

Exhibit Name: Indemnity Calculations
Exhibit Number: P21-13, Plans 16 & 17
Record Name: Acreage Claim
Record Code: P21

Reinsurance Year: 2022
Version: Draft
Release Date: 9/2/2021

Insurance Plan Code	16 Margin Protection	17 Margin Protection with Harvest Price Option
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Commodity Code	0011 Wheat	0018 Rice	0041 Corn	0081 Soybeans
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Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
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Section 1: Stage Guarantee Calculation

When Insurance Plan Code equals 16: $\text{Trigger Margin Amount} = \text{Expected Margin Amount} - [(\text{Expected Revenue Amount}) * (1.00 - \text{Coverage Level Percent})]$	Trigger Margin Amount	Internal		99999999.99	Round to 2 decimals	
	Expected Margin Amount	ADM		99999.999999		Edit with ADM Price, "A00810".
	Coverage Level Percent	P14	34			
	Expected Revenue Amount	ADM		99999999.99	Round to 2 decimals	Edit with ADM Price, "A00810".
When Insurance Plan Code equals 17: $\text{Trigger Margin Amount} = \text{Expected County Yield} * \text{MAX}(\text{Projected Price, Harvest Price}) - (\text{Expected Revenue Amount} - \text{Expected Margin Amount}) - [\text{Expected County Yield} * \text{MAX}(\text{Projected Price, Harvest Price})] * (1 - \text{Coverage Level Percent})$	Trigger Margin Amount	Internal		99999999.99	Round to 2 decimals.	
	Expected County Yield	ADM		99999999.99	None	Edit with ADM Price, "A00810". Expected County Yield will be stored in Expected Index Value in "A00810".
	Projected Price	ADM		99999.9999		Edit with ADM Price, "A00810".
	Harvest Price	ADM		99999.9999		Edit with ADM Price, "A00810".
For Both Plans: $\text{Acre Stage Guarantee Amount} = \text{MAX}(\text{Trigger Margin Amount} - \text{Final Margin Amount}, 0)$	Acre Stage Guarantee Amount	P21	62	99999999.99	Round to 2 decimals	The larger of subtraction or zero.
	Final Margin Amount	ADM		99999.999999		Edit with ADM Price, "A00810".

Section 2: Loss Guarantee Calculation

When Insurance Plan Code equals 16: $\text{Loss Guarantee Amount} = \text{MIN}(\text{Dollar Amount of Insurance, Acre Stage Guarantee Amount} * \text{Price Election Percent}) * \text{Determined Acreage} * \text{Insured Share Percent} * \text{Liability Adjustment Factor}$	Loss Guarantee Amount	P21	64	99999999.99	Round to whole number	
	Dollar Amount of Insurance	Internal		99999999.99	None	The P11 Dollar Amount of Insurance used in determination of P11 Liability.
	Determined Acreage	P21	18	99999999.99	None	
	Insured Share Percent	P11	43	9.9999	None	
	Price Election Percent	P14	35	9.9999	2 decimal places	Protection Factor. This will be the Price Election Percent reported on the P14 and used in determination of P11 Dollar Amount of Insurance. If Native Sod applies to the associated P11 record, the Price Election Percent MUST equal 0.65 (65%).
	Liability Adjustment Factor	P21	39	9.999999	None	

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Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When Insurance Plan Code equals 17: $\text{Final Dollar Amount of Insurance} = \text{MAX}(\text{Projected Price, Harvest Price}) * \text{Expected County Yield} * \text{Coverage Level Percent} * \text{Price Election Percent}$	Final Dollar Amount of Insurance	Internal		99999999.99	None	Calculated Value. This is not the Dollar Amount of Insurance used to determine the P11 liability.
$\text{Loss Guarantee Amount} = \text{MIN}(\text{Final Dollar Amount of Insurance, Acre Stage Guarantee Amount} * \text{Price Election Percent}) * \text{Determined Acreage} * \text{Insured Share Percent} * \text{Liability Adjustment Factor}$	Loss Guarantee Amount	P21	64	99999999.99	Round to whole number	
	Liability Adjustment Factor	P21	39	9.999999	None	

Section 3: Indemnity Calculation

With Base (companion) policy (all unit structures): $\text{Preliminary Indemnity Amount} = \text{Loss Guarantee Amount} - \text{Base (Companion) Policy Preliminary Indemnity Amount}$	Preliminary Indemnity Amount	P21	66	S999999999	Round to whole number	
	Base (Companion) Policy Preliminary Indemnity Amount	Internal		S999999999	Round to whole number	This value is read in from the Base Policy's P21 record, Field Number 63. When there is no base policy claim, please treat the "Base (Companion) Policy Preliminary Indemnity Amount" as a 0. Amounts paid on the base policy for stage codes P2, PF, PT, R or P are not included in the MP indemnity calculation. If the base policy claim lines that are eligible to be included in the margin unit sum up to a negative number (after excluding unisurable base policy acreage), then treat the "Base (Companion) Policy Preliminary Indemnity Amount" as a 0.
$\text{Total Preliminary Indemnity} = \sum \text{Preliminary Indemnity for the Margin Unit}$	Internal			S999999999	Round to whole number	
When Total Preliminary Indemnity is less than or equal to 0: $\text{Indemnity Amount} = 0$	Indemnity Amount	P21	67	S999999999	Round to whole number	When the Total Preliminary Indemnity for the Margin Unit is 0 or less, then no indemnity is due and all lines within the Margin Unit can be treated as a 0.
When Total Preliminary Indemnity is greater than 0: $\text{Indemnity Amount} = \text{Preliminary Indemnity Amount}$	Indemnity Amount	P21	67	S999999999	Round to whole number	The Indemnity Amount on an individual line within a Margin Unit can potentially be negative when the Total Preliminary Indemnity is positive for the Margin Unit.

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Without Base (companion) policy:						
Preliminary Indemnity Amount = Loss Guarantee Amount	Preliminary Indemnity Amount	P21	66	S999999999	Round to whole number	
Indemnity Amount = Preliminary Indemnity Amount	Indemnity Amount	P21	67	S999999999	Round to whole number	