



















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

Reinsurance Year: 2021  
 Version: Approved  
 Release Date: 7/1/2020

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

| <u>Calculations</u> | <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

**Section 3: Base Premium Rate Calculation** If Written Agreement is applicable make the necessary changes as provided by the agreement and ROE ADM.

|  |                          |          |    |             |                      |   |
|--|--------------------------|----------|----|-------------|----------------------|---|
| Current Year Yield Ratio = Rate Yield / Reference Amount | Current Year Yield Ratio | Internal |    | 9.9999      | Round to 2 decimals. | Cup at 0.50 and Cap at 1.50.  |
|  | 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".  |

**When previous year yield limitation code = '03', Insurance Option Code List contains Yield Cup (YC), and Commodity Code Dry Beans "0047" and Type Code equals Contract "62", or Commodity Code equals Dry Peas "0067" and Type Code equals Spring Contract "98":**

|   |                             |          |    |             |                      |                                    |
|---|-----------------------------|----------|----|-------------|----------------------|------------------------------------|
| Prior Year Yield Ratio = $\frac{\text{Round}(\text{Approved Yield} * \text{Contract Price}, 0)}{\text{Reference Amount}}$ | Prior Year Yield Ratio      | Internal |    | 99999999.99 | Round to 2 decimals. |                                    |
|   | Approved Yield              | P11      | 42 | 99999999.99 | None                 |                                    |
|   | Contract Price              | P11      | 46 | 9999.9999   | None                 |                                    |
|   | Prior year Reference Amount | ADM      |    | 99999.99    | None                 | Edit with ADM Base Rate, "A01010". |

**When previous year yield limitation code = '03' and Insurance Option Code List contains Yield Cup (YC) and the aforementioned commodities/types are not applicable:**

|   |                             |          |    |             |                      |   |
|---|-----------------------------|----------|----|-------------|----------------------|---|
| Prior Year Yield Ratio = Approved Yield / Prior Year Reference Amount | Prior Year Yield Ration     | Internal |    | 9.9999      | Round to 2 decimals. | Cup at 0.50 and Cap at 1.50.  |
|   | Approved Yield              | P11      | 42 | 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".  |







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|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

When previous year yield limitation code = '03' and Insurance Option Code List contains Yield Cup (YC):

|  |   |  |          |       |                     |  |  |
|--|---|--|----------|-------|---------------------|--|--|
| Prior Year Base Premium Rate =   | <b>When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":</b>                       | Prior Year Base Premium Rate               | Internal |       | 9999999999.99999999 | Round to 8 decimals.                                 |  |
|  |   | Prior Year Rate Differential Factor        | ADM      |       | 9.999999999         | None   | Edit with ADM Coverage Level Differential, "A01040." |
|  | Round(Prior Year Base Rate * 1.05 * Prior Year Rate Differential Factor * Prior Year Unit Residual Factor, 8)           | Prior Year Unit Residual Factor            | ADM      |       | 999.999             | None   | Edit with ADM Coverage Level Differential, "A01040." |
|  | <b>When Unit Structure code is Enterprise Unit, "EU" or "EP":</b>   |  |          |       |                     |  |  |
|  | Round(Prior Year Base Rate * 1.05* 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". |
|  | <b>When Unit Structure code is Whole Farm Unit, 'WU':</b>   |  |          |       |                     |  |  |
| Round(Prior Year Base Rate * 1.05 * 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." |  |

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|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

**Otherwise:**

|                              |  |   |  |     |                    |                      |  |
|------------------------------|--|---|--|-----|--------------------|----------------------|--|
| Prior Year Base Premium Rate | <b>When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":</b>        | Prior Year Base Premium Rate                                      | Internal                                   |     | 999999999.99999999 | 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  |     | 9.999999999        | None                 | Edit with ADM Coverage Level Differential, "A01040".<br>See Section 17 for Option code "TA" (Trend Adjustment), "YC" (Yield Cup), "YE" (Yield Exclusion), and "QL" (Quality Loss).   |
|                              |  | Prior Year Unit Residual Factor                                   | ADM  |     | 999.999            | None                 | Edit with ADM Coverage Level Differential, "A01040".<br>See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "YE" (Yield Exclusion), "QL" (Quality Loss) where Unit Structure Code equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU". |
|                              |  | <b>When Unit Structure code is Enterprise Unit, "EU" or "EP":</b> | Prior Year Enterprise Unit Residual Factor | ADM |                    | 9.999                | None   |
|                              | <b>When Unit Structure code is Whole Farm Unit, 'WU':</b>  | Prior Year Whole Farm Unit Residual Factor                        | ADM  |     | 9.999              | None                 | Edit with ADM Coverage Level Differential, "A01040".<br>See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "YE" (Yield Exclusion), and "QL" (Quality Loss) 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  | 97  | 999999999.99999999 | Round to 8 decimals. |  |
| Revenue Lookup Rate =        | MIN(Current Year Base Rate, Prior Year Base Rate * 1.2, 0.9999)  | Revenue Lookup Rate   | Internal                                   |     | 999999999.9999     | Round to 4 decimals. |  |

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|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

**Section 4: Optional Coverage (Additive "A" and Multiplicative "M")**

If Option Rate Method Code equal "T" (Total Premium Rate Adjustment) see Section 9.

|   |  |          |  |             |                      |  |
|---|--|----------|--|-------------|----------------------|--|
| <p><b>When Rate Method Code is Additive, "A":</b></p> $\text{Additive Optional Rate Adjustment Factor} = \sum \text{Option Rate} * \text{Rate Differential Factor}$                           | Additive Optional Rate Adjustment Factor       | Internal |  | 999999.9999 | Round to 4 decimals. |  |
|   | 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".  |
|   | Rate Differential Factor                       | ADM      |  | 9.99999999  | None                 | Edit with ADM Coverage Level Differential, "A01040".<br>See Section 17 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion). |
| <p><b>When Rate Method Code is Multiplicative, "M":</b></p> $\text{Multiplicative Optional Rate Adjustment Factor} = \sum \text{Option Rate1} * \text{Option Rate2} * \text{Option Rate3}...$ | Multiplicative Optional Rate Adjustment Factor | Internal |  | 999999.9999 | Round to 4 decimals. |  |
|   | Option Rate                                    | ADM      |  | 9.9999      | None                 | Edit with ADM Option Rate, "A01060".   |

**Section 5: Revenue Coverage Add on Rates (Applicable only for Plans 02 and 03)**

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 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.

|   |                                  |          |  |                 |                      |                 |
|---|----------------------------------|----------|--|-----------------|----------------------|-----------------|
| <p>Lookup Rate = Revenue Lookup Rate * Revenue Lookup Adjustment Factor</p> | Lookup Rate                      | Internal |  | 9999999999.9999 | Round to 4 decimals. |                 |
|   | Revenue Lookup Rate              | Internal |  | 9999999999.9999 | Round to 4 decimals. | From Section 3. |
|   | Revenue Lookup Adjustment Factor | Internal |  | 9.99999999      | None                 | From Section 2. |

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| <u>Calculations</u>   | <u>Field Name</u>                                | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u>   |
|---|--|----------------------|---------------------|---------------------|-----------------------|--|
| Adjusted Mean Quantity = Approved Yield * Mean Quantity / 100                             | Adjusted Mean Quantity (AdjMean)                 | Internal             |                     | 999999.99999999     | Round to 8 decimals.  |  |
|   | Approved Yield (AY)                              | P11                  | 42                  | 99999999.99         | None                  | For APH Trend, Quality Loss, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.<br><br>For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.       |
|   | Mean Quantity                                    | ADM                  |                     | 999.999999999       | None                  | Edit with ADM Combo Revenue Factor, "A01030".<br><br>Search the Combo Revenue Factor, "A01030" for the Mean Quantity using Lookup Rate.  |
| Adjusted Standard Deviation Quantity = Approved Yield * Standard Deviation Quantity / 100 | Adjusted Standard Deviation Quantity (AdjStdDev) | Internal             |                     | 9999999999.99999999 | Round to 8 decimals.  |  |
|   | Approved Yield (AY)                              | P11                  | 42                  | 99999999.99         | None                  | For APH Trend, Quality Loss, Yield Cup, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.<br><br>For skip row cotton, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied. |
|   | Standard Deviation Quantity                      | ADM                  |                     | 999.999999999       | None                  | Edit with ADM Combo Revenue Factor, "A01030".<br><br>Search the Combo Revenue Factor "A01030" for the Standard Deviation Quantity using Lookup Rate.   |







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|--|--|----------------------|---------------------|-----------------------|-----------------------|--|
| $\text{Simulated Revenue Protection with Harvest Price Exclusion Losses Quantity} = \sum_{i=1}^{500} \text{Round}(\text{MAX}(0, \text{AY} * \text{covlvl} * \text{ProjPrice} - (\text{Round}(\text{MAX}(0, \text{AdjStdDev} + \text{AdjMean}), 12) * \text{Round}(\text{MIN}(2 * \text{ProjPrice}, \text{Round}(e^{(\text{price}_i * \text{Price Volatility Factor} + \text{LnMean})}, 12)), 12))), 12)$ | Simulated Revenue Protection with Harvest Price Exclusion Losses Quantity (SimRPhpeLosses) | Internal             |                     | 9999999999.9999999999 | Round to 12 decimals. |  |
|  | Approved Yield (AY)  | P11                  | 42                  | 99999999.99           | None                  | For APH Trend, Quality Loss, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.<br><br>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                | None                  | For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss) and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion).                        |
|  | Projected Priced or Contract Price (ProjPrice)   | ADM                  |                     | 99999.9999            | None                  | Edit with ADM Price, "A00810". Contract Price as addressed in Section 1.   |

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| <u>Calculations</u>  | <u>Field Name</u>   | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u>   |
|--|---|----------------------|---------------------|---------------------|-----------------------|--|
| $\text{Simulated Yield Protection Base Premium Rate} = \frac{\text{Simulated Yield Protection Losses Quantity} / 500}{\text{Approved Yield} * \text{Coverage Level Percent}}$  | Simulated Yield Protection Base Premium Rate                                | Internal             |                     | 999999.99999999     | Round to 8 decimals.  | For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.   |
| $\text{Simulated Revenue Protection Base Premium Rate} = \frac{\text{Simulated Revenue Protection Losses} / 500}{\text{Approved Yield} * \text{Coverage Level Percent} * (\text{Projected Price or Contract Price})}$  | Simulated Revenue Protection Base Premium Rate                              | Internal             |                     | 999999.99999999     | Round to 8 decimals.  | For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.   |
| $\text{Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate} = \frac{\text{Simulated Revenue Protection with harvest Price Exclusion Losses Quantity} / 500}{\text{Approved Yield} * \text{Coverage level Percent} * (\text{Projected Price or Contract Price})}$ | Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate | Internal             |                     | 999999.99999999     | Round to 8 decimals.  | For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.   |
| $\text{Preliminary Revenue Protection Premium Add on Rate} = \text{MAX}(\text{Simulated Revenue Protection Base Premium Rate} - \text{Simulated Yield Protection Base Premium Rate}, 0.01 * \text{Base Premium Rate})$   | 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.                          |
| $\text{Preliminary Revenue Protection with Harvest Price Exclusion Add on Rate} = \text{MAX}(\text{Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate} - \text{Simulated Yield Protection Base Premium Rate}, -0.5 * \text{Base Premium Rate})$                 | 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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**Calculations**

**Field Name**

**Record Number**

**Field Number**

**Field Format**

**Field Rounding**

**Rules**

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



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|--|--|------------------------------------|--------------|-----------------|----------------------|---|
| Prior Capping Rate Multiplier = Prior Capping Yield Ratio ^ Prior Capping Exponent Value                                 | Prior Capping Rate Multiplier  | Internal                           |              | 999999.99999999 | Round to 8 decimals. |   |
|  | Prior Capping Exponent Value   | ADM                                |              | 599.999         | None                 | Edit with ADM Historical Revenue Capping, "A01110". |
| Historical Capping Base Rate =   | <b>If Rate Method Code = Fixed, "F":</b><br>Sub County Rate  | Historical Capping Base Rate       | Internal     | 999999.99999999 | Round to 8 decimals. |   |
|  | <b>If Rate Method Code = Additive, "A":</b><br>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".            |
|  | <b>If Rate Method Code = Multiplicative, "M":</b><br>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". |
|  | <b>Otherwise:</b><br>(Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)   | Capping Fixed Rate                 | ADM          | 9.9999          |                      | Edit with ADM Historical Revenue Capping, "A01110". |
| Historical Prior Capping Base Rate =   | <b>If Rate Method Code = Fixed "F":</b><br>Sub County Rate   | Historical Prior Capping Base Rate | Internal     | 999999.99999999 | Round to 8 decimals. |   |
|  | <b>If Rate Method Code = Additive, "A":</b><br>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".            |
|  | <b>If Rate Method Code = Multiplicative, "M":</b><br>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". |
|  | <b>Otherwise:</b><br>(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                           |              | 999999.99999999 | Round to 8 decimals. |   |

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

| <u>Calculations</u>                             |   | <u>Field Name</u>                               | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u>  | <u>Rules</u>   |  |
|---|---|---|----------------------|---------------------|---------------------|--|--|--|
| Historical Revenue Protection Base Premium Rate | 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), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion). |  |
|   | [beta0 Factor +<br>Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Historical Basic Unit Base Rate ^2 + Beta 3 Factor * Coverage Level Percent +<br>Beta 4 Factor * Coverage Level Percent ^2 +<br>Beta 5 Factor * Approved Yield / Capping Reference Yield +<br>Beta 6 Factor * (Approved Yield / Capping Reference Yield)^2 +<br>Beta 7 Factor * Price Volatility Factor +<br>Beta 8 Factor * Price Volatility Factor^2 +<br>Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level Percent +<br>Beta 10 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield +<br>Beta 11 Factor * Historical Basic Unit Base Rate * Price Volatility Factor +<br>Beta 12 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield +<br>Beta 13 Factor * Coverage Level Percent * Price Volatility Factor +<br>Beta 14 Factor * (Approved Yield / Capping Reference Yield) * Price Volatility Factor ] * Unit Residual Factor X 1.1 | Historical Revenue Protection Base Premium Rate | Internal             |                     | 9999999999.99999999 | Round each intermittent Beta * calculation to 8 decimals as it has been done historically. |  |  |
|   |   | Beta 0 Factor - Beta 14 Factor                  | ADM                  |                     |                     | S99.999999999  | None   | Edit with ADM Historical Revenue Capping, "A01110".  |
|   |   | 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".<br>See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion). |
|   | When Unit Structure Code is equal to Enterprise Unit, "EU" or "EP":   | Enterprise Unit Residual Factor                 | ADM                  |                     |                     | 999.999  | None   | Edit with ADM Coverage Level Differential, "A01040".<br>See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion). |
|   | Replace 'Unit Residual Factor' with 'Enterprise Unit Residual Factor'   |   |                      |                     |                     |  |  |  |

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

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**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  
 0015 Canola 0041 Corn 0051 Grain Sorghum 0078 Sunflowers  
 0018 Rice 0043 Popcorn 0067 Dry Peas 0081 Soybeans  
 0091 Barley

| Calculations   | Field Name   | Record Number                   | Field Number | Field Format      | Field Rounding   | Rules   |   |
|--|--|---------------------------------|--------------|-------------------|--|---|---|
| Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate<br><br>[beta0 Factor +<br>Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor *<br>Historical Basic Unit Base Rate ^2 + Beta 3 Factor * Coverage Level<br>Percent +<br>= Beta 4 Factor * Coverage Level Percent ^2 +<br>Beta 5 Factor * Approved Yield / Capping Reference Yield +<br>Beta 6 Factor * (Approved Yield / Capping Reference Yield)^2 +<br>Beta 7 Factor * Price Volatility Factor +<br>Beta 8 Factor * Price Volatility Factor^2 +<br>Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level<br>Percent +<br>Beta 10 Factor * Historical Basic Unit Base Rate * Approved Yield /<br>Capping Reference Yield +<br>Beta 11 Factor * Historical Basic Unit Base Rate * Price Volatility<br>Factor +<br>Beta 12 Factor * Coverage Level Percent * Approved Yield /<br>Capping Reference Yield +<br>Beta 13 Factor * Coverage Level Percent * Price Volatility Factor +<br>Beta 14 Factor * (Approved Yield / Capping Reference Yield) *<br>Price Volatility Factor ] * Unit Residual Factor X 1.1 | 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), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion). |   |
|  | Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate   | Internal                        |              | 999999999.9999999 | Round each intermittent Beta * calculation to 8 decimals as it has been done historically. |   |   |
|  | Beta 0 Factor - Beta 14 Factor   | ADM                             |              | 599.999999999     | None   | Edit with ADM Historical Revenue Capping, "A01110".   |   |
|  | 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), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion).                                   |   |
|  | When Unit Structure Code is equal to Enterprise Unit, "EU" or "EP":<br>= 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), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion). |

**Exhibit Name:** Premium Calculation  
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**Record Name:** Acreage  
**Record Code:** P11

**Reinsurance Year:** 2021  
**Version:** Approved  
**Release Date:** 7/1/2020

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

| <u>Calculations</u>  | <u>Field Name</u>  | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u>  |
|--|--|----------------------|---------------------|---------------------|-----------------------|---|
| Capped Revenue Protection Add on Rate = $\text{MIN}(\text{Base Premium Rate} + \text{Preliminary Revenue Protection Add On Rate, Historical Revenue Protection Base Premium Rate} * 1.2^{(\text{Commodity Year} - \text{Capping Year})} - \text{Base Premium Rate}$  | Capped Revenue Protection Add on Rate                              | Internal             |                     | 999999999.99999999  | Round to 8 decimals.  | Use the Preliminary Add On Rates for Insurance Plan Code Revenue Protection, "02" or Revenue Protection with Harvest Price Exclusion, "03" from section 5, the Base Premium Rate from section 3 to calculate the Capped Revenue add on factors. |
|  | Base Premium Rate  | P11                  | 97                  | 999999.99999999     | None                  |   |
|  | Commodity Year   | P14                  | 10                  | CCYY                | None                  |   |
|  | Capping Year   | ADM                  |                     | CCYY                | None                  | Edit with ADM Historical Revenue Capping, "A01110".   |
| Capped Revenue Protection with Harvest Price Exclusion Add on Rate = $\text{MIN}(\text{Base Premium Rate} + \text{Preliminary Revenue Protection with Harvest Price Exclusion Add On Rate, Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate} * 1.2^{(\text{Commodity Year} - \text{Capping Year})} - \text{Base Premium Rate}$ | Capped Revenue Protection with Harvest Price Exclusion Add on Rate | Internal             |                     | 999999999.99999999  | Round to 8 decimal    | Use the Preliminary Add On Rates for Insurance Plan Code Revenue Protection, "02" or Revenue Protection with Harvest Price Exclusion, "03" from section 5, the Base Premium Rate from section 3 to calculate the Capped Revenue add on factors. |
|  | Base Premium Rate  | P11                  | 97                  | 999999.99999999     | None                  |   |
|  | Commodity Year   | P14                  | 10                  | CCYY                | None                  |   |
|  | Capping Year   | ADM                  |                     | CCYY                | None                  | Edit with ADM Historical Revenue Capping, "A01110".   |

Exhibit Name: Premium Calculation  
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Reinsurance Year: 2021  
 Version: Approved  
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|                            |  |  |  |
|----------------------------|--|--|--|
| <b>Insurance Plan Code</b> | 01 Yield Protection                    | 02 Revenue Protection                    | 03 Revenue Protection with Harvest Price Exclusion   |
| <b>Commodity Code</b>      | 0011 Wheat<br>0015 Canola<br>0018 Rice | 0021 Cotton<br>0041 Corn<br>0043 Popcorn | 0047 Dry Beans<br>0051 Grain Sorghum<br>0067 Dry Peas<br>0075 Peanuts<br>0078 Sunflowers<br>0081 Soybeans<br>0091 Barley |

| <u>Calculations</u> | <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

Section 7: Whole Farm Unit Base Premium Rate

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.

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 = Revenue Lookup Rate * Revenue Lookup Adjustment Factor   | Lookup Rate                         | Internal |  | 9999999999.9999 | Round to 4 decimals. |  |
|  | Revenue Lookup Rate                 | Internal |  | 9999999999.9999 | Round to 4 decimals. | From Section 3.  |
|  | Revenue Lookup Adjustment Factor    | Internal |  | 9.99999999      | None                 | From Section 2.  |
| $\text{Mean Quantity}_{\text{commodityj}} = \frac{\text{Mean Quantity}_{\text{commodityj}}}{\text{Rate}_{\text{commodityj}}}$ WHERE $\text{Lookup Rate}_{\text{commodityj}} = \text{Base}$ | Mean Quantity <sub>commodityj</sub> | ADM      |  | 999.99999999    | None                 | Edit with ADM Combo Revenue Factor, "A01030".<br><br>Search the Combo Revenue Factor, "A01030" for the Mean Quantity, When the Lookup Rate = Base Rate |
|  | Lookup Rate <sub>commodityj</sub>   | Internal |  | 9.9999          | None                 |  |
|  | Base Rate <sub>commodityj</sub>     | ADM      |  | 9.9999          | None                 | Edit with ADM Combo Revenue Factor, "A01030".  |





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

| Calculations   | Field Name   | Record Number | Field Number | Field Format         | Field Rounding        | Rules  |
|--|--|---------------|--------------|----------------------|-----------------------|--|
| $\sum_{i=1}^{500} \text{Round}(\text{MAX}(0, \sum_{j=\text{all Commodities}} \text{Acres}_{\text{commodityj}} * \text{covl}_{\text{commodityj}} * \text{ProjPrice}_{\text{commodityj}} * \text{Round}(\text{MIN}(2 * \text{Round}(\text{MAX}(\text{ProjPrice}_{\text{commodityj}} * \text{PriceVolatility}_{\text{commodityj}} * \text{PriceVolatility}_{\text{commodityj}} + \text{LnMean}_{\text{commodityj}}), 12)), 12)), 12) - \sum_{j=\text{all Commodities}} \text{Round}(\text{MAX}(0, \text{Round}(\text{Yield}_{\text{commodityji}} * \text{AdjStdDev}_{\text{commodityj}} + \text{AdjMean}_{\text{commodityj}, 12}), 12) * \text{Round}(\text{MIN}(2 * \text{ProjPrice}_{\text{commodityj}} * \text{Round}(\text{e}^{(\text{Price}_{\text{commodityji}} * \text{PriceVolatility}_{\text{commodityj}} + \text{LnMean}_{\text{commodityj}}), 12)), 12) * \text{Round}(\text{Acres}_{\text{commodityj}, 12}), 12)$ | Simulated Revenue Protection Losses Whole Farm (SimRPLossesWF) | Internal      |              | 999999999.9999999999 | Round to 12 decimals. | Simulated Revenue Protection Losses for All Commodity/Acreage report line in the Whole Farm Unit.  |
|  | Coverage Level Percent (covlv)                                 | P14           | 34           | 9.9999               | None                  | For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion).   |
|  | Approved Yield (AY)  | P11           | 42           | 99999999.99          | None                  | Approved Yield for each Commodity/Acreage report line in the Whole Farm Unit.<br><br>For APH Trend, Quality Loss, Yield Cup, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.<br><br>For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied. |
|  | Reported Acreage (Acres)                                       | P11           | 48           | 999999.99            | None                  | Reported Acreage must equal the sum of all Land, P27, Reported Acreage.<br><br>Reported Acreage for each Commodity/Acreage report line in the Whole Farm Unit.   |
|  | Projected Price or Contract Price (ProjPrice)                  | ADM           |              | 99999.9999           | None                  | Edit with ADM Price, "A00810".<br><br>Projected Price or Contract Price for each Commodity/Acreage report line in the Whole Farm Unit.   |
|  | Price Draw Quantity (Price)                                    | ADM           |              | S99.999999999        | None                  | Price Draw Quantity for each Commodity /Acreage report line in the Whole Farm Unit.  |
|  | Price Volatility Factor  | Internal      |              | 999999.999999999     | None                  | Price Volatility Factor for each Commodity/Acreage report line in the Whole Farm Unit.   |
|  | Log Mean (LnMean)  | Internal      |              | 999999.999999999     | None                  | Log Mean for each Commodity/Acreage report line in the Whole Farm Unit.  |
|  | Yield Draw Quantity (Yield)                                    | ADM           |              | S99.999999999        | None                  | Yield Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.   |



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**Release Date:** 7/1/2020

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

| <u>Calculations</u>   | <u>Field Name</u>  | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u>   | <u>Field Rounding</u> | <u>Rules</u>  |
|---|--|----------------------|---------------------|-----------------------|-----------------------|---|
| $\sum_{i=1}^{500} \text{Round}(\text{MAX}(0, \sum_{j=\text{all commodities}} \text{covl}_{\text{commodityj}} * \text{AY}_{\text{commodityj}} * \text{ProjPrice}_{\text{commodityj}} * \text{Acres}_{\text{commodityj}}) - \sum_{j=\text{all commodities}} \text{Round}(\text{MAX}(0, \text{Round}(\text{Yield}_{\text{commodityj}} * \text{AdjStdDev}_{\text{commodityj}} + \text{AdjMean}_{\text{commodityj},12}), 12) * \text{Round}(\text{MIN}(2 * \text{ProjPrice}_{\text{commodityj}} * \text{Round}(e^{(\text{Price}_{\text{commodityj}} * \text{Price Volatility Factor}_{\text{commodityj}} + \text{LnMean}_{\text{commodityj}}), 12)), 12) * \text{Round}(\text{Acres}_{\text{commodityj},12}), 12))$ <p>Simulated Revenue Protection Harvest Price Excluded Losses Whole Farm</p> | Simulated Revenue Protection Harvest Price Excluded Losses Whole Farm (SimRPhpeLossesWF) | Internal             |                     | 9999999999.9999999999 | 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> (covlv)                                     | P14                  | 34                  | 9.9999                | None                  | For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion).  |
|   | Approved Yield <sub>commodityj</sub> (AY)  | P11                  | 42                  | 99999999.99           | None                  | Approved Yield for each Commodity/Acreage report line in the Whole Farm Unit.<br><br>For APH Trend, Yield Cup, Quality Loss, Yield Cup, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.<br><br>For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied. |
|   | Reported Acreage <sub>commodityj</sub> (Acres)   | P11                  | 48                  | 999999.99             | None                  | Reported Acreage must equal the sum of all Land, P27, Reported Acreage.<br><br>Reported Acreage for each Commodity/Acreage report line in the Whole Farm Unit.  |
|   | Projected Price or Contract Price <sub>commodityj</sub> (ProjPrice)                      | ADM                  |                     | 99999.9999            | None                  | Edit with ADM Price, "A00810".<br><br>Projected Price or Contract Price (as addressed in Section 1) for each Commodity/Acreage report line in the Whole Farm Unit.  |
|   | Yield Draw Quantity <sub>commodityj</sub> (Yield)  | ADM                  |                     | 599.999999999         | None                  | Yield Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.  |
|   | Adjusted Standard Deviation Quantity <sub>commodityj</sub> (AdjStnDev)                   | Internal             |                     | 9999999999.99999999   | None                  | Adjusted Standard Deviation Quantity for each Commodity/Acreage report line in the Whole Farm Unit.   |
|   | Adjusted Mean Quantity <sub>commodityj</sub> (AdjMean)                                   | Internal             |                     | 9999999.9999999999    | None                  | Adjusted Mean Quantity for each Commodity/Acreage report line in the Whole Farm Unit.   |



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

| Calculations   | Field Name  | Record Number | Field Number | Field Format       | Field Rounding       | Rules  |
|--|---|---------------|--------------|--------------------|----------------------|--|
| $\text{Revenue Protection Whole Farm Rate} = \frac{\sum_{j=\text{all commodities}} (\text{covl}_{\text{commodityj}} * \text{AY}_{\text{commodityj}} * \text{ProjPrice}_{\text{commodityj}} * \text{Acres}_{\text{commodityj}})}{\text{SimRPLossesWF} 500}$                                 | Coverage Level Percent <sub>commodityj</sub> (covl)                 | P14           | 34           | 9.9999             | None                 | For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion). |
|  | Revenue Protection Whole Farm Rate                                  | Internal      |              | 999999999.99999999 | Round to 8 decimals. |  |
|  | Projected Price or Contract Price <sub>commodityj</sub> (ProjPrice) | ADM           |              | 99999.9999         | None                 | Edit with ADM Price, "A00810".<br>Projected Price or Contract Price (as addressed in Section 1) for each Commodity/Acreage report line in the Whole Farm Unit.   |
| $\text{Revenue Protection with Harvest Price Exclusion Whole Farm Rate} = \frac{\sum_{j=\text{all commodities}} (\text{covl}_{\text{commodityj}} * \text{AY}_{\text{commodityj}} * \text{ProjPrice}_{\text{commodityj}} * \text{Acres}_{\text{commodityj}})}{\text{SimRPhpeLossesWF} 500}$ | Coverage Level Percent <sub>commodityj</sub> (covl)                 | P14           | 34           | 9.9999             | None                 | For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "QL" (Quality Loss), and "YE" (Yield Exclusion).                   |
|  | Revenue Protection with Harvest Price Exclusion Whole Farm Rate     | Internal      |              | 999999999.99999999 | Round to 8 decimals. |  |
|  | Projected Price or Contract Price <sub>commodityj</sub> (ProjPrice) | ADM           |              | 99999.9999         | None                 | Edit with ADM Price, "A00810".<br>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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 Version: Approved  
 Release Date: 7/1/2020

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

| <u>Calculations</u>  | <u>Field Name</u>            | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|--|------------------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
| When Insurance Plan Code equals Revenue Protection, "02":<br><br>$\text{Whole Farm Base Premium Rate} = \text{Revenue Protection Whole Farm Rate}$   | Whole Farm Base Premium Rate | Internal             |                     | 999999999.99999999  | None                  |              |
| When Insurance Plan Code equals Revenue Protection with Harvest Price Exclusion, "03":<br><br>$\text{Whole Farm Base Premium Rate} = \text{Revenue Protection with Harvest Price Exclusion Whole Farm Rate}$ | Whole Farm Base Premium Rate | Internal             |                     | 999999999.99999999  | None                  |              |

**Section 8: Premium Rate**

The Premium Rate for ALL Unit Structures should be capped at .999 in the event various adjustments to the Base Premium Rate would cause it to exceed 1.0.

|  |                        |          |  |                    |                      |   |
|--|------------------------|----------|--|--------------------|----------------------|---|
| When Unit Structure Code equals Whole Farm Unit, "WU":<br><br>$\text{Premium Rate} = \text{MIN}(.999, \text{Round}(\text{Whole Farm Base Premium Rate} * \text{Sum}((\text{Reported Acreage} * \text{Multiplicative Optional Rate Adjustment Factor}) / \text{Sum}(\text{Total Reported Acreage}) \text{ for Whole Farm including Prevented Planting}) + \text{Sum}((\text{Reported Acreage} * \text{Additive Optional Rate Adjustment Factor}) / \text{Sum}(\text{Total Reported Acreage}) \text{ for Whole Farm including Prevented Planting}), 8))$ | Premium Rate           | Internal |  | 999999999.99999999 | Round to 8 decimals. | Premium Rate is capped at 0.99900000. For situations where the option factors vary by Commodity, a reported Acreage weighted average of the Option Factors should be used to determine the Multiplicative and Additive Optional Rate adjustments to be used in the computation of the Premium Rate for Whole Farm Unit. |
|  | Total Reported Acreage | Internal |  | 99999999.99        | None                 | Total Reported Acreage for the Whole Farm including Prevented Planting.   |



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

**Calculations**

| <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

**Section 9: Total Premium Amount, Subsidy Amount, and Producer Premium Amount**

|  |  |          |    |            |                        |   |
|--|--|----------|----|------------|------------------------|---|
| $\text{Preliminary Total Premium} = \text{Premium Liability Amount} * \text{Premium Rate} * \text{Experience Factor} * \text{Premium Surcharge Percent} * \text{Total Premium Multiplicative Optional Rate Adjustment Factor}$ | Preliminary Total Premium                                    | Internal |    | 9999999999 | Round to whole number. |   |
|  | Experience Factor  | P11      | 47 | 9.999      | None                   | Experience Factor is only applicable for Insurance Plan Code Yield Protection, "01".  |
|  | Premium Surcharge Percent                                    | Internal |    |            |                        | Use when the Approved Yield Had a Cup or Surcharge applied.<br><br>Does not apply when option "YC" is elected. Set to 1.00.             |
|  | 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. |
| $\text{Total Premium Amount} = \text{Preliminary Total Premium} * \text{Multiple Commodity Adjustment Factor}$   | Total Premium Amount   | P11      | 95 | 9999999999 | 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.   |
| $\text{Subsidy Amount} = \text{Total Premium Amount} * \text{Subsidy Percent}$   | Subsidy Amount   | P11      | 93 | 9999999999 | Round to whole number. | If this record qualifies for Beginning Farmer and Rancher or Native Sod, see Section 18 for subsidy calculations.                       |
|  | Subsidy Percent  | ADM      |    | 9.999      | None                   | Edit with ADM Subsidy Percent, "A00070".  |
| $\text{Producer Premium Amount} = \text{Total Premium Amount} - \text{Subsidy Amount}$   | Producer Premium Amount                                      | P11      | 94 | 9999999999 | Round to whole number. |   |

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

| <u>Calculations</u> | <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
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**Cottonseed Endorsement Option 'SE'**

Information (Approved Yield, Reported Acreage, Insured Share Percent) will be obtained from Cotton P11 record and Rate Yield from P15 record associated with the Cottonseed record. CAT does not apply to Plan 01 Cottonseed. Unit Structure Code 'WU' does not apply to Cottonseed.

**Section 10: Liability Calculation**

|  |                                   |          |    |             |                        |  |
|--|-----------------------------------|----------|----|-------------|------------------------|--|
| Modified Yield = Approved Yield * Option Conversion Factor   | Modified Yield                    | Internal |    | 99999999.99 | 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 record with skip row (yield conversion factor) applied. |
|  | Option Conversion Factor          | ADM      |    | 9.9999      | None                   | Edit with ADM Option Rate, "A01060".   |
| Premium Guarantee Per Acre Amount = Modified Yield * Coverage Level Percent  | Premium Guarantee Per Acre Amount | Internal |    | 99999999.99 | Round to whole number. |  |
|  | Coverage Level Percent            | P14      | 34 | 9.9999      | None                   |  |
| When Guarantee Adjustment Type Code equals Late Planting, "L" OR Prevented Planting, "P":<br><br>Guarantee Per Acre Amount = Premium Guarantee Per Acre Amount * Guarantee Adjustment Factor | Guarantee Per Acre Amount         | Internal |    | 99999999.99 | Round to whole number. |  |
|  | Guarantee Adjustment Factor       | P11      | 69 | 0.999       | None                   | Edit with the Guarantee Adjustment ICE, "D00068" or ADM Guarantee Adjustment, "A01220" for Prevented Planting.   |
| Price Election Amount = Projected Price * Price Election Percent   | Price Election Amount             | Internal |    | 9999.9999   | None                   | Cottonseed will equal the Projected Price from ADM regardless of Price Election Percent for Cotton Lint.   |
|  | Projected Price                   | ADM      |    | 99999.9999  |                        |  |
|  | Price Election Percent            | ICE      |    | 9.9999      | None                   | Will always be 1.000 for Cottonseed.   |
| Premium Total Guarantee Amount = Premium Guarantee Per Acre Amount * Price Election Amount * Reported Acreage  | Premium Total Guarantee Amount    | Internal |    | 99999999.99 | Round to 2 decimals.   |  |
|  | Price Election Amount             | Internal |    | 9999.9999   | None                   |  |
|  | Reported Acreage                  | P11      | 48 | 99999999.99 | None                   | From Cotton P11 record.  |

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

| <u>Calculations</u>   | <u>Field Name</u>        | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u>  | <u>Rules</u>            |
|---|--------------------------|----------------------|---------------------|---------------------|------------------------|-------------------------|
| Total Guarantee Amount = Guarantee Per Acre Amount * Price Election Amount * Reported Acreage | Total Guarantee Amount   | P11                  | 103                 | 99999999.99         | Round to 2 decimals.   |                         |
|   | Price Election Amount    | Internal             |                     | 9999.9999           | None                   |                         |
|   | Reported Acreage         | P11                  | 48                  | 999999.99           | None                   | From Cotton P11 record. |
| Premium Liability Amount = Premium Total Guarantee Amount * Insured Share Percent             | Premium Liability Amount | Internal             |                     | 9999999999          | Round to whole number. |                         |
|   | Insured Share Percent    | P11                  | 43                  | 9.9999              | None                   | From Cotton P11 record. |
| Liability Amount = Total Guarantee Amount * Insured Share Percent                             | Liability Amount         | P11                  | 94                  | 9999999999          | Round to whole number. |                         |
|   | Insured Share Percent    | P11                  | 43                  | 9.9999              | None                   | From Cotton P11 record. |

**Section 11: Premium Rate**

|  |  |          |  |                    |                      |   |
|--|--|----------|--|--------------------|----------------------|---|
| MIN(.999, Base Premium Rate * Unit Structure Discount<br>Premium Rate = Factor * Multiplicative Optional Rate Adjustment Factor+<br>Additive Optional Rate Factor) | Premium Rate                                   | Internal |  | 999999999.99999999 | Round to 8 decimals. | To Determine the Premium Rate for the Cottonseed records:<br>1) Use the Rate Yield as determined under normal procedures.<br>2) Process the Rate Yield through section 3 of these procedures using the rating components for regular Cotton offer.<br>If Yield Exclusion, Yield Cup, or Quality Loss is elected, see section 24 for the current year base premium rate calculation when the Effective Coverage Level exceeds the MAX ADM coverage level.<br>3) Find the Unit Structure Discount Factor to be applied later from section 2 of these procedures for regular Cotton offer.<br>4) Find the applicable Option Factors to be applied later from section 4 for regular Cotton offer.<br>5) Sections 5, 6, 7 are not applicable for Cottonseed records. |
|  | Multiplicative Optional Rate Adjustment Factor | Internal |  | 999999.9999        |                      |   |
|  | Additive Optional Rate Adjustment Factor       | Internal |  |                    | 999999.9999          |   |

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

**Calculations**

| <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

**Section 12: Total Premium Amount, Subsidy Amount, and Producer Premium Amount**

|   |                                      |          |    |            |                        |   |
|---|--------------------------------------|----------|----|------------|------------------------|---|
| $\text{Preliminary Total Premium} = \frac{\text{Premium Liability Amount} * \text{Premium Rate} * \text{Experience Factor}}{\text{Factor} * \text{Premium Rate Surcharge Percent}}$ | Preliminary Total Premium            | Internal |    | 9999999999 | Round to whole number. |   |
|   | Experience Factor                    | P11      | 47 | 9.999      | None                   | Experience Factor is only applicable for Insurance Plan Code Yield Protection, "01".                              |
|   | Premium Rate Surcharge Percent       |          |    |            |                        | Does not apply when option "YC" is elected. Set to 1.00.  |
| $\text{Total Premium Amount} = \frac{\text{Preliminary Total Premium} * \text{Multiple Commodity Adjustment Factor}}$   | Total Premium Amount                 | P11      | 95 | 9999999999 | Round to whole number. |   |
|   | Multiple Commodity Adjustment Factor | ICE      |    | 9999.999   | None                   | Edit with ICE Multiple Cropping, "D00063".  |
| $\text{Subsidy Amount} = \text{Total Premium Amount} * \text{Subsidy Percent}$  | Subsidy Amount                       | P11      | 93 | 9999999999 | Round to whole number. | If this record qualifies for Beginning Farmer and Rancher or Native Sod, see Section 18 for subsidy calculations. |
|   | Subsidy Percent                      | ADM      |    | 9.999      | None                   | Edit with ADM Subsidy Percent, "A00070".  |
| $\text{Producer Premium Amount} = \text{Total Premium Amount} - \text{Subsidy Amount}$  | Producer Premium Amount              | P11      | 94 | 9999999999 | Round to whole number. |   |

APH Yield Trend (Trend Adjustment Option 'TA'), Yield Cup (Option 'YC'), Quality Loss (Option 'QL'), and Yield Exclusion (Option 'YE')

Trend Adjustment Option (TA), Yield Cup Option (YC), Quality Loss Option (QL), and Yield Exclusion Option (YE) ONLY available in select counties for selected crops. See "white papers" for examples.

**Section 13: Effective Coverage Level Calculation**

When Commodity Code equals Dry Beans "0047" and Type Code equals Contract "62", or Commodity Code equals Dry Peas "0067" and Type Code equals Spring Contract "98":

|   |                                  |          |    |             |                      |  |
|---|----------------------------------|----------|----|-------------|----------------------|--|
| $\text{Effective Coverage Level Percent} = \frac{\text{Coverage Level Percent} * \text{Round}(\text{Approved Yield} * \text{Contract Price}, 0) / \text{Adjusted Yield}}$ | Effective Coverage Level Percent | Internal |    | 99.9999     | Round to 2 decimals. |  |
|   | Coverage Level Percent           | P14      | 34 | 9.9999      | None                 |  |
|   | Approved Yield                   | P11      | 42 | 99999999.99 | None                 | For APH Trend, Yield Cup, Quality Loss, and Yield Exclusion, the Approved Yield will be the greater of the calculated Approved Yield and the Adjusted Yield. |
|   | Contract Price                   | P11      | 46 | 9999.9999   | None                 |  |
|   | Adjusted Yield                   | P15      | 44 | 99999999.99 | None                 |  |

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

| <u>Calculations</u> | <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

For all others:

|   |                                  |          |    |             |                              |  |
|---|----------------------------------|----------|----|-------------|------------------------------|--|
| Effective Coverage Level Percent = Coverage Level Percent * Approved Yield/Adjusted Yield | Effective Coverage Level Percent | Internal |    | 99.9999     | Rounded to 2 decimal places. |  |
|   | Coverage Level Percent           | P14      | 34 | 9.9999      | None                         |  |
|   | Approved Yield                   | P11      | 42 | 99999999.99 | None                         | For APH Trend, Yield Cup, Quality Loss, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield.   |
|   | Adjusted Yield                   | P15      | 44 | 99999999.99 | None                         | For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.<br>For skip row commodities, the adjusted yield is the converted adjusted yield from the P15 record with skip row (yield conversion factor) applied. |

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

| <u>Calculations</u> | <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

**Section 14: Rate Differential Factor**

When Trend Adjustment Option (TA) was chosen and yield reflects a trend or when Yield Cup Option (YC) was chosen or when Quality Loss Option (QL) was chosen or when Yield Exclusion Option (YE) was chosen.

**When the Insurance Option Code List contains Options "QL", "YE" or "YC":**

|   |                                      |          |  |             |                           |  |
|---|--------------------------------------|----------|--|-------------|---------------------------|--|
| $\text{Rate Differential Factor} = (1 + (\text{ROUND}(\text{MIN}((\text{MAX}(0.85, \text{Effective Coverage Level Percent}) - 0.85) / 0.15), 1)^3, 7)) * 0.05 * (\text{Round}(\text{Base Rate Differential Factor} + (\text{Upper Bound Rate Differential Factor} - \text{Lower Bound Rate Differential Factor}) * (\text{Effective Coverage Level Percent} - \text{Floored Effective Coverage Level Percent}) * 20, 9))$ | Rate Differential Factor             | Internal |  | 9.999999999 | Round to 9 decimal places |  |
|   | Base Rate Differential Factor        | ADM      |  | 9.999999999 | None                      | 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 Coverage Level. Edit with ADM Coverage Level Differential, "A01040".  |
|   | Upper Bound Rate Differential Factor | ADM      |  | 9.999999999 | None                      | Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level.<br>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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| <b>Insurance Plan Code</b> | 01 Yield Protection                    | 02 Revenue Protection                    | 03 Revenue Protection with Harvest Price Exclusion   |
| <b>Commodity Code</b>      | 0011 Wheat<br>0015 Canola<br>0018 Rice | 0021 Cotton<br>0041 Corn<br>0043 Popcorn | 0047 Dry Beans<br>0051 Grain Sorghum<br>0067 Dry Peas<br>0075 Peanuts<br>0078 Sunflowers<br>0081 Soybeans<br>0091 Barley |

| Calculations   | Field Name                           | Record Number | Field Number | Field Format | Field Rounding            | Rules  |
|--|--------------------------------------|---------------|--------------|--------------|---------------------------|--|
| <b>When Trend Adjustment Option "TA" is elected alone (excludes "YC" and "YE")</b>   |                                      |               |              |              |                           |  |
| Rate Differential Factor =<br>$\text{Round}(\text{Base Rate Differential Factor} + (\text{Upper Bound Rate Differential Factor} - \text{Lower Bound Rate Differential Factor}) * (\text{Effective Coverage Level Percent} - \text{Floored Effective Coverage Level Percent}) * 20, 9)$ | Rate Differential Factor             | Internal      |              | 9.999999999  | Round to 9 decimal places |  |
|  | Base Rate Differential Factor        | ADM           |              | 9.999999999  | None                      | 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 Coverage Level. Edit with ADM Coverage Level Differential, "A01040".  |
|  | Upper Bound Rate Differential Factor | ADM           |              | 9.999999999  | None                      | Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level.<br>If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.                                       |
|  | Lower Bound Rate Differential Factor | ADM           |              | 9.999999999  | None                      | Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".<br>If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent.<br>If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level.<br>If the Effective Coverage Level Percent 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                      |  |







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

| <u>Calculations</u> | <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

**Section 15: Unit Residual Factor**

The lookup/interpolation/extrapolation procedure for 'Unit Residual Factor and Prior Unit Residual Factor' when Trend Adjustment Option (TA) was chosen and yield reflects a trend or when Yield Cup Option was chosen or when Quality Loss Option (QL) was chosen 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:

|  |                                  |          |  |         |                            |   |
|--|----------------------------------|----------|--|---------|----------------------------|---|
| $\text{Unit Residual Factor} = \frac{\text{Round}(\text{Base Unit Residual Factor} + (\text{Upper Bound Unit Residual Factor} - \text{Lower Bound Unit Residual Factor}) * (\text{Effective Coverage Level Percent} - \text{Floored Effective Coverage Level Percent}) * 20, 3)}{\text{Effective Coverage Level Percent}}$ | 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 regardless of Coverage Type Code where applicable (Buy-up/CAT).  |
|  | Base Unit Residual Factor        | ADM      |  | 999.999 | None                       | Base Unit Residual Factor is equal to 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 Unit Residual Factor | ADM      |  | 999.999 | None                       | Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".<br>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 this will be based on the higher ADM Coverage Level.<br>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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| <b>Insurance Plan Code</b> | 01 Yield Protection                    | 02 Revenue Protection                    | 03 Revenue Protection with Harvest Price Exclusion   |
| <b>Commodity Code</b>      | 0011 Wheat<br>0015 Canola<br>0018 Rice | 0021 Cotton<br>0041 Corn<br>0043 Popcorn | 0047 Dry Beans<br>0051 Grain Sorghum<br>0067 Dry Peas<br>0075 Peanuts<br>0078 Sunflowers<br>0081 Soybeans<br>0091 Barley |

| <u>Calculations</u>  | <u>Field Name</u>                           | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u>      | <u>Rules</u>   |
|--|---|----------------------|---------------------|---------------------|----------------------------|--|
|  | 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".  |
| $\text{Prior Year Unit Residual Factor} = \frac{\text{Round}(\text{Base Prior Year Unit Residual Factor} + (\text{Upper Bound Prior Year Unit Residual Factor} - \text{Lower Bound Prior Year Unit Residual Factor}) * (\text{Effective Coverage Level Percent} - \text{Floored Effective Coverage Level Percent}) * 20, 3)}{\text{Effective Coverage Level Percent}}$ | 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".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level.<br>If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.   |
|  | 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".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level.<br>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                       |  |



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

**Calculations**

| <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

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:

|   |   |          |  |         |                            |  |
|---|---|----------|--|---------|----------------------------|--|
| $\text{Enterprise Unit Residual Factor} = \frac{\text{Round}(\text{Base Enterprise Unit Residual Factor} + (\text{Upper Bound Enterprise Unit Residual Factor} - \text{Lower Bound Enterprise Unit Residual Factor}) * (\text{Effective Coverage Level Percent} - \text{Floored Effective Coverage Level Percent}) * 20, 3)}{\text{Enterprise Unit Residual Factor}}$ | 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 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".  |
|   | Upper Bound Enterprise Unit Residual Factor | ADM      |  | 999.999 | None                       | Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".<br>If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent.<br>If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level.<br>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. |





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

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

| <u>Calculations</u>   | <u>Field Name</u>                                      | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u>   |
|---|--|----------------------|---------------------|---------------------|-----------------------|--|
| Round(Base Enterprise Prior Year Unit Residual Factor +<br>Prior Year Enterprise Unit (Upper Bound Prior Year Enterprise Unit Residual Factor -<br>Residual Factor = Lower Bound Prior Year Enterprise Unit Residual Factor) *<br>(continued) (Effective Coverage Level Percent - Floored Effective<br>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".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level.<br>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".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level.<br>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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|                            |  |  |  |
|----------------------------|--|--|--|
| <b>Insurance Plan Code</b> | 01 Yield Protection                    | 02 Revenue Protection                    | 03 Revenue Protection with Harvest Price Exclusion   |
| <b>Commodity Code</b>      | 0011 Wheat<br>0015 Canola<br>0018 Rice | 0021 Cotton<br>0041 Corn<br>0043 Popcorn | 0047 Dry Beans<br>0051 Grain Sorghum<br>0067 Dry Peas<br>0075 Peanuts<br>0078 Sunflowers<br>0081 Soybeans<br>0091 Barley |

| <u>Calculations</u>  | <u>Field Name</u>                                      | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u>   |
|--|--|----------------------|---------------------|---------------------|-----------------------|--|
| $\text{Prior Year Whole Farm Unit Residual Factor} = \frac{\text{Round}(\text{Base Whole Farm Prior Year Unit Residual Factor} + (\text{Upper Bound Prior Year Whole Farm Unit Residual Factor} - \text{Lower Bound Prior Year Whole Farm Unit Residual Factor}) * (\text{Effective Coverage Level Percent} - \text{Floored Effective Coverage Level Percent}) * 20, 3)}{\text{Effective Coverage Level Percent}}$ | 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".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level.<br>If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.   |
|  | 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".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level.<br>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                  |  |







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

| Calculations | Field Name | Record Number | Field Number | Field Format | Field Rounding | Rules |
|--------------|------------|---------------|--------------|--------------|----------------|-------|
|--------------|------------|---------------|--------------|--------------|----------------|-------|

When Unit Structure Code is equal to Basic Unit, 'BU', use the following calculation for Unit Structure Discount Factor:

|  |   |          |  |             |                            |  |
|--|---|----------|--|-------------|----------------------------|--|
| Unit Structure Discount Factor = $\text{Round}(\text{Base Coverage Level Percent Basic Unit Discount Factor} + (\text{Upper Bound Coverage Level Percent Basic Unit Discount Factor} - \text{Lower Bound Coverage Level Percent Basic Unit Discount Factor}) * (\text{Effective Coverage Level Percent} - \text{Floored Effective Coverage Level Percent}) * 20, 4)$ | Unit Structure Discount Factor                                | Internal |  | 9.999999999 | 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 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".  |
|  | Upper Bound Coverage Level Percent Basic Unit Discount Factor | ADM      |  | 9.999999999 | None                       | Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level.<br>If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.       |
|  | 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".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level.<br>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   |



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**Version:** Approved  
**Release Date:** 7/1/2020

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

**Calculations**

| <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

When Unit Structure Code is equal to Enterprise Unit, 'EU' or 'EP', use the following calculation for Unit Structure Discount Factor:

|  |  |          |  |             |                            |  |
|--|--|----------|--|-------------|----------------------------|--|
| $\text{Unit Structure Discount Factor} = \frac{\text{Round}(\text{Base Coverage Level Percent Enterprise Unit Discount Factor} + (\text{Upper Bound Coverage Level Percent Enterprise Unit Discount Factor} - \text{Lower Bound Coverage Level Percent Enterprise Unit Discount Factor}) * (\text{Effective Coverage Level Percent} - \text{Floored Effective Coverage Level Percent}) * 20, 4)}{\text{Effective Coverage Level Percent}}$ | Unit Structure Discount Factor                                     | Internal |  | 9.999999999 | Round to 4 decimal places. | Capped at 1.0  |
|  | Base Coverage Level Percent Enterprise Unit Discount Factor        | ADM      |  | 9.999999999 | 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      |  | 9.999999999 | None                       | Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level.<br>If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.       |
|  | 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".<br>If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level.<br>If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level.<br>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                       |  |



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

| <u>Calculations</u> | <u>Field Name</u> | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u> |
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|
|---------------------|-------------------|----------------------|---------------------|---------------------|-----------------------|--------------|

Downed Rice Endorsement (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 16: Liability Calculation

|   |                            |          |    |             |                        |  |
|---|----------------------------|----------|----|-------------|------------------------|--|
| Premium Liability Amount = Dollar Amount of Insurance * Reported Acreage * Insured Share Percent * Price Election Percent | Premium Liability Amount   | Internal |    | 999999999   | Round to whole number. |  |
|   | Dollar Amount of Insurance | ADM      |    | 99999       | None                   | Edit with ADM Price, "A00810", Fixed Coverage Amount with insurance option = 'DC'. |
|   | Reported Acreage           | P11      | 48 | 99999999.99 | None                   |  |
|   | Insured Share Percent      | P11      | 43 | 9.9999      | None                   | DRE insured share will always be 100% without regards to base Rice.                |
|   | Price Election Percent     | ICE      |    | 9.9999      | None                   | From base Rice P14 record.   |
| Liability Amount = Dollar Amount of Insurance * Reported Acreage * Insured Share Percent * Price Election Percent         | Liability Amount           | P11      | 94 | 999999999   | Round to whole number. |  |
|   | Dollar Amount of Insurance | ADM      |    | 99999       | None                   | Edit with ADM Price, "A00810", Fixed Coverage Amount with insurance option = 'DC'. |
|   | Reported Acreage           | P11      | 48 | 999999.99   | None                   |  |
|   | Insured Share Percent      | P11      | 43 | 9.9999      | None                   | DRE insured share will always be 100% without regards to base Rice.                |
|   | Price Election Percent     | ICE      |    | 9.9999      | None                   | From base Rice P14 record.   |

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

**Calculations**

| Field Name | Record Number | Field Number | Field Format | Field Rounding | Rules |
|------------|---------------|--------------|--------------|----------------|-------|
|------------|---------------|--------------|--------------|----------------|-------|

**Section 17: Total Premium Amount, Subsidy Amount, and Producer Premium Amount**

|   |                           |          |    |            |                        |   |
|---|---------------------------|----------|----|------------|------------------------|---|
| Preliminary Total Premium = Premium Liability Amount * Premium Rate | Preliminary Total Premium | Internal |    | 9999999999 | Round to whole number. |   |
|   | 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      | 95 | 9999999999 | Round to whole number. |   |
| Subsidy Amount = Total Premium Amount * Subsidy Percent             | Subsidy Amount            | P11      | 93 | 9999999999 | Round to whole number. | If this record qualifies for Beginning Farmer and Rancher or Native Sod, see Section 18 for subsidy calculations. |
|   | Subsidy Percent           | ADM      |    | 9.999      | None                   | Edit with ADM Subsidy Percent, "A00070". Will always be 38% for DRE.  |
| Producer Premium Amount = Total Premium Amount - Subsidy Amount     | Producer Premium Amount   | P11      | 94 | 9999999999 | Round to whole number. |   |

**Section 18: Beginning Farmer and Rancher (BFR), Veteran Farmer Rancher (VFR), Native Sod (NS) and Conservation Compliance (CC) Subsidy Calculations**

|   |                              |          |     |            |                       |  |
|---|------------------------------|----------|-----|------------|-----------------------|--|
| Base Subsidy Amount = Total Premium Amount * Subsidy Percent  | Base Subsidy Amount          | Internal |     | 9999999999 | 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/VFR Subsidy Amount = Total Premium Amount * 0.10 * (1 - CC Subsidy Reduction Percent)                               | BFR/VFR Subsidy Amount       | Internal |     | 9999999999 | Round to whole number | Beginning Farmer Rancher/Veteran 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 |     | 9999999999 | Round to whole number | If Applicable; else 0. 0.50 (50%). For CAT coverage, Native Sod Subsidy Amount is always 0.        |
| CC Subsidy Reduction Amount = Base Subsidy Amount * CC Subsidy Reduction Percent  | CC Subsidy Reduction Percent | P11      | 76  | 9.9999     | None                  | If Applicable; else 0.   |
|   | CC Subsidy Reduction Amount  | P11      | 111 | 9999999999 | Round to whole number | CC Subsidy Reduction Amount. If Applicable; else 0.  |
| Subsidy Amount = Base Subsidy Amount + BFR/VFR Subsidy Amount - Native Sod Subsidy Amount - CC Subsidy Reduction Amount | Subsidy Amount               | P11      | 93  | 9999999999 | Round to whole number | Subsidy Amount cannot exceed Total Premium Amount. Subsidy Amount will be cupped at \$0.           |
| Producer Premium Amount = Total Premium Amount - Subsidy Amount   | Producer Premium Amount      | P11      | 94  | 9999999999 | Round to whole number |  |

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

| Calculations | Field Name | Record Number | Field Number | Field Format | Field Rounding | Rules |
|--------------|------------|---------------|--------------|--------------|----------------|-------|
|--------------|------------|---------------|--------------|--------------|----------------|-------|

**Section 19: Yield Cup, Yield Exclusion, Quality Loss, and Trend APH 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)**

|  |  |          |    |                    |                       |  |
|--|--|----------|----|--------------------|-----------------------|--|
| $\text{Unadjusted Liability Amount} = \text{Round}(\frac{\text{Coverage Level Percent}}{\text{Effective Coverage Level Percent}}, 10) * \text{Premium Liability Amount}$   | Unadjusted Liability Amount                  | Internal |    | 9999999999         | Round to whole number |  |
|  | Coverage Level Percent                       | P14      | 34 | 9.9999             | None                  |  |
|  | Effective Coverage Level Percent             | Internal |    | 99.9999            |                       |  |
|  | Premium Liability Amount                     | Internal |    | 9999999999         | Round to whole number |  |
| <b>When Unit Structure Code is equal to Optional Unit, "OU", "UA" or "UD":</b><br><br>$\text{Max Coverage Level Adjustment Factor} = \frac{\text{ROUND}(1.00 / \text{Current Year Base Rate}, 8) - \text{ROUND}(\text{Unadjusted Liability Amount} / (\text{Current Year Base Rate} * \text{Premium Liability Amount}), 8) + \text{ROUND}(\text{ROUND}(\text{Base Rate Differential Factor} * \text{Base Unit Residual Factor} * \text{Base Optional Unit Structure Discount Factor} * \text{Unadjusted Liability Amount}, 8) / \text{Premium Liability Amount}, 8)}{\text{Premium Liability Amount}, 8)}$ | Max Coverage Level Adjustment Factor         | Internal |    | 999999999.99999999 | Round to 8 decimals.  |  |
|  | Unadjusted Liability Amount                  | Internal |    | 9999999999         | Round to whole number |  |
|  | Current Year Base Rate                       | Internal |    | 9999999999.99999   | Round to 8 decimals.  |  |
|  | Premium Liability Amount                     | Internal |    | 9999999999         | Round to whole number |  |
|  | Base Rate Differential Factor                | ADM      |    | 9.999999999        | None                  |  |
|  | Base Unit Residual Factor                    | ADM      |    | 999.999            | None                  |  |
|  | Base Optional Unit Structure Discount Factor | ADM      |    | 9.999999999        | 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.   |
|  | Base Basic Unit Structure Discount Factor    | ADM      |    | 9.999999999        | 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. |

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**Record Code:** P11

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**Release Date:** 7/1/2020

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

| <u>Calculations</u>                              |  | <u>Field Name</u>                              | <u>Record Number</u> | <u>Field Number</u> | <u>Field Format</u> | <u>Field Rounding</u> | <u>Rules</u>   |
|--|--|--|----------------------|---------------------|---------------------|-----------------------|--|
| Max Coverage Level Adjustment Factor (continued) | <b>When Unit Structure code is Enterprise Unit, "EU" or "EP":</b><br><br>ROUND(1.00/ Current Year Base Rate,8) –<br>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 * Unadjusted Liability Amount,8)/Premium Liability Amount,8) | Base Enterprise Unit Structure Discount Factor | ADM                  |                     | 9.999999999         | 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. |
|  |  | 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".  |
|  | <b>When Unit Structure code is Whole Farm Unit "WU":</b><br><br>ROUND(1.00/ Current Year Base Rate,8) –<br>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)                          | Unit Structure Discount Factor                 | Internal             |                     | 9.999999999         | None                  | Capped at 1.0<br>See Section 19 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), "QL" (Quality Loss), and "YE" (Yield Exclusion).  |
|  |  | 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".  |





