## Indemnity Calculations

**Exhibit Name:** Indemnity Calculations  
**Exhibit Number:** P21-13, Plans 16 & 17  
**Record Name:** Acreage Claim  
**Record Code:** P21  
**Reinsurance Year:** 2018  
**Version:** Draft  
**Release Date:** 8/1/2019

### Insurance Plan Code
- **Plan 16:** Margin Protection  
- **Plan 17:** Margin Protection with Harvest Price Option

### Commodity Code
- **0011:** Wheat  
- **0018:** Rice  
- **0041:** Corn  
- **0081:** Soybeans

<table>
<thead>
<tr>
<th>Field</th>
<th>Record Number</th>
<th>Field Number</th>
<th>Field Format</th>
<th>Field Rounding</th>
<th>Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger Margin Amount</td>
<td>Internal</td>
<td>99999999.99</td>
<td>Round to 2 decimals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Margin Amount</td>
<td>ADM</td>
<td>99999.999999</td>
<td>Edit with ADM Price, “A00810”.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coverage Level Percent</td>
<td>P14</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Revenue Amount</td>
<td>ADM</td>
<td>99999999.99</td>
<td>Round to 2 decimals</td>
<td>Edit with ADM Price, “A00810”.</td>
<td></td>
</tr>
</tbody>
</table>

### Section 1: Stage Guarantee Calculation

When Insurance Plan Code equals 16:

\[
\text{Trigger Margin Amount} = \text{Expected Margin Amount} - \left[ \left( \text{Expected Revenue Amount} - \text{Expected Margin Amount} \right) \times \left( 1.00 - \text{Coverage Level Percent} \right) \right]
\]

When Insurance Plan Code equals 17:

\[
\text{Trigger Margin Amount} = \text{Expected County Yield} \times \text{MAX} \left( \text{Projected Price}, \text{Harvest Price} \right) - \left( \text{Expected Revenue Amount} - \text{Expected Margin Amount} \right) - \left[ \text{Expected County Yield} \times \text{MAX} \left( \text{Projected Price}, \text{Harvest Price} \right) \right] \times \left( 1 - \text{Coverage Level Percent} \right)
\]

For Both Plans:

\[
\text{Acre Stage Guarantee Amount} = \text{MAX} \left( \text{Trigger Margin Amount} - \text{Final Margin Amount, 0} \right)
\]

### Section 2: Loss Guarantee Calculation

When Insurance Plan Code equals 16:

\[
\text{Loss Guarantee Amount} = \text{MIN} \left( \text{Dollar Amount of Insurance, Acre Stage Guarantee Amount} \right) \times \text{Price Election Percent} \times \text{Insured Share Percent} \times \text{Liability Adjustment Factor}
\]

When Insurance Plan Code equals 17:

\[
\text{Loss Guarantee Amount} = \text{Determined Acreage} \times \text{Insured Share Percent} \times \text{Liability Adjustment Factor}
\]

For Both Plans:

\[
\text{Liability Adjustment Factor} = \text{Price Election Percent} \times \text{Liability Adjustment Factor}
\]
### Indemnity Calculations

#### Exhibit Name: Indemnity Calculations  
#### Exhibit Number: P21-13, Plans 16 & 17  
#### Record Name: Acreage Claim  
#### Record Code: P21  
#### Reinsurance Year: 2018  
#### Version: Draft  
#### Release Date: 8/1/2019

<table>
<thead>
<tr>
<th>Ins</th>
<th>Plan Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ins</td>
<td>16 Margin Protection</td>
<td>17 Margin Protection with Harvest Price Option</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commodity Code</th>
<th>Record Name</th>
<th>Version</th>
<th>Release Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0011 Wheat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0018 Rice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0041 Corn</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0081 Soybeans</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Insurance Plan Code

- **Insurance Plan Code**: 16 Margin Protection  
- **Ins 17 Margin Protection with Harvest Price Option**

#### Calculations

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Record Number</th>
<th>Field Number</th>
<th>Field Format</th>
<th>Field Rounding</th>
<th>Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Dollar Amount of Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAX(Projected Price, Harvest Price) * Expected County Yield * Coverage Level Percent * Price Election Percent</td>
<td>Internal</td>
<td></td>
<td>99999999.99</td>
<td>None</td>
<td>Calculated Value. This is not the Dollar Amount of Insurance used to determine the P11 liability.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loss Guarantee Amount</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN(Final Dollar Amount of Insurance, Acre Stage Guarantee Amount * Price Election Percent) * Determined Acreage * Insured Share Percent * Liability Adjustment Factor</td>
<td>Loss Guarantee Amount</td>
<td>P21</td>
<td>60</td>
<td>99999999.99</td>
<td>Round to whole number</td>
</tr>
</tbody>
</table>

**Section 3: Indemnity Calculation**

**With Base (companion) policy (all unit structures):**

1. **Preliminary Indemnity Amount** = MIN(MAX(Loss Guarantee Amount - Base (Companion) Policy Preliminary Indemnity Amount, 0), Loss Guarantee Amount)

2. **Indemnity Amount** = Preliminary Indemnity Amount

**With Enterprise Unit:**

1. **Preliminary Indemnity Amount** = MIN(MAX(Loss Guarantee Amount - Base (Companion) Policy Preliminary Indemnity Amount, 0), Loss Guarantee Amount)

2. **Indemnity Amount** = Preliminary Indemnity Amount

**Without Base (companion) policy:**

1. **Preliminary Indemnity Amount** = Loss Guarantee Amount

2. **Indemnity Amount** = Preliminary Indemnity Amount

**All policies:**

1. **Indemnity Amount** = Preliminary Indemnity Amount