

## Stage 2 – Structural Recalibration Brief

### Shock Diagnosis

Out-of-time dataset exhibits higher volatility and amplified peak variability. Regulatory escalation increases peak underforecast penalty from ■4 to ■6.

Peak underforecast penalty increased 50% ( $\text{₹}4 \rightarrow \text{₹}6$ ), materially increasing tail-risk exposure.

### Impact Quantification

Metric	Value
Total Penalty	49,575.29
Peak Penalty	13,091.67
Off-Peak Penalty	36,483.63
Bias (%)	0.10
95th Percentile Abs Dev	19.59
Best Peak Multiplier	1.005
Recalibrated Penalty	48,517.32

### Trade-Off Recognition

Increased buffering reduces catastrophic peak underforecast exposure but increases overforecast bias. Risk prioritization favors peak stability.

### Stage 3 Direction

Introduce peak-specific quantile forecasting (~0.75), volatility-adaptive buffers, and rolling recalibration to manage structural shifts.

