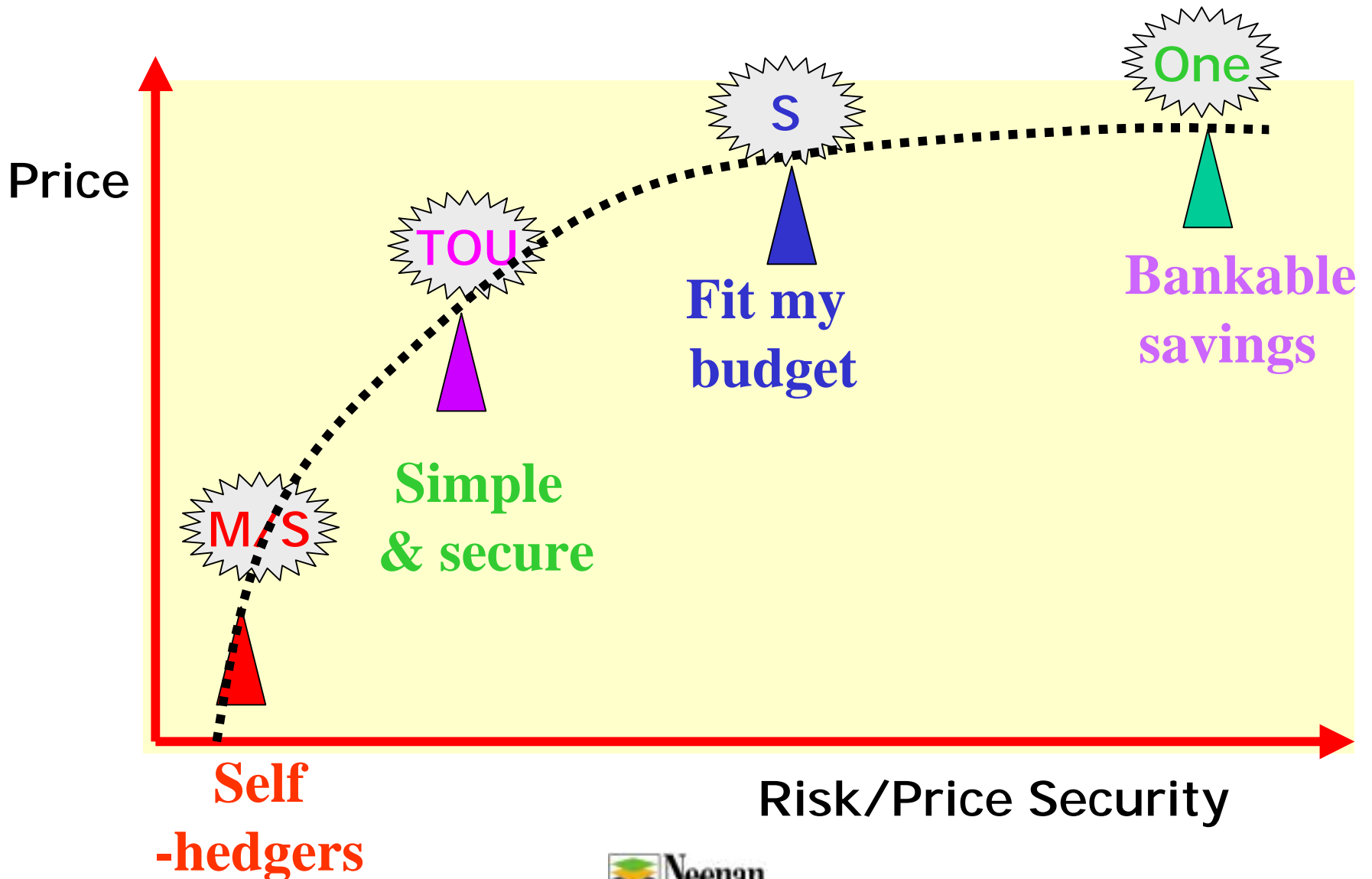


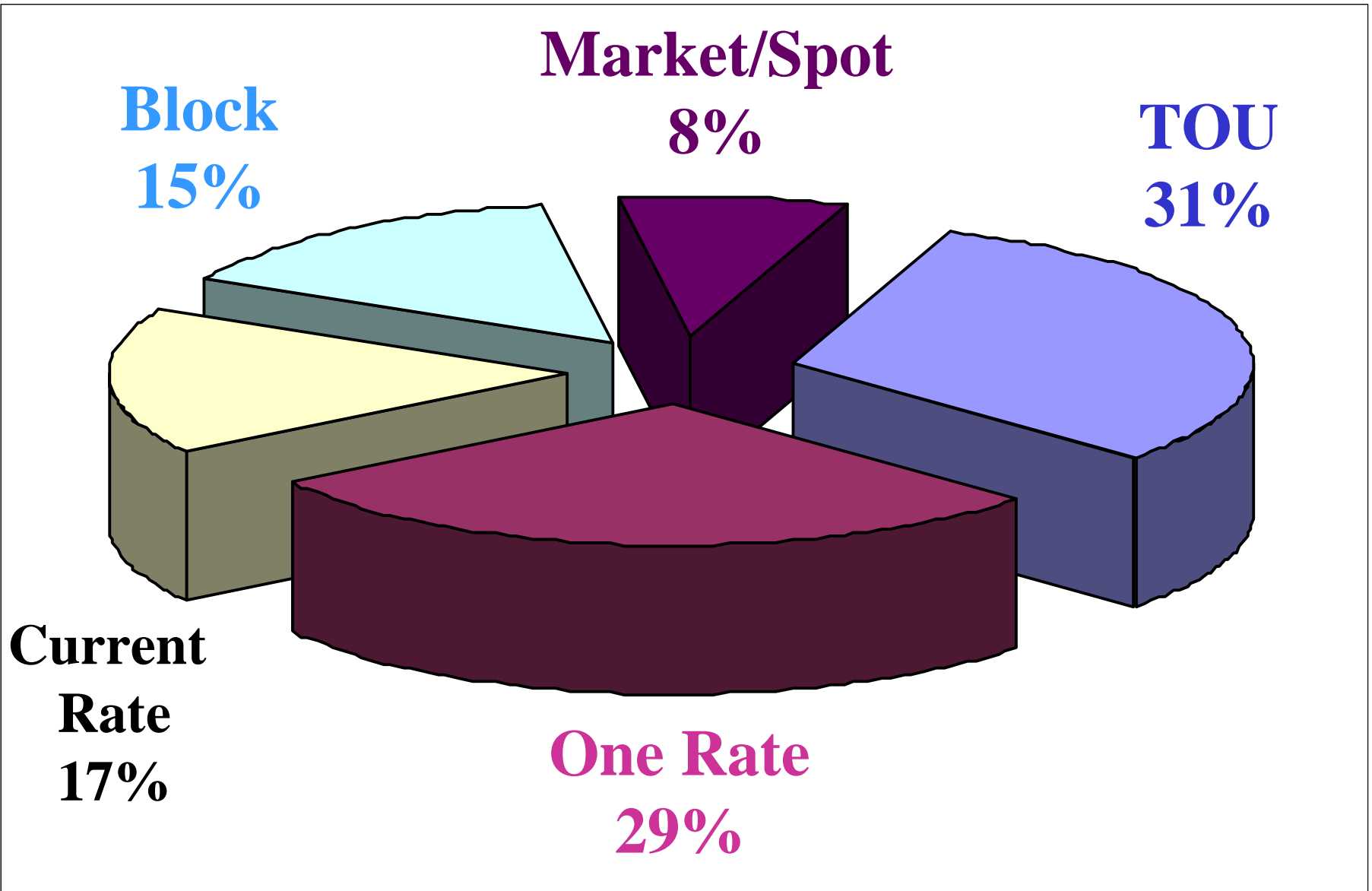
Improving Competitive Market Performance: The Role of Price Responsive Load

**Presented to NYISO PRL Task Force
September 8, 2000**

Matching supply and demand

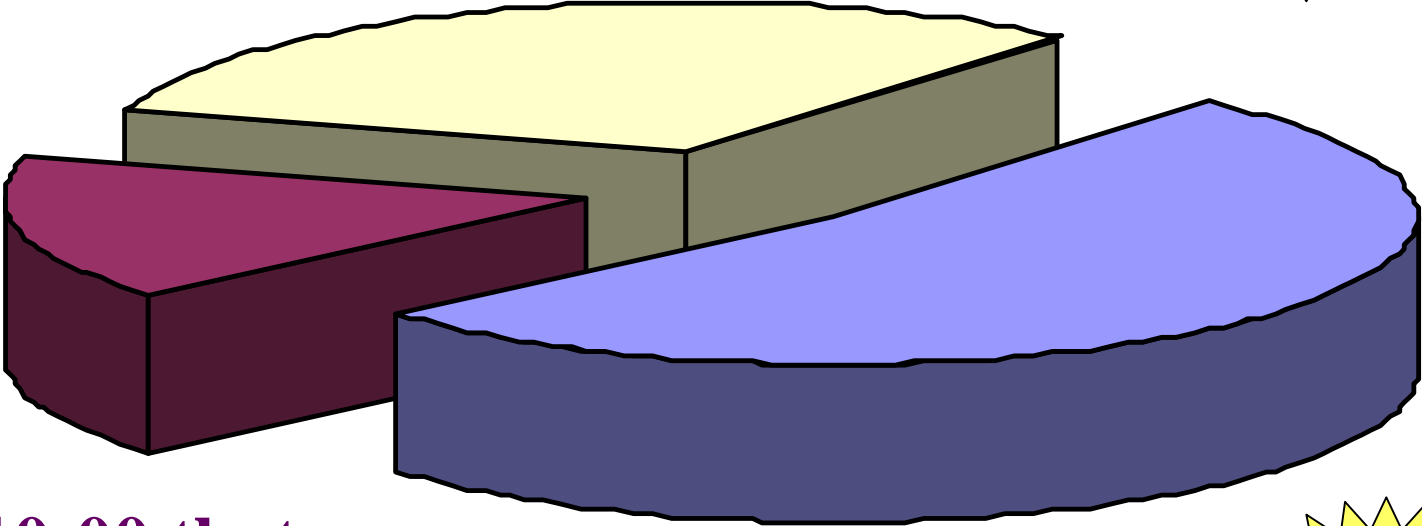


Commercial and Industrial Preferences < 1,000 kW



C&I Market /Spot Price Notice Preferences

One hour ahead

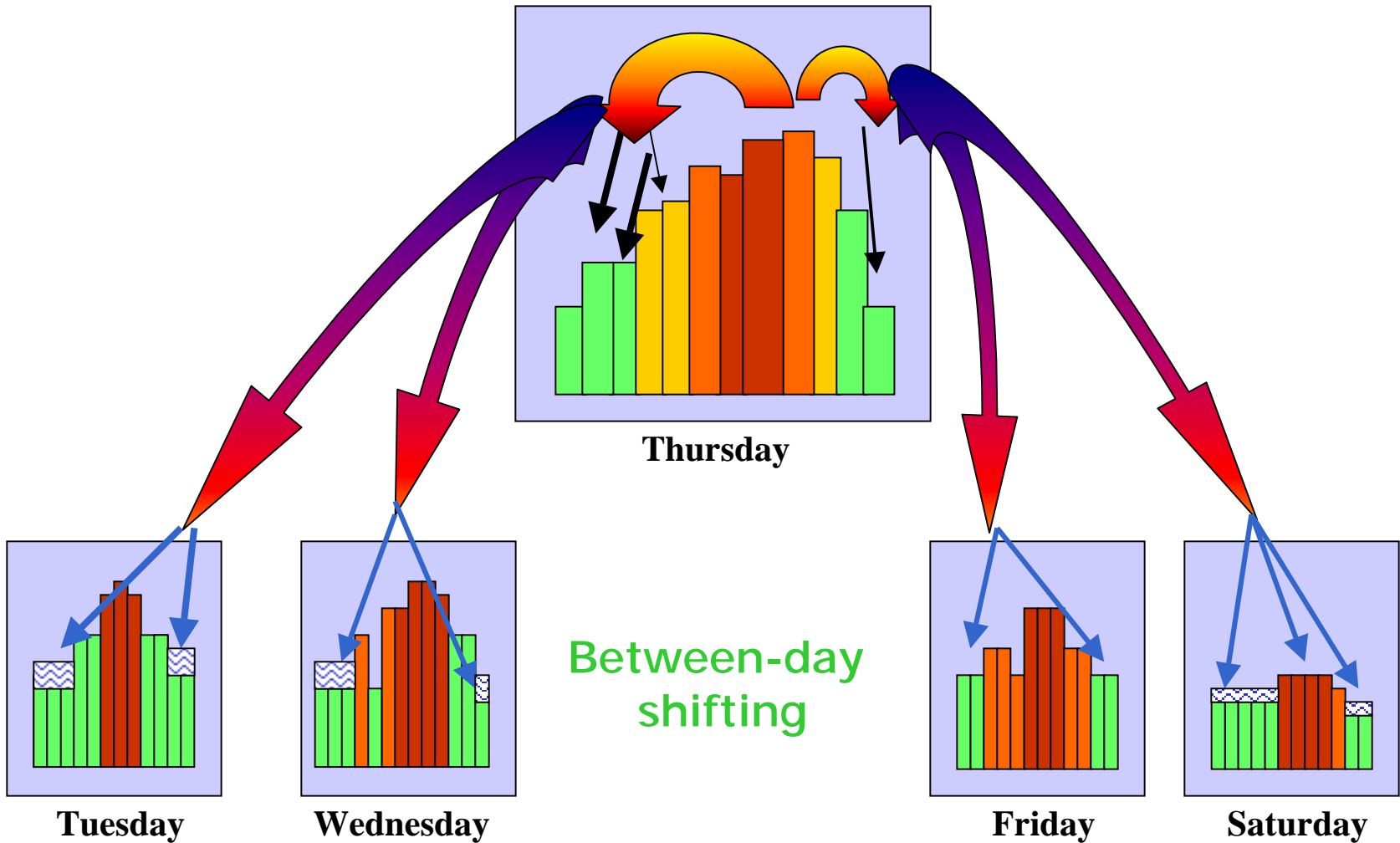


10:00 that
morning

Day-Ahead



Within-day shifting



The final result includes adjustments to adjacent days' usage patterns and levels

Figure 1. Illustration of subscriber Group A price response on a high priced day

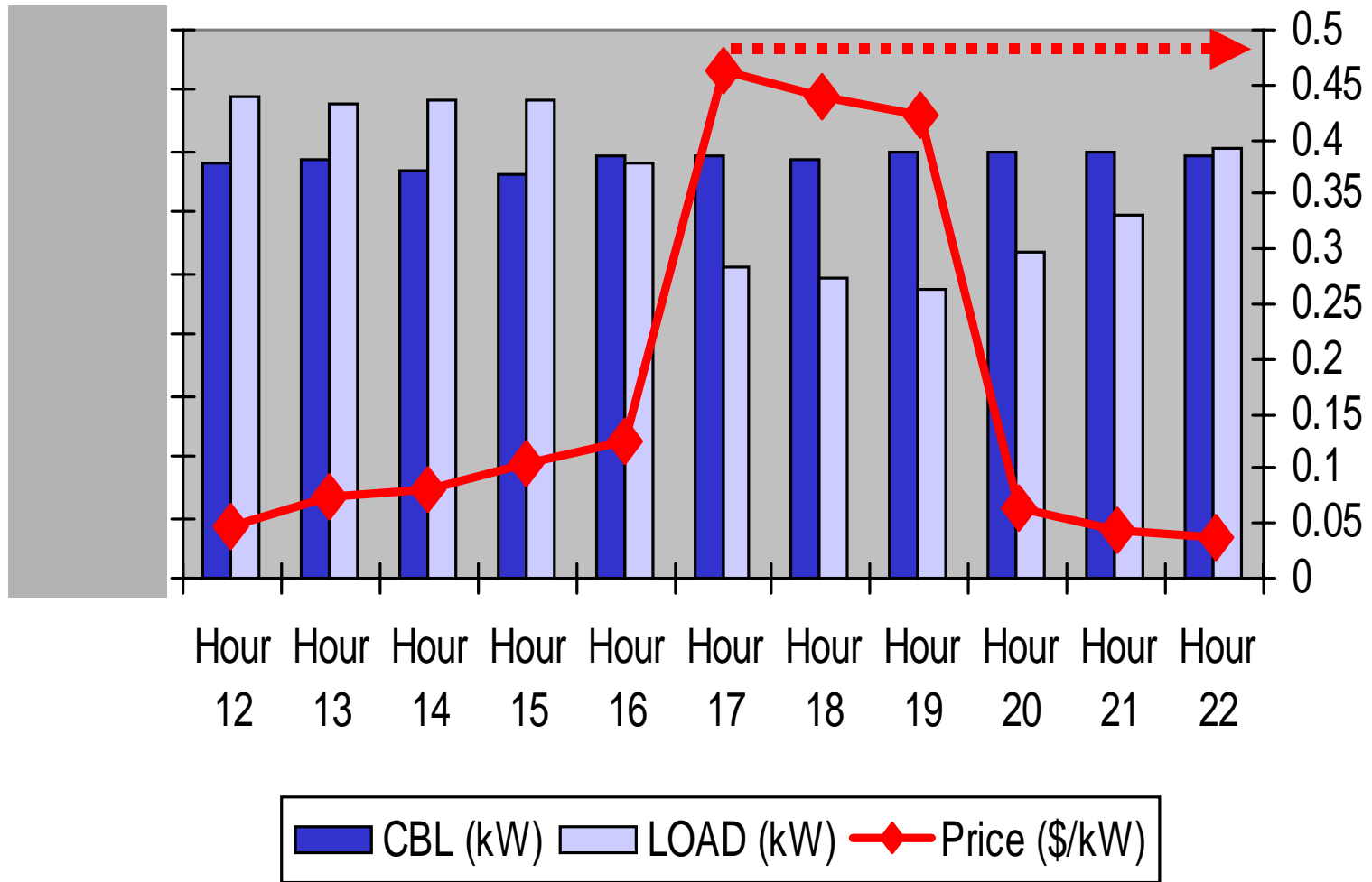


Figure 2. Illustration of subscriber Group B price response on a high priced day

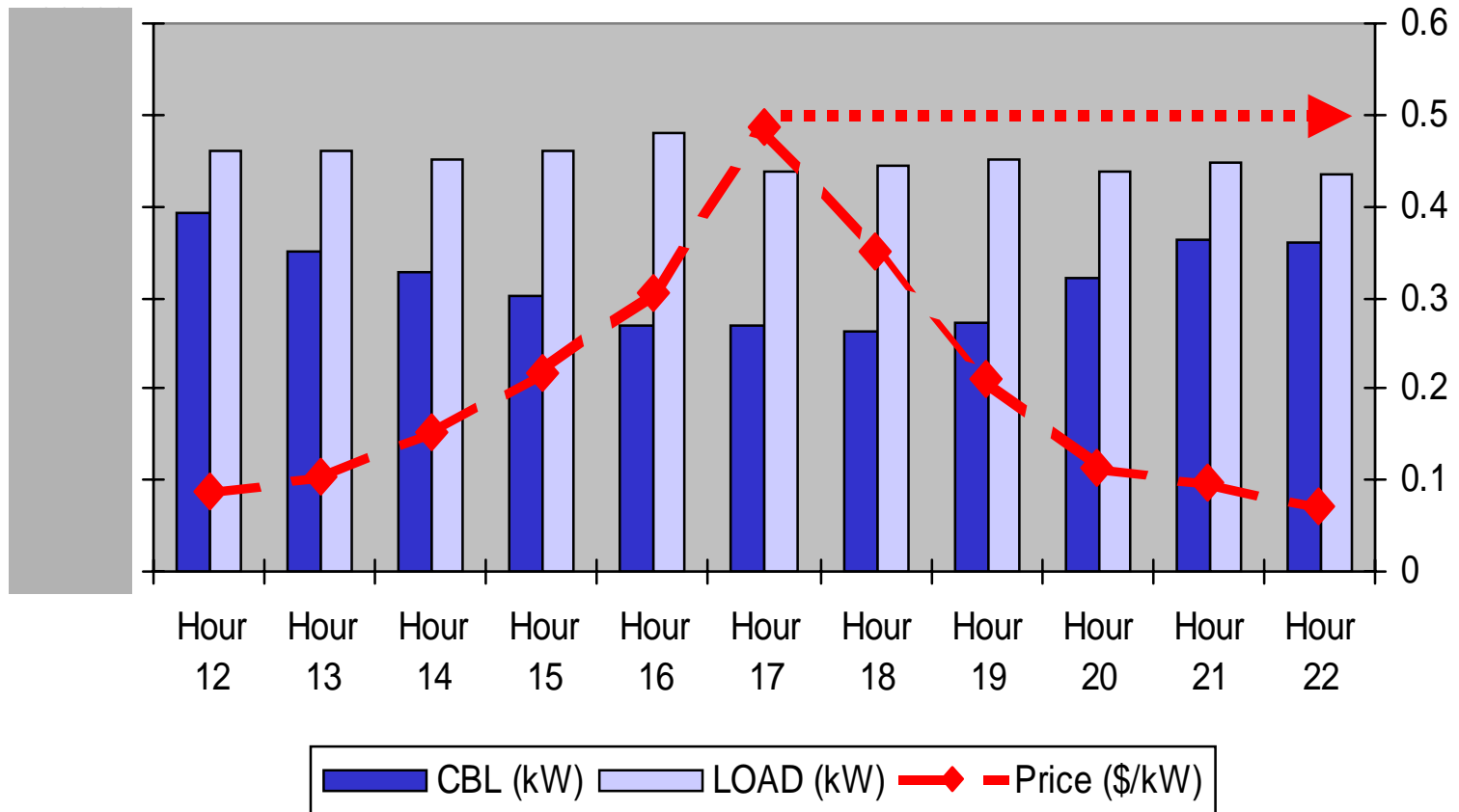
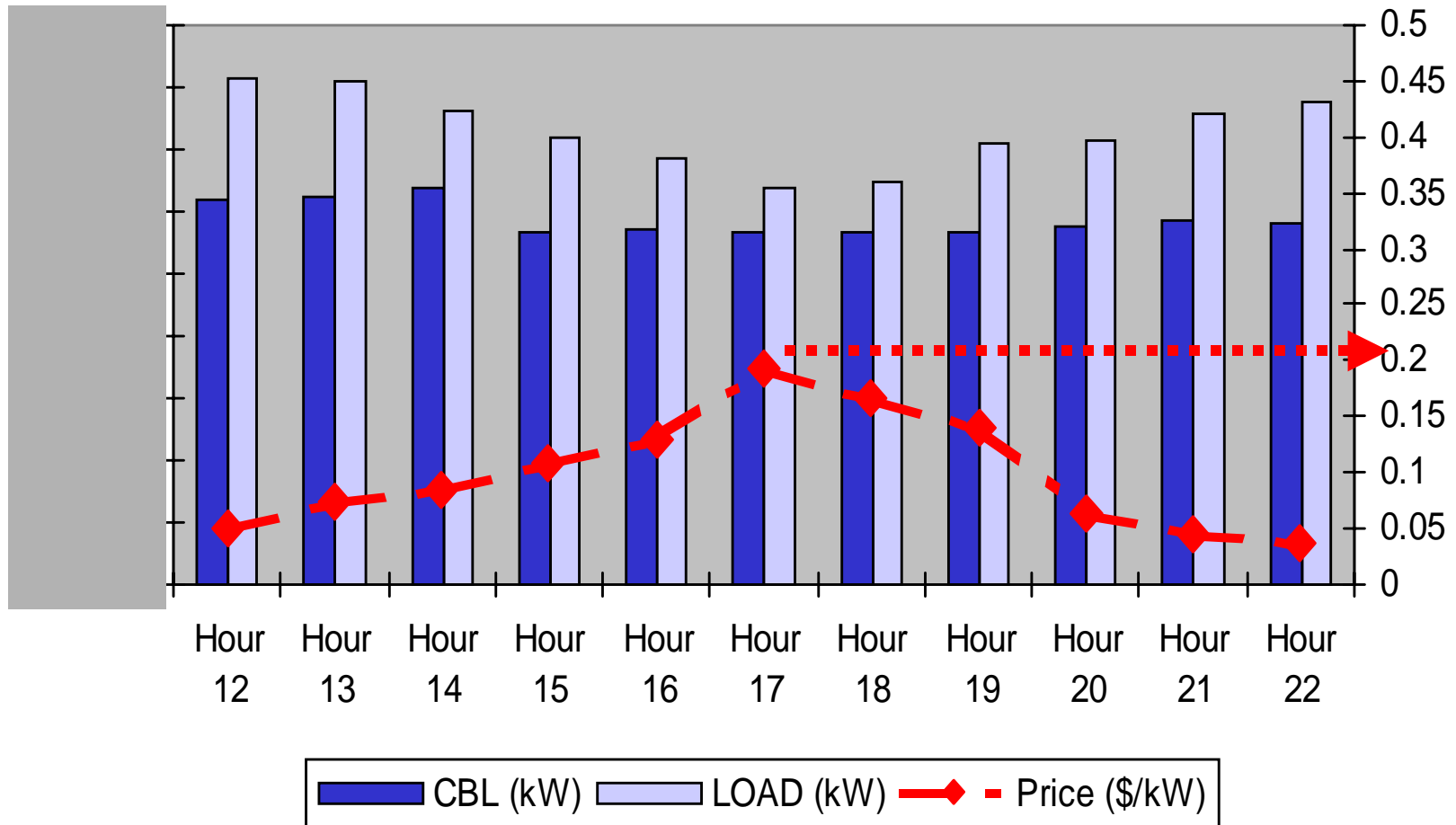
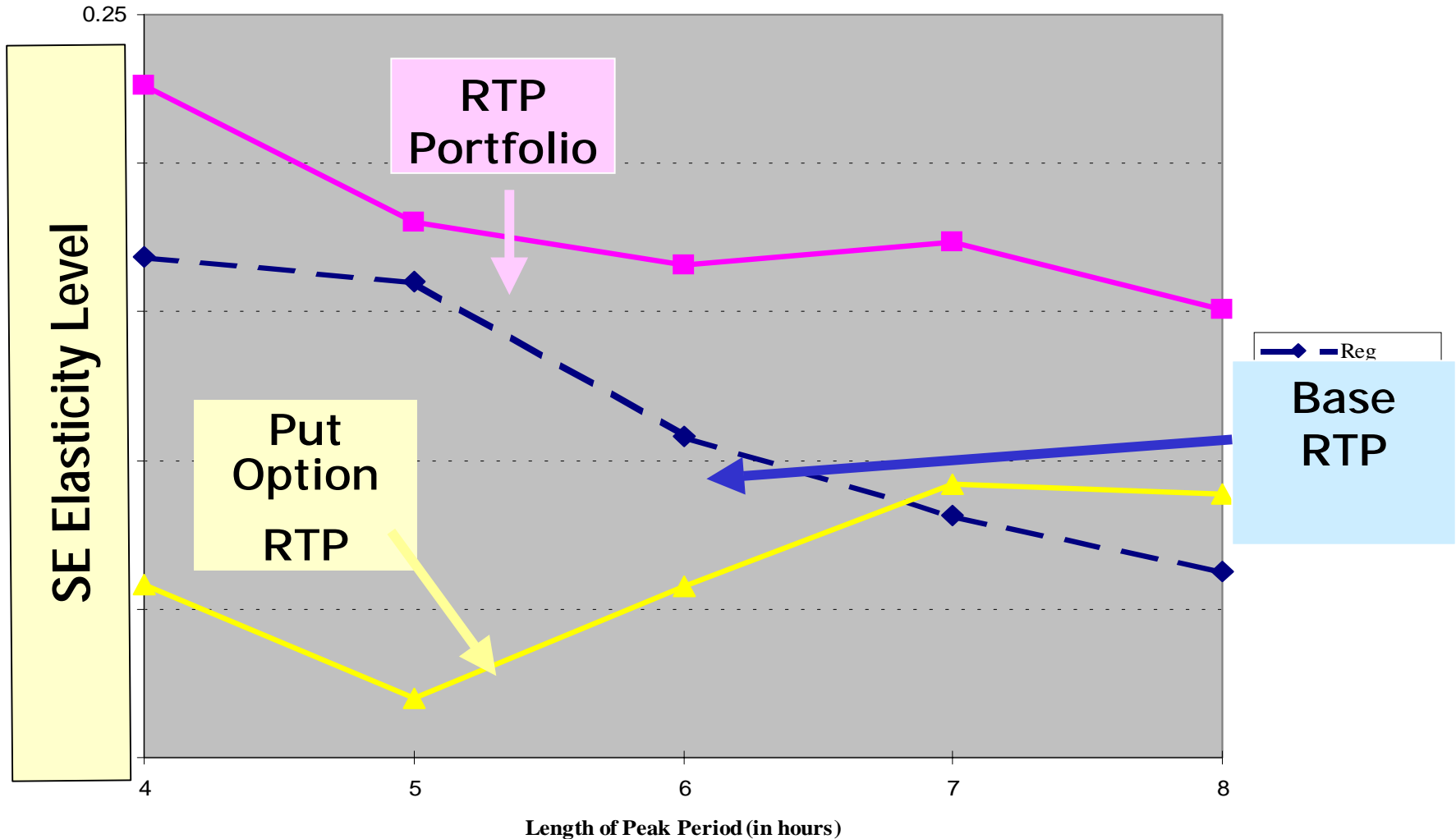


Figure 3. Full portfolio price response on a moderate priced day



SE Response Elasticities for Different Pricing Products



Example RTP Portfolio

Load Shifting Potential

BaseRate	\$0.04	\$0.04	\$0.04
Factor	3	6	12
Price	\$0.12	\$0.24	\$0.48
Shift Elasticity	TOU	Day-Ahead	Hour-Ahead
	Percentage Peak Shift		
0.05	2%	3%	3%
0.15	7%	8%	9%
0.25	11%	14%	16%
0.50	24%	31%	35%
0.75	39%	52%	59%
1.00	56%	76%	88%
	Values are the amount peak (3:00 to 7:00) load reduction		

		Load Shifting Response Elasticity			
Peak Hours		4	4	6	8
Peak Period		3-7:00	5-9:00	2-8:00	1-9:00
Customer					
Oil & Gas		5.50	0.00	2.70	0.00
Fabrication		1.60	2.30	1.50	0.90
Utility		1.20	1.60	1.20	1.10
Manufacturing		0.90	0.90	0.40	0.20
Metals		0.40	0.20	0.30	0.20
Oil & Gas		0.30	0.60	0.30	0.00
Metals		0.30	0.00	0.00	0.00
Oil & Gas		0.30	0.30	0.20	0.10
Paper		0.30	0.10	0.20	0.10
Chemicals		0.20	0.30	0.20	0.10
Metals		0.20	0.30	0.20	0.20
Metals		0.20	0.00	0.10	0.10
Metals		0.10	0.00	0.10	0.00
Oil & Gas		0.10	0.40	0.10	0.10
Health		0.05	0.07	0.05	0.04
Food		0.03	0.03	0.03	0.03
Assembly		0.02	0.06	0.02	0.02
Pipeline		0.00	0.00	0.60	0.00
Chemicals		0.00	0.30	0.00	0.00

Figure 1. Time Frames for Power System Management

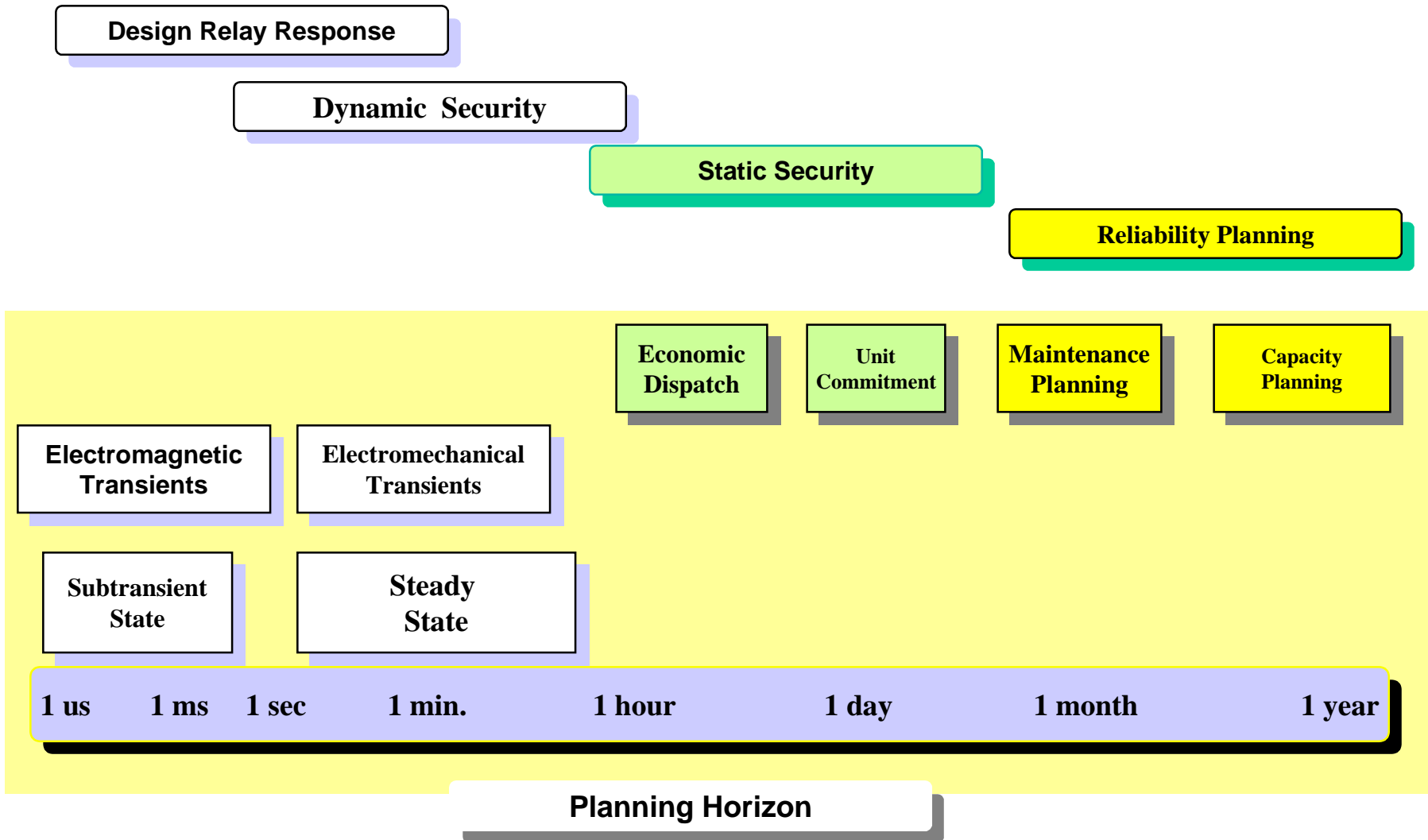
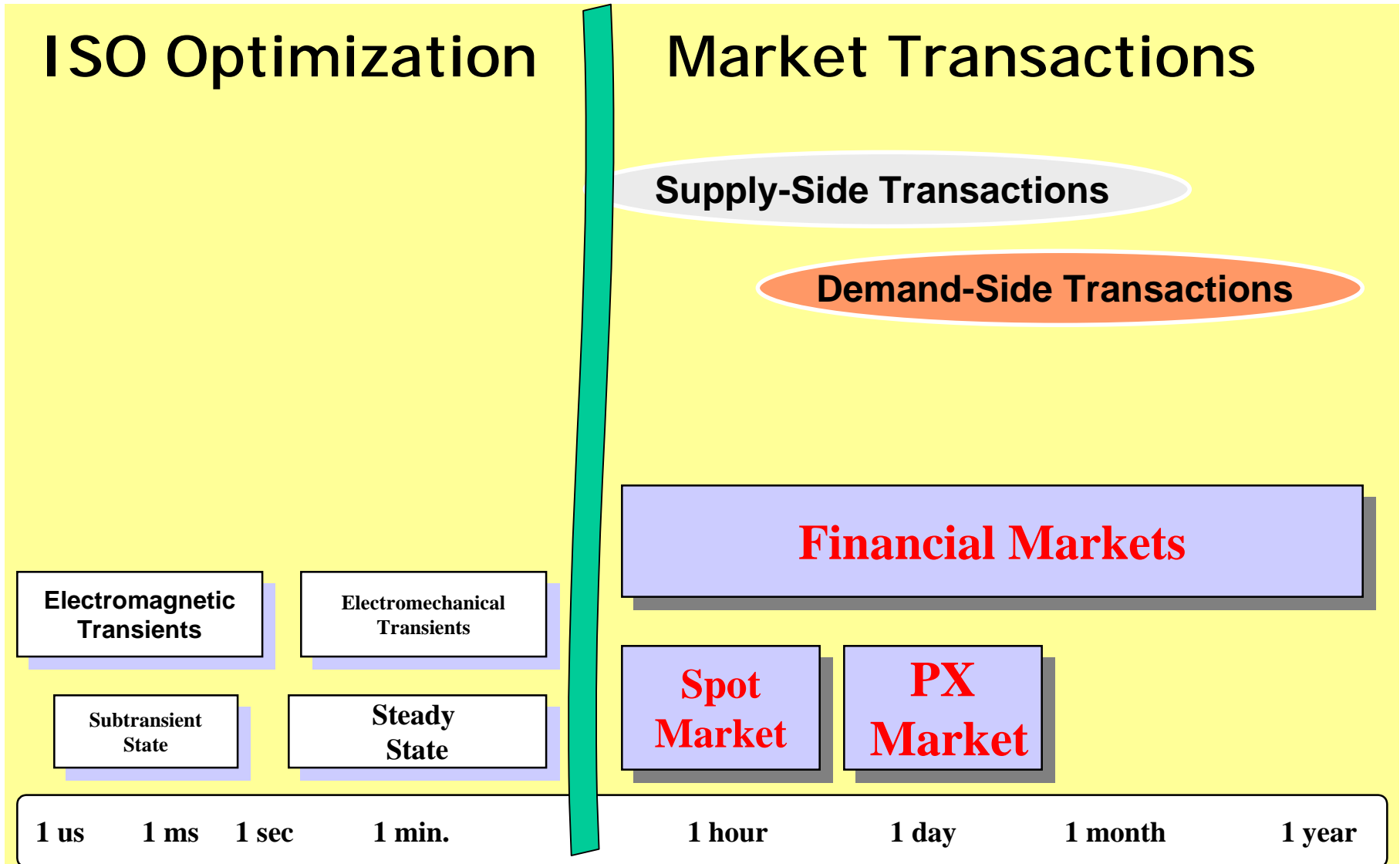


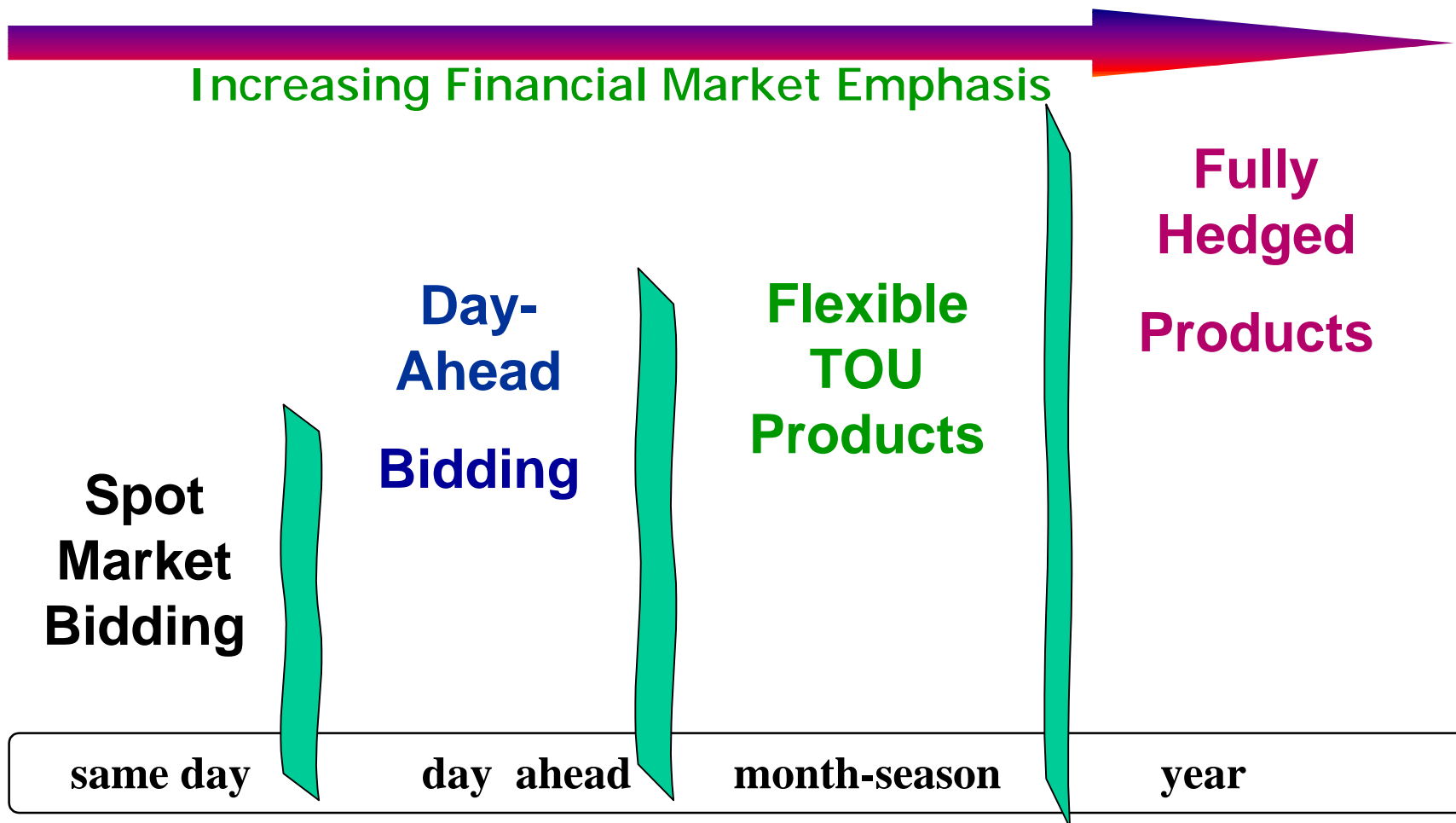
Figure 2. The Role of Markets



Product Design Hierarchy

Decreasing Physical Market Emphasis

Increasing Financial Market Emphasis



Project Organization and Schedule

Task #

DSB Project Phasing and Tasks

