Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts 0051 Grain Sorghum **Commodity Code** 0015 Canola 0078 Sunflowers 0041 Corn 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley <u>Field</u> Field <u>Field</u> <u>Field</u> Record Calculations Name Number Number Format Rounding Rules Section 1: Liability Calculation If Unit of Measure equals Pounds "LBS", then round to whole number. Common Crop Insurance Policy definition 'production guarantee (per acre)'. Premium Guarantee Per Acre If Unit of Measure Internal 99999999.99 Amount equals Tons "TONS", Premium Guarantee Per Acre Amount should be then round to 2 rounded to whole pounds for Dry Beans, "0047" decimals. (all types), and Dry Peas, "0067" (all types). Otherwise, round to 1 decimal. Premium Guarantee Per = Approved Yield \* Coverage Level Percent Acre Amount For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted Approved Yield P11 42 9999999.99 None For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) For APH Trend and Yield Exclusion the Coverage Level Percent in this section is ALWAYS the Coverage Level Percent P14 34 9.9999 None chosen coverage level and NOT the Effective Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

**Release Date: 12/6/2018** 

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

 0091 Barley

						0091 Barrey
<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	Field Number	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>
When Guarantee Adjustment Type Code equal Planting, "L" OR Prevented Planting, "P":  Premium Guarantee Per Acre Amount * Guara Adjustment Factor  Guarantee Per Acre Amount =  Amount		Internal		999999999.99	If Unit of Measure	Guarantee Per Acre Amount should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Guarantee Adjustment Factor	P11	72	0.999	None	Edit with the Guarantee Adjustment ICE,

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Exhibit Name: Premium Calculation

**Exhibit Number:** P11-1, Plan 01, 02, 03

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

 0091 Barley

	<u>Field</u>	Record	Field	<u>Field</u>	<u>Field</u>	COST Barrey
<u>Calculations</u>	<u>Name</u>	Number	Number	<u>Format</u>	Rounding	Rules
<u> </u>						13335
					When Commodity	
					Code equals Barley,	
					"0091", Corn, "0041",	
					Cotton, "0021", Grain	
					Sorghum, "0051",	
					Soybeans, "0081" or	
					Wheat, "0011"; round	
					to nearest whole cent	
					[\$9.99]. If result is	
					based on Contract Price for specialty type	
					Corn, Soybeans or	
					Barley; round to	
					nearest one	
					hundredth cent	
					(\$9.9999).	
					(ψ3.3333).	
					When Commodity	
Price Election Amount = Projected Price (or Contract Price) * Price Election Percent	Price Election Amount	Internal		9999.9999	Code equals Canola, "0015", Rice, "0018",	
					Sunflowers, "0078";	
					round to nearest one-	
					tenth cent [\$9.999]. If	
					result is based on	
					Contract Price for	
					specialty type Canola;	
					round to nearest one	
					hundredth cent	
					(\$9.9999).	
					When Commodity	
					Code equals Popcorn,	
					"0043", Dry Beans,	
					"0047", or Dry	
					Peas,"0067" round to	
					nearest one-	
					hundredth cent	
<del>11/15/2018</del>	Pana	3 of 74			[\$9.9999].	
11/10/2010	rage	3 01 /4				

Exhibit Name: Premium Calculation

Exhibit Number: P11-1, Plan 01, 02, 03
Record Name: Acreage

Record Code: P11

Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection

03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

0091 Barley								
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules	
		Projected Price	ADM		99999.9999		Liability for Yield Protection, "01" allows the producer the opportunity to choose a percentage of the Projected Price. Liability for Revenue Protection, "02", or Revenue Protection with Harvest Price Exclusion, "03", requires the producer to choose 100 percent of the Projected Price. Edit with ADM Price, "00810".	
Price Election Amount (continued)	= Projected Price (or Contract Price) * Price Election Percent continued)	Contract Price	P11	46	9999.9999	None	For Yield Protection, "01", Contract Price may be used in lieu of the Projected Price for Dry Beans, Dry Peas, specialty types of Canola, Corn, Soybean or Barley. For Revenue Protection, "02", or Revenue Protection with Harvest Price Exclusion, "03", Contract Price may be used in lieu of the Projected Price for Dry Beans, Dry Peas, or specialty types of Canola, Corn or Soybeans. If the insured chooses to use the contract price, the contract price per bushel should be entered in the contract price field. The contracted price will be capped by RMA at a certain percentage over the projected price for Canola, Corn, Soybean and Barley as specified in the Special Provisions.	
	Price Election Percent	ICE		9.9999	None	Price Election Percent must equal 1.000, when Insurance Plan Code is Revenue Protection, "02", or Revenue Protection with Harvest Price Exclusion, "03". Edit with ICE Price Election Percent, "D00007".		

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Record Name: Acreage Record Code: P11

Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley <u>Recor</u>d Field Field **Field** Field Calculations Name Number Number Format Rounding Rules Premium Total Guarantee Internal 9999999.99 Round to 2 decimals. Amount Premium Total Guarantee \_ Premium Guarantee Per Acre Amount \* Price Election Price Election Amount Internal 9999.9999 None Amount \* Reported Acreage Reported Acreage must equal the sum of all Reported Acreage P11 48 99999999.99 None Land, P27, Reported Acreage. **Total Guarantee Amount** P11 99 9999999.99 Round to 2 decimals. Total Guarantee Amount = Reported Acreage Guarantee Per Acre Amount \* Price Election Amount \* Price Election Amount Internal 9999.9999 None Reported Acreage must equal the sum of all Reported Acreage P11 48 999999.99 None Land, P27, Reported Acreage. Round to whole Premium Liability Amount Internal 999999999 Premium Liability Amount = Premium Total Guarantee Amount \* Insured Share Percent number. Insured Share Percent P11 43 9.9999 Round to whole P11 90 999999999 Liability Amount number. Liability Amount = Total Guarantee Amount \* Insured Share Percent P11 43 9.9999 Insured Share Percent None The appropriate discount factor should be Section 2: Unit Discount Calculation looked up and applied. When commodities are setup in the unit discount table for lookups based solely on acres. When the Unit Structure Code is Optional Unit, "OU", 'UA", "UD", Basic Unit, "BU", or Enterprise Unit, "EU" or Revenue Lookup Adjustment = "EP": 9.9999999 Internal None Factor Unit Structure Discount Factor Revenue Lookup Adjustment Factor When the Unit Structure Code is Whole Farm Unit "WU": Capped at 1.0 Unit Structure Discount 9.9999999 Internal None From below for Unit Structures "OU, UA, UD, Factor Unit Structure Discount Factor for Enterprise Unit"EU" BU, EU or EP". When the Unit Structure Code is Optional Unit, "OU", Unit Structure Discount Internal 9.99999999 None capped at 1.0 'UA", or "UD": Factor Unit Structure Discount Optional Unit Discount Factor ADM 9.999 None Edit with ADM Unit Discount, "A01090". Optional Unit Discount Factor Factor When Unit Structure Code is Basic Unit, "BU": Basic Unit Discount Factor ADM 9.999 None Edit with ADM Unit Discount, "A01090". Basic Unit Discount Factor

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

<u>Insurance Plan Code</u> 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

							0091 Barley
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules
Unit Structure Discount Factor = (continued)	When the Unit Structure Code is Enterprise Unit, "EU" or "EP": Enterprise Unit Discount Factor	Enterprise Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090".  Enterprise Units will now mandate that all insured acreage for a commodity will be included in the Enterprise Unit. This includes both fall and spring planted acreage.  Enterprise Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for all applicable units being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Unit Discount, "A01090". Unit is not eligible as an enterprise unit if summed planted acres are less than 20 acres or 20% of insured crop acreage.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

**Insurance Plan** Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** <u>Field</u> Calculations Name Number Number Format Rounding Rules When commodities are setup in the unit discount table for lookups based on acres and coverage levels. Revenue Lookup Adjustment Internal 9.9999999 None When the Unit Structure Code is Optional Unit, "OU", Factor "UA", or "UD": Capped at 1.0 Unit Structure Discount Factor Unit Structure Discount Internal 9.9999999 None From below for Unit Structure "OU", "UA", or Factor "UD". Edit with ADM Unit Discount, "A01090" for 65% Coverage Level. Basic Unit Discount Factor is contingent upon When Unit Structure Code is Basic Unit, "BU": the sum of the reported acres which were not Basic Unit Discount Factor ADM 9.999 None prevented from planting for the unit being Basic Unit Discount Factor for **65%** Coverage Level greater than or equal to the Area Low Quantity Revenue Lookup and less than or equal to Area High Quantity Adjustment Factor fields contained on the ADM Unit Discount, "A01090" for 65% Coverage Level. Edit with ADM Unit Discount, "A01090" for 65% Coverage Level. When the Unit Structure Code is Enterprise Unit, "EU" or Enterprise Unit Discount Factor is contingent "EP" or Whole Farm Unit "WU": upon the sum of the reported acres which were Enterprise Unit Discount ADM None 9.999 Factor not prevented from planting for all applicable Enterprise Unit Discount Factor for **65%** Coverage Level units being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Unit Discount, "A01090" for 65% Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

03 Revenue Protection with Harvest Price Exclusion Insurance Plan Code 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley

	0091 Barley							
	Calculations	<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	Pol-	
	Calculations	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	Rounding	<u>Rules</u>	
		Unit Structure Discount Factor	Internal		9.9999999	None	Capped at 1.0 See Section 19 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).	
	Optional Unit Discount Factor	Optional Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090". See Section 19 for Option Code "TA" (Trend Adjustment)and "YE" (Yield Exclusion).	
Unit Structure Discount Factor	When Unit Structure Code is Basic Unit, "BU": = Basic Unit Discount Factor	Basic Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090" by Coverage Level.  Basic Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for the unit being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Unit Discount, "A01090" for Coverage Level.  See Section 19 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).	

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Record Code: P11

Reinsurance Year: 2016 Version: Approved

	Record Name: Acreage Record Code: P11			Release Date: 12/6/2018					
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	n with Harvest Price Exclusion		
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley		
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> Number	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>		
Unit Structure Discount Factor (continued)	When the Unit Structure Code is Enterprise Unit, "EU" or = "EP": Enterprise Unit Discount Factor	Enterprise Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090" by Coverage Level.  Enterprise Units will now mandate that all insured acreage for a commodity will be included in the Enterprise Unit. This includes both fall and spring planted acreage.  Enterprise Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for all applicable units being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Uni Discount, "A01090" for Coverage Level. Unit is not eligible as an enterprise unit if summed planted acres are less than 20 acres or 20% of insured crop acreage.  See Section 19 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).		
Section 3: Base Premium R	ate Calculation						If Written Agreement is applicable make the necessary changes as provided by the agreement and ROE ADM.		
		Current Year Yield Ratio	Internal		9.9999	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.		
Current Year Yield Ratio	= Rate Yield / Reference Amount	Rate Yield	P15	35	99999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.		
		Reference Yield	ADM		99999.99	None	Edit with ADM Base Rate, "A01010".		

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

03 Revenue Protection with Harvest Price Exclusion **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts 0051 Grain Sorghum **Commodity Code** 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley <u>Field</u> Record <u>Field</u> <u>Field</u> <u>Field</u> Rounding **Calculations** Rules Name Number Number **Format** 

	<u>carculations</u>	<u>ivanic</u>	Humber	IVAIIIDEI	Tormat	<u>itouriums</u>	<u>itales</u>
		Prior Year Yield Ratio	Internal		9.9999	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
Prior Year Yield Ratio =	Prior Year Yield Ratio = Rate Yield / Prior Year Reference Amount		P15	35	99999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.
		Prior Year Reference Amount	ADM		99999.99	None	Edit with ADM Base Rate, "A01010".
Current Year Rate	- Current Year Yield Ratio ^ Exponent Value	Current Year Rate Multiplier	Internal		9999.9999999	Round to 8 decimals.	
Multiplier	·	Exponent Value	ADM		\$99.999	None	Edit with ADM Base Rate, "A01010".
Prior Year Rate Multiplier =	Frior Year Yield Ratio ^ Prior Year Exponent Value	Prior Year Rate Multiplier	Internal		9999.9999999	Round to 8 decimals.	
		Prior Year Exponent Value	ADM		S99.999	None	Edit with ADM Base Rate, "A01010".
	When Rate Method Code is Fixed, "F":	Current Year Base Rate	Internal		999999999.9999999	Round to 8 decimals.	
=	=	Sub County Rate	ADM		99.9999	None	Edit with ADM Sub County Rate, "A01050".
= Current Year Base Rate	When Rate Method Code is Additive, "A":  Sub County Rate + (Current Year Rate Multiplier * Reference Rate + Fixed Rate)	Current Year Rate Multiplier	Internal		9999.9999999	None	
=	When Rate Method Code is Multiplicative, "M":  Sub County Rate * (Current Year Rate Multiplier * Reference Rate + Fixed Rate)	Reference Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".
=	Otherwise:  Current Year Rate Multiplier * Reference Rate + Fixed rate	Fixed Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

**Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley <u>Field</u> <u>Field</u> <u>Field</u> <u>Field</u> Record **Calculations** Name Number Number **Format** Rounding Rules Prior Year Base Rate Internal 9999999999999999 Round to 8 decimals. When Rate Method Code is Fixed, "F": Sub County Rate ADM Sub County Rate 99.9999 None Edit with ADM Sub County Rate, "A01050". When Rate Method Code is Additive, "A": Prior Year Rate Multiplier Internal 9999.9999999 None Sub County Rate + (Prior Year Rate Multiplier \* Prior Year Reference Rate + Prior Year Fixed Rate) Prior Year Base Rate When Rate Method Code is Multiplicative, "M": Prior Year Reference Rate ADM 9.9999 None Edit with ADM Base Rate, "A01010". Sub County Rate \* (Prior Year Rate Multiplier \* Prior Year Reference Rate + Prior Year Fixed Rate) Otherwise: Prior Year Fixed Rate ADM 9.9999 None Edit with ADM Base Rate, "A01010". Prior Year Rate Multiplier \* Prior Year Reference Rate + Prior Year Fixed rate

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 03 Revenue Protection with Harvest Price Exclusion 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley

		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	Calculations	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	Rounding	<u>Rules</u>
	When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":  = Round(Current Year Base Rate * Rate Differential Factor * Unit Residual Factor, 8)  Current Year Base Premium Rate	Current Year Base Premium Rate	Internal		99999999999999999	Round to 8 decimals.	If Option Code "YE" or "TA" is applicable and the effective coverage level exceeds the highest coverage level for the offer in the ADM, see Section 23 for the Current Year Base Premium Rate calculation.
=		Rate Differential Factor	ADM		9.99999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
		Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, 'BU'.
=	When Unit Structure code is Enterprise Unit, "EU" or "EP":  Round(Current Year Base Rate * Rate Differential Factor * Enterprise Unit Residual Factor, 8)	Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.
=	When Unit Structure code is Whole Farm Unit, "WU":  Round(Current Year Base Rate * Rate Differential Factor * Whole Farm Unit Residual Factor, 8)	Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Whole Farm Unit, 'WU'.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

<u>Insurance Plan Code</u> 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

 0091 Barley

	Calculations	<u>Field</u> Name	Record Number	<u>Field</u> Number	<u>Field</u> Format	<u>Field</u> Rounding	Rules
	When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":	Prior Year Base Premium Rate	Internal			Round to 8 decimals.	
	Round(Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Unit Residual Factor, 8)	Prior Year Rate Differential Factor	ADM		9.99999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
= Prior Year Base Premium Rate		Prior Year Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU".
=	When Unit Structure code is Enterprise Unit, "EU" or "EP":  Round(Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Enterprise Unit Residual Factor, 8)	Prior Year Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.
=	When Unit Structure code is Whole Farm Unit, 'WU':  Round(Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Whole Farm Unit Residual Factor, 8)	Prior Year Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Whole Farm Unit, 'WU'.
Base Premium Rate =	MIN (Current Year Base Premium Rate, Prior Year Base Premium Rate * 1.2, .999)	Base Premium Rate	P11	93	9999999999999999	Round to 8 decimals.	
Revenue Lookup Rate =	MIN(Current Year Base Rate, Prior Year Base Rate * 1.2, 0.9999)	Revenue Lookup Rate	Internal		9999999999.9999	Round to 4 decimals.	

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Reinsurance Year: 2016

	Record Name Record Code	· ·			Version: Release Date:	: Approved : 12/6/2018		
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion	
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	rn 0051 Grain Sorghum				0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley	
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	Rules	
Section 4: Optional Coverag	ge (Additive "A" and Multiplicative "M")						If Option Rate Method Code equal "T' (Total Premium Rate Adjustment) see Section 9.	
		Additive Optional Rate Adjustment Factor	Internal		999999.9999	Round to 4 decimals.		
Additive Optional Rate	When Rate Method Code is Additive, "A":	Option Rate	ADM		99999.9999	None	Option Rate will be the Sum of all Option Rate with Rate Method Code equal to Additive, "A". Edit with ADM Option Rate, "A01060".	
Adjustment Factor	= ∑ Option Rate * Rate Differential Factor	Rate Differential Factor	ADM		9.9999999	None	Edit with ADM Coverage Level Differential, "A01040".  See Section 17 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).	
Multiplicative Optional	When Rate Method Code is Multiplicative, "M": =	Multiplicative Optional Rate Adjustment Factor	Internal		999999.9999	Round to 4 decimals.		
Rate Adjustment Factor	∑ Option Rate1 * Option Rate2 * Option Rate3	Option Rate	ADM		9.9999	None	Edit with ADM Option Rate, "A01060".	

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Record Name: Acreage

Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** <u>Field</u> Calculations Name Number Number Format Rounding Rules It is recommended that other than hard coding for specific type and practice codes which will eventually change when the new key structure is adopted, that a condition be put in place that will set the add on rate to 0 when the Price Volatility is 0. This condition MUST occur at Section 5: Revenue Coverage Add on Rates (Applicable only for Plans 02 and 03) some point in order to circumvent the **Calculation of Preliminary Revenue Protection** Add on Rate and Preliminary Revenue **Protection with Harvest Price Exclusion Add on** Rate, which contains a constraint that the add on rate be at least 1% greater than the base Premium Rate. Lookup Rate Internal 999999999.9999 Round to 4 decimals. Lookup Rate = Revenue Lookup Rate \* Revenue Lookup Adjustment Factor | Revenue Lookup Rate 9999999999.9999 From Section 3. Internal Round to 4 decimals. Revenue Lookup Adjustment Internal 9.99999999 None From Section 2. Factor Adjusted Mean Quantity Internal 999999.99999999 Round to 8 decimals. (AdjMean) For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted vield. Approved Yield (AY) P11 42 9999999.99 None For skip row commodities, the approved yield is Adjusted Mean Quantity = Approved Yield \* Mean Quantity / 100 the converted approved yield from the P15 record with skip row (yield conversion factor) applied. Edit with ADM Combo Revenue Factor, "A01030". Mean Quantity ADM 999.99999999 None Search the Combo Revenue Factor, "A01030" for the Mean Quantity using Lookup Rate.

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Record Name: Acreage Record Code: P11

0018 Rice

Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 03 Revenue Protection with Harvest Price Exclusion 001 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts

Commodity Code 0015 Canola 0041 Corn 0051 Grain Sorghum 0078 Sunflowers

 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

 0091 Barley

						0091 Barley
Calculations	<u>Field</u> Name	Record Number	<u>Field</u> Number	<u>Field</u> Format	<u>Field</u> Rounding	Rules
	Adjusted Standard Deviation Quantity (AdjStndDev)	Internal			Round to 8 decimals.	
Adjusted Standard	Approved Yield (AY)	P11	42	9999999.99	None	For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.
Adjusted Standard = Approved Yield * Standard Deviation Quantity / 100  Deviation Quantity	00					For skip row cotton, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
				999.99999999	None	Edit with ADM Combo Revenue Factor, "A01030".
	Standard Deviation Quantity	ADM				Search the Combo Revenue Factor "A01030" for the Standard Deviation Quantity using Lookup Rate.
	log Mean Quantity (LnMean)	Internal		999999.9999999	Round to 8 decimals.	
Ln(Projected Price or Contract Price) –  LnMean = 2	Projected Price	ADM		99999.9999		Edit with ADM Price, "A00810".
(Price Volatility Factor) <sup>2</sup> / 2	Contract Price	P11	46	9999.9999	None	Contract price as addressed in Section 1, capped with Max Contract Price from ADM.
	Price Volatility Factor	ADM		9.99		Edit with ADM Price, "A00810".
Yield Draw Quantity <sub>Sequence</sub> = For Sequence Number 1 to 500  Number Yield Draw Quantity	Yield Draw Quantity	ADM		599.99999999	None	Edit with ADM Beta, "A01020".  Use the Beta ID field from ADM Insurance Offer, "A00030" and the Beta "A01020" to obtain the applicable draws. There should be 500 draws (or sequence numbers) per Beta Id for every distinct Beta Id in the Insurance Offer ADM, "A00030".

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Exhibit Name: Premium Calculation

**Exhibit Number:** P11-1, Plan 01, 02, 03

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

Release Date: 12/6/2018

	Record Co	JE. FII		Neicase Date: 12/0/2010					
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion		
	0011 Wheat	0021 Cotton			0047 Dry Beans		0075 Peanuts		
Commodity Code	0015 Canola	0041 Corn			0051 Grain Sorghum		0078 Sunflowers		
	0018 Rice	0043 Popcorn			0067 Dry Peas		0081 Soybeans		
							0091 Barley		
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>			
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	Rounding	<u>Rules</u>		
Price Draw Quanity <sub>Sequence</sub> Number	For Sequence Number 1 to 500 = Price Draw Quantity	Price Draw Quantity	ADM		S99.99999999	None	Edit with ADM Beta, "A01020".  Use the Beta ID field from ADM Insurance Offer, "A00030" and the Beta "A01020" to obtain the applicable draws. There should be 500 draws (or sequence numbers) per Beta Id for every distinct Beta Id in the Insurance Offer ADM		
		Simulated Yield Protection Losses Quantity (SimYPLosses)	Internal		9999999999999999999	Round to 12 decimals.			
$Simulated\ Yield\ Protection = \sum_{i=1}^{500} Simulated\ Yield\ Protection = \sum_{i=1}^{500} AdjStndDev + AdjMean),12),12)$	∑ Round(MAX(0, AY * covlvl - Round(MAX(0, Yieldi *	Approved Yield (AY)	P11	42	99999999999	None	For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.  For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.		
		Coverage Level Percent (covlvl)	P14	34	9.9999		For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).		
		Yield Draw Quantity <sub>i</sub> (Yield <sub>i</sub> )	ADM		\$99.99999999	None			

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion
	0011 Wheat	0021 Cotton			0047 Dry Beans		0075 Peanuts
Commodity Code	0015 Canola	0041 Corn			0051 Grain Sorghum		0078 Sunflowers
	0018 Rice	0043 Popcorn			0067 Dry Peas		0081 Soybeans
		<u> </u>				ı	0091 Barley
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	_
	Calculations	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	Rounding	<u>Rules</u>
		Simulated Revenue					
		Protection Losses	Internal		999999999999999999	Round to 12 decimals.	
		Quantity(SimRPLosses)					
							For APH Trend and Yield Exclusion, the
							Approved Yield will be the greater of the
	500						calculated approved yield and the adjusted
	$\sum$ <b>Round(</b> MAX(0, AY * covlvl * <b>Round(</b> MAX(ProjPrice,						yield.
	Z ROUNG(MAX(U, AY * COVIVI * ROUNG(MAX(PTO)PTICE,	Approved Yield (AY)	P11	42	9999999.99	None	
Simulated Revenue	Round(MIN(2 * ProjPrice, Round(e' i						For skip row commodities, the approved yield
Protection Losses	= Factor + LnMean),12)),12)),12) -						the converted approved yield from the P15
Quantity	(Round(MAX(0, Yieldi * AdjStdDev + AdjMean),12)						record with skip row (yield conversion factor)
	*						applied.
	Round(MIN(2 * ProjPrice, Round(e <sup>(Price</sup> , * Price Volatility						For Option Code "TA" (Trend Adjustment) and
	Factor + LnMean),12)), 12))),12)	Coverage Level Percent	D1.4	24	0.0000	News	"YE" (Yield Exclusion) this will be Effective
		(covlvl)	P14	34	9.9999		Coverage Level Percent. See Section 16 for
							Option Code "TA" (Trend Adjustment) and "YE
		Yield Draw Quantity <sub>i</sub> (Yield <sub>i</sub> )	ADM		S99.99999999	None	(Yield Exclusion).
		Projected Priced or Contract	ADIVI		399.99999999	None	Edit with ADM Price, "A00810". Contract Price
		Price (ProjPrice)	ADM		99999.9999	None	as addressed in Section 1.
		Price (Projetice)					as addressed in Section 1.
		Simulated Revenue					
		Protection with Harvest Price			999999999,999999999	Davis da 12 da dissala	
		Exclusion Losses Quantity	Internal		999999999999999999	Round to 12 decimals.	
		(SimRPhpeLosses)					
							For APH Trend and Yield Exclusion, the
							Approved Yield will be the greater of the
	500						calculated approved yield and the adjusted
Simulated Revenue	$\sum$ Round (MAX(0, AY * covlvl * ProjPrice - (Round (MAX(0,						yield.
Protection with Harvest	_Yield <sub>i</sub> *	Approved Yield (AY)	P11	42	9999999.99	None	yiciu.
Price Exclusion Losses		Approved field (AT)	. 11	74	333333333		For skip row commodities, the approved yield
Quantity	ProjPrice,						the converted approved yield from the P15
	Round(e <sup>(price</sup> i * Price Volatility Factor + LnMean), 12)),12))),12)						record with skip row (yield conversion factor)
	, ,,,,-,,,,						applied.
							For Option Code "TA" (Trend Adjustment) and
							"YE" (Yield Exclusion) this will be Effective
		Coverage Level Percent	P14	34	9.9999	None	Coverage Level Percent. See Section 16 for
		(covlvl)	= :				Option Code "TA" (Trend Adjustment) and "YE

Exhibit Name: Premium Calculation Reinsurance Year: 2016 **Exhibit Number:** P11-1, Plan 01, 02, 03 Record Name: Acreage Version: Approved Record Code: P11 **Release Date: 12/6/2018 Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts 0051 Grain Sorghum **Commodity Code** 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley Field Record <u>Field</u> Field Field **Calculations** Rounding Name Number Number **Format** Rules Projected Priced or Contract Edit with ADM Price, "A00810". Contract Price ADM 99999.9999 None

as addressed in Section 1.

Price (ProjPrice)

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

	UU18 RICE	0043 Popcorn			0067 Dry Peas		0091 Soybeans 0091 Barley		
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules		
Simulated Yield Protection Base Premium Rate	= (	Simulated Yield Protection Base Premium Rate	Internal		999999.9999999	Round to 8 decimals.	For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.		
Protection Base Premium =	Yield * Coverage Level Percent * (Projected Price or	Simulated Revenue Protection Base Premium Rate	Internal		999999.9999999	Round to 8 decimals.	For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.		
Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate	7, 7, 11	Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate	Internal		999999.99999999	Round to 8 decimals.	For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.		
Protection Premium Add =	•	Preliminary Revenue Protection Premium Add on Rate	Internal		999999.99999999	Round to 8 decimals.	This is a control meant to ensure that the premium rate associated with Revenue Protection is at least 1% greater than the basic Base Premium Rate where the Price Volatility Factor is NOT EQUAL to 0.		
Preliminary Revenue Protection with Harvest Price Exclusion Add on Rate	= Exclusion Base Premium Rate - Simulated Yield Protection	Preliminary Revenue Protection with Harvest Price Exclusion Add on Rate	Internal		999999.99999999	Round to 8 decimals.	This is a control meant to ensure that the premium rate associated with Revenue Protection with Harvest Price Exclusion will not be less than half of the Base Premium Rate where the Price Volatility Factor is NOT EQUAL to 0.		

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion
	0011 Wheat	0021 Cotton			0047 Dry Beans		0075 Peanuts
Commodity Code	0015 Canola	0041 Corn			0051 Grain Sorghum		0078 Sunflowers
	0018 Rice	0043 Popcorn			0067 Dry Peas		0081 Soybeans
							0091 Barley
		<u>Field</u>	Record	Field	<u>Field</u>	<u>Field</u>	
	Calculations	<u>Name</u>	Number	Number	<u>Format</u>	Rounding	<u>Rules</u>

Section 6: Historical Revenue Capping (Applicable only for Plans 02 and 03)

Note: This Section will not apply if record has a Written Agreement.

This section is for calculation the 2010 Revenue Assurance Optional Unit Level Base Premium Rate for coverage level percents 65 thru 85 where applicable. Then it is used in conjunction with the Base Premium Rate and Revenue Add On Rates to compute capped Revenue Add On Rates. This table is set up such that the only value that will change from year to year is the Commodity Year. By doing this we are fixing a point where the premium calculation method was changed and applying an exponential capping over time.

If there is NOT a corresponding row in the Historical Revenue Capping ADM, "A01110", then this calculation does not need to be performed. Furthermore, since coverage level percents 50, 55, 60 did not exist for Revenue Assurance (RA) historically capping does not need to be performed for those coverage level percents as well. If TA is applicable then this will be based on the TA Effective Coverage Level Percent. See next statement.

When TA and YE Option is selected, this section does not apply when the Effective Coverage Level is less than 65%.

	Capping Yield Ratio	Internal		9.99	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
	Rate Yield	P15	35	9999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.
	Capping Reference Yield	ADM		99999.99	None	Edit with ADM Historical Revenue Capping, "A01110".
	Prior Capping Yield Ratio	Internal		9.99	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
Prior Capping Yield Ratio = Rate Yield / Prior Capping Reference Yield	Rate Yield	P15	35	99999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.
	Prior Capping Reference Yield	ADM		99999.99	None	Edit with ADM Historical Revenue Capping, "A01110".
Consider Date Multiplier - Co. 1971 LD 19 Acc. 1971 LD 19	Capping Rate Multiplier	Internal		999999.99999999	Round to 8 decimals.	
Capping Rate Multiplier = Capping Yield Ratio ^Capping Exponent Value  11/15/2018	Capping Exponent Value	ADM 21 of 74		\$99.999	None	Edit with ADM Historical Revenue Capping, "A01110".

Reinsurance Year: 2016

	Record Nan Record Co	J			Version: Release Date:	n: Approved e: 12/6/2018		
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion	
	0011 Wheat	0021 Cotton			0047 Dry Beans		0075 Peanuts	
Commodity Code	0015 Canola	0041 Corn			0051 Grain Sorghum	0078 Sunflowers		
	0018 Rice	0043 Popcorn	0067 Dry Peas			0081 Soybeans		
							0091 Barley	
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>		
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	Rounding	<u>Rules</u>	
Prior Capping Rate	ADdan a	Prior Capping Rate Multiplier	Internal		999999.9999999	Round to 8 decimals.		
Multiplier	= Prior Capping Yield Ratio ^Prior Capping Exponent Value	Prior Capping Exponent Value	ADM		S99.999 None		Edit with ADM Historical Revenue Capping "A01110".	

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

**Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0078 Sunflowers 0015 Canola 0041 Corn 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley <u>Field</u> Record <u>Field</u> <u>Field</u> <u>Field</u> **Calculations** Name Number Number **Format** Rounding Rules If Rate Method Code = Fixed, "F": Historical Capping Base Rate Internal 999999.9999999 Round to 8 decimals. Sub County Rate

	Sub County Rate					
	If Rate Method Code = Additive, "A":  Sub County Rate + (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Sub County Rate	ADM	9.9999	None	Edit with ADM Sub County Rate, "A01050".
Historical Capping Base _ Rate =	If Rate Method Code = Multiplicative, "M":  Sub County Rate * (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Capping Reference Rate	ADM	9.9999		Edit with ADM Historical Revenue Capping, "A01110".
	Otherwise:  (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Capping Fixed Rate	ADM	9.9999		Edit with ADM Historical Revenue Capping, "A01110".
	If Rate Method Code = Fixed "F": Sub County Rate	Historical Prior Capping Base Rate	Internal	999999.99999999	Round to 8 decimals.	
	If Rate Method Code = Additive, "A":  Sub County Rate + (Prior Capping Rate Multiplier * Prior Capping Reference Rate + Prior Capping Fixed Rate)	Sub County Rate	ADM	9.9999	None	Edit with ADM Sub County Rate, "A01050".
Historical Prior Capping Base Rate	If Rate Method Code = Multiplicative, "M":  Sub County Rate * (Prior Capping Rate Multiplier * Prior Capping Reference Rate + Prior Capping Fixed Rate)	Prior Capping Reference Rate	ADM	9.9999		Edit with ADM Historical Revenue Capping, "A01110".
	Otherwise:  (Prior Capping Rate Multiplier * Prior Capping Reference Rate + Prior Capping Fixed Rate)	Prior Capping Fixed Rate	ADM	9.9999		Edit with ADM Historical Revenue Capping, "A01110".
Historical Basic Unit Base Rate	.9 * MIN(.999, Historical Prior Capping Base Rate * 1.2, Historical Capping Base Rate)	Historical Basic Unit Base Rate	Internal	999999.9999999	Round to 8 decimals.	

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 03 Revenue Protection with Harvest Price Exclusion 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley

		Field	Record	Field	Field	Field	0091 Barrey
	Calculations	<u>Name</u>	Number	Number	<u>Format</u>	Rounding	<u>Rules</u>
	When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":	Coverage Level Percent	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
Historical Revenue Protection Base Premium Rate	[beta0 Factor + Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Historical Basic Unit Base Rate ^2 + Beta 3 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent ^2 + Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * (Approved Yield / Capping Reference Yield)^2 + Beta 7 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor^2 + Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level Percent +	Historical Revenue Protection Base Premium Rate	Internal		99999999999999999999	Round each intermittent Beta * calculation to 8 decimals as it has been done historically.	
	Beta 13 Factor * Coverage Level Percent * Price Volatility Factor +	Beta 0 Factor - Beta 14 Factor	ADM		S99.99999999	None	Edit with ADM Historical Revenue Capping, "A01110".
	, , , ,	Price Volatility Factor	ADM		9.99		Edit with ADM Price, "A00810".
Yield) * Price Volatility Factor ] * Unit Residual Factor X 1.	Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).	
,	When Unit Structure Code is equal to Enterprise Unit, "EU" or "EP":  Replace 'Unit Residual Factor' with 'Enterprise Unit Residual Factor'	Enterprise Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).

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Record Name: Acreage
Record Code: P11

Factor'

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Reinsurance Year: 2016

Version: Approved

Adjustment) and "YE" (Yield Exclusion).

	Record Code: P11											
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion					
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0041 Corn 0051 Grain Sor			rain Sorghum 0078 Sunflowers						
	Calculations	<u>Field</u> Name	Record Number	<u>Field</u> Number	<u>Field</u> Format	<u>Field</u> Rounding	Rules					
	When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":	Coverage Level Percent	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).					
Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate	[beta0 Factor + Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Historical Basic Unit Base Rate ^2 + Beta 3 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent ^2 + Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * (Approved Yield / Capping Reference Yield)^2 + Beta 7 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor^2 + Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level Percent + Beta 10 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield + Beta 11 Factor * Historical Basic Unit Base Rate * Price Volatility Factor + Beta 12 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 13 Factor * Coverage Level Percent * Price Volatility	Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate	Internal		999999999999999999999	Round each intermittent Beta * calculation to 8 decimals as it has been done historically.						
	Factor + Beta 14 Factor * (Approved Yield / Capping Reference	Beta 0 Factor - Beta 14 Factor	ADM		S99.99999999	None	Edit with ADM Historical Revenue Capping, "A01110".					
	Yield) * Price Volatility Factor ] * Unit Residual Factor X 1.1	Price Volatility Factor	ADM		9.99	None	Edit with ADM Price, "A00810".					
		Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).					
:	When Unit Structure Code is equal to Enterprise Unit, "EU" or "EP":  Replace 'Unit Residual Factor' with 'Enterprise Unit Residual	Enterprise Unit Residual	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).					

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley <u>Field</u> Field Record Field <u>Field</u> Calculations Name Number Number Format Rounding Rules Use the Preliminary Add On Rates for Insurance Plan Code Revenue Protection, "02" or Revenue Capped Revenue Protection Protection with Harvest Price Exclusion, "03" Internal 9999999999999999 Round to 8 decimals. MIN(Base Premium Rate + Preliminary Revenue Protection Add on Rate from section 5, the Base Premium Rate from Capped Revenue \_ Add On Rate, Historical Revenue Protection Base Premium section 3 to calculate the Capped Revenue add Protection Add on Rate Rate \* 1.2^(Commodity Year - Capping Year)) - Base on factors. **Premium Rate** Base Premium Rate P11 93 999999.99999999 None P14 10 Commodity Year CCYY None Edit with ADM Historical Revenue Capping, Capping Year ADM CCYY None "A01110". Use the Preliminary Add On Rates for Insurance Plan Code Revenue Protection, "02" or Revenue Capped Revenue Protection Protection with Harvest Price Exclusion, "03" with Harvest Price Exclusion Internal 9999999999999999 Round to 8 decimal MIN(Base Premium Rate + Preliminary Revenue Protection from section 5, the Base Premium Rate from Capped Revenue Add on Rate with Harvest Price Exclusion Add On Rate, Historical section 3 to calculate the Capped Revenue add Protection with Harvest = Revenue Protection with Harvest Price Exclusion Base on factors. Price Exclusion Add on Premium Rate \* 1.2^(Commodity Year - Capping Year)) -Base Premium Rate Base Premium Rate P11 93 999999.99999999 None P14 10 CCYY None Commodity Year Edit with ADM Historical Revenue Capping, Capping Year ADM CCYY None "A01110".

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Record Name: Acreage

Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley <u>Field</u> Record Field <u>Field</u> Field Calculations Name Number Number Format Rounding Rules The Whole Farm Unit Discount is only applicable to the Revenue Protection and **Revenue Protection with Harvest Price Exclusion Insurance Plans, unless the Special Provisions allow Whole Farm Units for other** Insurance Plans. Section 7: Whole Farm Unit Base Premium Rate Whole Farm Units will now mandate that producers include both their spring and fall planted commodities into the whole farm unit for commodity/plans offering Whole Farm Units. Malting Barley Coverage is NOT applicable for Whole Farm Unit. Lookup Rate Internal 999999999.9999 Round to 4 decimals. Lookup Rate = Revenue Lookup Rate \* Revenue Lookup Adjustment Factor Revenue Lookup Rate Internal 999999999.9999 Round to 4 decimals. From Section 3. Revenue Lookup Adjustment 9.9999999 None Internal From Section 2. Factor Edit with ADM Combo Revenue Factor, "A01030". ADM Mean Quantity commodity 999.99999999 None Search the Combo Revenue Factor, "A01030" Mean Quantity  $_{commodityj} = \frac{Rate}{Rate}$ Mean Quantity commodity WHERE Lookup Rate commodity = Base for the Mean Quantity, When the Lookup Rate = Base Rate Lookup Rate commodityi Internal 9.9999 None Edit with ADM Combo Revenue Factor, 9.9999 Base Rate commodityj ADM None "A01030".

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

**Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** Field Calculations Name Number Number Format Rounding Rules Edit with ADM Combo Revenue Factor, "A01030". Standard Deviation Quantity ADM 999.99999999 None Search the Combo Revenue Factor, "A01030" mmodityj Standard Deviation  $\underline{\ }$  Standard Deviation Quantity  $_{\text{commodity}j}$  WHERE Lookup Rate for the Standard Deviation Quantity, When the Quantity commodityj = Base Rate commodityj Lookup Rate = Base Rate Lookup Rate commodityj 9.9999 None Internal Edit with ADM Combo Revenue Factor, Base Rate commodityj ADM 9.9999 None "A01030". Adjusted Mean Quantity Internal 999999.99999999 Round to 8 decimals. commodityj For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted Adjusted Mean Quantity = Approved Yield  $_{commodityj}$  \* Mean Quantity  $_{commodityj}$  / 100 vield. Approved Yield commodityj P11 42 9999999.99 None For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied. Adjusted Standard Deviation Internal 9999999999999999 Round to 8 decimals. Quantity commodityj For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the Adjusted Standard Approved Yield commodityj \* Deviation Quantity = Standard Deviation Quantity commodity / 100 calculated approved yield and the adjusted Approved Yield commodity P11 42 9999999.99 None For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection	on with Harvest Price Exclusion
	0011 Wheat	0021 Cotton	0047 Dry Beans	0075 Peanuts
Commodity Code	0015 Canola	0041 Corn	0051 Grain Sorghum	0078 Sunflowers
	0018 Rice	0043 Popcorn	0067 Dry Peas	0081 Soybeans

						0091 Barley
<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	Rules
LnMean <sub>commodityj</sub> = Volatility Factor <sub>commodityj</sub> / 2	log Mean <sub>commodityj</sub> (LnMean)	Internal		999999.9999999	Round to 8 decimals.	
	Projected Price or Contract Price <sub>commodityj</sub>	ADM		99999.9999		Edit with ADM Price, "A00810". Contract Price as addressed in Section 1.
	Price Volatility Factor <sub>commodityj</sub>	ADM		9.99	None	Edit with ADM Price, "A00810".
Yield Draw Quantity = Yield Draw Quantity <sub>commodity</sub> commodity) Sequence Number	Yield Draw Quantity	ADM		S99.999999999		ADM Insurance Offer, "A00030", and Beta, "A01020", should be used to obtain the applicable draws. There should be 500 Draws (or sequence numbers) per Beta Id in the ADM Beta, "A01020" for every distinct Beta Id in the ADM Insurance Offer, "A00030".
Price Draw Quantity = Price Draw Quantity <sub>commodity</sub> commodity Sequence Number	Price Draw Quantity	ADM		S99.99999999		ADM Insurance Offer, "A00030", and Beta, "A01020", should be used to obtain the applicable draws. There should be 500 Draws (or sequence numbers) per Beta Id in the ADM Beta, "A01020" for every distinct Beta Id in the ADM Insurance Offer, "A00030".

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Record Name: Acreage
Record Code: P11

Reinsurance Year: 2016

Version: Approved

	Record Code:	P11			Release Date	: 12/6/2018	
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules
		Simulated Revenue Protection Losses Whole Farm (SimRPLossesWF)	Internal		999999999999999999999999999999999999999	Round to 12 decimals.	Simulated Revenue Protection Losses for All Commodity/Acreage report line in the Whole Farm Unit.
		Coverage Level Percent <sub>commodityj</sub> (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
500 all Commodities  ∑ Round(MAX(0,∑ Ay <sub>commodityj</sub> *  i=1 j=  Acres <sub>commodityj</sub> * covlvl <sub>commodityj</sub> *  Round(MAX(ProjPrice <sub>commodityj</sub> , Round(MIN(2 *  ProjPrice <sub>commodityj</sub> , Round(e <sup>(Pricecommodityj)</sup> * Price	Approved Yield <sub>commodityj</sub> (AY)	P11	42	99999999.99	None	Approved Yield for each Commodity/Acreage report line in the Whole Farm Unit.  For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.  For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.	
Simulated Revenue Protection Losses Whole Farm	Volatility Factor-commodityj +  = LnMeancommodityj),12)),12) -  all Commodities  \( \sum_{\text{Round}} \mathbb{MAX}(0, \mathbb{Round}(\mathbb{Y})) \)  j=	Reported Acreage <sub>commodityj</sub> (Acres)	P11	48	999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage.  Reported Acreage for each Commodity/Acreag report line in the Whole Farm Unit.
* Roun Round	* Round(MIN(2 * ProjPrice <sub>commodityj</sub> , + Round(e <sup>(Pricecommodityj)</sup> * Price Volatility Factorcommodityj + Lineancommodityj * Price Volatility Factorcommodityj * Price Volatility *	Projected Price or Contract Price <sub>commodityj</sub> (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810".  Projected Price or Contract Price for each Commodity/Acreage report line in the Whole Farm Unit.
	LnMeancommodityj),12)),12) * Round(Acres <sub>commodityj,12</sub> )), 12)	Price Draw Quanity <sub>commodityj</sub> i (Price)	ADM		S99.99999999	None	Price Draw Quantity for each Commodity /Acreage report line in the Whole Farm Unit.
		Price Volatility Factor <sub>commodityj</sub>	Internal		999999.99999999	None	Price Volatility Factor for each Commodity/Acreage report line in the Whole Farm Unit.
		log Mean <sub>commodityj</sub> (LnMean)	Internal		999999.99999999	None	Log Mean for each Commodity/Acreage report line in the Whole Farm Unit.

Record Name: Acreage

Reinsurance Year: 2016 Version: Approved

Record Code: P11 Release Date: 12/6/2018 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley <u>Field</u> Record <u>Field</u> <u>Field</u> <u>Field</u> **Calculations** Name Number Number **Format** Rounding Rules Yield Draw Quantity for each Yield Draw Quantity<sub>commodityj</sub>i ADM S99.99999999 None Commodity/Acreage report line in the Whole (Yield) Farm Unit. Adjusted Standard Deviation Quantity for each Adjusted Standard Deviation Commodity/Acreage report line in the Whole Internal 9999999999999999 None Quantity<sub>commodityi</sub> (AdjStnDev) Farm Unit. Adjusted Mean Quantity for each Adjusted Mean Internal 999999.99999999 None Commodity/Acreage report line in the Whole Quantity<sub>commodityj</sub> (AdjMean) Farm Unit.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

Release Date: 12/6/2018

	Record Code:	P11			Release Date	: 12/6/2018	
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley
	Calculations	<u>Field</u> <u>Name</u>	Record Number	Field Number	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	Rules
		Simulated Revenue Protection Harvest Price Excluded Losses Whole Farm (SimRPhpeLossesWF)	Internal		999999999.9999999999	Round to 12 decimals.	Simulated Revenue Protection Harvest Price Excluded Losses for All Commodity/Acreage report lines in the Whole Farm Unit.
		Coverage Level Percent <sub>commodityj</sub> (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment) and "YE (Yield Exclusion).
	500 all commodities  ∑ Round(MAX (0, ∑covlvl <sub>commodityj</sub> *  i=1 j=	Approved Yield <sub>commodityj</sub> (AY)	P11	42	99999999.99	None	Approved Yield for each Commodity/Acreage report line in the Whole Farm Unit.  For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.  For skip row commodities, the approved yield the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
Simulated Revenue Protection Harvest Price Excluded Losses Whole Farm	AY <sub>commodityj</sub> * ProjPrice <sub>commodityj</sub> * Acres <sub>commodityj</sub> ) -  all commodities  ■ ∑ Round(MAX(0, Round(Yield <sub>commodityji</sub> ) *  i=	Reported Acreage <sub>commodityj</sub> (Acres)	P11	48	999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage.  Reported Acreage for each Commodity/Acrea report line in the Whole Farm Unit.
AdjStdDev <sub>commodityj</sub> + AdjMean <sub>commodityj,12</sub> )),12)  * Round(MIN(2 * ProjPrice <sub>commodityj</sub> ,  Round(e <sup>(Pricecommodityj)</sup> * Price Volatility Factorcommodityj +  LnMeancommodityj),12)),12) *	Projected Price or Contract Price <sub>commodityj</sub> (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810".  Projected Price or Contract Price (as addressed in Section 1) for each Commodity/Acreage report line in the Whole Farm Unit.	
	Round(Acres <sub>commodityj,12</sub> )), 12)	Yield Draw Quantity <sub>commodityj</sub> i (Yield)	ADM		\$99.99999999	None	Yield Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.
		Adjusted Standard Deviation Quantity <sub>commodityj</sub> (AdjStnDev)	Internal		999999999.99999999	None	Adjusted Standard Deviation Quantity for each Commodity/Acreage report line in the Whole Farm Unit.

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 03 Revenue Protection with Harvest Price Exclusion 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley

	Field	Record	Field	<u>Field</u>	Field	0091 Barrey
Calculations	Name	Number	Number	Format	Rounding	Rules
	Adjusted Mean Quantity <sub>commodityj</sub> (AdjMean)	Internal		999999.99999999	None	Adjusted Mean Quantity for each Commodity/Acreage report line in the Whole Farm Unit.
	Price Draw Quanity <sub>commodityj</sub> i (Price)	ADM		S99.99999999	None	Price Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.
	Price Volatility Factor <sub>commodityj</sub>	Internal		999999.99999999	None	Price Volatility Factor for each Commodity/Acreage report line in the Whole Farm Unit.
	log Mean <sub>commodityj</sub> (LnMean)	Internal		999999.99999999	None	Log Mean for each Commodity/Acreage report line in the Whole Farm Unit.
$\frac{SimRPLossesWF}{500}$ Revenue Protection $Whole Farm Rate = \sum_{j=1}^{All \ commodities} \sum_{j=1}^{All \ commodityj} * AY_{commodityj} * ProjPrice_{commodityj} * Acres_{commodityj})$	Coverage Level Percent <sub>commodityj</sub> (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
	Revenue Protection Whole Farm Rate	Internal		99999999999999999	Round to 8 decimals.	
	Projected Price or Contract Price <sub>commodityj</sub> (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810".  Projected Price or Contract Price (as addressed in Section 1) for each Commodity/Acreage report line in the Whole Farm Unit.

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Exhibit Name: Premium Calculation

**Exhibit Number:** P11-1, Plan 01, 02, 03

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

**Release Date: 12/6/2018** 

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection 03 Revenue Protection 05 Revenue Protection 06 Revenue Protection 07 Revenue Protection 07 Revenue Protection 08 Revenue Protection 09 R

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

		об 10 1 бробии					0091 Barley
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules
	<u>SimRPhpeLossesWF</u>	Coverage Level Percent <sub>commodityj</sub> (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
Revenue Protection with Harvest Price Exclusion = Whole Farm Rate	all commodities $\sum_{\text{(covIvI}_{\text{commodityj}}} * AY_{\text{commodityj}} * ProjPrice_{\text{commodityj}} * J = $	Revenue Protection with Harvest Price Exclusion Whole Farm Rate	Internal		99999999999999999	Round to 8 decimals.	
Acres <sub>commodityj</sub> )	Projected Price or Contract Price <sub>commodityj</sub> (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810".  Projected Price or Contract Price (as addressed in Section 1) for each Commodity/Acreage report line in the Whole Farm Unit.	
When Insurance Plan Code	equals Revenue Protection, "02":						
Whole Farm Base = Premium Rate	Revenue Protection Whole Farm Rate	Whole Farm Base Premium Rate	Internal		9999999999999999	None	
When Insurance Plan Code 6	equals Revenue Protection with Harvest Price Exclusion,						
Whole Farm Base = Premium Rate	Revenue Protection with Harvest Price Exclusion Whole Farm Rate	Whole Farm Base Premium Rate	Internal		999999999.99999999	None	

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Record Name: Acreage
Record Code: P11

Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** <u>Field</u> Calculations Name Number Number Format Rounding Rules The Premium Rate for ALL Unit Structures should be capped at .999 in the event various Section 8: Premium Rate adjustments to the Base Premium Rate would cause it to exceed 1.0. When Unit Structure Code equals Whole Farm Unit, "WU": Premium Rate is capped at 0.99900000. MIN(.999, For situations where the option factors vary by Round(Whole Farm Base Premium Rate Commodity, a reported Acreage weighted \* Sum ((Reported Acreage \* Multiplicative Optional Rate average of the Option Factors should be used to Premium Rate Internal 9999999999999999 Round to 8 decimals. Adjustment Factor) / Sum(Total Reported Acreage) for determine the Multiplicative and Additive Premium Rate = Whole Farm including Prevented Planting) Optional Rate adjustments to be used in the + Sum ((Reported Acreage \* Additive Optional Rate computation of the Premium Rate for Whole Adjustment Factor) / Sum(Total Reported Acreage) for Farm Unit. Whole Farm including Prevented Planting), 8)) Total Reported Acreage for the Whole Farm Total Reported Acreage Internal 9999999.99 None including Prevented Planting. Set Capped Revenue Add On Factor as follows: When Unit Structure Code DOES NOT EQUAL Whole Farm Unit, "WU": If Insurance Plan Code equals 01, Capped Revenue Add On Factor will equal zero. If Unit Structure Code does not equal Whole Farm (WU), set Capped Revenue Add On Factor as follows: If Section 6 is applicable, Capped Revenue Add On Factor will equal Capped Revenue Protection Add On Rate when Insurance Plan Code equals 02 or Capped Revenue Protection with Harvest MIN(.999, Base Premium Rate \* Unit Structure Discount Premium Rate = Factor \* Multiplicative Optional Rate Adjustment Factor+ Price Exclusion Add On Rate when Insurance Premium Rate Internal 9999999999999999 Round to 8 decimals. Plan Code equals 03. Additive Optional Rate Factor + Capped Revenue Add On If Section 6 is not applicable, Capped Revenue Factor) Add On Factor will equal Preliminary Revenue Protection Add On Rate when Insurance Plan Code equals 02 or Preliminary Revenue Protection with Harvest Price Exclusion Add On Rate when Insurance Plan Code equals 03.

Record Name: Acreage Record Code: P11

Reinsurance Year: 2016 Version: Approved

**Release Date: 12/6/2018** 

nsurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protecti	on with Harvest Price Exclusion
	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>
tion 9: Total Premium A	Amount, Subsidy Amount, and Producer Premium Amount						
Premium Liability Amount * Premium Rate * Experience Premium = Factor * Premium Surcharge Percent * Total Premium Multiplicative Optional Rate Adjustment Factor	Preliminary Total Premium	Internal		999999999	Round to whole number.		
	Premium Liability Amount * Premium Rate * Experience	Experience Factor	P11	47	9.999	None	Experience Factor is only applicable for Insurance Plan Code Yield Protection, "01".
	= Factor * Premium Surcharge Percent * Total Premium	Premium Surcharge Percent	Internal				Use when the Approved Yield Had a Cup or Surcharge applied.
	Total Premium Multiplicative Optional Rate Adjustment Factor	ADM		9.9999	None	If Option Rate with Rate Method Code equal "T". Edit with ADM Option Rate, "A01060". Currently this will be used for Short Rate Option.	
Total Premium Amount = Preliminary Total Premium * Multiple Commodity Adjustment Factor		Total Premium Amount	P11	91	999999999	Round to whole number.	
	Multiple Commodity Adjustment Factor	ICE		9999.999	None	Edit with ICE Multiple Cropping, "D00063". Used when there is a first Commodity Loss.	
Subsidy Amount = Total Premium Amount * Subsidy Percent	Subsidy Amount	P11	89	999999999	Round to whole number.	If this record qualifies for Beginning Farmer a Rancher or Native Sod, see Section 22 for subsidy calculations.	
	Subsidy Percent	ADM		9.999	None	Edit with ADM Subsidy Percent, "A00070".	
Producer Premium Amount	= Total Premium Amount - Subsidy Amount	Producer Premium Amount	P11	92	999999999	Round to whole number.	
tion 13: Liability Calcula	ation						
Modified Yield = Approved Yield * Option Conversion Factor	Modified Yield	Internal		9999999.99	Round to whole Number.		
	Approved Yield	P11	42	99999999.99	None	From Cotton P11 record. For skip row cotton, the approved yield is the converted approved yield from the P15 recowith skip row (yield conversion factor) applied.	
	Option Conversion Factor	ADM		9.9999	None	Edit with ADM Option Rate, "A01060".	
remium Guarantee Per Acre Amount	= Modified Yield * Coverage Level Percent	Premium Guarantee Per Acre Amount	Internal		9999999999999	Round to whole number.	

Exhibit Name: Premium Calculation Reinsurance Year: 2016 **Exhibit Number:** P11-1, Plan 01, 02, 03 Version: Approved Record Name: Acreage Record Code: P11 **Release Date: 12/6/2018** 03 Revenue Protection with Harvest Price Exclusion **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts 0051 Grain Sorghum **Commodity Code** 0015 Canola 0041 Corn 0078 Sunflowers 0067 Dry Peas 0018 Rice 0043 Popcorn 0081 Soybeans 0091 Barley Field Record <u>Field</u> Field <u>Field</u> **Calculations** Number Rounding Name Number **Format** Rules

P14

34

9.9999

None

Coverage Level Percent

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

**Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** <u>Field</u> Calculations Name Number Number Format Rounding Rules When Guarantee Adjustment Type Code equals Late Round to whole Planting, "L" OR Prevented Planting, "P": number. Guarantee Per Acre Amount Internal 99999999.99 Guarantee Per Acre \_ Amount Premium Guarantee Per Acre Amount \* Guarantee Guarantee Adjustment Edit with the Guarantee Adjustment ICE, P11 72 0.999 None Adjustment Factor "D00068". Factor Round to nearest one Cottonseed will equal the Projected Price from tenth cent [\$9.999]. 9999.9999 ADM regardless of Price Election Percent for Price Election Amount Internal Cotton Lint. Price Election Amount = Projected Price \* Price Election Percent Projected Price ADM 99999.9999 Price Election Percent ICE 9.9999 None Will always be 1.000 for Cottonseed. Premium Total Guarantee Internal 99999999.99 Round to 2 decimals. Amount Premium Total Guarantee \_ Premium Guarantee Per Acre Amount \* Price Election Amount Amount Reported Acreage Price Election Amount Internal 9999.9999 None Reported Acreage P11 48 9999999.99 None From Cotton P11 record. Total Guarantee Amount P11 99 99999999.99 Round to 2 decimals. Guarantee Per Acre Amount \* Price Election Amount \* Total Guarantee Amount = Reported Acreage 9999.9999 Price Election Amount Internal None Reported Acreage P11 48 999999.99 None From Cotton P11 record. Round to whole 999999999 Premium Liability Amount Internal Premium Liability Amount = Premium Total Guarantee Amount \* Insured Share Percent number. Insured Share Percent P11 43 9.9999 None From Cotton P11 record. Round to whole Liability Amount P11 90 999999999 Liability Amount = Total Guarantee Amount \* Insured Share Percent number. P11 43 Insured Share Percent 9.9999 None From Cotton P11 record.

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Exhibit Name: Premium Calculation

Reinsurance Year: 2016

Exhibit Number: P11-1, Plan 01, 02, 03 Version: Approved Record Name: Acreage Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** <u>Field</u> Calculations Name Number Number Format Rounding Rules Section 14: Premium Rate To Determine the Premium Rate for the Cottonseed records: 1) Use the Rate Yield as determined under normal procedures. 2) Process the Rate Yield through section 3 of these procedures using the rating components for regular Cotton offer. If Yield Exclusion is elected, see section 24 for the current year base premium rate calculation Internal Round to 8 decimals. when the Effective Coverage Level exceeds the Premium Rate 9999999999999999 MIN(.999, Base Premium Rate \* Unit Structure Discount MAX ADM coverage level. Premium Rate = Factor \* Multiplicative Optional Rate Adjustment Factor+ 3) Find the Unit Structure Discount Factor to be Additive Optional Rate Factor) applied later from section 2 of these procedures for regular Cotton offer. 4) Find the applicable Option Factors to be applied later from section 4 for regular Cotton offer. 5) Sections 5, 6, 7 are not applicable for Cottonseed records. Multiplicative Optional Rate Internal 999999.9999 Adjustment Factor Additive Optional Rate Internal 999999.9999 Adjustment Factor Section 15: Total Premium Amount, Subsidy Amount, and Producer Premium Amount Round to whole Preliminary Total Premium Internal 999999999 number. Preliminary Total \_ Premium Liability Amount \* Premium Rate \* Experience Experience Factor is only applicable for Experience Factor P11 47 9.999 None Premium Factor \* Premium Rate Surcharge Percent Insurance Plan Code Yield Protection, "01". Premium Rate Surcharge Percent Round to whole Total Premium Amount = Preliminary Total Premium \* Multiple Commodity **Total Premium Amount** P11 91 999999999 number. Adjustment Factor Multiple Commodity ICE 9999.999 Edit with ICE Multiple Cropping, "D00063". None Adjustment Factor If this record qualifies for Beginning Farmer and Round to whole Subsidy Amount P11 89 999999999 Rancher or Native Sod, see Section 22 for number. subsidy calculations. Subsidy Amount = Total Premium Amount \* Subsidy Percent Subsidy Percent 9.999 None Edit with ADM Subsidy Percent, "A00070".

ADM

Exhibit Name: Premium Calculation **Exhibit Number:** P11-1, Plan 01, 02, 03 Record Name: Acreage

Record Code: P11

Reinsurance Year: 2016 Version: Approved

**Release Date: 12/6/2018** 

number.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with Harvest Price Exclusion		
	0011 Wheat	0021 Cotton			0047 Dry Beans		0075 Peanuts	
Commodity Code	0015 Canola	0041 Corn			0051 Grain Sorghum		0078 Sunflowers	
	0018 Rice	0043 Popcorn			0067 Dry Peas		0081 Soybeans	
							0091 Barley	
		<u>Field</u>	Record	Field	<u>Field</u>	<u>Field</u>		
	Calculations	<u>Name</u>	<u>Number</u>	Number	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>	
Producer Premium	= Total Premium Amount - Subsidy Amount	Producer Premium Amount	P11	92	999999999	Round to whole		

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Amount

Exhibit Name: Premium Calculation Exhibit Number: P11-1, Plan 01, 02, 03 Reinsurance Year: 2016 Version: Approved Record Name: Acreage Record Code: P11 Release Date: 12/6/2018 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts 0051 Grain Sorghum **Commodity Code** 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley <u>Field</u> <u>Field</u> <u>Field</u> <u>Field</u> Record **Calculations** Name Number Number Format Rounding Rules Trend Adjustment Option (TA) and Yield Exclusion Option (YE) ONLY available in select APH Yield Trend (Trend Adjustment Option 'TA') and Yield Exclusion (Option 'YE') counties for selected crops. See "white papers" for examples. Section 16: Effective Coverage Level Calculation Effective Coverage Level Rounded to 2 decimal Internal 99.9999 Percent places. P14 34 Coverage Level Percent 9.9999 None For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. Effective Coverage Level = Coverage Level Percent \* Approved Yield/Adjusted Yield Approved Yield P11 42 9999999.99 None For skip row commodities, the approved yield is

Adjusted Yield

P15

44

9999999.99

None

the converted approved yield from the P15 record with skip row (yield conversion factor)

For skip row commodities, the adjusted yield is the converted adjusted yield from the P15

record with skip row (yield conversion factor)

applied.

applied.

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Reinsurance Year: 2016

Version: Approved Record Name: Acreage Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley <u>Field</u> <u>Field</u> Record Field **Field** Calculations Name Number Number Format Rounding Rules When Trend Adjustment Option (TA) was Section 17: Rate Differential Factor chosen and yield reflects a trend or when Yield Exclusion Option "YE" was chosen. When Yield Exclusion Option "YE" is elected or when Options "YE" and "TA" are elected together Round to 9 decimal Rate Differential Factor Internal 9.99999999 places Base Rate Differential Factor is equal to Rate Differential for Minimum of 1) Maximum available Coverage Level or; 2) available Base Rate Differential Factor ADM 9.99999999 None Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. Upper Bound Rate If the Effective Coverage Level falls between ADM 9.99999999 None Differential Factor existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

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Record Name: Acreage

Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Record Code: P11

	Record Code:	PII		Release Date: 12/6/2018			
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protectio	n with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans
		1				,	0091 Barley
	Coloniations	<u>Field</u>	Record Number	<u>Field</u>	<u>Field</u>	<u>Field</u> Rounding	Post-
	Calculations	<u>Name</u>	Number	Number	<u>Format</u>	Kounding	Rules
Rate Differential Factor	(1+ (ROUND (MIN ( ( ( MAX (0.85,Effective Coverage Level Percent) -0.85) / 0.15) ,1)³ ,7)) * 0.05) * (Round(Base Rate Differential Factor + (Upper Bound Rate Differential Factor - Lower Bound Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9))	Lower Bound Rate Differential Factor	ADM		9.99999999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".  If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will b based on the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level Percent is greate than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greated than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Rev	renue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola	0021 Cotton 0041 Corn	0047 Dry Beans 0051 Grain Sorghum	0075 Peanuts 0078 Sunflowers
	0018 Rice	0043 Popcorn	0067 Dry Peas	0081 Soybeans 0091 Barley

<u>commodity code</u>	0015 Callola	0041 Com			0031 Grain Sorgifulii		0078 Sufflowers
	0018 Rice	0043 Popcorn			0067 Dry Peas		0081 Soybeans
							0091 Barley
		Field	Record	<u>Field</u>	Field	Field	
	Calculations	Name	Number	Number	Format	Rounding	Rules
				110			118755
		Prior Year Rate Differential	Internal		9.99999999	Round to 9 decimal	
		Factor				places.	
		Base Prior Year Rate Differential Factor	ADM		9.99999999	None	Base Prior Year Rate Differential Factor is equal to Prior Year Rate Differential for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
		Upper Bound Prior Year Rate Differential Factor	ADM		9.99999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".  If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.  If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level.  If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.
Prior Year Rate Differential Factor	Round(Base Prior Year Rate Differential Factor + (Upper Bound Prior Year Rate Differential Factor - Lower Bound = Prior Year Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9)	Lower Bound Prior Year Rate Differential Factor	ADM		9.99999999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
11/15/2018		Effective Coverage Level Percent Page	Internal 14 of 74		99.9999	None	

Record Name: Acreage

Reinsurance Year: 2016 Version: Approved

Record Code: P11 Release Date: 12/6/2018 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley <u>Field</u> Record <u>Field</u> <u>Field</u> <u>Field</u> Rounding **Calculations** Name Number Number **Format** Rules Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then Floored Effective Coverage this will be the lower ADM Coverage Level. Internal 99.9999 None Level Percent If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Reinsurance Year: 2016

99.9999

None

Version: Approved Record Name: Acreage Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** Field Rounding Calculations Name Number Number Format Rules When Trend Adjustment Option "TA" is elected alone (excludes "YE") Round to 9 decimal Rate Differential Factor Internal 9.99999999 places Base Rate Differential Factor is equal to Rate Differential for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective ADM Base Rate Differential Factor 9.99999999 None Coverage Level. Edit with ADM Coverage Level Differential, "A01040". Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between Upper Bound Rate ADM 9.99999999 None existing ADM Coverage Levels then this will be Differential Factor based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level. Based on the 'lower bound' Coverage Level. Round(Base Rate Differential Factor + (Upper Bound Rate Edit with ADM Coverage Level Differential, Differential Factor - Lower Bound Rate Differential Factor) \* "A01040". Rate Differential Factor = (Effective Coverage Level Percent - Floored Effective If the Effective Coverage Level Percent equals Coverage Level Percent) \* 20, 9) an existing ADM Coverage Level then this will be Lower Bound Rate based on the Effective Coverage Level Percent. ADM 9.99999999 None Differential Factor If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater

Internal

Effective Coverage Level

Percent

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 03 Revenue Protection with Harvest Price Exclusion 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley

	<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
<u>Calculations</u>	<u>Name</u>	<u>Number</u>	Number	<u>Format</u>	Rounding	<u>Rules</u>
	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Record Name: Acreage
Record Code: P11

Reinsurance Year: 2016 Version: Approved

9.99999999

99.9999

None

None

		Record Code: P11	•		Release Date	: 12/6/2018		
Insurance Plan Code	01 Yield Protection	02 Revenue Protection	02 Revenue Protection			03 Revenue Protectio	ection with Harvest Price Exclusion	
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley	
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules	
		Prior Year Rate Differential Factor	Internal		9.99999999	Round to 9 decimal places.		
		Base Prior Year Rate Differential Factor	ADM		9.99999999	None	Base Prior Year Rate Differential Factor is equ to Prior Year Rate Differential for Minimum of Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".	
							Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential,	

ADM

Upper Bound Prior Year Rate

Differential Factor

Effective Coverage Level

Percent

Prior Year Rate
Differential Factor

Bound Prior Year Rate
Prior Year Rate
Level Percent

Round(Base Prior Year Rate Differential Factor + (Upper Bound Prior Year Rate Differential Factor - Lower Bound = Prior Year Rate Differential Factor) \* (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) \* 20, 9)

Lower Bound Prior Year Rate
Differential Factor

ADM
9.99999999
None

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Based on the 'lower bound' Coverage Level.
Edit with ADM Coverage Level Differential,
"A01040".
If the Effective Coverage Level equals an
existing ADM Coverage Level then this will be
based on the Effective Coverage Level.
If the Effective Coverage Level falls between
existing ADM Coverage Levels then this will be
based on lower ADM Coverage Level.
If the Effective Coverage Level is greater than
the maximum ADM Coverage Level then this
will be based on the second highest ADM
Coverage Level.

"A01040".

Level.

If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.

If the Effective Coverage Level falls between

existing ADM Coverage Levels then this will be

based on the higher ADM Coverage Level.
If the Effective Coverage Level is greater than
the maximum ADM Coverage Level then this
will be based on the highest ADM Coverage

11/15/2018

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

99.9999

None

this will be the lower ADM Coverage Level.

If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

**Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans 0091 Barley <u>Field</u> Record <u>Field</u> <u>Field</u> <u>Field</u> Rounding **Calculations** Name Number Number **Format** Rules Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then

Internal

Floored Effective Coverage

Level Percent

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Reinsurance Year: 2016

Version: Approved Record Name: Acreage Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** <u>Field</u> Calculations Name Number Number Format Rounding Rules The lookup/interpolation/extrapolation procedure for 'Unit Residual Factor and Prior Unit Residual Factor' when Trend Adjustment Section 18: Unit Residual Factor Option (TA) was chosen and yield reflects a trend or when Yield Exclusion Option "YE" was chosen. When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU", use the following calculations for Unit Residual Factor and Prior Year Unit Residual Factor: The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels Round to 3 decimal Unit Residual Factor 999.999 within the chosen unit structure regardless of Internal places. Coverage Type Code where applicable (Buyup/CAT). Base Unit Residual Factor is equal to Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level ADM 999.999 None less than or equal to Effective Coverage Level. Base Unit Residual Factor Edit with ADM Coverage Level Differential, "A01040". Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then Upper Bound Unit Residual ADM 999.999 None this will be based on the higher ADM Coverage Factor If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0001 Bealers

				•		0091 Barley
<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	Field Number	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>
Round(Base Unit Residual Factor + (Upper Bound Unit Residual Factor - Lower Bound Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Lower Bound Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
	Effective Coverage Level Percent	Internal		99.9999	None	
	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

0018 KICE	5043 Popcorn 0067 Dry Peas					0081 Soybeans 0091 Barley		
<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	Rules		
	Prior Year Unit Residual Factor	Internal		999.999	Round to 3 decimal places.	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure		
	Base Prior Year Unit Residual Factor	ADM		999.999	None	Base Prior Year Unit Residual Factor is equal to Prior Year Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".		
	Upper Bound Prior Year Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.		

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

<u>Insurance Plan Code</u> 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

	·			·		0091 Barley
<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>
	Lower Bound Prior Year Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
	Effective Coverage Level Percent	Internal		99.9999	None	
	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Record Name: Acreage

Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field <u>Field</u> <u>Field</u> Calculations Name Number Number Format Rounding Rules When Unit Structure Code is equal to Enterprise Unit, 'EU' or 'EP', use the following calculations for Enterprise Unit Residual Factor and Prior Year Enterprise Unit Residual Factor: The cap value for the Residual Factors is the Enterprise Unit Residual Round to 3 decimal Internal 999.999 MAX(Residual Factor) from all coverage levels Factor places. within the chosen unit structure Base Enterprise Unit Residual Factor is equal to Enterprise Unit Residual for Minimum of 1) Base Enterprise Unit Residual Maximum available Coverage Level or; 2) ADM 999.999 None Factor available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent. Upper Bound Enterprise Unit If the Effective Coverage Level Percent falls ADM 999.999 None Residual Factor between existing ADM Coverage Levels then this will be based on the higher ADM Coverage If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0091 Barley

0091 Barley								
	<u>Field</u>	Record	Field	<u>Field</u>	<u>Field</u>			
<u>Calculations</u>	<u>Name</u>	Number	Number	<u>Format</u>	Rounding	Rules		
	Lower Bound Enterprise Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".  If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.  If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level.  If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.		
	Effective Coverage Level Percent	Internal		99.9999	None			
	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.		

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 03 Revenue Protection with Harvest Price Exclusion 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley

<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> Number	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules
	Prior Year Enterprise Unit Residual Factor	Internal		999 999	Round to 3 decimal places.	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure
	Base Enterprise Prior Year Unit Residual Factor	ADM		999.999	None	Base Enterprise Prior Year Unit Residual Factor is equal to Enterprise Prior Year Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
	Upper Bound Prior Year Enterprise Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

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Exhibit Name: Premium Calculation

**Exhibit Number:** P11-1, Plan 01, 02, 03

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

 0091 Barley

	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules
Prior Year Enterprise Unit Residual Factor	Round(Base Enterprise Prior Year Unit Residual Factor + (Upper Bound Prior Year Enterprise Unit Residual Factor - = Lower Bound Prior Year Enterprise Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Lower Bound Prior Year Enterprise Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Record Name: Acreage

Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018 Record Code: P11 **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** <u>Field</u> Calculations Name Number Number Format Rounding Rules When Unit Structure Code is equal to Whole Farm Unit, 'WU', use the following calculations for Whole Farm Unit Residual Factor and Prior Year Whole Farm Unit Residual Factor: The cap value for the Residual Factors is the Whole Farm Unit Residual Round to 3 decimal 999.999 Internal MAX(Residual Factor) from all coverage levels Factor places. within the chosen unit structure. Base Whole Farm Unit Residual Factor is equal to Whole Farm Unit Residual for Minimum of 1) Base Whole Farm Unit Maximum available Coverage Level or; 2) ADM 999.999 None Residual Factor available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent. Upper Bound Whole Farm If the Effective Coverage Level Percent falls ADM 999.999 None Unit Residual Factor between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

<u>Insurance Plan Code</u> 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

 0091 Barley

							0091 Barley
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	Calculations	<u>Name</u>	<u>Number</u>	Number	<u>Format</u>	Rounding	<u>Rules</u>
Whole Farm Unit Residual Factor		Lower Bound Whole Farm Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

0091 Barley									
Calculations	<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	Pol			
<u>Calculations</u>	<u>Name</u>	Number	Number	<u>Format</u>	Rounding	<u>Rules</u>			
	Prior Year Whole Farm Unit Residual Factor	Internal		999.999	nlaces	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure			
	Base Whole Farm Base Prior Year Unit Residual Factor	ADM		999.999	None	Base Whole Farm Base Prior Year Unit Residual Factor is equal to Whole Farm Base Prior Year Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".			
	Upper Bound Prior Year Whole Farm Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.			

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

**Release Date: 12/6/2018** 

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection 03 Revenue Protection 05 Revenue Protection 05 Revenue Protection 06 Revenue Protection 07 Revenue Protection 07 Revenue Protection 08 Revenue Protection 09 R

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0001 Rodgers

	0018 Rice	0043 Popcorn			0067 Dry Peas		0081 Soybeans 0091 Barley
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules
Prior Year Whole Farm Unit Residual Factor	Round(Base Whole Farm Prior Year Unit Residual Factor + (Upper Bound Prior Year Whole Farm Unit Residual Factor - = Lower Bound Prior Year Whole Farm Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Lower Bound Prior Year Whole Farm Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999		Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion
	0011 Wheat	0021 Cotton			0047 Dry Beans		0075 Peanuts
Commodity Code	0015 Canola	0041 Corn			0051 Grain Sorghum		0078 Sunflowers
	0018 Rice	0043 Popcorn			0067 Dry Peas		0081 Soybeans
							0091 Barley
		<u>Field</u>	Record	Field	<u>Field</u>	<u>Field</u>	
	<u>Calculations</u>	<u>Name</u>	Number N	<u>umber</u>	<u>Format</u>	Rounding	Rules
							The lookup/interpoloation/extrapolation
							procedure for 'Optional Unit Discount Factor,
Section 19: Unit Discount	Coloulation						Basic Unit Discount Factor, and Enterprise Unit
Section 19: Unit Discount	Calculation						Discount Factor' when Trend Adjustment Option
							(TA) or Yield Exclusion Option (YE) was chosen
							and yield reflects a trend.

When Unit Structure Code is equal to Optional Unit, "OU", "UA", or "UD", use the following calculation for Unit Structure Discount Factor:

Unit Structure Discount Factor	Internal	9.99999999	Round to 4 decimal places.	Capped at 1.0
Base Coverage Level Percent Optional Unit Discount Factor	ADM	9.99999999	None	Base Coverage Level Percent Optional Unit Discount Factor is equal to Percent Optional Discount for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
Upper Bound Coverage Level Percent Optional Unit Discount Factor	ADM	9.99999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016

Version: Approved

Release Date: 12/6/2018

<u>Insurance Plan Code</u> 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

	ooto nee	0007 D1 y 1 Cu3					0091 Barley		
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>		
Unit Structure Discount Factor	Round(Base Coverage Level Percent Optional Unit Discount Factor + (Upper Bound Coverage Level Percent Optional = Unit Discount Factor - Lower Bound Coverage Level Percent Optional Unit Discount Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 4)		ADM		9.99999999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.		
		Effective Coverage Level Percent	Internal		99.9999	None			
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.		

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved

Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

ilisarance Flan Code	of field Protection	02 Revenue Protection				os nevende i rotectio	With Harvest Free Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans
	Calculations	<u>Field</u> Name	Record Number	<u>Field</u> Number	<u>Field</u> Format	<u>Field</u> Rounding	0091 Barley Rules
When Unit Structure Code		ing calculation for Unit Structure Discount Factor:	Number	Number	Tormat	Rounding	Rules
when Onit Structure Code	is equal to basic Unit, BU , use the follow	Unit Structure Discount Factor: Factor	Internal		9.99999999	Round to 4 decimal places.	Capped at 1.0
		Base Coverage Level Percent Basic Unit Discount Factor	ADM		9.999999999	None	Base Coverage Level Percent Basic Unit Discour Factor is equal to Basic Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than o equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
		Upper Bound Coverage Level Percent Basic Unit Discount Factor	ADM		9.99999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level start will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0081 Soybeans

		0091 Barley					
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>
Unit Structure Discount Factor		Lower Bound Coverage Level Percent Basic Unit Discount Factor	ADM			None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".  If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.  If the Effective Coverage Levels then this will be based on the lower ADM Coverage Level.  If the Effective Coverage Levels then this will be based on the lower ADM Coverage Level.  If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 03 Revenue Protection with Harvest Price Exclusion 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans

						0091 Barley
	<u>Field</u>	Record	Field	<u>Field</u>	<u>Field</u>	
<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	Rounding	<u>Rules</u>
When Unit Structure Code is equal to Enterprise Unit, 'EU' or 'EP', use the following calcu	lation for Unit Structure Disco	unt Factor				
	Unit Structure Discount Factor	Internal		9.99999999	Round to 4 decimal places.	Capped at 1.0
	Base Coverage Level Percent Enterprise Unit Discount Factor	ADM		9.99999999	None	Base Coverage Level Percent Enterprise Unit Discount Factor is equal to Enterprise Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
	Upper Bound Coverage Level Percent Enterprise Unit Discount Factor	ADM		9.99999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion

 Commodity Code
 0011 Wheat
 0021 Cotton
 0047 Dry Beans
 0075 Peanuts

 Commodity Code
 0015 Canola
 0041 Corn
 0051 Grain Sorghum
 0078 Sunflowers

 0018 Rice
 0043 Popcorn
 0067 Dry Peas
 0091 Barley

0091 Barley									
<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>			
Round(Base Coverage Level Percent Enterprise Unit Discount Factor + (Upper Bound Coverage Level Percent Unit Structure Discount Factor  Enterprise Unit Discount Factor - Lower Bound Coverage Level Percent Enterprise Unit Discount Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 4)	Lower Bound Coverage Level Percent Enterprise Unit Discount Factor	ADM			None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".  If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.  If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level.  If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.			
	Effective Coverage Level Percent	Internal		99.9999	None				
	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.			

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Reinsurance Year: 2016

	Record Name Record Code	•	Version: Approved Release Date: 12/6/2018					
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	on with Harvest Price Exclusion	
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley	
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>	
Downed Rice Endorsement	t (DRE) Option 'DC'						CAT does not apply to Downed Rice (DRE). Only Unit Structure Codes 'BU and OU' apply regardless of the base Rice selection. Price Election Percent for base Rice will apply to DRE. Subsidy Level will be 38% for DRE regardless of the base Rice Unit Structure or Coverage Level. Insured Share can be different for DRE than base Rice. Insured Share will be 100%. DRE coverage is not available for high-risk CAT acreage if excluded from additional coverage for Base Rice.	
Section 20: Liability Calcul	lation							
		Premium Liability Amount	Internal		999999999	Round to whole number.		
Premium Liability Amount	= Dollar Amount of Insurance * Reported Acreage * Insured  Share Percent * Price Election Percent	Dollar Amount of Insurance	ADM		99999	None	Edit with ADM Price, "A00810", Fixed Coverage Amount with insurance option = 'DC'.	
	Share Percent Price Election Percent							
		Reported Acreage	P11	48	9999999.99	None		
		Reported Acreage Insured Share Percent	P11 P11	48 43	99999999.99 9.9999	None None	DRE insured share will always be 100% without regards to base Rice.	
		Insured Share Percent	P11		9.9999	None	regards to base Rice.	
Liability Amount	_ Dollar Amount of Insurance * Reported Acreage * Insured	Insured Share Percent Price Election Percent	P11 ICE	43	9.9999 9.9999	None None Round to whole	regards to base Rice.	
Liability Amount	= Dollar Amount of Insurance * Reported Acreage * Insured Share Percent * Price Election Percent	Insured Share Percent Price Election Percent Liability Amount	P11 ICE P11	43	9.9999 9.9999 999999999	None  None  Round to whole number.	regards to base Rice. From base Rice P14 record.  Edit with ADM Price, "A00810", Fixed Coverage	
Liability Amount	= '	Insured Share Percent Price Election Percent Liability Amount  Dollar Amount of Insurance	P11 ICE P11 ADM	90	9.9999 9.9999 9999999999 99999	None  None  Round to whole number.  None	regards to base Rice. From base Rice P14 record.  Edit with ADM Price, "A00810", Fixed Coverage	

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Record Name: Acreage
Record Code: P11

Reinsurance Year: 2016

Version: Approved

Release Date: 12/6/2018

	Record Code:									
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protecti	on with Harvest Price Exclusion			
<u>Commodity Code</u>	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn			0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley			
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>			
Section 21: Total Premium	Amount, Subsidy Amount, and Producer Premium Amount									
Preliminary Total		Preliminary Total Premium	Internal		999999999	Round to whole number.				
Premium	= Premium Liability Amount * Premium Rate	Premium Rate	ADM			None	Edit with ADM Option Rate, "A01060", rate with insurance option = 'DC'.			
Total Premium Amount	= Preliminary Total Premium	Total Premium Amount	P11	91	999999999	Round to whole number.				
Subsidy Amount	= Total Premium Amount * Subsidy Percent	Subsidy Amount	P11	89	999999999	Round to whole number.	If this record qualifies for Beginning Farmer and Rancher or Native Sod, see Section 22 for subsidy calculations.			
		Subsidy Percent	ADM		9.999	None	Edit with ADM Subsidy Percent, "A00070". Will always be 38% for DRE.			
Amount	= Total Premium Amount - Subsidy Amount	Producer Premium Amount	P11	92	999999999	Round to whole number.				
Section 22: Beginning Farm	er and Rancher (BFR), Native Sod (NS) and Conservation Com	npliance (CC) Subsidy Calculati	ons							
Base Subsidy Amount	= Total Premium Amount * Subsidy Percent	Base Subsidy Amount	Internal		999999999	Round to whole number	Cupped by the standard rule of \$1 if applicable			
		Subsidy Percent	ADM		9.999	None	Edit with ADM Subsidy Percent, "A00070".			
BFR Subsidy Amount	= Total Premium Amount * 0.10 * (1 - CC Subsidy Reduction Percent)	BFR Subsidy Amount	Internal		999999999	Round to whole number	Beginning Farmer Rancher Subsidy Amount. If Applicable; else 0. 0.10 (10%).			
Native Sod Subsidy Amount	= Total Premium Amount * 0.50	Native Sod Subsidy Amount	Internal		999999999	Round to whole number	If Applicable; else 0. 0.50 (50%). For CAT coverage, Native Sod Subsidy Amount i always 0.			
CC Subsidy Reduction Amount	= Base Subsidy Amount * CC Subsidy Reduction Percent	CC Subsidy Reduction Amount	P11	108	999999999	Round to whole number	CC Subsidy Reduction Amount. If Applicable; else 0.			
		CC Subsidy Reduction Percent	P11	76	9.999	None	If Applicable; else 0.			
Subsidy Amount	Base Subsidy Amount + BFR Subsidy Amount - Native Sod Subsidy Amount - CC Subsidy Reduction Amount	Subsidy Amount	P11	89	999999999	Round to whole number	Subsidy Amount cannot exceed Total Premium Amount. Subsidy Amount will be cupped at \$0.			
·	= Total Premium Amount - Subsidy Amount				_	Round to whole				

Record Name: Acreage

Reinsurance Year: 2016 Version: Approved

Record Name: Acreage Record Code: P11				Release Date: 12/6/2018					
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection	with Harvest Price Exclusion		
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas			0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley			
	<u>Calculations</u>	<u>Field</u> Name	Record Number	<u>Field</u> Number	<u>Field</u> Format	<u>Field</u> Rounding	Rules		
Section 23: Yield Exclusion a	nd Trend APH Current Year Base Premium Rate Calculations	(only use when the Effective (	Coverage Le	vel for the	record exceeds the highes	t coverage level for the	offer in the ADM)		
		Unadjusted Liability Amount	Internal		999999999	Round to whole number			
Unadjusted Liability	Round((Coverage Level Percent/Effective Coverage Level	Coverage Level Percent	P14	34	9.9999	None			
Amount	Percent),10) * Premium Liability Amount	Effective Coverage Level Percent	Internal		99.9999				
		Premium Liability Amount	Internal		999999999	Round to whole number			
	When Unit Structure Code is equal to Optional Unit, "OU",	Max Coverage Level Adjustment Factor	Internal		999999999.99999999	Round to 8 decimals.			
		Unadjusted Liability Amount	Internal		999999999	Round to whole number			
		Current Year Base Rate	Internal		9999999999.99999	Round to 8 decimals.			
	"UA" or "UD:	Premium Liability Amount	Internal		999999999	Round to whole number			
	ROUND(1.00/ Current Year Base Rate,8) –	Base Rate Differential Factor	ADM		9.99999999	None			
	ROUND(Unadjusted Liability Amount/(Current Year Base	Base Unit Residual Factor	ADM		999.999	None			
		Base Optional Unit Structure Discount Factor	ADM		9.99999999	None	Base Optional Unit Structure Discount Factor is equal to Optional Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". See Section 19 for more info.		
Max Coverage Level Adjustment Factor	When Unit Structure code is Basic Unit, "BU":  ROUND(1.00/ Current Year Base Rate,8) —  ROUND(Unadjusted Liability Amount/(Current Year Base Rate * Premium Liability Amount),8) + ROUND(ROUND(Base Rate Differential Factor * Base Unit Residual Factor * Base Basic Unit Structure Discount Factor * Unadjusted Liability Amount,8)/Premium Liability Amount,8)	Base Basic Unit Structure Discount Factor	ADM		9.99999999	None	Base Basic Unit Structure Discount Factor is equal to Basic Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". See Section 19 for more info. When the total planted acres for the unit is 0 (all acres are prevented planted) set to 1.00.		

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code 03 Revenue Protection with Harvest Price Exclusion 01 Yield Protection 02 Revenue Protection 0047 Dry Beans 0011 Wheat 0021 Cotton 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley

<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> Number	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules
When Unit Structure code is Enterprise Unit, "EU" or "EP":  ROUND(1.00/ Current Year Base Rate,8) —  ROUND(Unadjusted Liability Amount/( Current Year Base Rate * Premium Liability Amount),8) + ROUND(ROUND(Base) Rate Differential Factor * Base Enterprise Unit Residual Factor * Base Enterprise Unit Structure Discount Factor *	Base Enterprise Unit Structure Discount Factor	ADM		9.99999999	None	Base Enterprise Unit Structure Discount Factor is equal to Enterprise Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". See Section 19 for more info. When the total planted acres for the unit is 0 (all acres are prevented planted) set to 1.00.
Unadjusted Liability Amount,8)/Premium Liability Amount,8)	Base Enterprise Unit Residual Factor	ADM		999.999	None	Base Enterprise Unit Residual Factor is equal to Enterprise Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
When Unit Structure code is Whole Farm Unit "WU":  ROUND(1.00/ Current Year Base Rate,8) –	Unit Structure Discount Factor	Internal		9.9999999	None	Capped at 1.0 See Section 19 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
ROUND(Unadjusted Liability Amount/( Current Year Base Rate * Premium Liability Amount),8) + ROUND(ROUND(Base Rate Differential Factor * Base Whole Farm Unit Residual Factor * Unit Structure Discount Factor * Unadjusted Liability Amount,8)/Premium Liability Amount,8)	Base Whole Farm Unit Residual Factor	ADM		999.999	None	Base Whole Farm Unit Residual Factor is equal to Whole Farm Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion		
	0011 Wheat	0021 Cotton	0047 Dry Beans		0075 Peanuts		
Commodity Code	0015 Canola	0041 Corn	0051 Grain Sorgh	um	0078 Sunflowers		
	0018 Rice	0043 Popcorn	0067 Dry Peas		0081 Soybeans		
					0091 Barley		
		E' 11	1 6:11	e* 1.1			

<u>Calculations</u>		<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules
Marginal Rate Adjustment Factor	Max Coverage Level Adjustment Factor /(Rate Differential Factor * Unit Residual Factor * Unit Structure Discount Factor)	Marginal rate Adjustment Marginal Adjustment Rate Factor	Internal		9.99999999	Round to 8 decimals.	
		Max Coverage Level Adjustment Factor	Internal		99999999999999	Round to 8 decimals.	
		Rate Differential Factor	ADM		9.99999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
		Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
		Unit Structure Discount Factor	Internal		9.99999999	None	Capped at 1.0 See Section 19 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
	When Unit Structure code is Enterprise Unit, "EU" or "EP":  Max Coverage Level Adjustment Factor /(Rate Differential Factor * Enterprise Unit Residual Factor * Unit Structure Discount Factor)	Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.
	When Unit Structure code is Whole Farm Unit, "WU":  Max Coverage Level Adjustment Factor /(Rate Differential Factor * Whole Farm Unit Residual Factor * Unit Structure Discount Factor)	Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Whole Farm Unit, 'WU'.
	When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":	Current Year Base Premium Rate	Internal		999999999.9999999	Round to 8 decimals.	
		Rate Differential Factor	ADM		9.99999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
11/15/2018	Round(Current Year Base Rate * Rate Differential Factor * Unit Residual Factor, 8) * MIN(Marginal Rate Adjustment Factor, 1.00)	Unit Residual Factor Page	ADM 72 of 74		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, 'BU'.

Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

<u>Insurance Plan Code</u>	01 Yield Protection	02 Revenue Protection	02 Revenue Protection			03 Revenue Protection with Harvest Price Exclusion		
	0011 Wheat	0021 Cotton			0047 Dry Beans		0075 Peanuts	
Commodity Code	0015 Canola	0041 Corn			0051 Grain Sorghum		0078 Sunflowers	
	0018 Rice	0043 Popcorn			0067 Dry Peas		0081 Soybeans	
							0091 Barley	
		Field	Record	Field	Field	Field		

	Calculations	<u>Field</u> <u>Name</u>	Record Number	Field Number	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	<u>Rules</u>
Current Year Base Premium Rate		Marginal Rate Adjustment Factor	Internal		9999999999999999	Round to 8 decimals.	
=	When Unit Structure code is Enterprise Unit, "EU" or "EP":  Round(Current Year Base Rate * Rate Differential Factor * Enterprise Unit Residual Factor, 8) * MIN(Marginal Rate Adjustment Factor, 1.00)	Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.
=	When Unit Structure code is Whole Farm Unit, "WU":  Round(Current Year Base Rate * Rate Differential Factor * Whole Farm Unit Residual Factor, 8) * MIN(Marginal Rate Adjustment Factor, 1.00)	Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Whole Farm Unit, 'WU'.

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2016 Version: Approved Release Date: 12/6/2018

**Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion 0011 Wheat 0021 Cotton 0047 Dry Beans 0075 Peanuts **Commodity Code** 0051 Grain Sorghum 0015 Canola 0041 Corn 0078 Sunflowers 0018 Rice 0067 Dry Peas 0043 Popcorn 0081 Soybeans 0091 Barley Field Record Field **Field** <u>Field</u> Calculations Name Number Number Format Rounding Rules Section 24: Yield Exclusion and Trend APH for Cottonseed--Current Year Base Premium Rate Calculations (only use when the Effective Coverage Level for the record exceeds the highest coverage level for the offer in the ADM). Current Year Base Premium 9999999999999999 Round to 8 decimals. Internal Rate Edit with ADM Coverage Level Differential, "A01040". When Unit Structure Code is equal to Optional Unit, "OU", Rate Differential Factor ADM None 9.99999999 See Section 17 for Option Code "TA" (Trend "UA", "UD", or Basic Unit, "BU": Adjustment) and "YE" (Yield Exclusion). Edit with ADM Coverage Level Differential, Round(Current Year Base Rate \* Rate Differential Factor \* "A01040". Unit Residual Factor, 8) \* MIN(Marginal Rate Adjustment See Section 18 for Option Code "TA" (Trend Factor, 1.00) Unit Residual Factor ADM 999.999 None Adjustment) and "YE" (Yield Exclusion) where Unit Structure Code equal to Optional Unit, Current Year Base "OU", "UA", "UD", or Basic Unit, 'BU'. Premium Rate Marginal Rate Adjustment 9999999999999999 Internal Round to 8 decimals. Copy value over from the base lint line. Factor When Unit Structure Code is is Enterprise Unit, "EU" or Edit with ADM Coverage Level Differential, "EP": "A01040". Enterprise Unit Residual See Section 18 for Option Code "TA" (Trend ADM 9.999 None Round(Current Year Base Rate \* Rate Differential Factor \* Factor Adjustment) and "YE" (Yield Exclusion) where Enterprise Unit Residual Factor, 8) \* MIN(Marginal Rate Unit Structure Code equal to Enterprise Unit, Adjustment Factor, 1.00) 'EU' or 'EP'.

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