

PRUDENTIAL STANDARD FRAMEWORK RULE CHANGE REQUEST

14 December 2011

PRESENTED BY RUTH GUEST

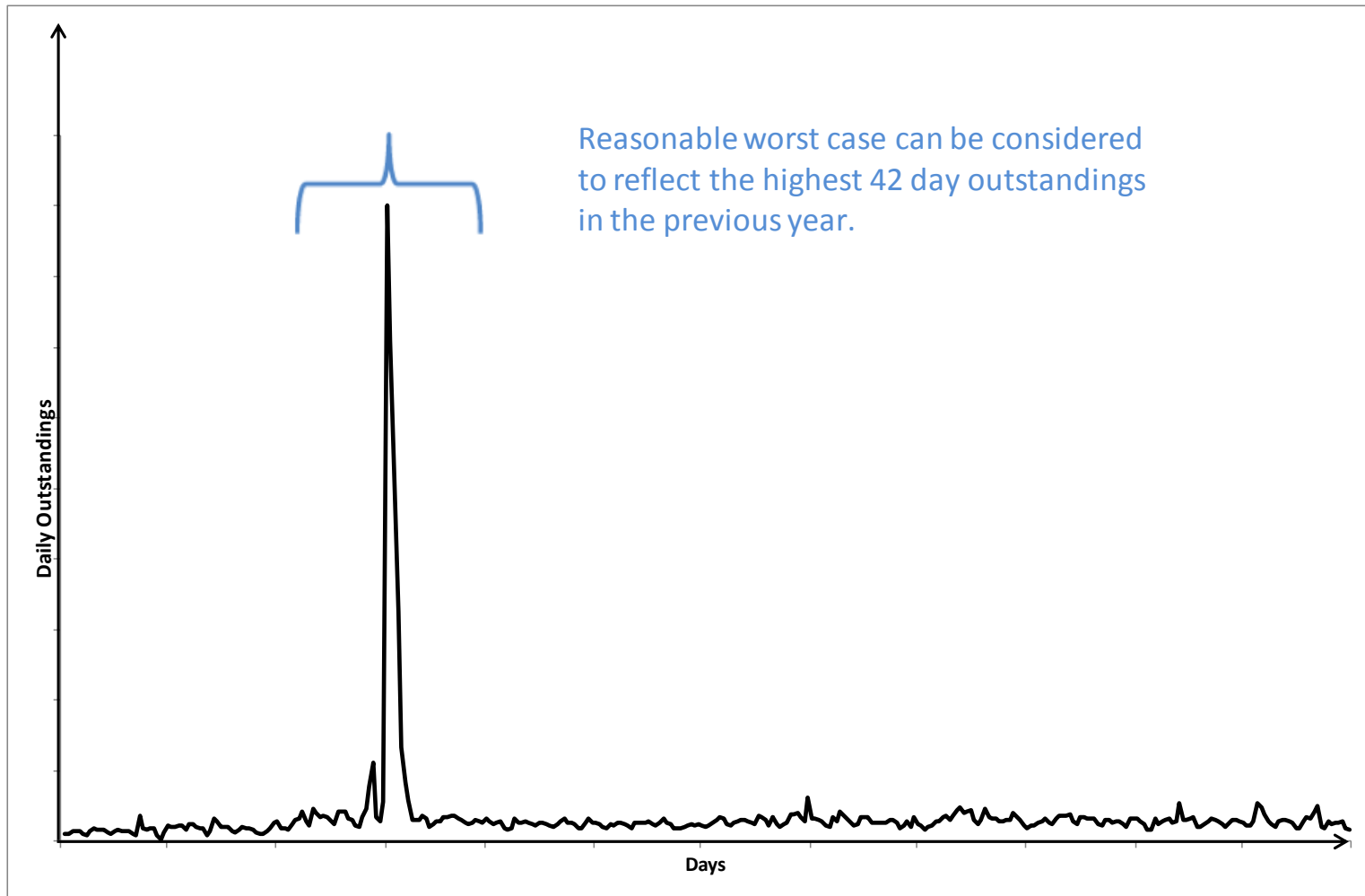


NEW VERSUS OLD



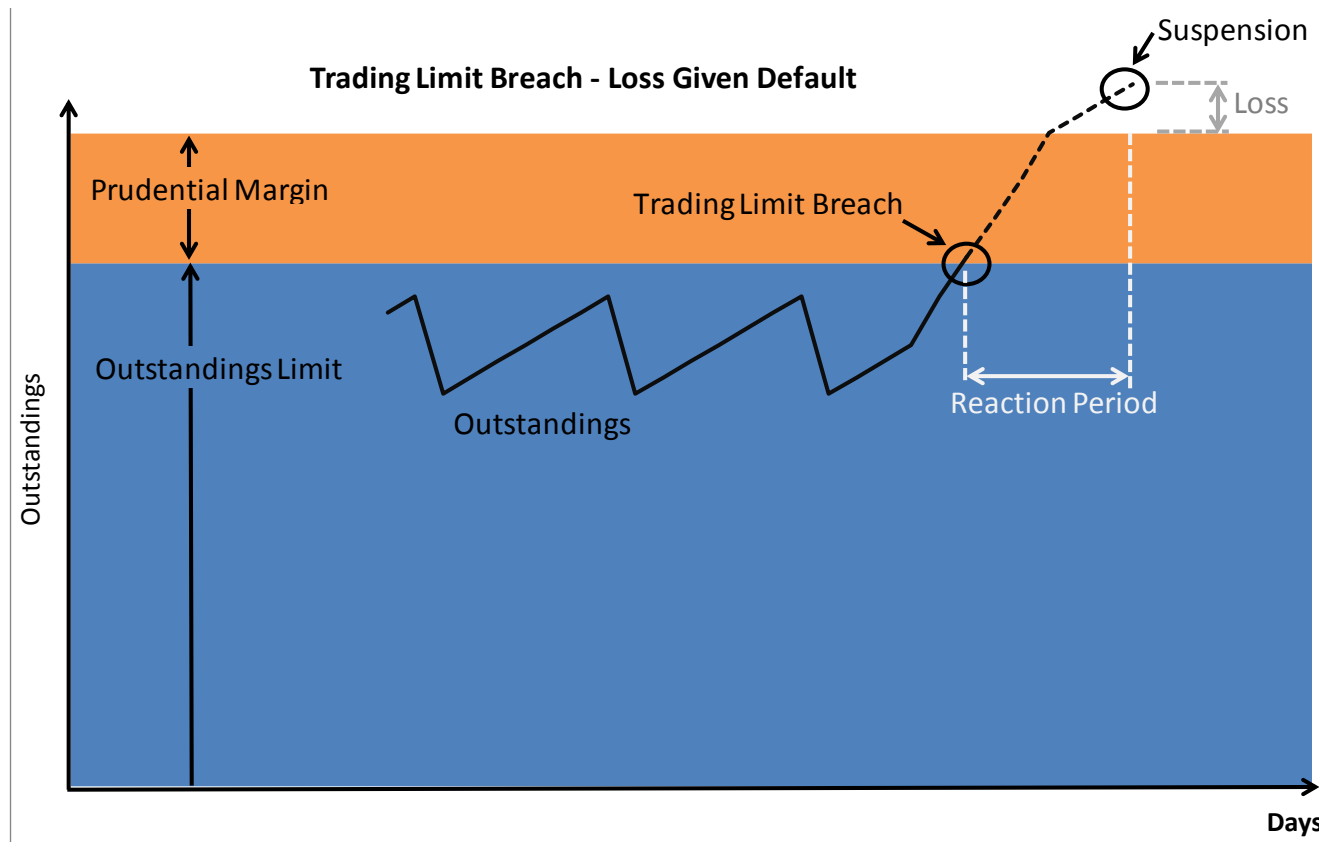
Credit Limits Procedure	Credit Limits Methodology
Probability of Loss Given Default	Reasonable Worst Case
Equivalent credit support, more efficient timing – 2% P(LGD)	Reduced MCL affords 4% P(LGD)
Outstandings Limit + Prudential Margin → Maximum Credit Limit	Maximum Credit Limit - Prudential Margin → Trading Limit
Basis of OSL and PM: Price x load x volatility x days	Basis of MCL and PM: Price x load x volatility x days
Seasonal approach Average price prior 4 years Volatility factor from NEM start	Annual approach to quarterly review Average price in prior year Volatility factor in prior year
Differentiate participants with load factor and load profile	Daily load only differentiation between participants

REASONABLE WORST CASE



LOSS GIVEN DEFAULT

- P(LGD) is to be met for each region over life of NEM
- 2% is equivalent to approximately 7 days a year



MAXIMUM CREDIT LIMIT (NEW)



- MCL = outstandings limit plus prudential margin
 - OSL and PM calculated simultaneously to meet P(LGD)
 - Daily load x price x volatility factor x (21, 7) days
 - Model calibrated for VFs to meet the P(LGD)
 - Price and volatility factors are a region parameter
- Outstandings limit is a new term which is distinguishable from trading limit when credit support > MCL
 - Trading limit = credit support – prudential margin
 - Outstandings limit \equiv MCL – prudential margin

Credit Limit Procedure

- Average price of previous four equivalent seasons-region parameter
- Trending of daily load – participant specific

Credit Limit Methodology

- Previous year's average price - region parameter
- Trending of daily load – participant specific

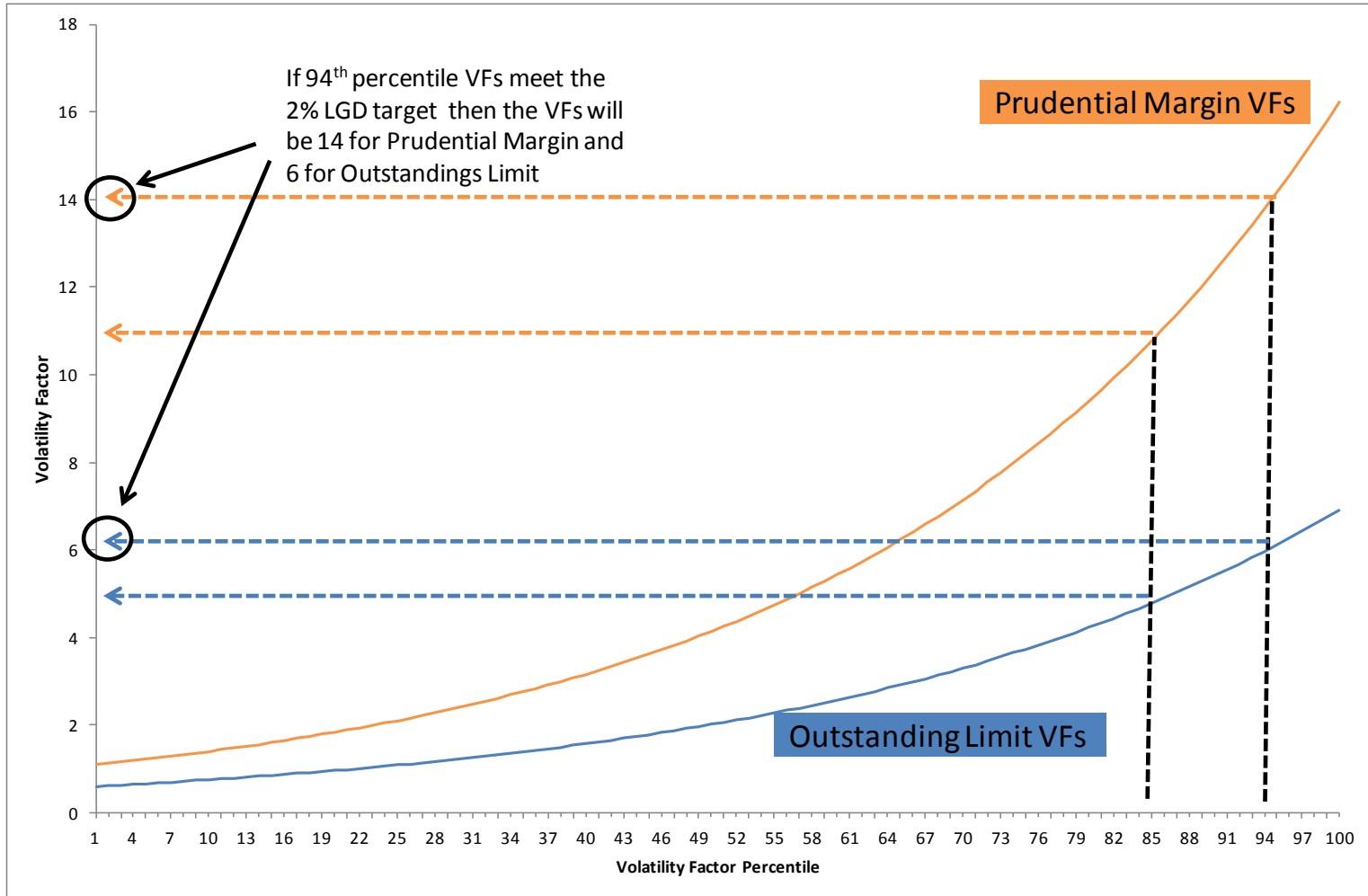
Credit Limits Procedure

- VF each day over life of NEM for OSL and PM
- Seasonal approach to ratio
35 or 7 day outstandings:
35 or 7 day average in previous 4 seasons
- Set VF percentiles for OSL and PM equivalent
- Calibrate the model to meet P(LGD)

Credit Limits Methodology

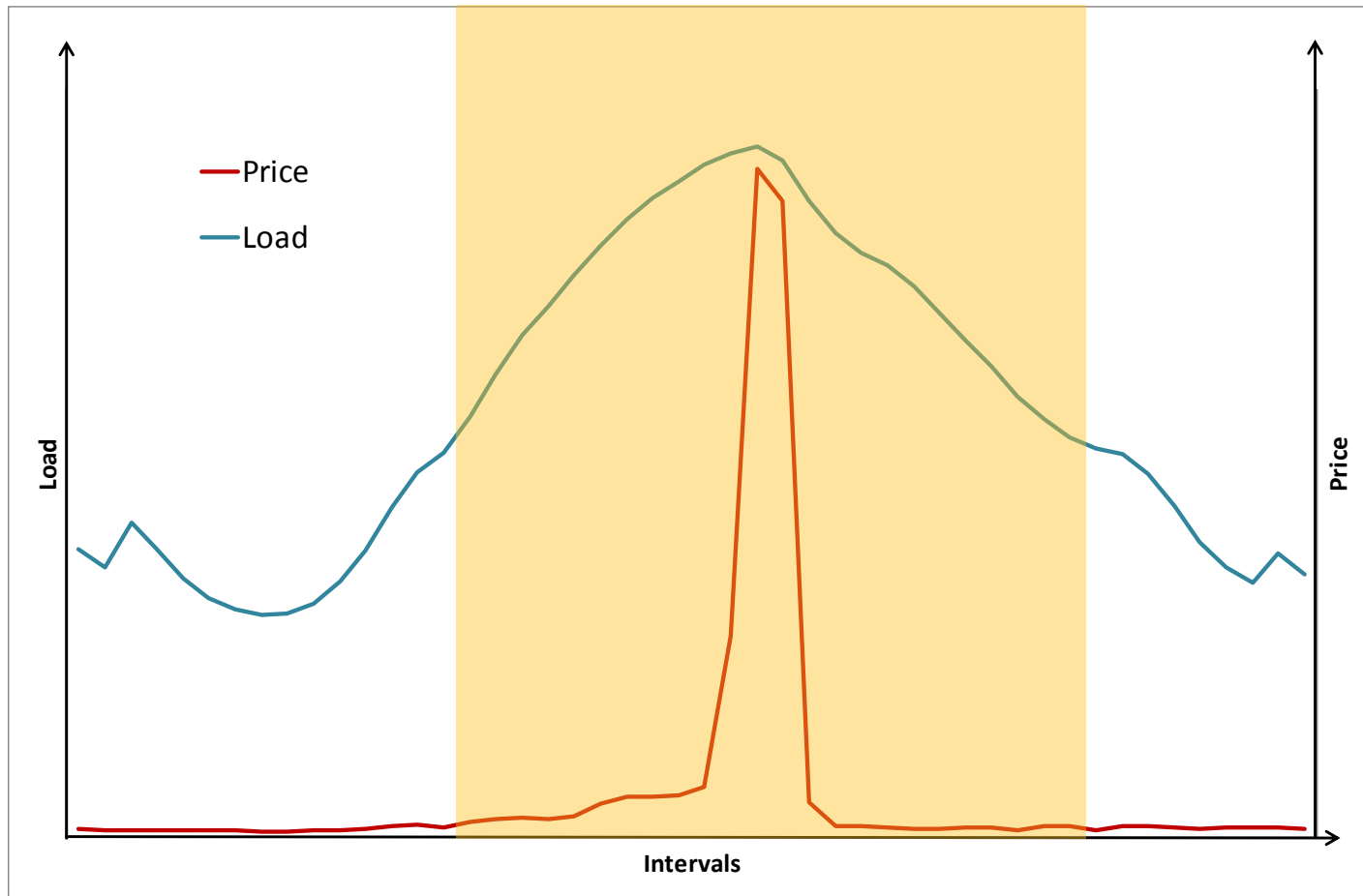
- Ratio in last year
Maximum 42 day outstandings :
Average 42 day outstandings

VOLATILITY FACTOR



LOAD PROFILING

- Regional impact
- Method to manage correlation between price and load during a day
- Participant impact depends on load spread during the day



LOAD PROFILING WORKED EXAMPLE

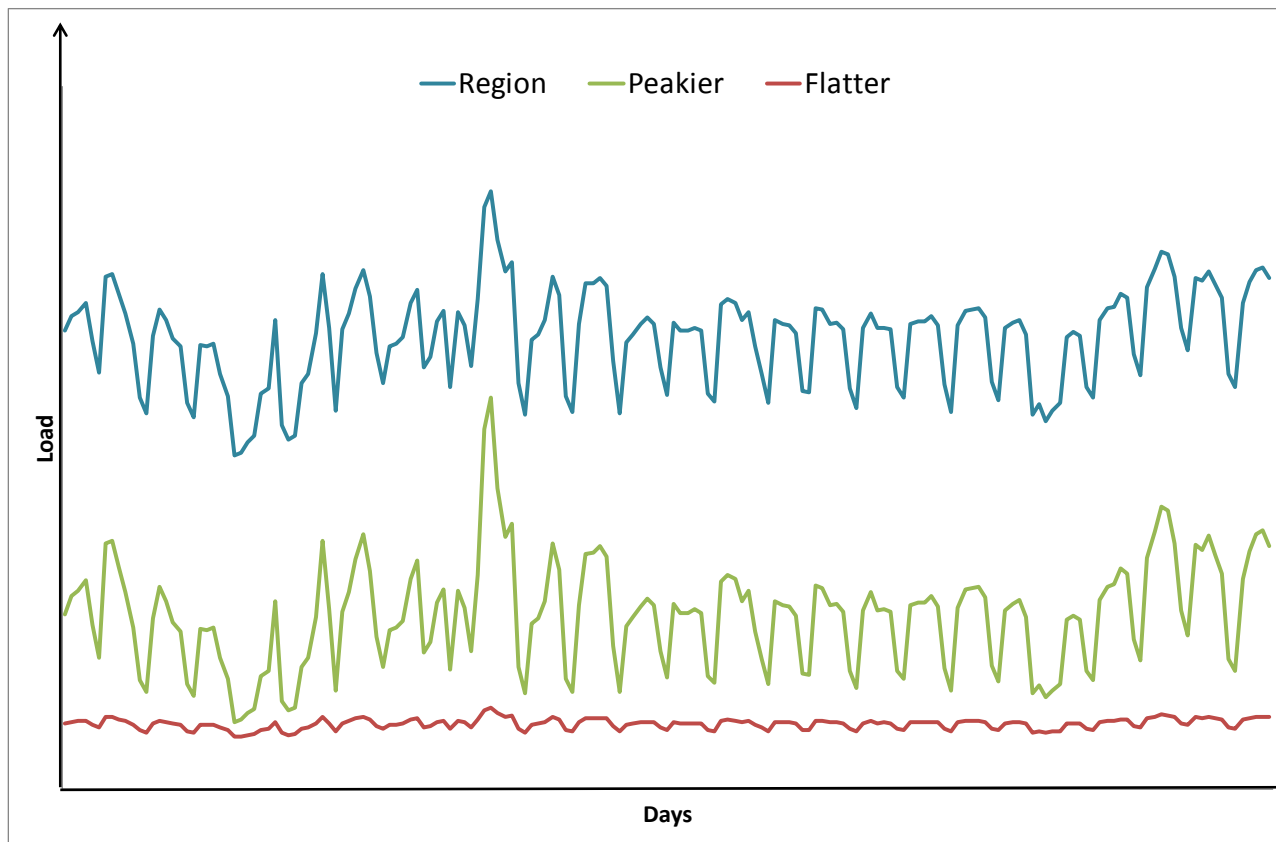


- OSL = OSL off peak plus OSL on peak
- Assume on peak time = off peak time = 12 hours

Participant	OSL on peak	OSL off peak	OSL Total	OSL No Profile
Daily Load MWh	600	400	1000	1000
Price \$/MWh	40	20	30	30
Days	21	21	21	21
VF	3.5	2.5	-	3
OSL	\$1.8M	\$0.4M	\$2.2M	\$1.9M

LOAD FACTOR

- Participant parameter
- Method to manage participant volatility greater or lower than region
- In general the peakier the load the greater the credit support requirement
- Envisaged to encourage management of load patterns.



LOAD FACTOR WORKED EXAMPLE



- $OSL = \text{Daily load} \times \text{price} \times \text{volatility factor} \times 21 \text{ days} \times \text{load factor}$

Participant	Region volatility	Peakier Volatility	Flatter Volatility
Daily Load MWh	1000	1000	1000
Price \$/MWh	30	30	30
Days	21	21	21
VF	3	3	3
Load Factor	1	1.2	0.8
OSL	\$1.9M	\$2.3M	\$1.5M

- A clear (and previously accepted) target for prudential surety
- Dramatic changes in credit support lagging a high outstandings event are avoided.
- Differentiation of more risky profiles
- Provide a driver for managing NEM risk
 - Matching load profiles with generation and reallocation profiles
 - Reduce volatility of load

