1.1 Portfolio Optimization

We seek a well-balanced spread within each segment with an aim of generating portfolios that maximize return relative to portfolio level risk (or, conversely, minimizes risk in return for portfolio level margins).

- Portfolios are diversified via conscious targeting and selection of non-correlated or low correlated risks
- State-of the-art catastrophe portfolio optimization
  - Each cat-exposed account is modeled to find its return relative to its Contribution to Portfolio PML (CPPML)
  - Underwriters select accounts with high margin to CPPML ratios
  - Automatically steers the portfolio towards a geographic spread within a peril zone
  - Optimizes the risk / return relationship
- Reinsurance limits downside risk of PML bust, if desired.

1.2 Catastrophe Optimization

A magnified focus on the management of catastrophe optimization is a fulcrum of our underwriting process. As the portfolio matures, we will seek to optimize catastrophe deployment and the return we achieve on cat capacity.

This is an important enhancement factor in generating portfolio scale and diversification. In order to achieve this, we deploy our CPPML methodology: the key objective is to promote greater diversification within any given peril zone.

CPPML = Contribution to the Portfolio PML

This is the marginal impact to the portfolio 250 year PML generated by adding the account to the portfolio. It is calculated by comparing the portfolio modeled PML without the account and with the account.

This methodology is systematically incorporated as an underwriting decision driver and is embedded in our underwriting process.

Total margin to CPPML ratio

This is the ratio of an individual account's total priced technical margin divided by the account's CPPML

Our underwriters compare the output from this measure to the following 3 benchmarks:

1. the minimum
2. the existing portfolio average
3. the set target

When the output is higher than average the account improves the return on the cat capacity. This steers the portfolio in the direction of those accounts that offer the highest total return on cat capacity deployed and favors those accounts with the most non-correlating peak cat exposure.