

## ETH2 Staking Cover

### Cover Wording

The Mutual *may* pay a claim under this ETH2 Staking Cover if during the **cover period** one or more of the **covered validators** incur **penalties and missed rewards** greater than the **deductible** in any continuous 40 day period.

Claim payments will reimburse 100% of **penalties and missed rewards** in excess of the **deductible**, subject to a maximum claim payment of the **cover amount**.

This cover wording and any associated addendums constitute the entire cover terms and no member or the mutual as a whole shall be liable or bound to any other member in any manner by any warranties, representations or covenants outside this cover wording.

### Definitions

**Penalties and missed rewards** means;

- all deductions made from the **covered validators** on the **ETH 2 Beacon Chain**, and
- any missed consensus rewards as a result of being offline, and
- for periods post the Ethereum network “Merge”, any **transaction rewards** as part of execution rewards missed as a result of being offline,

subject to a maximum of the **validator coverage limit** per validator less any **excluded penalties and rewards**. *See note on penalties and missed rewards calculation.*

**Excluded penalties and rewards** means;

- any penalties applied to **covered validators** during a period where there is a widespread network issue which results in penalties being applied to more than 10% of total active validators on the entire **ETH 2 Beacon Chain**, and
- any penalties applied to **covered validators** during the **cover period** as a result of offenses incurred prior to the start of the **cover period**, and
- any missed rewards from the **covered validator** being outside the active validator set, and
- any other form of missed rewards not specified in **penalties and missed rewards** including, but not limited to, any onchain or offchain revenue in connection with the prioritisation or reordering of transactions, generally called Maximal Extractable Value or MEV.

**Transaction Rewards** means any priority fees or tips recorded in the on-chain data only and specifically excludes any Maximal Extractable Value or MEV. *See note on penalties and missed rewards calculation.*

**Deductible** means 0.25 ETH per covered validator.

**Covered validators** means the list of ETH proof-of-stake validators included in the on-chain data provided by the covered member when the cover was purchased. If the chosen **cover amount** divided by the number of validators included in the **covered validators** list is less than the chosen **cover multiple**, then validators from the bottom of the list, up until the point where the remaining validators multiplied by the **cover multiple** corresponds to the cover amount, shall be deemed excluded from the **covered validators** list.

**Cover Amount** means the maximum claim amount payable under the cover and is chosen by the covered member on a per validator basis. **Cover Amount** must be a chosen **cover multiple** multiplied by the number of validators covered.

**Cover Period** means the period of time that a Covered Member is protected under this Cover, chosen by the Covered Member when purchasing Cover and stated in the Member Smart Contract Data.

**Cover Multiple** means the maximum claim payment that can be made per validator as chosen by the covered member when purchasing cover. The cover multiple is either:

- 9.75 ETH, for a **validator coverage limit** of 10 ETH per validator, or
- 4.75 ETH, for a **validator coverage limit** of 5 ETH per validator, or
- 2.75 ETH, for a **validator coverage limit** of 3 ETH per validator,

and is the same for all **covered validators**.

**Validator coverage limit** means the maximum value of penalties that are covered before applying the deductible.

**ETH 2 Beacon Chain** means the chain that launched on December 1st 2020 around noon UTC that introduced proof-of-stake to the Ethereum network and will be used to validate Ethereum main-net consensus after the proposed Merge.

## **Notes:**

### **Note 1 - Calculating Penalties and Missed Rewards**

The **ETH 2 Beacon Chain** only records the net amount of rewards less penalties in any particular epoch. To calculate **penalties and missed rewards** Nexus Mutual will use `rated.network`'s calculation or if deprecated any other generally accepted calculation. `Rated.network` calculates penalties by taking estimated rewards less actual rewards and therefore fully adheres to the **penalties and missed rewards** definition pre-Merge.

Post “Merge”, missed rewards will also include missed **transaction rewards** and will rely on `rated.network`'s calculation which can include reasonable estimations and/or averages to determine the actual loss amount.

### **Note 2 - Multiple Events impacting Different Validators**

The 40 day time period can be applied at either the individual validator level or across multiple validators. Where there are different time periods covering different validators, cover holders are encouraged to submit one claim covering all losses and provide detail of the penalties calculation used.

## Addendum to ETH2 Staking Cover - Lost Revenue pre Withdrawals

The definition of **penalties and missed rewards** shall also include an **extra allowance** for lost revenue prior to the enablement of withdrawals on the ETH2 Beacon Chain.

**Extra allowance** means;

- if a **covered validator** is exited from the active validator set as a result of slashing offenses incurred before the enablement of withdrawals on the ETH2 Beacon Chain then the extra allowance will be calculated using simple interest at a rate of 5% on a principle of 32 ETH from the date of exit up until 23:59 UTC 31-Jan-2023, rounded to the nearest number of whole days.
- **extra allowance** will be zero if either the slashing offense or exit from the active validator set occurs post the enablement of withdrawals on the ETH2 Beacon Chain.

### ***Example calculation:***

*Date of exit from active validator set: 23:59 UTC 30-Jun-2022*

*Number of Validators: 1*

*Days until 31-Dec-2022: 184*

*Extra Allowance =  $184/365 \times 5\% \times 32 \times 1 = 0.8066$  ETH*