalGas20X4Member
ExM26	NYMEX Swap - Oil 20X2 [Member]	NymexSwapOil20X2Member
ExM27	NYMEX Swap - Oil 20X3 [Member]	NymexSwapOil20X3Member
ExM28	NYMEX Swap - Oil 20X4 [Member]	NymexSwapOil20X4Member
ExM29	Basis Swap - Oil Basis Differential 20X2 [Member]	BasisSwapOilBasisDifferential20X2Member
ExM30	Basis Swap - Oil Basis Differential 20X3 [Member]	BasisSwapOilBasisDifferential20X3Member
ExM31	Liquid Swap - Natural Gas Liquids 20X2 [Member]	LiquidSwapNaturalGasLiquids20X2Member
ExM32	Liquid Swap - Natural Gas Liquids 20X3 [Member]	LiquidSwapNaturalGasLiquids20X3Member

(2) Elements that have an instant period type and elements that have a duration period type are indicated as such in Figure x.2 of each example. Instant elements have a single date context (such as December 31, 20X1) while duration elements have a starting and ending date as its context (such as January 1, 20X1 to December 31, 20X1).

(3) Instance documents (Figure x.3 in each example) do not include all the information that may appear in an entity's instance document. The instance documents are provided for illustrative purposes only.

(4) For elements contained in the Taxonomy, the standard label is as it appears in the Taxonomy. For extension elements, the standard label corresponds to the element name. For information about structuring extension elements, refer to the *EDGAR Filer Manual*.

(5) Values reported in XBRL are generally entered as positive, with the exception of certain concepts such as net income (loss) or gain (loss).

Example 1—Notional Assets and Liabilities

This example illustrates the modeling for a disclosure that disaggregates notional amounts and fair value between derivative asset and derivative liability positions.

			(In Millions)				
			Assets at 12/31/2017			Liabilities at 12/31/2017	
			Fair Value L1	Notional L2		Fair Value L6	Notional L7
	Derivatives designated as accounting hedges:						
A1:M1, A3:M6	Interest rate contracts		$ 8,100	$ 71,000		$ —	$ —
A1:M1, A3:M7	Foreign exchange contracts		348	12,000		57	7,000
A1:M1	Total derivatives designated as accounting hedges		8,448	83,000		57	7,000
	Derivatives not designated as accounting hedges:						
A1:M2, A3:M6	Interest rate contracts		$ 904,000	$ 21,000,000		$ 880,000	$ 21,000,000
A1:M2, A3:M8	Credit contracts		138,000	2,500,000		130,000	2,400,000
A1:M2, A3:M7	Foreign exchange contract		61,000	1,500,000		64,000	1,400,000
A1:M2	Total derivatives not designated as accounting hedges		1,103,000	25,000,000		1,074,000	24,800,000
	Total derivatives		$ 1,111,448	$ 25,083,000		$ 1,074,057	$ 24,807,000
	Cash collateral netting	L3	(77,000)		L8	(44,000)	
	Counterparty netting	L4	(1,000,000)		L9	(1,000,000)	
	Net derivatives	L5	$ 34,448	$ 25,083,000	L10	$ 30,057	$ 24,807,000

Figure 1.1

The legend for the elements used to tag these facts is:

	Standard Label	Balance Type	Period Type	Element Name
A1	Hedging Designation [Axis]		Duration	HedgingDesignationAxis
	Hedging Designation [Domain]		Duration	HedgingDesignationDomain
M1	Designated as Hedging Instrument [Member]		Duration	DesignatedAsHedgingInstrumentMember
M2	Not Designated as Hedging Instrument [Member]		Duration	NondesignatedMember
A3	Derivative Instrument [Axis]		Duration	DerivativeInstrumentRiskAxis
	Derivative Contract [Domain]		Duration	DerivativeContractTypeDomain
M6	Interest Rate Contract [Member]		Duration	InterestRateContractMember
M7	Foreign Exchange Contract [Member]		Duration	ForeignExchangeContractMember
M8	Credit Risk Contract [Member]		Duration	CreditRiskContractMember
L1	Derivative Asset, Fair Value, Gross Asset	Debit	Instant	DerivativeFairValueOfDerivativeAsset
L2	Derivative Asset, Notional Amount		Instant	DerivativeAssetNotionalAmount
L3	Derivative Asset, Collateral, Obligation to Return Cash, Offset	Credit	Instant	DerivativeAssetCollateralObligationToReturnCashOffset
L4	Derivative Asset, Fair Value, Gross Liability	Credit	Instant	DerivativeAssetFairValueGrossLiability
L5	Derivative Asset	Debit	Instant	DerivativeAssets
L6	Derivative Liability, Fair Value, Gross Liability	Credit	Instant	DerivativeFairValueOfDerivativeLiability
L7	Derivative Liability, Notional Amount		Instant	DerivativeLiabilityNotionalAmount
L8	Derivative Liability, Collateral, Right to Reclaim Cash, Offset	Debit	Instant	DerivativeLiabilityCollateralRightToReclaimCashOffset
L9	Derivative Liability, Fair Value, Gross Asset	Debit	Instant	DerivativeLiabilityFairValueGrossAsset
L10	Derivative Liability	Credit	Instant	DerivativeLiabilities

Figure 1.2

The instance document created using the modeling structure is provided here:

	Standard Label	Preferred Label**								
	Hedging Designation [Axis] A1		Designated as Hedging Instrument [Member] M1			Not Designated as Hedging Instrument [Member] M2				Report-wide Value
	Derivative Instrument [Axis] A3		Interest Rate Contract [Member] M6	Foreign Exchange Contract [Member] M7		Interest Rate Contract [Member] M6	Foreign Exchange Contract [Member] M7	Credit Risk Contract [Member] M8		
L1	Derivative Asset, Fair Value, Gross Asset	Fair value of Derivatives, Assets	8100000000	348000000	8448000000	904000000000	61000000000	138000000000	1103000000000	1111448000000
L2	Derivative Asset, Notional Amount	Notional of Derivatives, Assets	71000000000	12000000000	83000000000	21000000000000	1500000000000	2500000000000	25000000000000	25083000000000
L3	Derivative Asset, Collateral, Obligation to Return Cash, Offset	Fair value of Cash collateral netting, Assets								77000000000
L4	Derivative Asset, Fair Value, Gross Liability	Fair value of Counterparty netting, Assets								1000000000000
L5	Derivative Asset	Fair value of Net derivatives, Assets								34448000000
L6	Derivative Liability, Fair Value, Gross Liability	Fair value of Derivatives, Liabilities	0	57000000	57000000	880000000000	64000000000	130000000000	1074000000000	1074057000000
L7	Derivative Liability, Notional Amount	Notional of Derivatives, Liabilities	0	7000000000	7000000000	21000000000000	1400000000000	2400000000000	24800000000000	24807000000000
L8	Derivative Liability, Collateral, Right to Reclaim Cash, Offset	Fair value of Cash collateral netting, Liabilities								44000000000
L9	Derivative Liability, Fair Value, Gross Asset	Fair value of Counterparty netting, Liabilities								1000000000000
L10	Derivative Liability	Fair value of Net derivatives, Liabilities								30057000000

Figure 1.3

Notes:

** Preferred Labels are the labels created and used by the company to show the line item captions in its financial statements.

Example 2—Notional for Unassociated Assets and Liabilities

This example illustrates the modeling for a disclosure that combines notional amounts for derivative asset positions and derivative liability positions.

			A1:M1	A1:M33	A1:M3
			Designated as hedging instruments	Other derivative instruments	
				Trading derivatives	Management hedges
			December 31, 2017	December 31, 2017	December 31, 2017
		in millions of dollars			
		Interest rate contracts			
A3:M9		Swaps	$ 160,000	$ 28,000,000	$ 100,000
A3:ExM10		Futures and forwards	—	3,500,000	43,000
A3:ExM11	A2:M4	Written options	—	3,870,000	16,000
	A2:M5	Purchased options	—	3,888,000	7,000
A3:M6		**Total interest rate contract notionals**	$ 160,000	$ 39,258,000	$ 166,000
		Foreign exchange contracts			
A3:M12		Swaps	$ 27,000	$ 1,100,000	$ 22,000
A3:ExM13		Futures and forwards	55,000	3,100,000	31,000
A3:M14	A2:M4	Written options	4,000	590,000	190
	A2:M5	Purchased options	39,000	593,000	53
A3:M7		**Total foreign exchange contract notionals**	$ 125,000	$ 5,383,000	$ 53,243
		Equity contracts			
A3:M16		Swaps	$ —	$ 86,000	$ —
A3:ExM17		Futures and forwards	—	12,000	—
A3:M18	A2:M4	Written options	—	552,000	—
	A2:M5	Purchased options	—	509,000	—
A3:M15		**Total equity contract notionals**	$ —	$ 1,159,000	$ —
		Credit derivatives			
A3:ExM19	A2:M4	Protection sold	$ —	$ 1,300,000	$ —
	A2:M5	Protection purchased	4,000	1,400,000	21,000
A3:M8		**Total credit derivatives**	$ 4,000	$ 2,700,000	$ 21,000
		Total derivative notionals	$ 289,000	$ 48,500,000	$ 240,243

L11

Figure 2.1

The legend for the elements used to tag these facts is:

	Standard Label	Balance Type	Period Type	Element Name
A1	Hedging Designation [Axis]		Duration	HedgingDesignationAxis
	Hedging Designation [Domain]		Duration	HedgingDesignationDomain
M1	Designated as Hedging Instrument [Member]		Duration	DesignatedAsHedgingInstrumentMember
M3	Not Designated as Hedging Instrument, Economic Hedge [Member]		Duration	NotDesignatedAsHedgingInstrumentEconomicHedgeMember
M33	Not Designated as Hedging Instrument, Trading [Member]		Duration	NotDesignatedAsHedgingInstrumentTradingMember
A2	Position [Axis]		Duration	PositionAxis
	Position [Domain]		Duration	PositionDomain
M4	Short [Member]		Duration	ShortMember
M5	Long [Member]		Duration	LongMember
A3	Derivative Instrument [Axis]		Duration	DerivativeInstrumentRiskAxis
	Derivative Contract [Domain]		Duration	DerivativeContractTypeDomain
M6	Interest Rate Contract [Member]		Duration	InterestRateContractMember
M9	Interest Rate Swap [Member]		Duration	InterestRateSwapMember
ExM10	Interest Rate Future and Forward [Member]		Duration	InterestRateFutureandForwardMember
ExM11	Interest Rate Option [Member]		Duration	InterestRateOptionMember
M7	Foreign Exchange Contract [Member]		Duration	ForeignExchangeContractMember
M12	Currency Swap [Member]		Duration	CurrencySwapMember
ExM13	Foreign Exchange Future and Forward [Member]		Duration	ForeignExchangeFutureandForwardMember
M14	Foreign Exchange Option [Member]		Duration	ForeignExchangeOptionMember
M15	Equity Contract [Member]		Duration	EquityContractMember
M16	Equity Swap [Member]		Duration	EquitySwapMember
ExM17	Equity Future and Forward [Member]		Duration	EquityFutureandForwardMember
M18	Equity Option [Member]		Duration	StockOptionMember
M8	Credit Risk Contract [Member]		Duration	CreditRiskContractMember
ExM19	Credit Risk Option [Member]		Duration	CreditRiskOptionMember
L11	Derivative, Notional Amount		Instant	DerivativeNotionalAmount

Figure 2.2

The instance document created using the modeling structure is provided here:

							L11
Standard Label	Derivative Instrument [Axis]	A3	Position [Axis]	A2	Hedging Designation [Axis]	A1	Derivative, Notional Amount
Preferred Label**							Derivative notionals
	Interest Rate Swap [Member]	M9			Designated as Hedging Instrument [Member]	M1	160000000000
					Not Designated as Hedging Instrument, Trading [Member]	M33	28000000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	100000000000
	Interest Rate Future and Forward [Member]	ExM10			Designated as Hedging Instrument [Member]	M1	0
					Not Designated as Hedging Instrument, Trading [Member]	M33	3500000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	43000000000
	Interest Rate Option [Member]	ExM11	Short [Member]	M4	Designated as Hedging Instrument [Member]	M1	0
					Not Designated as Hedging Instrument, Trading [Member]	M33	3870000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	16000000000
			Long [Member]	M5	Designated as Hedging Instrument [Member]	M1	0
					Not Designated as Hedging Instrument, Trading [Member]	M33	3888000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	7000000000
	Interest Rate Contract [Member]	M6			Designated as Hedging Instrument [Member]	M1	160000000000
					Not Designated as Hedging Instrument, Trading [Member]	M33	39258000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	166000000000
	Currency Swap [Member]	M12			Designated as Hedging Instrument [Member]	M1	27000000000
					Not Designated as Hedging Instrument, Trading [Member]	M33	1100000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	22000000000
	Foreign Exchange Future and Forward [Member]	ExM13			Designated as Hedging Instrument [Member]	M1	55000000000
					Not Designated as Hedging Instrument, Trading [Member]	M33	3100000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	31000000000
	Foreign Exchange Option [Member]	M14	Short [Member]	M4	Designated as Hedging Instrument [Member]	M1	4000000000
					Not Designated as Hedging Instrument, Trading [Member]	M33	590000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	190000000
			Long [Member]	M5	Designated as Hedging Instrument [Member]	M1	39000000000
					Not Designated as Hedging Instrument, Trading [Member]	M33	593000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	53000000
	Foreign Exchange Contract [Member]	M7			Designated as Hedging Instrument [Member]	M1	125000000000
					Not Designated as Hedging Instrument, Trading [Member]	M33	5383000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	53243000000

Figure 2.3 (continues)

	Derivative Instrument [Axis]	A3	Position [Axis]	A2	Hedging Designation [Axis]	A1	L11 Derivative, Notional Amount
Preferred Label**							Derivative notionals
	Equity Swap [Member]	M16			Designated as Hedging Instrument [Member]	M1	0
	Equity Swap [Member]	M16			Not Designated as Hedging Instrument, Trading [Member]	M33	86000000000
	Equity Swap [Member]	M16			Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	0
	Equity Future and Forward [Member]	ExM17			Designated as Hedging Instrument [Member]	M1	0
	Equity Future and Forward [Member]	ExM17			Not Designated as Hedging Instrument, Trading [Member]	M33	12000000000
	Equity Future and Forward [Member]	ExM17			Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	0
	Equity Option [Member]	M18	Short [Member]	M4	Designated as Hedging Instrument [Member]	M1	0
	Equity Option [Member]	M18	Short [Member]	M4	Not Designated as Hedging Instrument, Trading [Member]	M33	552000000000
	Equity Option [Member]	M18	Short [Member]	M4	Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	0
	Equity Option [Member]	M18	Long [Member]	M5	Designated as Hedging Instrument [Member]	M1	0
	Equity Option [Member]	M18	Long [Member]	M5	Not Designated as Hedging Instrument, Trading [Member]	M33	509000000000
	Equity Option [Member]	M18	Long [Member]	M5	Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	0
	Equity Contract [Member]	M15			Designated as Hedging Instrument [Member]	M1	0
	Equity Contract [Member]	M15			Not Designated as Hedging Instrument, Trading [Member]	M33	1159000000000
	Equity Contract [Member]	M15			Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	0
	Credit Risk Option [Member]	ExM19	Short [Member]	M4	Designated as Hedging Instrument [Member]	M1	0
	Credit Risk Option [Member]	ExM19	Short [Member]	M4	Not Designated as Hedging Instrument, Trading [Member]	M33	1300000000000
	Credit Risk Option [Member]	ExM19	Short [Member]	M4	Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	0
	Credit Risk Option [Member]	ExM19	Long [Member]	M5	Designated as Hedging Instrument [Member]	M1	4000000000
	Credit Risk Option [Member]	ExM19	Long [Member]	M5	Not Designated as Hedging Instrument, Trading [Member]	M33	1400000000000
	Credit Risk Option [Member]	ExM19	Long [Member]	M5	Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	21000000000
	Credit Risk Contract [Member]	M8			Designated as Hedging Instrument [Member]	M1	4000000000
	Credit Risk Contract [Member]	M8			Not Designated as Hedging Instrument, Trading [Member]	M33	2700000000000
	Credit Risk Contract [Member]	M8			Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	21000000000
					Designated as Hedging Instrument [Member]	M1	289000000000
					Not Designated as Hedging Instrument, Trading [Member]	M33	48500000000000
					Not Designated as Hedging Instrument, Economic Hedge [Member]	M3	240243000000
	Report-wide Value						

Figure 2.3 (continued)

Notes:

- The instance document has the primary line item elements in the column headings, and the member elements are the row headings due to size constraints.

- *Report-wide Value* is presented in Figure 2.3 without a value because every amount presented in the disclosure is dimensionally qualified.

** Preferred Labels are the labels created and used by the company to show the line item captions in its financial statements.

Example 3—Nonmonetary Notional Amounts

Example 3 illustrates the modeling for disclosures of nonmonetary notional amounts for underlying contract prices and related volumes that are hedged.

As of December 31, 2017	A1:M1 L12		A1:M1 L13			
Production Period	**Total Hedged Volumes**		**Average Contract Price**		**Description**	
Natural Gas						
20x2	11.0	Bcf	$ 5.07	Mcf	NYMEX Swaps	A3:ExM20
	29.5	Bcf	$ 4.60	Mcf	Basin Specific Swaps	A3:ExM21
20x3	8.8	Bcf	$ 5.30	Mcf	NYMEX Swaps	A3:ExM22
	25.1	Bcf	$ 4.88	Mcf	Basin Specific Swaps	A3:ExM23
20x4	3.0	Bcf	$ 5.72	Mcf	NYMEX Swaps	A3:ExM24
	16.6	Bcf	$ 5.16	Mcf	Basin Specific Swaps	A3:ExM25
Oil						
20X2	6762	MBbls	$88.29	bbl	NYMEX Swaps	A3:ExM26
20X3	7643	MBbls	$90.03	bbl	NYMEX Swaps	A3:ExM27
20X4	5612	MMbls	$90.56	bbl	NYMEX Swaps	A3:ExM28
Oil Basis Differential						
20X2	3124	MMbls	$ 42.31	bbl	Basis Swaps	A3:ExM29
20X3	2768	MBbls	$ 48.77	bbl	Basis Swaps	A3:ExM30
Natural Gas Liquids						
20X2	58.5	MMGal	$ 0.98	gal	Liquids Swaps	A3:ExM31
20X3	44.5	MMGal	$ 1.02	gal	Liquids Swaps	A3:ExM32

Figure 3.1

The legend for the elements used to tag these facts is:

	Standard Label	Balance Type	Period Type	Element Name
A1	Hedging Designation [Axis]		Duration	HedgingDesignationAxis
	Hedging Designation [Domain]		Duration	HedgingDesignationDomain
M1	Designated as Hedging Instrument [Member]		Duration	DesignatedAsHedgingInstrumentMember
A3	Derivative Instrument [Axis]		Duration	DerivativeInstrumentRiskAxis
	Derivative Contract [Domain]		Duration	DerivativeContractTypeDomain
ExM20	NYMEX Swap - Natural Gas 20X2 [Member]		Duration	NymexSwapNaturalGas20X2Member
ExM21	Basin Specific Swap - Natural Gas 20X2 [Member]		Duration	BasinSpecificSwapNaturalGas20X2Member
ExM22	NYMEX Swap - Natural Gas 20X3 [Member]		Duration	NymexSwapNaturalGas20X3Member
ExM23	Basin Specific Swap - Natural Gas 20X3 [Member]		Duration	BasinSpecificSwapNaturalGas20X3Member
ExM24	NYMEX Swap - Natural Gas 20X4 [Member]		Duration	NymexSwapNaturalGas20X4Member
ExM25	Basin Specific Swap - Natural Gas 20X4 [Member]		Duration	BasinSpecificSwapNaturalGas20X4Member
ExM26	NYMEX Swap - Oil 20X2 [Member]		Duration	NymexSwapOil20X2Member
ExM27	NYMEX Swap - Oil 20X3 [Member]		Duration	NymexSwapOil20X3Member
ExM28	NYMEX Swap - Oil 20X4 [Member]		Duration	NymexSwapOil20X4Member
ExM29	Basis Swap - Oil Basis Differential 20X2 [Member]		Duration	BasisSwapOilBasisDifferential20X2Member
ExM30	Basis Swap - Oil Basis Differential 20X3 [Member]		Duration	BasisSwapOilBasisDifferential20X3Member
ExM31	Liquid Swap - Natural Gas Liquids 20X2 [Member]		Duration	LiquidSwapNaturalGasLiquids20X2Member
ExM32	Liquid Swap - Natural Gas Liquids 20X3 [Member]		Duration	LiquidSwapNaturalGasLiquids20X3Member
L12	Derivative, Nonmonetary Notional Amount, Volume		Duration	DerivativeNonmonetaryNotionalAmountVolume
L13	Underlying, Derivative Volume		Duration	UnderlyingDerivativeVolume

Figure 3.2

The instance document created using the modeling structure is provided here:

					L12	L13
Standard Label	**Hedging Designation [Axis]**	A1	**Derivative Instrument [Axis]**	A3	**Derivative, Nonmonetary Notional Amount, Volume**	**Underlying, Derivative Volume**
Preferred Label**					**Hedged volumes**	**Average contract price**
	Designated as Hedging Instrument [Member]	M1	**NYMEX Swap - Natural Gas 20X2 [Member]**	ExM20	11.0 Bcf	5.07 USD/Mcf
			Basin Specific Swap - Natural Gas 20X2 [Member]	ExM21	29.5 Bcf	4.60 USD/Mcf
			NYMEX Swap - Natural Gas 20X3 [Member]	ExM22	8.8 Bcf	5.30 USD/Mcf
			Basin Specific Swap - Natural Gas 20X3 [Member]	ExM23	25.1 Bcf	4.88 USD/Mcf
			NYMEX Swap - Natural Gas 20X4 [Member]	ExM24	3.0 Bcf	5.72 USD/Mcf
			Basin Specific Swap - Natural Gas 20X4 [Member]	ExM25	16.6 Bcf	5.16 USD/Mcf
			NYMEX Swap - Oil 20X2 [Member]	ExM26	6762000 Bbls	88.29 USD/bbl
			NYMEX Swap - Oil 20X3 [Member]	ExM27	7643000 Bbls	90.03 USD/bbl
			NYMEX Swap - Oil 20X4 [Member]	ExM28	5612000000 Bbls	90.56 USD/bbl
			Basis Swap - Oil Basis Differential 20X2 [Member]	ExM29	3124000000 Bbls	42.31 USD/bbl
			Basis Swap - Oil Basis Differential 20X3 [Member]	ExM30	2768000 Bbls	48.77 USD/bbl
			Liquid Swap - Natural Gas Liquids 20X2 [Member]	ExM31	58500000 gal	0.98 USD/gal
			Liquid Swap - Natural Gas Liquids 20X3 [Member]	ExM32	44500000 gal	1.02 USD/gal

Figure 3.3

Notes:

- The instance document has the primary line item elements in the column headings, and the member elements are the row headings due to size constraints.

- The information related to units is provided for illustrative purposes only. Please see the Unit Registry for the units. *MMGal* is not included in the Unit Registry; as such, the values reported in the instance document have been converted and are reported with a unit id of *gal*. *Bbls* has been used instead of *MMbls* and *Mbls* to keep the units and implicit scale factors consistent.

** Preferred Labels are the labels created and used by the company to show the line item captions in its financial statements.

Appendix A—Changes to 2017 Taxonomy Implementation Guide from 2016 Taxonomy Implementation Guide

Example Number(s) or Section	Figure(s)	Explanation	2016 Reference	2016 Element	2016 Standard Label	2017 Reference	2017 Element	2017 Standard Label
Example 2	2.1, 2.2, 2.3	Replaced with new US-GAAP element.	**M2**	NondesignatedMember	Not Designated as Hedging Instrument [Member]	**M33**	NotDesignatedAsHedgingInstrumentTradingMember	Not Designated as Hedging Instrument, Trading [Member]
Example 2	2.1, 2.2, 2.3	Extension element replaced with US-GAAP element. Updated Standard Label.	**ExM3**	NotDesignatedAsHedgingInstrumentManagementHedgesMember	Not Designated as Hedging Instrument Management Hedges [Member]	**M3**	NotDesignatedAsHedgingInstrumentEconomicHedgeMember	Not Designated as Hedging Instrument, Economic Hedge [Member]
Example 3	3.1, 3.3	Scales of all facts previously using MBbls and MMbls units were changed to Bbls unit to conform to EFM 6.6.35 requirement.	N/A	N/A	N/A	N/A	N/A	N/A