

pulse  
COMMERCIAL UTILITIES





# How to Get Energy Fit

Brief: Energy Procurement Do's & Don'ts

# Contents

1. Find out if your KVA is set correctly
2. Find out who is cheapest in your area
3. Get the most suitable energy tariff for your business
4. Ensure you compare quotes like for like



**Customer Name**

A Theatre Co. Ltd

**Site Name**

Theatre Street

**MPAN Number**

12 0001 0053 190

**Current KVA Level Set at: 500**

Month	Max demand in KW	Power Factor	Covert to KVA	KVA used over set KVA
Jun-09	232.4	0.9500	244.6	-255
Jul-09	223.4	0.9500	235.2	-265
Aug-09	221.4	0.9500	233.1	-267
Sep-09	234.8	0.9500	247.2	-253
Oct-09	216	0.9500	227.4	-273
Nov-09	260.4	0.9500	274.1	-226
Dec-09	250.6	0.9500	263.8	-236
Jan-10	173.8	0.9500	182.9	-317
Feb-10	152.6	0.9500	160.6	-339
Mar-10	231	0.9500	243.2	-257
Apr-10	131.2	0.9500	138.1	-362
May-10	226.8	0.9500	238.7	-261
			<b>274</b>	<b>-226</b>
		<b>0.9500</b>	<b>138</b>	<b>-362</b>

No power factor information is available yet so I have estimated this at 0.95

The highest level used in the last 12-months is 274. Plus 10% = 304

**Current KVA Charges**

KVA Level 500  
 x Days 365  
 x Charge 3.919p /KVA/day  
**Total PA £7,152**

**Proposed KVA Charges**

KVA Level 310  
 x Days 365  
 x Charge 3.919p /KVA/day  
**Total PA £4,434**

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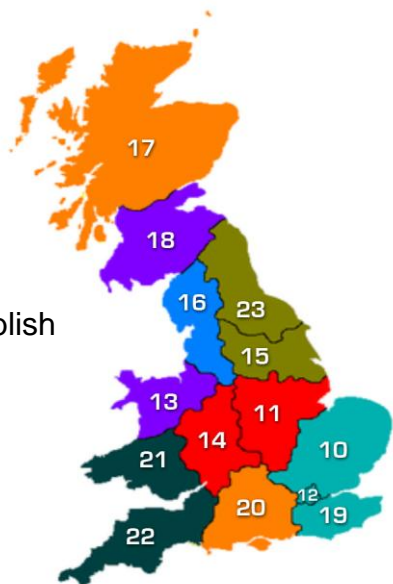
**Savings £2,717.83**

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## Why Suppliers Are Cheaper in Different Areas

1. Location of Supply Station of the Network Grid
2. Transportation costs on the Network Grid
3. Suppliers desire to establish themselves in the area



Area	Company	Area ID
10	East England	EDF Energy Networks
11	East Midlands	Central Networks
12	London	EDF Energy Networks
13	North Wales, Merseyside and Cheshire	Scottish Power Energy Networks
14	West Midlands	Central Networks
15	North East England	CE Electric (NEDL)
16	North West England	Electricity North West
17	North Scotland	Scottish Hydro Electric Power Distribution
18	South Scotland	Scottish Power Energy Networks
19	South East England	EDF Energy Networks
20	Southern England	Southern Electric Power Distribution
21	South Wales	Western Power Distribution
22	South West England	Western Power Distribution
23	Yorkshire	CE Electric (YEDL)





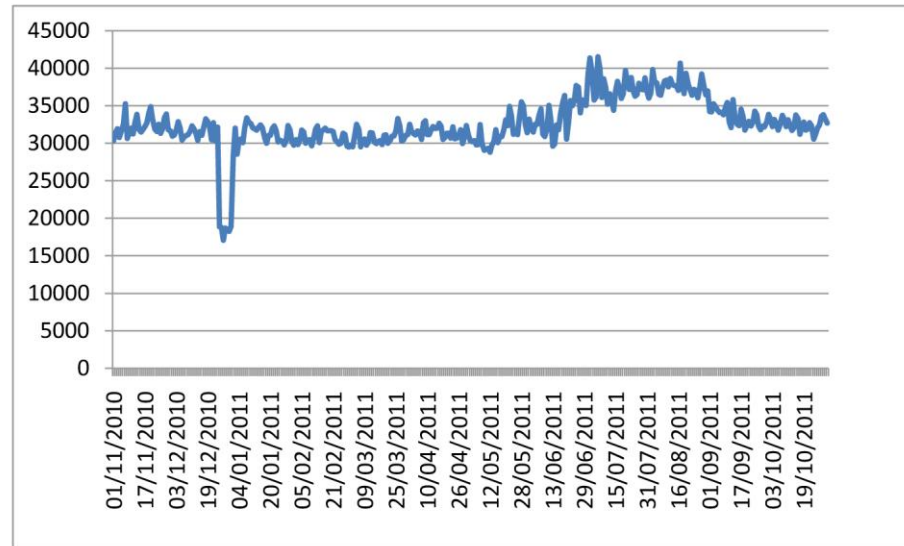
## A Theatre Co Ltd

### Annual Consumption Patterns

As can be seen from the annual consumptions patterns the Energy consumption peaks in the Summer and is at its highest in the Summer months.

A tariff which takes advantage of lower rates during the Summer peak months clearly would have benefits for the Cinemas.

Due to the need for higher output of A/C units during the Summer months we would expect to find similar usage patterns amongst most Cinemas and Theatres throughout the UK.





## A Theatre Co Ltd Average Daily Shape

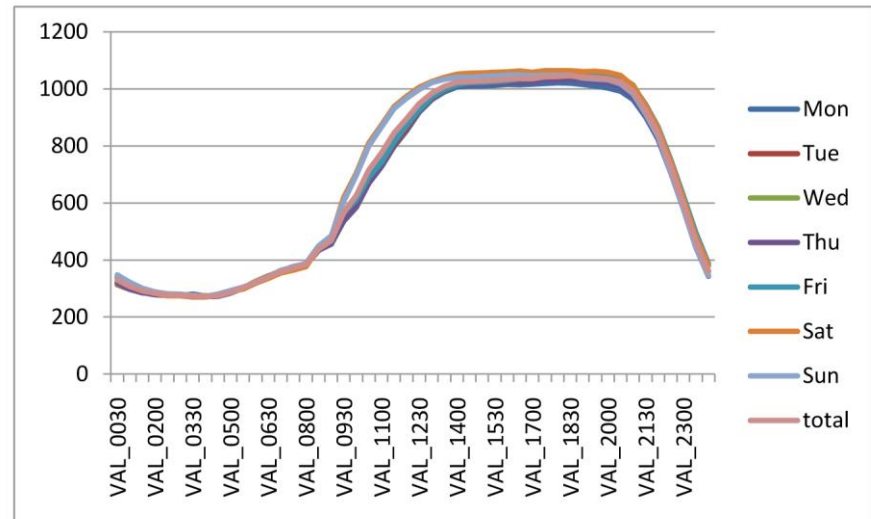
The table above shows the daily usage patterns for cinema for 365 days. The usage consistent and full capacity begins around 12.30pm and lasts until 21.30pm.

This shows that a usage patterns which peaks during the bulk of the Afternoon and Evening.

The night usage is relatively small 10% and usage during the morning is again only a small proportion of the overall consumption.

A multi-rate tariff that provided cheaper energy during the evening periods would clearly reduce the Cinemas costs.

Armed with the knowledge of consumption patterns we can look for a tariff that is cheaper in the Summer and Evenings.



## Comparison of Energy Contracts

1. Location of Supply Station of the Network Grid
2. Transportation costs on the Network Grid
3. Suppliers desire to establish themselves in the area

Current Annualised Spend:	Supplier 1	Supplier 2	Supplier 3	Supplier 4
Price Plan				
Contract Term	Current Prices	12 Months Renewal	12 Months Renewal	12 Months Renewal
Standing Charge per annum	£1,541.23	£281.05	£281.05	£671.27
Annual Capacity Charge (£/KVA)	£7,152.18	£2,875.56	£7,152.18	£7,152.18
Rate 1 (Day)	8.7102	9.5415	8.5600	9.6600
Rate 2 (Night)	5.8620	8.5250	5.2100	5.0130
Rate 3		6.8070		
Rate 4		5.5450		
Rate 1 Consumption (Winter Day)	828,400	228,635	828,400	828,400
Rate 2 Consumption (Summer Day)	176,001	351,159	176,001	176,001
Rate 3 Consumption (Evening)		243,690		
Rate 4 Consumption (Night)		176,715		
DC/DA Charge	£207.00	/	/	/
Settlement Charge	£15.00	/	/	/
Annual Unit Costs	£82,472.48	£78,138.34	£87,513.92	£88,846.37
Net Annualised Total	£91,387.88	£81,294.95	£94,947.14	£96,669.82
Versus Current (£ pa):		+ £10,092.93	- £3,559.26	- £5,281.94
Versus Current (%):		+ 11%	- 4%	- 6%

All quotes are based on annual usage of **kwh** per annum.