Earthquake (EQ) coverage within the EIA Property Program is optional and available to all members who elect to purchase the coverage. The exception is Tower VI, where a $25M primary EQ limit is available to all members within this tower.

As a benefit to the members, starting in the 2016/17 program year, the Property Program provided a reduced EQ deductible for members. The application of the deductible in the event of a loss, or multiple losses, can be complicated and depends on many factors. Endorsement U-19 in the EIA Memorandum of Coverage defines the current application of the EQ deductible and this document is intended to further assist members in understanding how the EQ deductible applies under various scenarios.

Earthquake Deductible (3/31/17 to 3/31/18)
To provide some background, prior to the 2016/17 program year, the member had an EQ deductible of 5% of the total values per unit (defined below) with no maximum dollar cap. There were two key enhancements in 2016/17. The first enhancement was that while the Program’s EQ deductible remained at 5% per unit, the EIA EQ Deductible Buy-Down Credit was created, resulting in the member’s EQ deductible being reduced to a minimum of 2% per unit. The EIA Property Program is assuming the difference between the 5% per unit and the 2% per unit minimum subject to a $60M annual aggregate. The second enhancement was the addition of a $100M maximum cap on the EQ deductible.

For the 2017/18 program year, the key change to the EQ deductible was the reduction of the maximum cap from $100M to $50M, which reduced the Program’s assumed risk from $60M to $30M.

To assist with describing how the EQ deductible structure works during a given incident and how the deductible is payable to reinsurers, it is helpful to understand a few program concepts:

Definition of Unit
The units are determined/valued based on what the member provides on their application and schedule of values. Units are any of the following:

1. Each separate building or structure
2. Contents of each separate building or structure
3. Applicable time element coverage of each separate building or structure
4. Property in each yard

EIA EQ Deductible Buy-Down Credit
As introduced above, in addition to the maximum dollar cap on the EQ deductible in 2016/17, the EIA implemented a deductible buy-down credit for all members with EQ coverage except John Wayne Airport, which opted out of the buy-down credit.

For the 2017/18 policy period, the EIA is responsible for a maximum credit (subject to application of the minimum) of 3% of total values per unit, per occurrence, per covered party, subject to a maximum of $30M per occurrence and annual aggregate. The 3% buy-down credit will adjust higher to apply the minimum deductible and will adjust lower if the maximum deductible is reached.

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The maximum EIA deductible buy down credit of $30M is funded annually from the Catastrophic Risk Pool. The Catastrophic Risk Pool is also responsible for funding Flood losses within the 100-yr flood zone, subject to a maximum $4M aggregate for the 2017/18 policy period. Funding for the Catastrophic Risk pool is at the discretion of the Property Committee and is currently being funded at $2.5M annually as part of the members’ premium.

**Explanation of How to Calculate Deductible Payment**

In the event of an EQ loss during the 2017/18 policy year, the EQ deductible is payable to reinsurers as follows:

- 5% of the total values per unit, per occurrence subject to a minimum deductible of $100k and a $50M maximum for Towers I, II, III, IV, and V combined less the **EIA Buy-Down Credit.**

- 5% of the total values per unit, per occurrence subject to a minimum deductible of $100k and a $50M maximum for Towers VI less the **EIA Buy-Down Credit.**

- 5% of the total values per unit, per occurrence subject to a minimum deductible of $100k and a $50M maximum for Towers VII less the **EIA Buy-Down Credit.**

- 5% of the total values per unit, per occurrence subject to a minimum deductible of $100k and a $50M maximum for Orange County less the **EIA Buy-Down Credit** as described below and a separate 5% of total values per unit, per occurrence subject to a minimum deductible of $100k for John Wayne Airport in Tower VIII. No **EIA Buy-Down Credit** applies to John Wayne Airport since they opted not to purchase the buy-down credit.

*the buy-down credit will absorb the difference between 2% and the minimum, if applicable. For example, if a loss were to occur at a building with $1M in TIV, the 2% deductible is $20k and the EIA will make up the difference of $80k – effectively an 8% contribution.*

**EQ Deductible Structure**

Below is a visual representation of the basic application of the EQ deductible and the EIA deductible buy-down credit.
In applying the EQ deductible to various scenarios, multiple variables can apply including:

1. Carrier EQ Deductible Cap = $50M per occurrence maximum
2. EIA Deductible buy-down credit = $30M per occurrence and annual aggregate
3. Number of EQ losses in a year
4. Number of Members involved
5. Number of Tower Groups (see below)

<table>
<thead>
<tr>
<th>Tower Group*</th>
<th>EQ Dollar Cap, Per Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tower I-V</td>
<td>$50M</td>
</tr>
<tr>
<td>Tower VI</td>
<td>$50M</td>
</tr>
<tr>
<td>Tower VII</td>
<td>$50M</td>
</tr>
<tr>
<td>Tower VIII – Orange County</td>
<td>$50M</td>
</tr>
<tr>
<td>Tower VIII – John Wayne Airport</td>
<td>No Cap</td>
</tr>
</tbody>
</table>

*Due to the unique excess structure of the EQ placements for Towers I-V (shared excess limits), for Tower VI (no excess capacity), for Tower VII (dedicated excess limits for each member), and for Tower VIII (dedicated limit for Orange County) one combined $50M maximum dollar cap across all eight towers cannot be applied for all members purchasing EQ. Therefore, there are four separate tower groups that need to be taken into consideration (in certain scenarios) when applying the EQ deductible.

**Earthquake Loss Scenarios**

The following examples illustrate how the EQ deductible will apply for various loss scenarios. The scenarios provide a range from relatively simple losses that impact only one member and one tower group (i.e. 2014 Napa EQ and 2010 Baja EQ) to scenarios involving multiple members, and multiple tower groups. Some of the scenarios highlight exhaustion of the Catastrophic Risk Pool in a single year. The key takeaways for these examples are:

1. The Member’s EQ deductible will be a minimum of 2% per unit.
2. The EIA EQ deductible buy-down credit will be a maximum of 3% per unit subject to a $30M annual aggregate.
3. Depending on the number of variables that are applicable (EQ events, number of members involved, number of tower groups involved, $50M maximum cap per occurrence, and the $30M annual aggregate EIA EQ deductible buy-down credit), the effective member EQ deductible will be between 2% and 5%. However, due to the deductible buy-down credit, the member deductible will always be below 5% per unit.
4. **The scenarios below contemplate one earthquake event annually.** For the more complex scenarios involving up to five EQ events annually, the EIA has developed a template to ensure that the EQ deductible(s) and EIA EQ Buy-Down Credit is allocated equitably and in a proportional manner by member entity. This template will be posted on the EIA website and is available upon request.

**Scenario 1: $50M EQ loss to single member, single tower group**

**Step 1: EQ Deductible Application**

$200M unit values involved x 5% = $10M

**Step 2: Is EQ Deductible at 5% per unit > $50M maximum cap? (Yes/No)**

No. $10M < $50M; therefore, $10M deductible applies

**Step 3: Adjustment for EIA Buy-Down Credit**

$200M x 2% = $4,000,000

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EQ Deductible Buy-Down Credit = $200M x 3%  $6,000,000
Carrier(s) payment = $50M (loss) - $10M (deductible)  $40,000,000
Total loss  $50,000,000

Step 4: Is EIA Buy-Down Credit > $30M annually? (Yes/No)
No. Scenario 1 is complete.

Scenario 2: $50M EQ loss to two members, single tower group

Step 1: EQ Deductible Application
Member 1: $75M unit values involved x 5% = $3,750,000
Member 2: $125M unit values involved x 5% = $6,250,000

Step 2: Is combined EQ Deductible at 5% per unit > $50M maximum cap? (Yes/No)
No. $10M < $50M; therefore, $10M deductible applies

Step 3: Adjustment for EIA Buy-Down Credit
Member 1 deductible = $75M x 2% $1,500,000
Member 2 deductible = $125M x 2% $2,500,000
EQ Deductible Buy-Down Credit = $200M x 3%  $6,000,000
Carrier(s) payment = $50M (loss) - $10M (deductible)  $40,000,000
Total loss  $50,000,000

Step 4: Is EIA Buy-Down Credit > $30M? (Yes/No)
No. Scenario 2 is complete.

Scenario 3: $200M EQ loss to single member, single tower group

Step 1: EQ Deductible Application
$1.25 billion unit values involved x 5% = $62.5M

Step 2: Is EQ Deductible at 5% per unit > $50M maximum cap? (Yes/No)
Yes. $62.5M > $50M; therefore, $50M maximum cap applies

Step 3: Adjustment for EIA Buy-Down Credit at $50M cap
Member Deductible = $1.25M x 2% $25,000,000
Deductible Buy-Down Credit = $50m maximum - $25m member $25,000,000
Carrier(s) payment = $200M (loss) - $50M (deductible) $150,000,000
Total loss $200,000,000

Step 4: Is EIA Buy-Down Credit > $30M? (Yes/No)
No. $25M < $30M. Scenario 3 is complete.

Scenario 4: $200M EQ loss, three members, single tower group

Step 1: EQ Deductible Application
Member 1: $500M unit values involved x 5% = $25M
Member 2: $1B unit values involved x 5% = $50M
Member 3: $500M unit values involved x 5% = $25M
Total EQ Deductible = $100M

Step 2: Is combined EQ Deductible at 5% per unit > $50M maximum cap? (Yes/No)
Yes. $100M > $50M; therefore, $50M maximum cap applies

Step 3: Adjustment for EIA Buy-Down Credit and $50M maximum cap
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Member 1 Deductible = $500M x 2% $10,000,000
Member 2 Deductible = $1B x 2% $20,000,000
Member 3 Deductible = $500M x 2% $10,000,000
Deductible Buy-Down Credit = $50m maximum - $40m members $10,000,000
Carrier(s) payment = $200M (loss) - $50M (deductible) $150,000,000
Total loss $200,000,000

Step 4: Is EIA Buy-Down Credit > $30M? (Yes/No)
No. EIA Buy-Down Credit is $10M. Scenario 4 is complete

Scenario 5: $300M EQ loss, three members, two Tower Groups

Tower Group 1 (Towers I-V)
Step 1: EQ Deductible Application
Member 1: $1B unit values involved x 5% = $50M
Member 2: $1B unit values involved x 5% = $50M

Step 2: Is combined EQ Deductible at 5% per unit > $50M maximum cap? (Yes/No)
Yes. $100M combined > $50M. Then, $50M deductible applies.

Step 3: Tower Group I-V Adjustment for EIA buy down credit
Member 1 Deductible = $1B x 2% $20,000,000
Member 2 Deductible = $1B x 2% $20,000,000
EQ Deductible Buy-Down Credit = $50M - $40M (members) $10,000,000
Carrier(s) Payment = $150M (loss) - $50M (deductible) $100,000,000
Total $150,000,000

Step 4: Is EIA Buy-Down Credit > $30M? (Yes/No)
No. $10M < $30M. Move to Tower Group 2.

Tower Group 2 (Tower VIII – Orange County)
Step 1: EQ Deductible Application
Orange County: $1.25 billion unit values involved x 5% = $62.5M

Step 2: Is EQ Deductible at 5% per unit > $50M maximum cap? (Yes/No)
Yes. $62,500,000 > $50M. Then, reduce to $50M maximum.

Step 3: Tower Group VIII Adjustment for EIA Buy-Down Credit
Orange County = $1.25B x 2% $25,000,000
EQ Deductible Buy-Down Credit = $50m maximum - $25m OC $25,000,000
Carrier(s) Payment = $150M (loss) - $50M (deductible) $100,000,000
Total $150,000,000

Step 4: Is EIA Buy-Down Credit > $30M? (Yes/No)
No. $25M > $30M. Move to Tower Groups 1 and 2 combined.

Tower Groups 1 and 2 Combined
Step 1: Is combined EIA Buy-Down Credit >$30M
Yes. $35M combined > $30M. Then, reduce to $30M maximum and adjust member deductibles.

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Step 2: Tower Groups 1 and 2 Adjustment for EIA Buy-Down Credit

EQ Deductible Buy-Down Credit = Reduce to $30M maximum $30,000,000
Member 1 adjustment = $20M + ($5M x 20/65) $21,538,462
Member 2 adjustment= $20M + ($5M x 20/65) $21,538,642
Orange County adjustment= $25M + ($5M x 25/65) $26,923,076
Carrier(s) Payment = $300M (loss) - $100M (deductible) $200,000,000
Total loss for Tower Group I-V and Tower Group VIII $300,000,000

Step 3: Calculate Equivalent % deductible by Member

Member 1: % deductible = $21,538,462/$1B (units involved) 2.15%
Member 2: % deductible= $21,538,462/$1B (units involved) 2.15%
Orange County: % deductible= $26,923,076/$1.25B (units involved) 2.15%