UKRAINE: Electricity

Sector Update

Alexander Paraschiy ap@con-cap.com +380 44 206 8370



Oblenergo Profits

Everything You Need To Know

Recommendation Changes: (New/Previous)

HAON: BUY / SELL HMON: SELL / HOLD KION: HOLD / SELL POON: BUY / SELL SMEN: HOLD / BUY SOEN: SELL / BUY TOEN: BUY / HOLD VIEN: HOLD / BUY VOEN: SELL / BUY ZHEN: BUY / SELL

December 15, 2005



KEY FINDINGS

- Value created by Oblenergos is not equally captured by all categories of shareholders
- Due to several optimization techniques, those who control operations can generate what we call utilities' value alpha UVA[®] the excess value, which is invisible to other shareholders, and can make up to 50% of the visible value
- UVA is rooted in the existing regulatory system of the Ukrainian energy sector. Implementation of less restrictive tariff policies (which is only a matter of time) is going to correct distortions in value distribution, and promises upside for minority shareholders
- We differentiate among prices for strategic and portfolio investors
- Our DCF model, in addition to multiples valuations, was an integral part of the process we used to determine our target. This resulted in higher targets (compared to our previous report) for most companies (especially HAON, KION, POON and ZHEN), and lower targets for HMON, VIEN, VOEN, ZAON and ZOEN.

Company	Ticker	Rec	Upside	Target Price USD	arget Revision Since Sep. USD	Market rice USD	Market Capitalization USD mln
Prykarpatoblenergo	PREN	BUY	136%	0.47	+0.12	0.20	20.7
Poltavaoblenergo	POON	BUY	105%	0.51	+0.26	0.25	55.2
Krymenergo	KREN	BUY	91%	0.38	+0.17	0.20	34.6
Lvivoblenergo	LVON	BUY	75%	0.28	-0.02	0.16	31.0
Ternopiloblenergo	TOEN	BUY	59%	0.25	+0.04	0.16	9.8
Kharkivoblenergo	HAON	BUY	44%	0.40	+0.19	0.28	71.8
Zhytomiroblenergo	ZHEN	BUY	16%	0.70	+0.41	0.60	73.4
Sevastopolenergo	SMEN	HOLD	8%	0.87	+0.14	0.80	21.51
Dnipooblenergo	DNON	HOLD	3%	39.92	+1.92	38.60	231.3
Kirovohradoblenergo	KION	HOLD	-6%	0.49	+0.32	0.52	62.1
Vinnitsaoblenergo	VIEN	HOLD	-7%	7.47	-1.63	8.00	24.8
Khersonoblenergo	HOEN	SELL	-27%	0.27	n/a	0.37	66.2
Zaporizhiaoblenergo	ZAON	SELL	-29%	0.57	-0.09	0.80	143.5
Volynoblenergo	VOEN	SELL	-33%	0.03	-0.02	0.05	23.9
Chernihivoblenergo	CHEON	SELL	-45%	0.30	+0.10	0.54	64.4
Sumyoblenergo	SOEN	SELL	-45%	0.24	+0.08	0.44	77.9
Khmelnitskoblenergo	HMON	SELL	-49%	0.18	-0.04	0.36	48.44
Zakarpatoblenergo	ZOEN	SELL	-66%	0.08	-0.03	0.23	28.7
Chernivtsioblenergo	CHEN	N/R	n/a	n/a	n/a	1.00	56.8
Cherkasyoblenergo	CHON	N/R	n/a	0.25	n/a	n/a	n/a
Donetskoblenergo	DOON	N/R	n/a	n/a	n/a	0.71	46.5
Kievoblenergo	KOEN	N/R	n/a	0.10	n/a	n/a	n/a
Mykoliaivoblenergo	MYON	N/R	n/a	n/a	n/a	n/a	n/a
Odessaoblenergo	ODEN	N/R	n/a	0.21	n/a	n/a	n/a
Rivneoblenergo	ROEN	N/R	n/a	0.50	n/a	n/a	n/a



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GLOSSARY

Visible Value

The value of a company which can be derived from the officially reported data. Visible value is distributed proportionally among all shareholders.

Utilities' Value Alpha (UVA)

Value created by an Oblenergo in excess of what is predetermined by the regulatory body. The source of UVA is Oblenergo's management skills to utilize inefficiencies in regulation of the industry. This extra value is created in the course of normal business activity but is invisible to the regulator and captured only by the shareholders who exercise control over the operations.

Operating Control Leverage (OCL)

In addition to financial leverage and operating leverage, we introduce the concept of Operating Control Leverage, which reflects to what extent those shareholders controlling operating activity can utilize this control for their own benefit, earning returns above those available to other shareholders:

OCL = UVA / Visible Value

Distributor's Revenue

Also known as "Tariff Revenue". The revenue of Oblenergos generated by electricity transmission and supply services. This represents part of the total revenue, not associated with the re-selling of electricity purchased on the whole-sale market. Contrary to common belief, it is Distributor's Revenue – not total revenue – that drives Oblenergos' value.

Soft Costs

The part of an Oblenergo costs which may be relatively easily varied under existing regulations. Companies are able to over-state soft costs in order to receive higher tariffs from the NERC. One of the major tools of UVA generation.



EXECUTIVE SUMMARY

The flare up in the heated corporate wars for Ukrainian Oblenergos earlier this year, M&A agitation concerning VSE-owned Oblenergos and the market's growing interest in utilities forced us to use more refined tools to investigate the value of the electricity distributors. We are introducing the term **UVA**, **Utilities' Value Alpha**, to refer to the unique business process inherent in the operations of Ukrainian utilities today, which allows extra profits invisible to those not in control over operations. We analyzed the typical methods used for distributing real profits asymmetrically and the reasons behind it. In addition, we analyzed the sensitivity of UVA to different factors.

Our main finding is that under the current condition of asymmetric access to UVA, certain categories of shareholders, even those who possess sizeable blocks of shares, are deprived of their share of the total value of Oblenergos, while those in control of business operations leverage their control over the management. Privat group and the Energy Standard group are among those whose lack of control which hurts the value of their shares. The two companies are stuck with 33%-40% stakes in five Oblenergos.

So far, the groups exercising operating control have the ability to transfer the burden of regulator sanctions to other shareholders. Portfolio investors suffer the most: they can only capture the visible tip of the value iceberg, their shares are only worth a fraction of the value of strategic players. We use the concept of *Operating Control Leverage (OCL)* to quantify the scope of value deprivation, which we found to be significant, exceeding 40 percent for several Oblenergos.

We believe in the future opportunities to distribute value asymmetrically will be fewer and fewer, as the National Electricity Regulation Commission (NERC) is working on new tariff setting procedures which would give all Oblenergos an equal opportunity to earn the market rate of return. In the short term, however, the shareholders with no access to UVA are left without any opportunity to capture value either through fair profit distribution or by selling their blocks at market price.

We have reached a new level of understanding in terms of Oblenergo operations, which makes us confident in our DCF approach to valuation. Moreover, we believe that investors should not overly rely on the top line in valuing Ukrainian utilities, as it is the so called "Distributor's Revenue" rather than Revenue per se that drives the value for Oblenergos.

The findings of this report are based on the results of special studies conducted in November of this year by two agencies: UNIAN media research and TNS industry expert opinion study, as well as our own interviews with the management of Oblenergos and NERC experts.



CORPORATE WARS: A SYMPTOM

The ongoing conflicts between Oblenergo shareholders have forced us to revise our valuation of Ukrainian distribution companies. Despite operating in a highly regulated environment, Oblenergos remain one of the hottest issues for potential investors. Moreover, according to recent market research by TNS Ukraine, Oblenergos, when properly managed, can be profitable.

The fact that powerful business groups are fighting for control of these companies is evidence that their real value is much higher than their reported financials suggest. The catch is that only those who control company operations capture the real value.

In our current examination we estimate the difference between the Oblenergos' visible and actual (including invisible) value and determine the factors affecting these values.

A History Of The Conflict

On February 17 2005, special forces seized the main office of Prikarpatoblenergo, and evicted the current management. The troops were enforcing a court decision, which gave the company managers that were dismissed in 2002, their jobs back. This upheaval paralyzed company operations for a couple of days, and brought the conflict into the public eye.

The conflict has been full of legal procedures and PR attacks in the media (refer to page 24), and several organizations, including the State Securities Commission, energy companies and regulators, courts, and the police have all been involved.

Making matters more complicated - there exist multiple share registers/registrars for the "conflict" Oblenergos, and the rival parties dispute their validity. The authorities are considering freezing the turnover of all shares in the companies to prevent further legal complications.

The Energy Standard Group (Konstantin Grigorishyn) accumulated 40% the shares in six Oblenergos privatized in 1998 (**PREN**, **LVON**, **TOEN**, **CHEON**, **SMEN**, **POON**), Grigorishyn began controlling these companies in 1999-2001. Other blocks were accumulated by the Slavutich Group and its owner Grigoriy Surkis, who had strong ties to then President Kuchma and his inner circle.

According to Grigorishyn, Grigoriy Surkis used his lobbying power, to change the management of the Oblenergos in 2001-2002 so that he was the only shareholder who could control company operations.

According to one of the owners of Privat group, Ihor Kolomoiskiy, in the fall 2004 Grigorishyn sold him 50% stakes in his holding companies which owned blocks in Oblenergos. After the "orange revolution", Surkis's lobbying power decreased, and Grigorishyn, who had the support of some of the "revolution's" leaders, decided to try to change the management in some Oblenergos. Unfortunately for him, this attempt failed.

To lend fact to the words cited above, we have outlined the current situation:

- Currently Grigorishyn and Kolomoiskiy (lets call them the *partners*) jointly own 33%-40% of the "conflict" Oblenergos, so neither of them can independently operate with these blocks.
- When Surkis fell out of favor in early 2005, the *partners* had two options: to try to reach an agreement with Surkis to buyout Surkis' stake, or to take away Surkis from operating control. Grigorishyn chose the second option, but failed.
- Grigorishyn's defeat means the *partners* no longer have much of a chance to regain operating control.



As this experience shows, buying a non-controlling stake in an Oblenergo is a bad idea. We will talk more about the values of the stakes in the conflicting Oblenergos in the last section of our report.

What Is Going On Behind The Scenes?

The conflict in five Oblenergos is related to their ownership: The National Energy Company of Ukraine (NC ECU), Slavutich Group (Surkis), Energy Standard Group (Grigorishyn) and Privat Group (Kolomoiskiy) all have only minority stakes in **CHEON**, **LVON**, **POON**, **PREN**, and **SOEN**. The bone of contention in this conflict is the distribution of operating control in the Oblenergos among these shareholders. This means that not the ownership per se could be interesting for investors: all the owners of minority blocks are trying to control operating activity in the companies. Thus, only CONTROL is interesting for them, and gaining control is such a key factor that it is worth starting military actions.



Disposition: Ownership & Control Of Oblenergos

We can separate the six main Oblenergo owners and the four major groups of companies by control:

VS Energy: fully controls KION, ZHEN, SMEN, HOEN, ODEN. It also has minority stakes in MYON, CHEN, ZOEN, HMON, VIEN.

The AES Corporation: fully controls KOEN, ROEN

The Owners Of The Contested Oblenergos: (PREN, **LVON**, **SOEN**, **POON**, **CHEON**). The three main groups of shareholders have their stakes in these companies:

- Surkis & Co.: companies related to him control 10%-35% of the Oblenergos, and are believed to control the operating activities in them
- Grigorishyn and Kolomoiskiy: according to Kolomoiskiy, they jointly own the companies which control 33%-40% of these Oblenergos. Because of the conflicts between Grigorishyn and Surkis, this group of shareholders has no access to the operational control of these Oblenergos. In addition to the five conflict Oblenergos, Grigorishyn and Kolomoiskiy also have joint ownership in three state-controlled Oblenergos: DNON, TOEN and ZAON.

The NC ECU: technically controls all the Oblenergos in which the state has a majority stake (VOEN, HMON, VIEN, CHEN, HAON, ZOEN, DOON, DNON, ZAON, KREN, TOEN, MYON). In addition, NC ECU can increase its stake in CHON from 46% to 71%, by taking away a 25% stake from state-controlled company UKRESCO. In fact, however, NC ECU does not control the companies: part of them are controlled by the management, the others are under the influence of the different groups listed above.

	VSE	AES	Surkis	Grigorishyn	Kolomoiskiy	State
CHEN	?					(+)
CHEON			?	?	?	
CHON			?	?		?
DNON				?	?	(+)
DOON						(+)
HAON						(+)
HMON						(+)
HOEN	+					
KIEN						(+)
KION	+					
KOEN		+				
KREN						(+)
LVON			?	?	?	
MYON	?					(+)
ODEN	+					
POON			?	?	?	
PREN			?	?	?	
ROEN		+				
SMEN	+					
SOEN			?	?	?	
TOEN				?	?	(+)
VIEN						(+)
VOEN						(+)
ZAON				?	?	(+)
ZHEN	+					
ZOEN						(+)

Control Of Oblenergos

Source: Concorde Capital estimates

+ represents operating control; (+) only nominal control; ? control is uncertain



What Does Operating Control Give You?

The value of an Oblenergo is distributed between its shareholders proportionally to their ownership rights. However, utilization of operating control by some shareholders may lead to asymmetric access to the real value generated by the company, which does not necessarily coincide with the visible value.

Example. Assume 25% of the company is owned by four groups of shareholders: A, B, C and D, and the company's visible value is USD 100, while its real value is 120 (i.e. the company generates unseen value (or UVA) of USD 20). There are four ways to distribute this real value between shareholders:

Case 1: Fair Distribution: the real value for each shareholder is 120*25% = USD 30.

Case 2: Asymmetric Distribution: those who have no access to the real earnings (who do not control the company) value their stake based on reported data (i.e USD 100*25% = 25). The unseen value (USD 20 in this case) will be distributed only between those who have operating control.

2.1: Only A Has Operating Control: The value of A's stake will be USD 45 (share in visible value: USD 25 + all the unseen value: USD 20). For the others it is USD 25.

2.2: Only A And B Have Control: The value of A and B will be USD 35 (the share in visible value: USD 25 + part of unseen value distributed between those who have control: USD 10).

2.3: A, B and C Have Control: The value of stake of A, B and C is USD 31.7.

Value Distribution Among Shareholders:



Note that for shareholder A, the most beneficial case is Case 2.1: when he captures all the unseen value of the company.

Implication For Shareholder A:

Unseen	Premium	То	The	Visible	Value	Of	A's	Stake

	UVA In % To Visible Value *								
Control:	10%	20%	30%	40%	50%	60%	70%		
Only A	40%	80%	120%	160%	200%	240%	280%		
A&B	20%	40%	60%	80%	100%	120%	140%		
A&B&C	13%	27%	40%	53%	67%	80%	93%		
All	10%	20%	30%	40%	50%	60%	70%		

* This is Operating Control Leverage (OCL) as defined in the paragraph below.

For shareholder A, the fewer parties with operating control, or the more the difference between real and visible value, the more value for his stake.



The latter conclusion explains the conflict between Oblenergo shareholders: currently three groups of shareholders are trying to increase their control over operating activity, to take advantage of the UVA of these companies.

Note that if there is no UVA, there is no major difference between the price of shares for the shareholders who operate the company and those who do not have operating control.

Another implication is that the higher the UVA of these companies, the more desirable it is for the shareholders to install/save operating control, thus battles for operating control can be more fierce.

We will use the term Operating Control Leverage (OCL) to describe the ratio between the real value captured only by the shareholder who controls operations, with the visible value.

The main valuation implication for the "conflict" Oblenergos is that the real value for different groups of shareholders can vary significantly. Moreover, the size of UVA has an effect on the reported value of the companies (i.e. the value which is available for portfolio shareholders).

Below are the results of our study on the influence of recent events in the energy sector on the reported and unreported values of Oblenergos. We also look at the influence of operating control and ownership stake size on the value of shares.



UTILITIES' VALUE ALPHA (UVA)

What Is This?

We believe the process we are analyzing deserves a special title and therefore introduce the concept of Utilities' Value Alpha (UVA). Oblenergos operate in the environment of strict regulatory control and caps on profitability this entails. Alpha is what skillful management can earn using regulator's inefficiency in defining and controlling factors that determine prescribed profitability margins.

Note that UVA generation does not violate current legislation: these excessive profits emerge either in the process of optimization of costs in order to re-allocate cash flows according to the company's vision rather than according to the allocation prescribed by the NERC, or after knowingly over-stating future costs in order to apply for higher tariff from the NERC.

Why Do They Need It?

Prescribed Costs

When costs are higher than the tariffs the NERC is willing to allow, Oblenergos try to "hide" the necessary capital in their cost structure.

Case Study: The Trade Union Agreement

According to an agreement with the trade unions, Oblenergos are obliged to annually increase wages by 25% on average. The National Electricity Regulation Commission (NERC) agrees that wages must be increased, but will not include the 25% annual growth in their new tariffs, which means Oblenergos must find additional sources of income to boost wages.

Tariffs are set by the NERC at a "Cost+" basis and the commission has to balance between two options:

- to allow tariffs high enough for Oblenergos to earn profits that will allow them to be stable and develop;
- not to allow unnecessary spending by the distribution companies and their owners which will negatively affect energy consumers (as they will have to pay for these extra expenditures)

Because the second option is more popular with society at large, and because Oblenergos are trying to over-estimate their needs, the NERC tends to limit the amount of expenditures which are compensated via electricity tariffs.

Sure, Oblenergos have their own view on how to spend money and on what their real needs are. Moreover, as there is often a gap between cost growth and tariff revision, the companies need to have reserves to weather such periods. Thus, Oblenergos create "invisible" reserves to supply their real needs and provide insurance during tough times.

These reserves cannot be fully reported because they are not allowed by the regulator - if the NERC learned about them, it would adjust tariffs downwards correspondingly.



Tariff Rigidity

Historically tariffs for Oblenergos only changed once every 2 years, leaving Oblenergo managers to create reserves that will supply operating cash flow during the lag between cost increases and the NERC's decision to revise tariffs. According to the results of an interview of market participants and experts held by TNS Ukraine, the management of privately-controlled Oblenergos are considered the most qualified and capable to substantiate tariffs for their companies (refer to the table on page 14). We also assume that they are better at foreseeing future expenses and the time needed to justify tariff revision.

Example: Tariff Rigidity And Reserve Needs

Assume that on average Oblenergos have the following cost structure:

Payroll costs: 25%, with annual growth of 22% Fixed Costs: 55%, which grow 2% annually Material (Variable) Costs: 20%, which grow proportionally to electricity supplies

If the tariffs for an Oblenergo do not increase this year, the company would need electricity supply to grow by 10% to compensate for its higher annual costs.

Supply Growth And Profitability With Constant Tariffs



Source: Concorde Capital

In Ukraine, the average time between tariff changes was 2.2 years, therefore in order to maintain their profitability, all Oblenergos have to calculate not only next year's costs and sales, but also forecast costs and sales for the following year.

In our example, if in the second year an Oblenergo predicts electricity supply growth of 5% and no changes in tariffs, in the second year it must compensate for a \sim 4% growth in costs. The fact that most of the privately controlled Oblenergos have positive operating profits in this rigid system suggests they have a reserve which can compensate for the growth in their costs.

On top of this, Oblenergos must create a reserve for expenditures which are not supported by the NERC.



Working For Reserves Or Veiling The Value?

It would be naïve to assume that the management of these companies over-reports actual costs only to create reserves to cover future costs. If it is easy to over-estimate costs then it is likely managers use this opportunity to earn on the difference between reported and actual costs/profits, thus generating what we call the utilities' value alpha (UVA).

The most important implication of UVA for shareholders is its unequal distribution. This, in our opinion, is the core reason for the conflicts between the main shareholders.



ESTIMATING REAL VALUE

"Come on, everybody does it ... "

Most market experts agree that all Oblenergos are involved in activities to build up UVA, moreover – they use the same set of methods for generating UVA. Many believe the more efficient the management team at an Oblenergo, the more the company can earn from this:

- Because they are more efficient in substantiating their tariff with the NERC
- Because they are more profitable, and do not need to cover their losses and cash flow deficits with excessive profits

Summary Of Expert Opinion Survey

Question:	Answers	% of respondents
	"It's really a profitable business"	20%
What do you estimate to be the real profitability of Oblenergos? Are private companies more efficient in substantiating high tariffs?	3%-5%	20%
	It depends on the ownership: private companies are more profitable	20%
	Reported values are close to the truth	40%
Are private companies more efficient in	Yes	75%
substantiating high tariffs?	No	25%
There were numerous misappropriations uncovered by the NERC and disclosed by the owners of conflicting Oblenergos. Do you think they are common only in these companies?	No, such practice is common for all Oblenergos	100%
Source: TNS Ukraine, Concorde Capital		

The results of the opinion survey made us believe that there must be a common approach used by all Oblenergos to generate UVA. Our analysis of operating activity allows us to assume that the most common method of generating UVA is to over-state variable costs and CapEx.

How UVA Is Generated

Theoretically, the following can be practiced:

- Cutting real costs (in the case with trade unions: optimization/cutting of the workforce) not an easy option for most companies.
- Obtaining additional income sources (i.e. "other activities", which are limited by the NERC): commodities trading, operations with securities etc. As the NERC tends to frown upon unlicensed activities (i.e. something other than electricity supply), the companies try to hide these sources of income
- Over-reporting real costs to apply for higher tariffs
- Over-reporting capital expenditures

The latter three seem like the methods of choice for Oblenergos, as they would work for all the companies regardless of their customer profile and staff.



While the methods listed above can hardly be considered an exhaustive list, the overreporting of operating costs seems to be the most effective and universal way to underreport the actual profitability of Oblenergos.

Still, the costs listed below are hard to manipulate:

- Depreciation & Amortization they are non-cash costs
- Wages as a rule, this costs item is under-stated rather than over-stated
- Electricity purchase costs, electricity losses these are easy for the regulator to check

All other costs (material and other variable costs) are relatively easy to over-report, and Oblenergos probably take advantage of this. Thus, assuming that all the companies use the opportunity to over estimate their costs:

There must be some correlation between operating costs and the amount of under-stated profits

A straightforward estimation of this relationship is difficult to find - we will approach this question from a different angle:

It is common knowledge that a considerable part of Ukrainian insurance is captive. The NERC's investigation makes us believe that Oblenergos use insurance as a legal vehicle to reallocate profits. Assuming conservatively that all the UVA is withdrawn from an Oblenergo using only insurance techniques, we can extrapolate the NERC's findings about insurance misuses at a group of companies, to gauge the operating costs overstated by any Oblenergo.



NERC Study: Where Are Excessive Profits Directed?

Among the multiple violations made by Oblenergos in electricity supply, the NERC discovered that they tend to misuse money by increasing costs through insurance operations:

Insurance Expenditures, 2003-2004

	USD mln	% of Total Revenue 2004
POON	11.3	7.5%
PREN	1.8	2.3%
SOEN	1.2	1.9%
ZHEN	0.8	1.3%
LVON	1.4	1.2%
TOEN	0.2	0.7%
ZAON	1.3	0.5%
KOEN	0.2	0.2%

Source: NERC, Concorde Capital calculations

Statistical Approach

Hypothesis: all Oblenergos under-state profits in the same way, and all over-state nearly equal parts of their operating costs.

To check the hypothesis, we first define the costs that could qualify for overstatement (let's call them *soft costs*) as total costs minus the cost of electricity purchased, excessive electricity losses, wages and D&A. We regress the insurance expenses on the amount of soft costs to test the stated hypothesis.





From the graph we see there exists a strong correlation between reported *soft costs* and the level of insurance fees paid by the companies.

We treat POON as an outlier, as this is the only Oblenergo which has a large electricity generating department.

Source: NERC, company data, Concorde Capital calculations

Regression:





Our analysis supports the idea that the companies over-state their operating costs in nearly equal proportions. With a probability of 95%, this proportion lies between 4.5% and 8.1%.

Using the results of the regression analysis of the companies which were caught redistributing UVA, backed by expert opinion that Oblenergos apply similar methods to obtain excess (unrecorded to most of shareholders) profits,

we assume the following relationship to be applicable to all Oblenergos:

Unrecorded Profit = 6.2% x Soft Costs

	Unrecorded Profit USD mln	% To Sales	% To EBITDA
CHEN*	n/a	n/a	n/a
CHEON	1.05	1.8%	19%
CHON	1.10	1.9%	n/m
DNON	3.04	0.4%	44%
DOON*	n/a	n/a	n/a
HAON	2.48	1.4%	n/m
HMON	0.39	0.8%	12%
HOEN	1.30	1.8%	20%
KION	0.40	0.7%	5%
KOEN	1.76	1.5%	8%
KREN	1.43	1.2%	28%
LVON	1.47	1.3%	11%
MYON*	n/a	n/a	n/a
ODEN	0.03	0.0%	n/m
POON	3.77	2.5%	38%
PREN	1.75	2.3%	15%
ROEN	0.75	1.1%	8%
SMEN	0.50	1.6%	11%
SOEN	1.00	1.6%	16%
TOEN	0.36	1.1%	40%
VIEN	0.35	0.6%	9%
VOEN	0.27	0.8%	10%
ZAON	1.01	0.4%	20%
ZHEN	0.71	1.2%	7%
ZOEN	0.03	0.1%	1%

Estimates Of Under-Stated Profit, 2004

Source: Energo Business, company data, Concorde Capital estimates * We do not consider these three Oblenergos as investment opportunity and exclude them from our analysis



UVA Forever?

Though Oblenergos currently make use of regulatory loop-holes to generate UVA, this is not going to be sustainable in the future. This is due to the growing control over the money spending habits of Oblenergos which have become more visible since March 2005.

Case study: Insurance

According to sector regulation rules, if a company is caught overstating costs, underspending on CapEx, or using money for purposes not allowed by the NERC, it is fined by up to USD 16.8 ths, and the difference between its real and reported/allowed spending can be deducted from the Oblenergo's tariff.

This was the case with 8 Oblenergos in 2005, when the NERC found they used money for insurance of thier assets (values of insurance contracts are on page 16), which is not allowed according to the NERC's rules on tariffs.

The NERC's policy allows it to prevent unjustified and unnecessary (according to the NERC) spending, and limits unreported profitability reserves.

Thus, the NERC's increased attention to Oblenergo spending is likely to cause unrecorded profitability margins to converge with the reported.

Example: The Owner And Tariff Reduction



Assume an Oblenergo has an Owner that controls 100% of the company and expects some rate of return from his investment. The owner shows part of his real profit as *Reported PBT* (which is then taxed) and the other part he does not record (by overstating costs). His actual return consists of the Reported PBT, reduced by taxes, and Unreported Profit. Note that unrecorded profit is more preferable for the owner, as it is not taxable.

Now assume the NERC found some reason to reduce $\frac{1}{2}$ of the owner's unreported profit by decreasing the tariff. The NERC is going to decrease the Oblenergo's unreported profit by the amount it reduces the tariff, while it expects the reported profit to stay the same:

The scenario desirable for NERC is as follows:





However, following tariff reduction, the Oblenergo's owner will try to regain the level of profit he had before. He can do this in two ways:

Way 1: increase unrecorded profit by decreasing reported profit

Way 2: start applying for a higher tariff in order to regain its level of actual profit, and not touch reported profit

Tariff Reduction: The Owner's Scenario:



In the short-run, the NERC's scenario is the most likely, while in mid-term the owner will do his best to reach one of the outcomes desirable for him. However, if the NERC is able to efficiently control the Oblenergo's activity, the owner is unlikely to fully regain his profit after tariff reduction. Therefore, in the long-run, we can expect the following patterns (assuming real costs are constant):



This strategy is not beneficial for either party, as cash flow in the Oblenergo constantly decreases, and the company may become bankrupt.

The effect of the Way-2 depends on the bargaining power of the owner. If this power weakens and the NERC adjusts an Oblenergo's tariff downwards more often than upwards - the owner loses. Therefore, a wise owner will use the first strategy, so the NERC will be forced to change its own policy of tariff reduction in order not to bankrupt the company.

For the NERC, the only way out is to fight against over-stated costs on the one hand, and allow for higher reported earnings on the other. This means that in the



long term, the NERC has to establish allowed (reported) profitability which will satisfy the owner and at the same time, create conditions which will make it unbeneficial to over-report costs.

The equilibrium scenario for both parties is the following: if the NERC finds excessive (unrecorded) profits, it tries to bring them out in the open by reaching an agreement with the owner to increase reported profit. Incentives for the owner to increase his unrecorded profit in the long-run are still there, but the already high profit the NERC would allow plus strict monitoring make this more trouble than it is worth.



The reality of the last outcome is supported by evidence that the NERC is going to work out a new tariff policy, according to which the tariff will account for the required rate of return for strategic investors. However, this will not happen over night, and is more likely in the mid- to long-term.

With the new policy in place, portfolio investors will be able to increasingly get access to the whole pie.



VALUE: SENSITIVITY ANALYSIS

Regulation Changes

Last year saw some changes in the regulatory base of the energy sector:

- A law "On Measures Directed To Ensure Stable Work In The Energy Sector" was adopted, which was designed to solve the debt problem
- Unified retail tariffs for non-residential consumers were introduced
- The government issued a decree, according to which all the companies in which the state has a stake are obliged to pay dividends on that stake based on the results of previous quarters

However, industry experts have not noted any significant effect:

Question:	Answers:	% Of Respondents
How has regulation in the energy sector changed under	No changes	75%
the new government?	Less restrictions	25%
	No important acts implemented	40%
Which regulatory acts adopted	Some minor restrictions were eliminated	20%
Oblenergos the most?	Convergence to EU standards started	20%
	Implementation of unified tariffs	20%

Summary Of Expert Opinion Survey

Source: TNS Ukraine, Concorde Capital

We conclude that the positives in the regulatory acts mentioned lacked enforcement, and the negatives were overcome by the Oblenergos' management.

The Debt Offsetting Process

Despite the fact the act was adopted almost half year ago and the companies did all they could to start the process, state agencies turned out to be completely unprepared to implement the law. This kind of behavior is starting to become habit for the current government, as implementation of the debt offsetting process (which will raise costs for energy consumers) will increase retail electricity prices in Ukraine by up to 10%. This will not be a popular decision before the parliamentary elections in March 2006. We expect the process to start after the elections.

Dividend Decree

In May 2005, the government issued a decree, according to which all companies in which the state has an interest, have to pay dividends on a quarterly basis, based on the results of each quarter. Despite the fact that this decree contradicts current legislation on jointstock companies (only an AGM is empowered to determine dividend payout), this decree has been put into practice. This move can be regarded as additional taxation, which gives the companies more incentive to decrease their reported profit on a quarterly basis, i.e. to move part of their real profits into the shadows, increasing UVA and operating control leverage.



The NC ECU Factor

The creation of the National Energy Company of Ukraine (NC ECU) in August 2004, increased control over the Oblenergos in which the state has a stake. The increased control and the risk of management dismissal for poor performance, lead the Oblenergos, where the state had more than a 50% stake, to show higher margins starting in 3Q04 (refer to the September update on Oblenergos). However, NC ECU pressure on Oblenergos is likely to lighten up in the near future for two reasons:

- The NC ECU has become a pawn in political wars, and its management has changed twice since August 2004, as a result, the company did not manage to create a professional team which could control the assets efficiently. In fact, the NC ECU does not intrude into the operations of Oblenergos, but only pretends to control them.
- The future of the NC ECU is unclear

Thus, the NC ECU could have had a positive effect on the decrease of OCL for some statecontrolled companies, however, this effect was only short-term.

Unified Tariff Introduction

The introduction of unified tariffs did not directly affect the operating activity of Oblenergos (refer to our September update on Oblenergos). In the long-term, this could cause a decrease in the customer base of eastern Oblenergos, whose consumers will see their electricity costs grow.



Conflicts In Oblenergos

Oblenergo conflicts came into the public eye in February 2005, due to vast coverage in the press, most of which tended to be biased towards one side or the other. Most of these articles accused the opposing party of gross violations while operating Oblenergos.

Experts agree that the conflicts did not directly affect the performance of "conflict" Oblenergos:

Question:	Answers:	% Of Respondents
How have the conflicts in	No effect at all	80%
results in these companies?	Only a very short term instability	20%
How have the conflicts in Oblenergos affected the attitude of regulators to these Oblenergos?	No effect, state does not intrude in corporate conflicts	100%

Source: TNS Ukraine, Concorde Capital

Most of the companies maintained their high scores in our rankings, and all of them remained in the top positions among all Oblenergos. However, the conflict indirectly provoked regulating bodies to take a more careful look at the financial misappropriations in the companies, and therefore, negatively affected the companies' future earnings, both reported and unreported.



Conflict, Mass-Media And The Attitude Of The Regulators

Since March 2005, the NERC has stepped up its investigations of Oblenergos and the number of fines imposed for violations have increased significantly.

It is clear from the graphs below that the NERC's increased activity in imposing penalties on Oblenergos was preceded by an abnormal increase in news related to the "conflict" Oblenergos in major Ukrainian mass-media outlets.





Source: UNIAN monitoring of printed and internet media, Concorde Capital

The NERC's Investigations Of Oblenergos (#per month)



Source: NERC, Concorde Capital calculations

According to UNIAN's analysis of 10 printed nation-wide media and 10 top-rated Ukrainian news websites, prior to February 2005, there were about seven articles on the "conflict" Oblenergos per month, and only 31% of them were clearly biased. For the last 9 months the average number of articles per month has increased 4.6 times, and 67% of them could be considered openly biased.

As a regulatory body, the NERC was required to study all the information disclosed in the media. Moreover, this flow of negative information coincided with the newly elected government's announcement of a war against "shadow" profits: making it a real chance for the NERC to show that it was a valuable soldier in the war: as a result – investigations and the growth of sanctions against Oblenergos.



NERC Activity: Who Suffered?

The table below represents the distribution of fines and warnings doled out by the NERC for misuses in 2004 and 2005. We sorted Oblenergos according to our scores which represent the performance of the companies (refer to pages 33-34 for scoring). This information allows us to make several conclusions:

- violations were found in **all** the companies, regardless of their performance, during both 2004 and 2005.
- While in 2004 the NERC fined (i.e. found major violations) only poor-performing Oblenergos, in 2005 the NERC started to fine all the companies regardless of their operating results – which had an impact on *conflict* Oblenergos which are among the best performing.
- In 2004, the group of *conflict* Oblenergos flew below the NERC's radar, in 2005 they were fined more often than other Oblenergos.

NERC Sanctions Applied To Oblenergos

	2004		11M 20	Current	
	warnings	fines	warnings	fines	Score*
SMEN					4.8
KOEN	2			1	4.8
ZHEN				1	4.7
SOEN				1	4.7
LVON				2	4.7
POON				1	4.7
CHEON	1		1	1	4.7
KION	1				4.5
PREN				1	4.5
HMON				1	4.3
TOEN		1		1	4.3
HOEN	1			2	4.2
ROEN		1	1		4.2
VOEN					4.2
CHON				1	4.0
HAON			2		4.0
ZAON				1	3.8
KREN	1			2	3.7
VIEN		1	1	1	3.5
ODEN		1		2	3.5
ZOEN	2		1		3.5
DNON			1	1	3.2
MYON	1		1	1	2.8
DOON	2	1			2.5
CHEN			2	1	2.3

Sanctions Summary By Groups:

Act Per Company In Group: Control							
Control	200	4	11M 2	# of Co's			
	warnings	fines	warnings	fines	in group		
NC ECU	0.5	0.2	0.6	0.7	13		
"Conflict"	0.2	0.0	0.2	1.2	5		
VSE	0.4	0.2	0.0	1.0	5		
AES	1.0	0.5	0.5	0.5	2		

Act Per Company in Group: Ownership										
Ownership	200	4	11M 2	# of Co's						
	warnings	fines	warnings	fines	in group					
State >50%	0.5	0.3	0.6	0.8	13					
Minorities**	0.2	0.0	0.2	1.2	6					
Private Owner	0.7	0.2	0.2	0.7	6					
shish 8.4 4 1 1 14										

** Note: minority ownership: companies where nobody has control stake (the conflict Oblenergos, plus CHON)

Source: NERC, Concorde Capital calculations

* For scoring, refer to pages 33-34 Red: "conflict" Oblenergos

The analysis above support the beliefs of the majority of experts that all Oblenergos make similar violations:

Summary Of Expert Opinion Survey

Question:	Answers	% of respondents
le the increase in the NEDC's	Yes	20%
sanctions in 2005 related to	No, it is coincidence	20%
the CONFLICTS in Oblenergos?	No, it must be related to the government's fight with shadow profits	60%

Source: TNS Ukraine, Concorde Capital

Still, the fines by themselves do not hurt Oblenergos: the key risk related to NERC investigations is tariff reduction by the amounts of money spent improperly, according to the NERC. These amounts (refer to insurance case on page 18) tend to harm both the companies' unreported and reported profitability.



AGM Boycotting

The conflict was exacerbated by the refusal of Grigorishyn and occasionally the NC ECU to participate in company AGMs and EGMs. However, AGM boycotts are unlikely to have any effect on the performance of Oblenergos, especially if their management is qualified and does not need to be changed by the shareholders at the meeting.

Case Study. Kyivstar: AGM Boycotts And Performance

During 2005, the Ukrainian mobile operator Kyivstar planned three AGMs, and because of a conflict between the company's main shareholders (Russia's Alfa group and Norway's Telenor) it failed to hold any of them. Despite this fact, Kyivstar, which had been the #2 mobile operator for the last three years (in terms of mobile subscriber base), managed to become the mobile leader in Ukraine.

The only negative outcome of AGM boycotting for shareholders is the failure to pay dividends. This, however, is not a major concern, as Oblenergos had low net incomes (the base for dividends) in 2004, and investors were not expecting large dividends.

Maximum Dividends Expected From The AGMs (USD):

	Stock Price	EPS 2004	Maximum Div. Yield
LVON	0.16	0.0287	16.9%
CHEON	0.54	-0.0074	-
POON	0.25	-0.0236	-
SOEN	0.44	0.0005	0.1%

Source: company data, Concorde Capital estimates

The money wasted on organizing failed shareholders' meetings is of course not an example of efficient money spending. However, the costs related to AGM organization are barely noticeable in the companies' operating results.

Case Study: The CEO of Prikarpatoblenergo took the NC ECU to court for boycotting an EGM in October 2005: the NC ECU demanded that PREN hold the EGM, and PREN wasted USD 8.3 ths setting up the meeting. Now the company wants the NC ECU to compensate them for these losses.



VALUATION

By understanding why and how the value is kept from minority shareholders, we are able to make valuations for a different groups of investors. We use multiples from international peer groups, as well as CEE/CIS privatization and M&A comparisons. Our DCF models provide a flexible tool to identify the visible and estimated total real value of Oblenergos.

Peer Comparison: Valuing The Tip Of The Iceberg

Things To Keep In Mind While Applying Peer Multiples

Parameters To Compare

We compared Ukrainian Oblenergos with their closest international peers: Czech and Hungarian distribution companies. In our peer comparison method we used multiples based on **revenues**, **EBITDA** and **net income**. Because of the significant difference between retail electricity prices in Ukraine vs the Czech Republic and Hungary, we do not use multiples based on physical output.

Average Retail Electricity Prices, 2004, USD/MWh



Source: company data, Concorde Capital

Fixed Asset Accounting Distortions

There is no uniformity in Oblenergos' accounting for fixed assets. Some companies have conducted several revaluations of property, plant and equipment (PP&E) to make sure their assets correctly reflect future economic benefits (refer to page 49 for details), while others carry under-estimated values on their books.



Regulatory Differences:

Regulations for Ukrainian Oblenergos are different from their international peers in the following ways:

The NERC algorithm

Oblenergos do not earn on the re-selling of electricity from the wholesale market to end customers: they are only allowed to earn money on the transmission of electricity in their grid and on the supply of electricity to end users.

Most Oblenergos (except **KION**, **ZHEN**, **SMEN**, **KOEN**) are not directly involved in the allocation of money for electricity sold: the NERC is responsible for this process. The NERC calculates the proportion of money (the NERC algorithm) to be transferred from the Oblenergos' customers to their commercial accounts. Thus, most Oblenergos only earn money on their accounts for transmission and supply services: the rest of the money collected from customers, the NERC forwards directly to Energorynok (bypassing the Oblenergos' accounts).

Thus, most Oblenergos only obtain 10%-50% of the money reported as revenues in their accounts. This significantly limits the use of operating cash by Oblenergos compared to their international peers.

Tariff Rigidity

Oblenergo tariffs for the supply and transmission of electricity are approved by the NERC. For Oblenergos, it is hard to have their tariffs changed for two reasons:

- The NERC, as a state body, is not interested in the growth of retail electricity prices
- Even if there is a need to increase electricity tariffs (i.e. fuel prices grow), Oblenergos are the last in the list of energy companies (after generation companies) for whom the NERC raises tariffs. Their place on the list means that Oblenergos have less chances to raise their tariffs in accordance with their needs.

The Peculiarities Of Tariff Setting:

Oblenergos cannot include all their costs related to electricity transmission and supply to their electricity tariffs:

- The NERC calculates the level of electricity losses which can be included in the tariffs: if the company loses more electricity than its allowed level, these losses come out of the Oblenergo's profits.
- The NERC strictly regulates which expenses can be compensated with tariffs, and monitors declared expenses and the real use of money by the companies. If the commission finds that real expenses were lower than was assumed by the tariff (e.g. the company's CapEx was less than was allowed), the company's tariff can be decreased to exclude the difference from future revenues.

The latter peculiarity has important implications when determining the costs of Oblenergos:

- The companies are interested in overestimating their operating costs, which means the EBITDA and net income reported by Oblenergos is understated.



Long-Term Top-Line Instability

In the long-term Oblenergo revenues will be unstable due to the threat of separation by big industrial customers. At the same time operating profits (or *distributor's revenue*), seems to be less sensitive parameter. Even after separation, the consumer still pays to Oblenergo for transmission services.

Case Study:

The Sensitivity Of An Oblenergo's Financials To Its Customer Base:

Assume an Oblenergo has a Consumer with a license for purchasing electricity directly from the wholesale market, which allows it to refuse to buy electricity from the Oblenergo. Assume this Consumer accounts for 20% of the Oblenergo's total consumption. Lastly, assume the Oblenergo's revenue and cost structure is the following:

Total revenue: USD 100 Revenue to cover electricity purchase costs 70% Revenue from transmission services 27% Revenue from supply services 3%

Revenue available for the Oblenergo (distributor's revenue): 30%=27%+3%

Operating costs related to transmission and supply: USD 20

Case 1: The Consumer Does Not Separate

In this case, the Oblenergo reports all the proceeds it gets from the electricity sold to the Customer as revenue. The company will receive on its account only USD 30, the rest (70% of sales) will go directly to the WEM, and will be reported as both a USD 70 increase in revenue and USD 70 increase in costs.

Thus, the Oblenergos' total revenue is USD 100=70+27+3

The *distributor's revenue* (revenue excluding electricity purchase costs): USD 30=27+3

Profit is USD 10=100-70-20 = 30 - 20

Case 2: The Consumer Separates:

The Short Term Effect

If the Consumer decides to purchase electricity from the WEM, the Oblenergo will purchase 20% less electricity from the WEM, which will reduce its revenues and costs related to electricity purchases by 70*20%=14. Still, the Consumer will pay for the Oblenergo's transmission services. This means that the Oblenergo's available revenue from transmission services will remain stable (USD 27), and the Oblenergo will loose only 20% of the revenue from its supply services (USD 0.6).

Thus, the Oblenergo's reported (total) revenue is now:

(70-14)+27+(3-0.6)=85.4 which is a 14.6% decrease

The *distributor's revenue* is 27+(3-0.6) = 29.4 (only a 2% decrease)

Profit (conservatively assuming no decrease in operating costs) is:

85.4-(70-14)-20 = tariff revenue-20 = 9.4 (a 6% decrease)

Conclusion: if the Customer separates, the effect on sales is more noticeable than on profits.



The Long Term Effect

In the long term the Oblenergo's tariffs for transmission and supply will be revised in order to renew correspondence between revenues (which fell) and costs (which did not change). The company will apply for higher tariffs, so that its *distributors' revenue* and profits will remain relatively stable in the long term.

KION, **ZHEN**, **CHON** and **SOEN** have lost more than 10% of their customers and their revenues have dropped significantly, however, their profits were for the most part unharmed. Thus their sales figures do not reflect fairly their *distributor's revenues*, and therefore, these companies would be undervalued when applying EV/S multiples.

Note also that Ukraine plans to come up with a bi-lateral contract system for the WEM in the long term. Such liberalization should increase incentives for most large industrial consumers to start purchasing electricity from the WEM. Still, Oblenergos will go on earning on electricity transmission (which is on average about 83% of their *distributor's revenues*, and will increase in the future). In other words, Oblenergos' sales could decrease significantly in long-term, without pronounced effect on their profits.

Current Bottom-Line Instability

Most of the companies have large receivables from their customers, part of which the companies have to write off as bad debt, generating losses, while leaving their real cash flows unaffected. In addition, some companies write off their payables to the wholesale market, "artificially" increasing their bottom lines. These makes Oblenergos' EBIT and net income not comparable within Ukraine, nor to international peers.



Implications For Multiples Valuation

While valuing Oblenergos by P/S (EV/Sales) a discount to their international peers should be applied due to the following:

- Peer tariffs are more flexible
- Peer operating activity is less regulated
- Peers have greater ability to use operating cash flows
- The (reported) profitability of Ukrainian Oblenergos is lower

EV/EBITDA, P/E and P/Book multiples would lead us nowhere.

In accordance with our standard methodology, we use a combined approach, where we use EV/S as a basic multiple, while applying a discount/premium to Oblenergos depending on their operating results and bottom lines. Now that Oblenergos have canceled their practice of under-estimating sales (please refer to our report of February 28, 2005) top-lines are difficult to manipulate in financial reporting, and for valuation purposes we favor the EV/S multiple over P/E and EV/EBITDA.

Net Debt Calculation

To calculate the net debt of Oblenergos we only take bank loans, net cash and equivalents into consideration. Under the cover of *other long-term liabilities* and some *current liabilities* we can discover positions which *de-facto* represent long-term debt to the wholesale market for most of the companies. However, we will not restate these items:

- debts of state-controlled Oblenergos accounted for as payables are likely to be offset in accordance with the law adopted in June 2005
- unlike the group of companies above, those Oblenergos privatized in 1998 and 2001 are currently paying off their long-term debt. Again, restructuring according to the law is expected in the near future



Oblenergos vs Peers: Performance Comparison

While close in geographical location and activity, Ukrainian Oblenergos have the following differences from their Hungarian and Czech peers:

- Most of them are smaller
- All are less profitable (or show lower margins)
- They loose more electricity during transportation

Oblenergos vs Peers: Summary (2004)

				EL Cuml	
	Sales	EBITDA	Net margin	EI. SUPI.	El. Losses
CLIEN		margin	00/	0.00	2.20/
	30	-3%	-070	0.90	3270
CHEON	57	10%	-2%	1.37	15%
CHON	58	-3%	-12%	1.57	14%
DNON	/21	1%	-2%	25.87	8%
DOON	270	-26%	-30%	8.38	31%
HAON	181	-6%	-11%	4.71	18%
HMON	52	1%	0%	1.52	23%
HOEN	/3	9%	-3%	1.80	21%
KIEN	311	6%	0%	6.93	15%
KION	57	14%	-3%	1.60	17%
KOEN	120	18%	10%	3.17	18%
KREN	120	4%	-6%	3.63	18%
LVON	115	12%	5%	3.28	18%
MYON	64	-17%	-34%	2.02	28%
ODEN	147	-1%	-19%	4.41	25%
POON	151	7%	-3%	3.31	8%
PREN	75	16%	5%	1.71	13%
ROEN	66	14%	8%	1.99	15%
SMEN	30	15%	9%	0.77	19%
SOEN	61	10%	0%	1.54	13%
TOEN	31	3%	-6%	0.89	21%
VIEN	63	6%	0%	1.84	23%
VOEN	34	8%	2%	0.97	21%
ZAON	276	2%	0%	10.15	10%
ZHEN	60	16%	6%	1.67	18%
ZOEN	45	5%	-1%	1.47	31%
Oblenergos average	126	5%	-4%	3.75	19%
¥ ¥					
Demasz RT	391	19%	6%	3.83	10%
Emasz RT	445	14%	4%	3.27	12%
ELMU RT	978	17%	8%	8.35	11%
Hunagarian Average	605	17%	6%	5.15	11%
Prazska Energetika	457	18%	9%	5 31	8%
Vychodoceska Energetika	457	n/a	6%	6.20	8%
Soveroceska Energetika	400	2004	0.70	6 11	70/
Severomoravska Eporaetika	612	2070 10%	7 /0 / 0/	Q 20	Q 0/
Stradoceska Energeticka	01Z /01	1770	4 70 60/	6.30 6.31	070 100/
Zanadoceska Enorgetika	401	1070 D107	070 110/	0.21	1270
Lapauuueska Energatika	4 I Z 6 2 1	24%	1170	4.40	0% 120/
	E07	1 2070	770	6.02 2 11	1370
uzeun Average	507	10%	ö 70	0.41	7%

Source: Company Data, Concorde Capital calculations

Despite the differences in the regulating environments and some variations in profiles, Oblenergo value can be derived from these peers' market multiples. Still, discounts must be applied while valuing some Oblenergos by EV/S, to account for the poorer performance of some groups of Ukrainian distribution companies.



Sales-Based Valuation

We use our traditional two-step method in valuation

1. Scoring

At the first stage we separate Oblenergos into groups depending on their valuedetermining parameters.

Key factors are described more in our previous Oblenergo reports:

Factors	Determining	Revenues	And	Costs
1 401013	Determining	Revenues	Allia	00313

Parameter	Direct Effect On:
Excessive Electricity Losses	Costs
Equipment Condition, CapEx	Electricity Losses, Costs
Regulation Related Factors:	
Tariffs	Sales, Costs, CapEx
Fines	Costs
Algorithm	Operating Leverage; Costs
Debt Growth (Money Collection)	Algorithm; Future Costs
Company-Specific Exogenous Factors:	-
Customers Profile	Tariffs, Sales, Future Sales, Money Collection
Weather Conditions	Costs

Below we present rankings which demonstrate our scoring of Oblenergos according to the main parameters. We also apply scoring for the results of 2004 to account for changes in the Oblenergos' performances last year.

Oblenergos By Score																			
	Supply	Change	yo	у	EBIT	DA Mar	gin		Paymer	nts Colle	ectio	n	NERC	Excessi	ive. El.	Los	ses	Mkt Desitio	-
	04/03	1H: 05/04	04	05	2004	1H05	04	05	2004	9M05	04	05	Algorithm 1H05	9M04	9M05	04	05	Sustainabilit	ty
SMEN	1%	5%	4	5	15%	n/a	5	5	117%	116%	5	5	100% 5	1%	-1%	3	4	high	5
KOEN	5%	5%	5	5	18%	17%	5	5	105%	106%	5	5	45% 4	0%	-2%	4	5	high	5
ZHEN	1%	5%	4	5	16%	17%	5	5	108%	108%	5	5	100% 5	0%	0%	4	4	medium	4
SOEN	10%	13%	5	5	10%	15%	4	5	104%	105%	5	5	33% 4	-4%	-4%	5	5	medium	4
LVON	3%	4%	4	5	12%	9%	5	4	106%	105%	5	5	31% 4	-1%	-2%	5	5	high	5
POON	5%	5%	5	5	7%	13%	3	5	108%	104%	5	5	57% 4	-3%	-3%	5	5	medium	4
CHEON	2%	3%	4	5	10%	17%	4	5	102%	100%	5	5	35% 4	-2%	-2%	5	5	medium	4
KION	-11%	-23%	3	3	14%	23%	5	5	112%	117%	5	5	100% 5	0%	-3%	4	5	medium	4
PREN	12%	14%	5	5	16%	8%	5	4	105%	103%	5	5	39% 4	-1%	-2%	5	5	medium	4
HMON	4%	5%	5	5	7%	6%	3	3	101%	106%	5	5	38% 4	5%	0%	2	4	high	5
TOEN	-1%	-2%	4	4	3%	5%	2	3	108%	104%	5	5	40% 4	0%	-2%	4	5	high	5
HOEN	-8%	5%	3	4	9%	11%	4	4	105%	106%	5	5	34% 4	2%	-1%	2	4	medium	4
ROEN	7%	-3%	5	4	14%	17%	5	5	103%	104%	5	5	41% 4	0%	1%	4	3	medium	4
VOEN	6%	4%	5	5	8%	6%	4	3	105%	101%	5	5	32% 4	4%	0%	1	3	high	5
CHON	-5%	-4%	3	3	-3%	12%	1	4	112%	111%	5	5	36% 4	-1%	-2%	5	5	low	3
HAON	-1%	4%	4	5	-6%	6%	1	3	103%	102%	5	5	26% 4	2%	0%	2	4	low	3
ZAON	-6%	4%	3	5	2%	4%	2	2	104%	107%	5	5	8% 4	0%	-1%	3	4	low	3
KREN	14%	0%	5	4	4%	10%	3	4	96%	97%	4	4	27% 4	1%	2%	3	2	medium	4
KIEN	5%	n/a	5	4	6%	10%	3	4	n/a	n/a	4	3	100% 5	2%	1%	2	2	medium	4
VIEN	7%	-8%	5	3	6%	5%	3	3	98%	101%	4	5	37% 4	7%	4%	1	1	high	5
ODEN	4%	1%	5	4	-1%	1%	1	2	96%	100%	4	5	27% 4	10%	5%	0	1	high	5
ZOEN	7%	7%	5	5	5%	6%	3	3	82%	87%	2	3	28% 4	9%	5%	0	1	high	5
DNON	16%	-1%	5	5	1%	3%	2	2	100%	99%	4	4	9% 4	2%	1%	2	2	low	3
MYON	-3%	3%	4	4	-17%	-5%	0	1	86%	89%	3	3	19% 4	13%	9%	0	0	high	5
DOON	-16%	6%	3	5	-26%	-11%	0	0	78%	86%	1	3	15% 4	14%	9%	0	0	low	3
CHEN	-3%	-16%	4	3	-5%	-5%	1	1	88%	83%	3	2	26% 4	6%	14%	1	0	medium	4
Source: co	Durce: company data, Energo Business, Concorde Capital estimates																		

Red: "conflict" Oblenergos



Average Score

	2004	2005	Difference 2005 to 2004
SMEN	4 5	4.8	0.3
KOEN	4.7	4.8	0.2
ZHEN	4.5	4.7	0.2
SOEN	4.5	4.7	0.2
LVON	4.7	4.7	0.0
POON	4.3	4.7	0.3
CHEON	4.3	4.7	0.3
KION	4.3	4.5	0.2
PREN	4.7	4.5	-0.2
HMON	4.0	4.3	0.3
TOEN	4.0	4.3	0.3
HOEN	3.7	4.2	0.5
ROEN	4.5	4.2	-0.3
VOEN	4.0	4.2	0.2
CHON	3.5	4.0	0.5
HAON	3.2	4.0	0.8
ZAON	3.3	3.8	0.5
KREN	3.8	3.7	-0.2
KIEN	3.8	3.7	-0.2
VIEN	3.7	3.5	-0.2
ODEN	3.2	3.5	0.3
ZOEN	3.2	3.5	0.3
DNON	3.3	3.3	0.0
MYON	2.7	2.8	0.2
DOON	1.8	2.5	0.7
CHEN	2.8	2.3	-0.5
C		D / O.	and a second sec

Source: company data, Energo Business, Concorde Capital estimates Red: "conflict" Oblenergos



2. Applying Peer Multiples

Tradable International peers

	Sales 2004	MCap	EV	D/6	
	USD mln	USD mln	USD mln	P/5	EV/S
Demasz RT	391	301.3	361.2	0.77	0.92
Emasz RT	445	158.9	285.1	0.36	0.64
ELMU RT	978	836.4	884.0	0.85	0.90
Prazska Energetika	457	682.3	693.8	1.49	1.52
Severoceska Energetika	500	459.7	441.3	0.92	0.88
Stredoceska Energeticka	481	435.1	444.5	0.90	0.92
Median					0.91
Mean					0.97

Source: Bloomberg, company data, Concorde Capital calculations

We take the median of peers' EV/S as a benchmark non-discounted ratio for Oblenergos.

As we did earlier, we apply a zero discount to EV/S to the companies which scored 4.5 and above, a 25% discount to the companies which scored 4.0-4.49, and a 50% discount to the companies which scored 3.0-3.99. We do not consider the bottom three Oblenergos as an investment opportunity, and do not value them.

EV/S-Base	ed Valuation						
	Sales 2004 USD mln	Price USD	MCap USD mln	EV/S	Discount to Im peers	plied Price USD	Implied Upside
CHEN	29.6	0.54	30.7	1.04	n/a	n/a	n/a
CHEON	57.0	0.54	64.4	1.24	0%	0.38	-29%
CHON*	57.6	n/a	n/a	n/a	25%	0.26	n/a
DNON	716.9	38.60	231.3	0.32	50%	54.44	41%
DOON	268.1	0.00	0.0	0.02	n/a	n/a	n/a
HAON	179.8	0.28	71.8	0.40	25%	0.48	71%
HMON	51.3	0.36	48.4	0.95	25%	0.26	-29%
HOEN	72.2	0.37	66.2	0.94	25%	0.27	-28%
KION*	57.0	0.52	62.1	1.18	0%	0.39	-25%
KOEN	119.0	n/a	n/a	n/a	0%	0.10	n/a
KREN	119.1	0.20	34.6	0.29	50%	0.31	57%
LVON	114.2	0.16	31.0	0.32	0%	0.51	219%
MYON	63.4	n/a	n/a	n/a	n/a	n/s	n/a
ODEN	146.5	0.00	0.0	0.00	50%	0.32	n/a
POON	150.5	0.25	55.2	0.41	0%	0.59	136%
PREN	74.7	0.20	20.7	0.35	0%	0.60	201%
ROEN	65.8	n/a	n/a	n/a	25%	0.46	n/a
SMEN	30.2	0.80	21.5	0.75	0%	0.98	23%
SOEN*	61.0	0.44	77.9	1.35	0%	0.29	-34%
TOEN	31.3	0.16	9.8	0.35	25%	0.33	106%
VIEN	63.1	8.00	24.8	0.40	50%	9.11	14%
VOEN	33.6	0.05	23.9	0.71	25%	0.05	-4%
ZAON	274.9	0.80	143.5	0.52	50%	0.70	-13%
ZHEN*	60.1	0.60	73.4	1.23	0%	0.44	-26%
ZOEN	45.2	0.23	28.7	0.68	50%	0.15	-35%

Source: company data, Concorde Capital calculations * EV/S valuation can under-estimate implied prices for these companies, as they have lost their major consumers (refer to pages 29-30 for details)



Valuation By Comparable Block Deals

Ukrainian Privatization

The privatization of Oblenergos started in the late 1990-s, when shares in the companies totaling about 20% were distributed among employees – they are currently the main source of free float.

Later large scale privatization began, blocks of shares started to be sold at auctions to strategic investors. The first tenders took place in 1997-1998, when 20% to 35% in nine Oblenergos was sold. The tender conditions were not transparent, the energy sector was rather unattractive at that time, and the buyers were local business groups. Correspondingly, the prices paid for the Oblenergos were relatively low.

The second round of privatizations occurred in 2001, when clear tender rules were created, and controlling stakes in six Oblenergos were put up for sale. In addition, the government worked out special conditions for these six companies - higher profitability allowed than for all the other companies (in fact, in 2001-2008 the new owners started obtaining 17% rent from their investments in Oblenergos). As a result, international energy holdings were interested in the privatization, and the tender price doubled. Part of the premium can be considered as a premium for control.





Source: EnCoG, company data, Concorde Capital calculations

Surprisingly for many, it turned out that the 2001 privatization of utilities in Ukraine was conducted fully in line with the Czech privatization of the sector during the years that followed (see the tables in the next page).

0.87

0.57

0.57

0.59

EV/EBITDA n/a n/a n/a n/a n/a n/a n/a

n/a

n/a



We used three sets of data: recent acquisitions in CEE, and the history of privatization in Ukraine: 1998 and 2001.

Privatization Results: Ukraine

ODEN

LVON

Median

Ukraine 1998						
	Stake	MCap	Sales*	EBITDA*	P/S	EV/S
KION	20%	19.5	41.8	n/a	0.55	0.81
TOEN	20%	12.9	23.5	n/a	0.44	0.51
CHEON	35%	18.9	46.6	n/a	0.64	0.66
SOEN	36%	24.4	41.6	n/a	0.38	0.35
PREN	35%	12.7	36.1	n/a	0.15	0.24
LOEN	35%	34.0	254.1	n/a	0.75	0.70
POON	36%	58.1	83.8	n/a	0.40	0.56

36.3

54.9

Average Source: EnCoG, company data, Concorde Capital calculations * Sales and EBITDA were taken from the year preceded the deal

35%

35%

Ukraine 2001							
	Stake	MCap	Sales*	EBITDA*	P/S	EV/S	EV/EBITDA
KOEN	75%	62.1	64.6	4.5	0.96	0.93	13.8
ROEN	75%	31.4	25.7	1.1	1.23	1.16	27.9
ZHEN	75%	47.4	39.3	5.7	1.21	1.23	8.2
SMEN	70%	27.0	14.9	-0.2	1.82	1.91	neg
HOEN	65%	32.2	48.8	0.1	0.66	1.24	292.4
KION	51%	32.3	41.7	1.9	0.78	0.83	20.0
Median					1.09	1.20	19.97
Average					1.11	1.22	72.46

99.7

76.1

n/a

n/a

0.79

0.51

0.51

0.51

Source: EnCoG, company data, Concorde Capital calculations * Sales and EBITDA were taken from the year preceded the deal

M&A In CEE & CIS

	Buyer	Year	Stake	MCap USD mln	Sales* USD mln	P/S	EV/S
Armenian Electric Grids	RAO UES	2005	100%	73	121	0.60	n/a
Jihoceska Energetika	CEZ	2002	34%	135	154	0.87	0.92
Jihoceska Energetika	EON	2004	13%	660	230	2.88	2.92
Jihomoravska Energetika	CEZ	2002	33%	372	376	0.99	1.12
Jihomoravska Energetika	EON	2004	14%	623	536	1.16	1.20
Prazska Energetika	CEZ	2002	34%	371	249	1.49	1.52
Severoceska Energetika	CEZ	2002	48%	303	286	1.06	0.98
Severomoravska Energetika	CEZ	2002	49%	420	378	1.11	1.12
Severomoravska Energetika	CEZ	2005	10%	557	571	0.98	0.92
Stredoceska Energetika	CEZ	2002	58%	210	267	0.78	0.85
Vychodoceska Energetika	CEZ	2002	50%	257	284	0.90	0.92
Vychodoceska Energetika	CEZ	2003	7%	285	364	0.78	0.76
Zapadoceska Energetika	CEZ	2002	48%	328	187	1.76	1.60
Median						0.99	1.05
Average						1.18	1.24
Source: Intellinews, company data, Co	oncorde Capital ca	alculations					

* Sales wese taken for the year preceding the deal

We selected the average between CEE M&A's and the Ukrainian average tender price in 2001: implied EV/S for Oblenergos is 1.23.



Valuation By M&A Multiples

	Sales 2004	Market Price	MCap	EV/S	Discount to	Implied Price	Implied Upside
	USD min	USD	USD min		peers	USD	
CHEN	29.6	0.54	30.7	1.04	n/a	n/a	n/a
CHEON	57.0	0.54	64.4	1.24	0%	0.54	-1%
CHON*	57.6	n/a	n/a	n/a	25%	0.36	n/a
DNON	716.9	38.60	231.3	0.32	50%	73.59	91%
DOON	268.1	0.00	0.0	0.02	n/a	n/a	n/a
HAON	179.8	0.28	71.8	0.40	25%	0.65	131%
HMON	51.3	0.36	48.4	0.95	25%	0.35	-3%
HOEN	72.2	0.37	66.2	0.94	25%	0.36	-2%
KION*	57.0	0.52	62.1	1.18	0%	0.54	4%
KOEN	119.0	n/a	n/a	n/a	0%	0.14	n/a
KREN	119.1	0.20	34.6	0.29	50%	0.42	112%
LVON	114.2	0.16	31.0	0.32	0%	0.70	336%
MYON	63.4	n/a	n/a	n/a	n/a	n/s	n/a
ODEN	146.5	0.00	0.0	0.00	50%	0.43	n/a
POON	150.5	0.25	55.2	0.41	0%	0.81	223%
PREN	74.7	0.20	20.7	0.35	0%	0.83	316%
ROEN	65.8	n/a	n/a	n/a	25%	0.64	n/a
SMEN	30.2	0.80	21.5	0.75	0%	1.34	68%
SOEN*	61.0	0.44	77.9	1.35	0%	0.40	-9%
TOEN	31.3	0.16	9.8	0.35	25%	0.45	183%
VIEN	63.1	8.00	24.8	0.40	50%	12.37	55%
VOEN	33.6	0.05	23.9	0.71	25%	0.06	30%
ZAON	274.9	0.80	143.5	0.52	50%	0.94	18%
ZHEN*	60.1	0.60	73.4	1.23	0%	0.60	0%
ZOEN	45.2	0.23	28.7	0.68	50%	0.21	-10%

Source: EnCoG, Intellinews, company data, Concorde Capital calculations * EV/S valuation can under-estimate implied prices for these companies, as they have lost their major consumers (refer to pages 29-30 for details)



Going Below The Top Line

Due to a series of factors, including strict state regulation, profitability caps, debt offsetting procedures and possible accounting distortions, the companies' bottom lines do not reflect current operating results. We have not used P/E and EV/EBITDA multiples for valuation purposes.

The tables below are for illustration only

Peer Valuation

	Sales 2004	EBITDA margin	Net margin	el. Losses	EV/EBITDA	P/E
Demasz RT	391	19%	6%	10%	4.80	12.4
Emasz RT	445	14%	4%	12%	4.51	9.2
ELMU RT	978	17%	8%	11%	5.25	10.7
Prazska Energetika	457	18%	9%	8%	8.50	17.2
Severoceska Energetika	500	20%	9%	7%	4.46	9.8
Stredoceska Energeticka	481	15%	6%	12%	6.32	15.9
Median					5.02	11.55
Mean					5.64	12.53

Oblenergo (2004 financials)

					Reported	data
	Sales 2004 USD mln	EBITDA margin	Net margin	MCap USD mln	EV/ EBITDA	P/E
CHEN	29.6	-5%	-8%	30.7	neg	neg
CHEON	57.0	10%	-2%	47.7	9.7	neg
CHON	57.6	-3%	-12%	n/a	neg	neg
DNON	716.9	1%	-2%	225.4	32.9	neg
DOON	268.1	-26%	-30%	49.8	neg	neg
HAON	179.8	-6%	-11%	87.2	neg	neg
HMON	51.3	7%	0%	47.1	14.0	446.6
HOEN	72.2	9%	-3%	80.5	12.4	neg
KION	57.0	14%	-3%	47.8	6.5	neg
KOEN	119.0	18%	10%	n/a	n/a	n/a
KREN	119.1	4%	-6%	50.2	9.9	neg
LVON	114.2	12%	5%	33.0	2.8	5.9
MYON	63.4	-17%	-34%	n/a	neg	neg
ODEN	146.5	-1%	-19%	n/a	neg	neg
POON	150.5	7%	-3%	55.2	6.2	neg
PREN	74.7	16%	5%	64.3	6.0	18.8
ROEN	65.8	14%	8%	n/a	n/a	n/a
SMEN	30.2	15%	9%	20.2	4.6	7.0
SOEN	61.0	10%	0%	77.9	13.4	907.0
TOEN	31.3	3%	-6%	12.2	15.1	neg
VIEN	63.1	6%	0%	21.7	6.0	n/m
VOEN	33.6	8%	2%	2.9	1.1	5.1
ZAON	274.9	2%	0%	148.9	28.8	417.6
ZHEN	60.1	16%	6%	60.0	6.2	15.7
ZOEN	45.2	5%	-1%	31.2	15.6	neg
Average					11.2	228

Source: company data, Concorde Capital calculations

	Market Price	Implie	d Price	Implied	Upside
	Market Price	EV/EBITDA	P/E	EV/EBITDA	P/E
CHEN	0.54	neg	neg	n/m	n/m
CHEON	0.54	0.18	neg	-66%	n/m
CHON	n/a	neg	neg	n/m	n/m
DNON	38.60	5.74	neg	-85%	n/m
DOON	0.76	neg	neg	n/m	n/m
HAON	0.28	neg	neg	n/m	n/m
HMON	0.36	0.12	0.01	-66%	-97%
HOEN	0.37	0.18	neg	-52%	n/m
KION	0.52	0.30	neg	-43%	n/m
KOEN	n/a	0.11	0.13	n/m	n/m
KREN	0.20	0.15	neg	-26%	n/m
LVON	0.16	0.33	0.33	107%	107%
MYON	n/a	neg	neg	n/m	n/m
ODEN	n/a	neg	neg	n/m	n/m
POON	0.25	0.20	neg	-22%	n/m
PREN	0.20	0.51	0.38	154%	90%
ROEN	n/a	0.49	0.70	n/m	n/m
SMEN	0.80	0.82	1.23	3%	54%
SOEN	0.44	0.15	0.01	-66%	-99%
TOEN	0.16	0.05	neg	-66%	n/m
VIEN	8.00	5.79	neg	-28%	n/m
VOEN	0.05	0.03	0.01	-43%	-73%
ZAON	0.80	0.14	0.02	-82%	-97%
ZHEN	0.60	0.39	0.36	-34%	-40%
ZOEN	0.23	0.07	neg	-70%	n/m

Implied Prices, USD

Source: company data, Concorde Capital calculations

The obvious conclusion is that the valuation of Oblenergos' by EBITDA and net income multiples is unproductive, with several exceptions like LVON, PREN and SMEN.



DCF VALUATION

We will apply DCF valuations only for the companies with relatively high performance levels, and ignore the companies with the poorest results (**DOON**, **CHEN**, **MYON**): these Oblenergos have significant operating cash flow deficits, and it is unclear when their problems will start being solved.

Distributors' Revenue, Not Sales, Drives Value

Thorough analysis of the Ukrainian energy distribution sector has led us to understand that it is not sales, EBITDA or net income that drives an Oblenergo's value. The driver is what the NERC calls "Tariff Revenue" and we use the term *Distributors' Revenue* (to better reflect what this means). While total revenue is readily available to investors from published financial statements, it takes some work to figure out *Distributors' Revenue*.

Oblenergos have two components to their revenue:

- 1. Revenue from electricity re-sale, which is set by the regulator at the same level as electricity purchase costs. Oblenergos do not earn from this.
- 2. Revenue related to providing electricity distribution services (*distributor's revenue*). This revenue has two constituents:
 - Revenue from electricity transmission services
 - Revenue from electricity supply services

CHEN	26%	MYON	12%
CHEON	46%	ODEN	23%
CHON	48%	POON	70%
DNON	13%	PREN	49%
DOON	13%	ROEN	27%
HAON	37%	SMEN	35%
HMON	34%	SOEN	43%
HOEN	45%	TOEN	39%
KIEN	98%	VIEN	31%
KION	39%	VOEN	31%
KOEN	36%	ZAON	12%
KREN	34%	ZHEN	37%
LVON	35%	ZOEN	24%
Courses company det	- Energehisinge Concerde Conital	a a filma a fa a	

Distributor's Revenue As % Of Total Revenue, 2004

Source: company data, Energobizines, Concorde Capital estimates

The trick with Oblenergos is that only *distributor's revenue* generates profits. The rest of their revenue (the first component above) only covers the costs of electricity purchased on the wholesale market.



Mechanics Of FCF Generation In Ukrainian Utilities

Distributor's Revenue is the starting point in our modeling. Tariffs for services are highly regulated - even "profit" and "profit distribution" are pre-assigned by the NERC. Along with tariffs, each company receives an appendix with a prescribed distribution of the revenue, and the approved CapEx program. The appendix is confidential and not available to the public. We were given an opportunity to look at these documents during our meetings with the management of several Oblenergos. The common-size version of a typical NERC instruction is given below.

	% Of Deversio	Distribution I	By Activities:
	% OF Revenue	Transmission	Supply
Total Distributor's Revenue	100%	83%	17%
"Operating Costs":	93.0%	83%	17%
Material	16.0%	94%	6%
Payroll	38.1%	77%	23%
Social Expenditures	14.5%	77%	23%
D&A	17.9%	94%	6%
Other Oper. Costs	6.6%	71%	29%
Financial Expenses:	0.0%		
Profit Before Tax:	7.0%	86%	14%
Profit Tax	1.7%	86%	14%
Dividends	1.5%	85%	15%
Development, CapEx	3.7%	86%	14%

Oblenergo Revenue: Typical Structure (Approved By The NERC)

Source: company data, Concorde Capital estimates

To negate the effect of financing decisions by Oblenergos (some of them use borrowings to finance operations, but the NERC does not account for them in their tariffs), in our modeling we will assume Oblenergos use only their own funds to finance CapEx programs: depreciation reserves and profits.

We found an intriguing relationship: the NERC-prescribed profit before tax (PBT_{NERC}) seems to be close to 7% of the total *Distributor's Revenue* for several companies:

PBT_{NERC} = Distributor's Revenue * 7%

We use this as a benchmark, and make the following assumption for our model:

For Oblenergos which are not 100% private, profit before tax (PBT) is set at about 7% of the *distributor's revenue* but not less than the amount which, after taxation and dividends payoff, will be enough to cover the needs of fulfilling CapEx program approved by the NERC.

On the other hand, for 100% private Oblenergos, in accordance with a NERC decree, during 2001-2008 PBT is set at 17% of the privatization tender's implied MCap and starting 2009 - at not less than 11% of this amount. In addition, if the company finances its CapEx from PBT, this invested value is also partially compensated from the tariff in subsequent years.

In real life, PBT posted by companies tends to deviate from what the NERC decree, due to the deviation of cost factors. In our model we only account for one significant factor – excessive electricity losses, ignoring the debt factor (assuming the debt problem to be solved in the nearest future).

If real losses of electricity are higher than those compensated by the tariff, the company has additional costs, if not, the company earns additional cash. High excessive losses



means lower real PBT, and as a result, a lack of money for the company's planned CapEx program.

UVA Generation

In addition to the visible cash flows described above, those controlling the operations of an Oblenergo, over-state their operating costs and capital expenditures, in order to get higher *distributor's revenue*, to create some profitability reserves (excess or unrecorded profits) and generating UVA. Later in the report we will study how visible and excess cash flows affect the valuation of Oblenergos for different types of shareholders in the companies.



Base Scenario Model (Model 1):

Taking Reported Data For Granted

In addition to what we have stated above, we are introducing the following assumptions in our base model:

- *Distributor's revenue* growth is related only to the growth of electricity consumption in the region: 4% to 12% per annum during 2005-2010, depending on the region. This growth directly drives revenues and profits for Oblenergos.
- Starting in 2010, the wholesale market system is expected to change, with the introduction of a bilateral contract system. This will reduce revenues related to electricity supply. Still, distributor's revenue will not be affected much by the change.
- The long-term growth rate is 2%.
- PP&E is not re-valued (they are taken as they are reported by Oblenergos), straightline amortization applied to all Oblenergos. Twenty years depreciable life is assumed for new PP&E.
- All Oblenergos will have their debt problems solved in the mid-term, outstanding payables and receivables will not affect the Oblenergos' operating results.
- Changes in working capital will be only related to the growth of short-term receivables (assuming a 15 day collection period).
- WACC of 17% assumed for the best performing Oblenergos in 2005 (equal to the return on invested capital in private Oblenergos set by the NERC). WACC linearly reduces to 12% which is taken to perpetuity.
- Additional risk premium to the first year WACC is:
 - o 1% for the Oblenergos with an average score of (page 33-34) 4.0-4.5
 - o 2% for an average score of 3.7-3.9
 - o 3% for an average score of 3.0-3.6
- Net debt is calculated as described on page 31



valuatio	on Summary, U	50			
	Implied MCap USD mln	Implied EV/S	Implied Price USD	Market Price USD	Implied Upside
CHEON	27.8	0.59	0.23	0.54	-57%
CHON	55.2	0.96	0.37	n/a	n/a
DNON	236.5	0.33	39.48	38.60	2%
HAON	96.7	0.54	0.38	0.28	35%
HMON	23.2	0.46	0.17	0.36	-52%
HOEN	43.8	0.63	0.24	0.37	-34%
KION	57.9	1.11	0.48	0.52	-7%
KOEN	96.4	0.81	0.09	n/a	n/a
KREN	64.9	0.54	0.37	0.20	87%
LVON	47.0	0.46	0.24	0.16	51%
ODEN	40.6	0.28	0.19	n/a	n/a
POON	104.5	0.74	0.47	0.25	89%
PREN	43.9	0.66	0.42	0.20	112%
ROEN	39.1	0.68	0.46	n/a	n/a
SMEN	22.4	0.78	0.83	0.80	4%
SOEN	39.5	0.72	0.22	0.44	-49%
TOEN	20.5	0.69	0.34	0.16	110%
VIEN	24.5	0.40	7.90	8.00	-1%
VOEN	14.0	0.42	0.03	0.05	-41%
ZAON	126.5	0.46	0.71	0.80	-12%
ZHEN	78.7	1.32	0.64	0.60	7%
ZOEN	11.2	0.29	0.09	0.23	-61%

Valuation Summary, USD

Source: company data, Energo Business, NERC, Concorde Capital estimates

As the table shows, almost all the companies deserve a SELL recommendation according to our base model, however, the base model does not capture the real value of Oblenergos. The valuations above would be derived by a portfolio investor using officially published data.

Example: according to our base model, the value of VSE's stake in the 5 Oblenergos they plan to sell, is USD 208 mln.

	Total MCap	Stake of VSE	Value Of VSE's Stake
	USD mln		USD mln
HOEN	43.8	90.5%	39.6
KION	57.9	94.0%	54.4
ODEN	40.6	55.4%	22.5
SMEN	22.4	95.2%	21.3
ZHEN	78.7	91.6%	72.1
Total			209.9

However, potential strategic investors are rumored to consider it worth double this figure.

This suggests Oblenergo owners that control the companies' operations can earn more than a minority shareholder, thanks to UVA. Below we introduce UVA in our base model.



Estimation Of UVA: The Base Case Scenario

So far our modeling assumed that the NERC behaves as if there were no unreported profits in the companies (not implementing any sanctions for violations), or that the owner of the Oblenergo is able to quickly restore the needed tariff level after a tariff reduction by NERC (as described on page 19, the owner's second option). Under these assumptions, UVA would exist infinitely.

Base Model: Assumptions About UVA:

- Over-stated costs are equal to 6.2% of *soft costs*
- Practice of costs over-statement lives in the long run
- The cost of capital associated with this unseen cash flow is the same as for the visible cash flow
- Visible value (MCap) is equally distributed between all the shareholders, while the UVA is captured exclusively by the owner who controls company operations.

Valuatior	n Summary: Base				
	Implied MCap USD mln	Implied EV/S	Implied Price USD	Market Price USD	Implied Upside
CHEON	40.4	0.81	0.34	0.54	-37%
CHON	66.3	1.15	0.45	n/a	n/a
DNON	272.7	0.38	45.52	38.60	18%
HAON	124.9	0.69	0.49	0.28	74%
HMON	27.8	0.55	0.21	0.36	-43%
HOEN	58.9	0.84	0.33	0.37	-11%
KION	62.0	1.18	0.52	0.52	0%
KOEN	118.0	0.99	0.11	n/a	n/a
KREN	82.0	0.69	0.47	0.20	137%
LVON	63.3	0.60	0.33	0.16	104%
ODEN	43.9	0.30	0.21	n/a	n/a
POON	148.4	1.03	0.67	0.25	169%
PREN	65.6	0.95	0.63	0.20	216%
ROEN	46.9	0.80	0.55	n/a	n/a
SMEN	28.0	0.96	1.04	0.80	30%
SOEN	52.6	0.93	0.30	0.44	-33%
TOEN	24.2	0.81	0.40	0.16	148%
VIEN	28.0	0.45	9.04	8.00	13%
VOEN	16.9	0.50	0.04	0.05	-29%
ZAON	140.0	0.51	0.78	0.80	-2%
ZHEN	86.8	1.45	0.71	0.60	18%
ZOEN	12.4	0.32	0.10	0.23	-57%

Source: company data, Energo Business, NERC, Concorde Capital estimates

Estimation Of VSE's Stake With UVA: USD mln

	Visible MCap	Stake of VSE	Visible VSE's Value	Plus UVA	Total VSE's Value
HOEN	43.8	90.5%	39.6	15.1	54.8
KION	57.9	94.0%	54.4	4.1	58.5
ODEN	40.6	55.4%	22.5	3.4	25.8
SMEN	22.4	95.2%	21.3	5.5	26.9
ZHEN	78.7	91.6%	72.1	8.1	80.2
Total			209.9		246.2

Source: company data, Energo Business, NERC, Concorde Capital estimates



Operating Model With UVA Incorporated

UVA Convergence Model (Model 2)

Now we make realistic assumptions about the future of UVA in Ukraine. We believe changing the policies of the regulator will create conditions where the owners will have the ability to earn the necessary level of return without additional unrecorded profits. That is the NERC will not reduce tariffs if Oblenergos start to reveal their profits: this is in line with the behavior of the Oblenergos and the regulator discussed on page 20.

We introduce **additional assumptions** to our base case model regarding true cash flow and its convergence to reported cash flow in the long-run:

- Over-stated costs are 6.2% of *soft costs*
- Unrecorded profits are not taxed
- The cost of capital related to unrecorded profit is equal to that associated with reported profits
- From 2009 through 2014 unrecorded profits gradually diminish, due to the increasing amount of them being officially reported (due to NERC's more investor-friendly policy). From 2014 UVA is zero.

Based on these assumptions, we have come to the following valuations:

Valuation Summary: Base Model vs Model Incorporating UVA Convergence To Visible

	Base Case Model				UVA Convergence Model			
	Visible MCap USD mln	Price for portfolio investor USD per share	UVA USD mln	Value for strategic* USD per share	Visible MCap USD mln	Price for portfolio investor USD per share	UVA USD mln	Value for strategic* USD per share
CHEON	27.8	0.23	12.6	0.34	30.5	0.26	6.3	0.31
CHON	55.2	0.37	11.1	0.45	57.4	0.39	5.4	0.42
DNON	236.5	39.48	36.2	45.52	243.5	40.64	16.9	43.46
HAON	96.7	0.38	28.2	0.49	102.6	0.40	13.9	0.45
HMON	23.2	0.17	4.7	0.21	24.0	0.18	1.9	0.19
HOEN	43.8	0.24	15.1	0.33	47.1	0.26	7.7	0.31
KION	57.9	0.48	4.1	0.52	58.5	0.49	1.5	0.50
KOEN	96.4	0.09	21.6	0.11	101.2	0.10	10.7	0.11
KREN	64.9	0.37	17.1	0.47	68.4	0.40	8.6	0.45
LVON	47.0	0.24	16.3	0.33	50.1	0.26	8.0	0.30
ODEN	40.6	0.19	3.4	0.21	40.6	0.19	0.1	0.20
POON	104.5	0.47	43.9	0.67	114.3	0.52	23.8	0.62
PREN	43.9	0.42	21.7	0.63	48.9	0.47	11.2	0.58
ROEN	39.1	0.46	7.8	0.55	40.6	0.48	3.7	0.52
SMEN	22.4	0.83	5.5	1.04	23.6	0.88	2.9	0.99
SOEN	39.5	0.22	13.1	0.30	42.3	0.24	6.4	0.28
TOEN	20.5	0.34	3.7	0.40	21.1	0.35	1.6	0.37
VIEN	24.5	7.90	3.5	9.04	24.9	8.05	1.3	8.48
VOEN	14.0	0.03	2.9	0.04	14.5	0.03	1.4	0.03
ZAON	126.5	0.71	13.5	0.78	128.9	0.72	6.4	0.75
ZHEN	78.7	0.64	8.1	0.71	80.3	0.66	4.0	0.69
ZOEN	11.2	0.09	1.1	0.10	11.3	0.09	0.2	0.09

Source: company data, Energo Business, NERC, Concorde Capital estimates

* Value of one share assuming the strategic investor controls 100% of the company. If not, its value per share will be even higher (refer to our last section)



The relationship between UVA and visible value can be quantified by operating control leverage (OCL).



Visible Value And UVA Of Oblenergos, USD mln:

Note, the higher the OCL today (according to the base case model), the larger there is potential upside to the base scenario's price for a portfolio investor, but the fewer incentives there are for the owner who controls the company to disclose all his excess profits. Therefore, the NERC will have to establish fierce control over spending money even if it allows for higher profitability.

As excess profit is distributed only between those who control the company, the parties controlling Oblenergos value them much higher than those who do not see the real profitability of Oblenergos. On the other hand, UVA is more sensitive to changes in the regulatory environment than visible value of Oblenergos.

High Operating Control Leverage is especially apparent in "conflict" Oblenergos.

	OCL Derived From Base Case Model	OCL By UVA Convergence Model
PREN	49%	23%
CHEON	45%	21%
POON	42%	21%
LVON	35%	16%
HOEN	35%	16%
SOEN	33%	15%
HAON	29%	14%
KREN	26%	13%
SMEN	25%	12%
KOEN	22%	11%
VOEN	21%	9%
HMON	20%	8%
CHON	20%	9%
ROEN	20%	9%
TOEN	18%	8%
DNON	15%	7%
VIEN	14%	5%
ZAON	11%	5%
ZHEN	10%	5%
ZOEN	10%	1%
ODEN	8%	0%
KION	7%	2%
Source: company	data, Concorde Capital estimates	Red: "conflict" Oblenergos

Company Ranking By OCL

For portfolio investors, high OCL suggests the company will have high hidden upside potential, when it posts real profitability in the future.



Model With Adjusted D&A

Fixed Assets Revaluation

Basically, gridlines and transformers make up the infrastructure of electricity distributors. We expect a strong correlation between the PP&E on the Oblenergos' books and the parameters of their key fixed assets: length of gridlines (km) and capacity of transformers (kVA). We analyzed the frequency distribution of two ratios – PP&E to km of grid and PP&E to kVA of transformer capacity. If all companies applied uniform accounting policies for their fixed assets we would see normal distribution. In the charts below, deviation from normal distribution is obvious, the anomaly of many companies with relatively low PP&E value, suggests they lag behind other Oblenergos in revaluation of their fixed asset

Frequency Distribution Plots:



Source: company data, Concorde Capital estimates

Indeed, only 11 Oblenergos out of 27 have revalued their fixed assets more than twice over the past 5 years.



Revalua	ation Of	Gross	PP&E, I	Imes	
	2000	2001	2002	2003	2004
HAON		2.6			
HMON					3.6
HOEN	2.0				
KION		2.1	1.6		
KREN					2.2
LVON			1.8	1.6	
ODEN					2.2
POON			2.9		
PREN			3.6		
SOEN		1.4	4.1		
TOEN			2.8		

Source: company data, Concorde Capital calculations

Source: NERC, company data, Concorde Capital estimates Red: Oblenergos privatized in 1998

We believe that sooner or later all the companies will implement uniform, economically feasible accounting policies. So we conduct readjustment ourselves and factor it into our operational models. Statistics lead us to select 30'000 UAH/km as an estimate for the population mean. Then we adjusted gross PP&E for Oblenergos in the following way:



- we take UAH 30,000 per km of lines as an average level of fixed assets per company
- we do not downsize fixed assets if the company has larger PP&E/km
- we increase PP&E twofold, if PP&E/km is less than 15,000 UAH/km;
- PPE is adjusted to the amount which corresponds to the ratio 30,000 UAH/km if PP&E/km is between 15,000 and 30,000 UAH/km.

After the described re-adjustment of PP&E, frequency ranges are closer to normal distribution:

Frequency Distribution Plots. Adjusted PP&E:

PP&E Per km Of Grid, UAH





Source: company data, Concorde Capital estimates

As the NERC is currently looking into setting tariffs based on ROIC metrics, they want all Oblenergos to have uniform accounting policies in relation to their fixed assets. Thus, PP&E (and correspondingly D&A readjustment) looks like the most probable scenario in the future.

We applied our DCF to the restated data (using the base model and the UVA model), and obtained following results:

Valuation Summary	v [.] Base Model vs	Model Incorpor	ating UVA Conver	gence To Visible	(Restated PP&F)
valuation Summar	y. Dase mouel vs	model meet por	ating own converg	gence to visible	(Restated in de

		Base Case I	Nodel			UVA Convergen	ce Model	
	Visible	Price for portfolio		Value for	Visible	Price for portfolio		Value for
	MCap	investor	UVA	strategic*	MCap	investor	UVA	strategic*
	USD mln	USD per share	USD mln	USD per share	USD mln	USD per share	USD mln	USD per share
CHEON	34.5	0.29	12.9	0.40	37.2	0.31	6.3	0.36
CHON	28.2	0.19	11.3	0.27	30.4	0.20	5.4	0.24
DNON	219.8	36.69	36.3	42.74	226.8	37.86	16.9	40.68
HAON	96.7	0.38	28.2	0.49	102.6	0.40	13.9	0.45
HMON	23.2	0.17	4.7	0.21	24.0	0.18	1.9	0.19
HOEN	46.5	0.26	15.3	0.35	49.8	0.28	7.7	0.32
KION	57.9	0.48	4.1	0.52	58.5	0.49	1.5	0.50
KOEN	107.1	0.10	21.9	0.12	111.9	0.11	10.7	0.12
KREN	64.9	0.37	17.1	0.47	68.4	0.40	8.6	0.45
LVON	47.0	0.24	16.3	0.33	50.1	0.26	8.0	0.30
ODEN	40.6	0.19	3.4	0.21	40.6	0.19	0.1	0.20
POON	104.5	0.47	43.9	0.67	114.3	0.52	23.8	0.62
PREN	43.9	0.42	21.7	0.63	48.9	0.47	11.2	0.58
ROEN	43.0	0.50	7.9	0.60	44.4	0.52	3.7	0.57
SMEN	22.4	0.83	5.5	1.04	23.6	0.88	2.9	0.99
SOEN	39.5	0.22	13.1	0.30	42.3	0.24	6.4	0.28
TOEN	12.3	0.20	3.8	0.26	12.9	0.21	1.6	0.24
VIEN	21.4	6.90	3.8	8.12	21.9	7.06	1.3	7.49
VOEN	15.2	0.03	3.0	0.04	15.7	0.03	1.4	0.04
ZAON	85.8	0.48	13.7	0.55	88.3	0.49	6.4	0.53
ZHEN	86.4	0.71	8.4	0.77	88.0	0.72	4.0	0.75
ZOEN	7.6	0.06	1.2	0.07	7.7	0.06	0.2	0.06

Source: company data, Energo Business, NERC, Concorde Capital estimates

* Value of one share assuming the strategic investor controls 100% of the company. If not, its value per share will be even higher (refer to our last section)



Regulation And Investment Attractiveness

How Much Should Oblenergos Be Allowed To Earn?

The answer is straightforward: the NERC has to allow Oblenergos to have a profitability level to make the return on investments in Oblenergos comparable to alternative markets. We are going to find the rate of return which the NERC needs to set, to force the intrinsic value of an Oblenergo's business (as captured by our DCF model) to equal the value implied by the EV/Sales multiple average for Hungarian and Czech peers.

We assume the NERC will set new profitability margins (as % to distributor's revenue) starting in 2006, and keep them stable thereafter. We calculate the margin which forces the visible value of the company (captured by our DCF model) to x 0.91 EV/Sales'2004 equal to peers. We use the base DCF scenario, for two base cases: with fixed assets left as reported (model described on page 44), and readjusted (model on pages 49-50).

Required NERC Margin, 2006 (% to distributor's revenue)

	Current (est.)	At Current D&A	At Restated D&A
CHEON	7%	11%	10%
CHON	7%	13%	10%
DNON	20%*	23%	21%
HAON	7%	10%	10%
HMON	7%	13%	13%
HOEN	7%	8%	8%
KION	-	-	-
KOEN	-	-	-
KREN	7%	7%	7%
LVON	16%*	21%	21%
ODEN	7%	16%	16%
POON	7%	7%	7%
PREN	7%	10%	10%
ROEN	-	-	-
SMEN	-	-	-
SOEN	7%	10%	15%
TOEN	7%	16%	14%
VIEN	7%	17%	12%
VOEN	7%	16%	14%
ZAON	7%	16%	14%
ZHEN	-	-	-
ZOEN	7%	18%	16%

Source: company data, Energo Business, NERC, Concorde Capital estimates *In 2006 only; it converges to 7% in the long-term

Our analysis suggests the required increase in allowed profitability is up to two times on average, and we can reasonably expect the regulator to introduce this policy in the midterm.

Interestingly, five Oblenergos privatized in 2001 (i.e. minus the sixth, HOEN) do not require additional margins to their profits, as they are benefiting from the so called investor profitability margins set by the regulators' decrees. As a result, DCF gives higher values for most of these companies than benchmarking to peers' EV/S:

Implied Prices For Five Oblenergos Privatized In 2001, USD

	Base DCF	At peers' EV/S
KION	0.48	0.39
KOEN	0.09	0.10
ROEN	0.46	0.46
SMEN	0.83	0.98
ZHEN	0.64	0.44
Source, company data Energe F	Pusiness NEDC Concorde Conital	actimator

ource: company data, Energo Business, NERC, Concorde Capital estimates



DCF Valuation Summary

We derive the value of Oblenergos for portfolio investors as the weighted average of three scenarios:

- Scenario 1 (probability 25%) **Status-quo:** the companies under-state profits, UVA is channeled bypassing minority shareholders.
- Scenario 2 (probability 65%) **Convergence:** The NERC allows higher profitability for Oblenergos starting in 2009, excessive profits gradually diminish, fixed assets adjust upward.
- Scenario 3 (probability 10%) **Benchmarking:** The NERC allows a profitability level that puts Ukrainian companies on par with their international peers (makes values correspondent to those implied from the peers' EV/S). We do not apply the third scenario to five companies which were privatized in 2001, and which are now benefiting from the pre-privatization conditions.

Valuation Summary: Price for Portfolio Investor, USD

	Market		Scenario Prices		Weighted Price	Umaiala	Deserved
	Price	Status-quo	Convergence	Benchmarking	Target	upside	Recom.
CHEON	0.54	0.23	0.31	0.38	0.30	-45%	SELL
CHON	n/a	0.37	0.20	0.26	0.25	n/a	N/R
DNON	38.60	39.48	37.86	54.44	39.92	3%	HOLD
HAON	0.28	0.38	0.40	0.48	0.40	44%	BUY
HMON	0.36	0.17	0.18	0.26	0.18	-49%	SELL
HOEN	0.37	0.24	0.28	0.27	0.27	-27%	SELL
KREN	0.20	0.37	0.40	0.31	0.38	91%	BUY
LVON	0.16	0.24	0.26	0.51	0.28	75%	BUY
ODEN	0.00	0.19	0.19	0.32	0.21	n/a	N/R
POON	0.25	0.47	0.52	0.59	0.51	105%	BUY
PREN	0.20	0.42	0.47	0.60	0.47	136%	BUY
SOEN	0.44	0.22	0.24	0.29	0.24	-45%	SELL
TOEN	0.16	0.34	0.21	0.33	0.25	59%	BUY
VIEN	8.00	7.90	7.06	9.11	7.47	-7%	HOLD
VOEN	0.05	0.03	0.03	0.05	0.03	-33%	SELL
ZAON	0.80	0.71	0.49	0.70	0.57	-29%	SELL
ZOEN	0.23	0.09	0.06	0.15	0.08	-66%	SELL
Probability		25%	65%	10%			

Source: company data, Energo Business, NERC, Concorde Capital estimates

Companies Which Benefit From Preferential Treatment:

Valuation Summary: Price For Portfolio Investors, USD

	Market Price	Status-quo Cor	nvergence	Weighted Price Target	Upside	Recom.
KION	0.52	0.48	0.49	0.49	-6%	HOLD
KOEN	0.00	0.09	0.11	0.10	n/a	N/R
ROEN	0.00	0.46	0.52	0.50	n/a	N/R
SMEN	0.80	0.83	0.88	0.87	8%	HOLD
ZHEN	0.60	0.64	0.72	0.70	16%	BUY
Probability		30%	70%			

Source: company data, Energo Business, NERC, Concorde Capital estimates



For strategic investors, we use the same scenarios and probabilities in calculating the full value (i.e. visible value plus UVA). Please note that the valuations in the table below are for a 100% ownership in an Oblenergo, which entitles full appropriation of UVA. As explained on page 10, this value for a strategic investor must be corrected depending on the size of his block and the blocks of others who have access to UVA.

valuation Summary. Visible And Total moup of Oblenci gos, OSD mini	Valuation Summary:	Visible And Total MCa	p Of Oblenergos,	USD mln
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	Status-	quo	Conver	gence	Benchmarking	Weighted	Weighted	Difference
	MCap Visible	UVA	MCap Visible	UVA	Total MCap	Total MCap	Mcap	(weigned UVA)
CHEON	27.78	12.60	37.25	6.26	45.82	42.96	35.74	7.22
CHON	55.25	11.07	30.37	5.45	39.30	43.79	37.49	6.31
DNON	236.52	36.19	226.82	16.90	326.19	259.22	239.18	20.03
HAON	96.67	28.23	102.62	13.88	122.74	119.23	103.14	16.08
HMON	23.19	4.65	23.97	1.85	34.62	27.20	24.84	2.37
HOEN	43.79	15.13	49.76	7.65	47.74	56.82	48.07	8.75
KREN	64.86	17.13	68.37	8.62	54.21	75.96	66.08	9.89
LVON	46.97	16.31	50.14	7.97	98.92	63.48	54.22	9.26
ODEN	40.57	3.38	40.62	0.15	66.66	44.15	43.21	0.94
POON	104.49	43.91	114.34	23.75	130.51	139.91	113.49	26.42
PREN	43.91	21.69	48.90	11.25	62.29	61.72	48.99	12.73
SOEN	39.52	13.05	42.29	6.42	51.39	49.94	42.51	7.43
TOEN	20.51	3.71	12.88	1.60	20.17	17.48	15.51	1.97
VIEN	24.46	3.54	21.85	1.34	28.22	24.90	23.14	1.75
VOEN	14.00	2.90	15.74	1.36	22.90	17.62	16.02	1.61
ZAON	126.46	13.54	88.28	6.39	125.08	109.04	101.50	7.53
ZOEN	11.23	1.13	7.66	0.16	18.59	10.03	9.65	0.38
Probability	y 25%	, D	6	5%	10%			

Source: company data, Energo Business, NERC, Concorde Capital estimates

Companies Which Benefit From Preferential Treatment:

Valuation Summary: Visible And Total Oblenergo MCap, USD mln

	Status-quo		Convergence		Weighted Total MCan	Weighted	Difforonco
	MCap Visible	UVA	MCap Visible	UVA	weighted Total weap	Мсар	Difference
KION	57.88	4.11	58.46	1.45	60.54	58.29	2.25
KOEN	96.42	21.59	111.89	10.68	121.20	107.25	13.95
ROEN	39.10	7.83	44.45	3.74	47.81	42.84	4.97
SMEN	22.42	5.54	23.63	2.92	26.97	23.26	3.71
ZHEN	78.70	8.13	88.00	4.00	90.45	85.21	5.24
Probability	30%		7	0%			

Source: company data, Energo Business, NERC, Concorde Capital estimates

Below we estimate the values of different block shareholders in Oblenergos, using our estimations of visible and total MCap.



VALUATION BY STAKE

Since we discovered the existence of UVA and asymmetric assess to it, we now use more detailed analysis to test the value per share associated with different blocks of shares in the companies.

In general, the value of the stake in a company depends on two factors associated with the stake:

- **Nominal (legal) power**: this power is derived from ownership rights. Generally speaking, the greater the size of the stake in the company, the greater the nominal power. This power is important for potential strategic investors: these investors are willing to control operations of companies, which can be associated with a stake of at least 50%+1 (i.e. nominal operating control)
- **Real power**: control over the company's operations (e.g. regardless of the size of the stake, the owner may or may not control operations of the company). This power is associated with access to UVA distribution.

A private owner of a 50%+ stake in an Oblenergo has both real and nominal power.

Although the state owns more than 50% in some Oblenergos, it has only nominal power.

Portfolio investors have neither of these types of power in Oblenergos

In the "conflict" Oblenergos, the situation is more complex: both types of power are present there, and different shareholders are delegated by different types of power, which is one of the main concerns of these companies' owners, and one of the main reasons for the conflict.



100% Private Companies

As the owners of these Oblenergos have full control over the operations of their companies, and there are no other parties engaged in operating control, all the UVA is only captured by these majority owners (AES, VSE).

Majority stakes in these companies can be valued as part of the distributed value derived from the reported profits, plus all the UVA. To calculate the visible MCap and UVA for each specific shareholder we use the values for full company estimated on page 53.

The value of the stake for minority shareholders (i.e. other than AES or VSE) is not associated with any access to operating control. These investors do not have access to the distribution of the company's UVA, and can capture only visible value. Thus, they value their shares according to prices for the portfolio investors estimated on page 52.

Values for those who control companies are listed below:

AES-Controlled Companies:

AES Perspective

	Ctoko	Value	of Stake USD	mln	Price per share	Upside To
	Stake	Scenario1*	Scenario 2*	Weighted	USD	Portfolio inv.
KOEN	89%	107.4	110.3	109.4	0.12	15%
ROEN	75%	37.2	37.1	37.1	0.58	15%
Probabili	tv	30%	70%			

Source: company data, Energo Business, NERC, Concorde Capital estimates

* For scenario descriptions and values estimates, refer to pages 52-53

VSE-Controlled Companies:

VSE Perspective (Companies benefiting from preferential treatment)

	Chalve	Value of Stake USD mln		Price per share	Upside To	
	Stake	Scenario1*	Scenario 2*	Weighted	USD	Portfolio inv.
KION	94%	58.5	56.4	57.0	0.51	11%
SMEN	95%	26.9	25.4	25.9	1.01	23%
ZHEN	92%	80.2	84.6	83.3	0.74	17%
Drohohili	4	200/	700/			

Probability 30% 70% Source: company data, Energo Business, NERC, Concorde Capital estimates

* For scenario descriptions and values estimates, refer to pages 52-53

VSE Perspective (Companies with common treatment)

		Value of Stake USD mln				Price per	Upside To
	Stake	Scenario1*	Scenario 2*	Scenario 3*	Weighted	share USD	Portfolio Inv.
HOEN	91%	59.8	52.7	43.2	53.5	0.33	23%
ODEN	55%	44.5	22.6	36.9	29.5	0.26	23%
Probabi	litv	25%	65%	10%			

Source: company data, Energo Business, NERC, Concorde Capital estimates

* For scenario descriptions and values estimates, refer to pages 52-53

In addition to the five companies which are under VSE full control, the holding also have minority stakes in CHEN, HOEN, MYON and ZOEN. Still, the management of these companies is fully controlled by NC ECU, and therefore, VSE has no access to any excessive value in these companies. Thus, the holding can only value their shares in four companies in line with portfolio investors (refer to page 52).



The Group Of "*Conflict"* Companies (CHEON, LVON, POON, PREN, SOEN)

(CHEON, LVON, POON, PREN, SOEN)

As none of the shareholders currently own controlling stakes in these companies, the distribution of UVA is related to actual operating control.

Three groups of private owners are currently fighting for control there:

- Energy Standard group (Grigorishyn)
- Privat group (Kolomoiskiy)
- Slavutich group (Surkis)

Share Distribution

	Privat and Energy Standard, each	Slavutich	State (NC ECU)	Others
CHEON	20%	25%	25%	10%
LVON	19%	13%	27%	21%
POON	20%	34%	25%	1%
PREN	17%	28%	25%	14%
SOEN	20%	15%	25%	20%

Source: State Securities Commission, Concorde Capital

In the period of time spanning from 2002 to the "orange revolution," the group of Surkis, who was close to President Kuchma, used the state's stakes to establish full operating control in these Oblenergos.

On the eve of the revolution, Grigorishyn sold Kolomoiskiy (Privat group) 50% ownership in two Cyprian off-shore companies – special purpose vehicles to intermediate ownership of 33% to 40% in six Oblenergos, and less than 20% in two more energy distribution companies. According to media reports, neither of the partners can make a major decision concerning these stakes without permission from the other partner.

Since Yushchenko's election, Surkis' position in Oblenergos has weakened significantly. However, because the *partners*, Grigorishyn and Kolomoiskiy, did not agree on a common strategy they missed their chance to seize operating control in the Oblenergos. As a result, Surkis was able to maintain control of these companies, effectively taking advantage of the NC ECU's silence in the conflict.

Case Study: Prikarpatoblenego (PREN) AGM.

Due to the fact that Kolomoiskiy/Grigoryshyn own less than 40% of PREN, the company's shareholders were able to reach quorum (60%) and hold an AGM on March 15, 2005. At this AGM, Alexander Buben was re-elected CEO, and the supervisory board of the company was reduced from seven to five people. The new supervisory board consists of four representatives from Surkis-related companies (owning 27.6% of the company) and only one representative from the NC ECU (owning 25% of the company) which means Surkis increased his control of the company. The *partners* Kolomoiskiy/Grigoryshyn dropped the ball.

Below we map the relationship between a stake owned by the shareholder in a "conflict" Oblenergo, factoring in operating control, and the value of the shareholder's shares. Here we use our estimates of visible MCap and UVA as presented on page 53.

Note that there exists an inverse relationship between the size of the controlling stake in Oblenergo and value of the shares in this stake. This is because the larger the stake, the less UVA is distributed per single share.



This reciprocal relationship is the main reason for the conflicts in Oblenergos: all existing shareholders are against sharing operating control (UVA) with others – as sharing decreases the of value of ownership.

Below we present our estimates of share values, depending on the size of the stake and access to operating control in Oblenergos:



Value Per Share Associated With Stake, Depending On Access To Operating Control

Source: company data, Energo Business, NERC, Concorde Capital estimates * This means that only person(s) who own this stake have access to UVA

KEY

 ${\bf A}$: represents value per share of stake of Privat or Energy Standard, in case only Privat (Energy Standard) controls operations in the company

A' : value if Privat (Energy Standard) do not participate in company's operating control

 ${\bf B}$: value per share of Slavutich Group, in case only Slavutich controls operations of Oblenergo

 ${\bf B'}$: value if Slavutich does not participate in operating control

 ${\bf C}$: value per share of NC ECU's stake, in case only NC ECU controls operations ${\bf C}'$: value if NC ECU does not participate in company's operating control

 ${\bf D}$: value per share of combined stake, Privat + Energy Standard, or if both Privat and Energy Standard control the company

 ${\bf E}$: Value per share of combined stake, Privat (or Energy Standard) + Slavutich, or if Slavutich shares its control either with Privat or with Energy Standard

 ${\bf F}$: Value per share of combined stake, Privat + Energy Standard + Slavutich, or in case three parties share operating control in Oblenergo

 ${\bf G}$: Value per share of a 100% holder controlling company's operations, or in case there exists fair distribution of company's total value

H : Value per share of a portfolio shareholder





Value Per Share Associated With Stake, Depending On Access To Operating Control

Source: company data, Energo Business, NERC, Concorde Capital estimates * This means that only person(s) who own this stake have access to UVA



Value Per Share Associated With Stake, Depending On Access To Operating Control

Source: company data, Energo Business, NERC, Concorde Capital estimates * This means that only person(s) who own this stake have access to UVA





Value Per Share Associated With Stake, Depending On Access To Operating Control

Source: company data, Energo Business, NERC, Concorde Capital estimates * This means that only person(s) who own this stake have access to UVA



Value Per Share Associated With Stake, Depending On Access To Operating Control

Source: company data, Energo Business, NERC, Concorde Capital estimates * This means that only person(s) who own this stake have access to UVA



Implications

In the conflict Oblenergos, neither side has nominal power to solve major issues in the companies, only a combination of blocked stakes can give them access to nominal control in the company. However, as there are no agreements between shareholders, some of them have real power in the companies, and the others are only nominal shareholders in these companies.

According to the information available, Slavutich has full control over the conflicting Oblenergos, which means it values **CHEON's** share USD 0.56 (point **B**), while all the other shareholders are likely to value their shares USD 0.32 (points **H**, **A'**, **C'**). However, Energy Standard is going to crowd out Slavutich in order to gain sole control of the company's operations (point **A**) or in tandem with Privat (point **D**).

Moreover, other shareholders have large stakes which are not associated with neither nominal nor with real power. If these owners decide to sell their stakes, these shares would be valued even lower than for minority shareholders. This is due to the illiquidity of the stocks and impossibility to find investors who can purchase these stakes:

Question:	Answers:	% of respondents
	Someone from the conflicting parties, but not Grigorishyn	50%
Who are the most probable	Portfolio Investors can afford a small block only	100%
Oblenergos?	Those who have lobbying power with the new Government	40%
	Those with an interest in a controlling block only	100%

Expert Opinion Summary

Source: TNS Ukraine, Concorde Capital

The combined stakes of Slavutich and Privat (or Energy Standard) can allow access to nominal operating control (more than a 50% stake) for these two **POON** shareholders. This implies that the conflict in **POON** can be solved if Slavutich shares its control with at least one of the *partners*, Privat or Energy Standard. The latter, however, is possible only if Privat and Energy Standard are able to control their stakes independently of the other *partner*. However, as sharing control of Slavutich with one of the *partners* will be not beneficial for the other *partner* (who will not have access to control), separation of the two partner's ownership rights does not look realistic.

For **CHEON**, **LVON**, **PREN** and **SOEN**: combining the stakes of any two block-holders would not give them access to nominal operating power. Here, the conflict can only be resolved if the three main private shareholders take common control, or if some of the parties sell their stakes to the others.



The State's Role In Conflict Oblenergos

Despite the fact that the state has at least blocking stakes in all the "conflict" Oblenergos, it does not actively control any of these companies, and only cares about dividends.

The NC ECU is a passive executor for those who control the companies. Thus, the state's stake is used as a wildcard in Surkis's game. The higher the state's stake in an Oblenergo, the easier it is for the owner who controls the company to implement his politics (refer to the case study on page 56). This is important for **TOEN**, **DNON** and **ZAON**, where the state has more than a 50% stake, while *de facto* private shareholders operate these companies.

This conclusion is also important for the conflicting parties: as the state is a silent follower of the policies of whoever controls the conflict Oblenergo. The combination of the blocks from any two private shareholders, plus the state's stake, would equal a 60% stake (enough to reach quorum at an AGM and implement important decisions). This means that if Surkis starts sharing his operating control (access to UVA) with either of the *partners* (Grigorishyn or Kolomoiskiy), they would obtain both nominal and real power in the companies. However, as we have said this outcome would not be beneficial for the other *partner*, who *de facto* would loose any chance of gaining access to operating control. We consider this the main reason why Kolomoiskiy and Grigorishyn cannot agree on separate ownership of their blocks in Oblenergos.

Another angle of the state's ownership in "conflict" Oblenergos is that the state has a wildcard. If the state were to decide to sell its stakes in these companies, the privatization price could grow incredibly, as the owner of this stake would be the winner in the battle for control.

Though for Surkis the state's stake would be worth a minorities' price per se (as the purchase of new shares is not associated with additional access to UVA for him), he would be ready to pay a premium, because if his rivals were to buy, for Surkis the game is over.

For either Grigorishyn or Kolomoiskiy, the purchase of the state's stake would mean control over company operations - and therefore access to UVA. So, they would be ready to open up their wallets, paying for state's stake up to the prices associated with points **C** on the charts. This price is definitely higher than that associated with point $\mathbf{C'}$ – the price per share which the state can obtain if the conflict end and the conflicting parties reach an agreement about the distribution of operating control.

Thus, the state could potentially kill two birds with one stone: cash in on the opportunity to sell its stakes in the "conflict" Oblenergos and put an end to the conflict. However, we consider the current privatization very doubtful, as the government would prefer to maintain the illusion of control over the situation and try to resolve the conflict in a legal way.



Other Companies With Large Private Blocks

The groups involved in the conflicts in five Oblenergos also own large blocks in three other energy distribution companies. Below we present the relationship between share values, size and access to control in these companies (the key is similar to the graphs of "conflict" Oblenergos).



Value Per Share Associated With Stake, Depending On Access To Operating Control

Source: company data, Energo Business, NERC, Concorde Capital estimates * This means that only person(s) who own this stake have access to UVA



Value Per Share Associated With Stake, Depending On Access To Operating Control

Source: company data, Energo Business, NERC, Concorde Capital estimates * This means that only person(s) who own this stake have access to UVA

Value Per Share Associated With Stake, Depending On Access To Operating Control





Source: company data, Energo Business, NERC, Concorde Capital estimates * This means that only person(s) who own this stake have access to UVA



State-Controlled Companies

Comparable Privatizations

Using the benchmarks from the Ukrainian 2001-tenders and the privatizations in the Czech Republic of 2002-2005 gives us valuations, presented on page 38.

The experts have no uniform opinion on the possibility of future privatizations, which shows that a great deal will depend on political will:

Expert Opinion Summary

Question:	Answers:	% of respondents
	Soon	25%
When can we expect a new wave of Oblenergo privatization ?	More than 5 years	25%
	It depends on politics	50%
Who are the most probable buyers	Buyers will be interested in controlling stakes only	100%
of the state's stakes?	Someone with experience in the energy market of CEE/Ukraine	100%

Source: TNS Ukraine, Concorde Capital

No Privatization

The price of the stakes in Oblenergos if the state holds them forever can be estimated the same as the stakes of portfolio investors (estimated on page 52).

Privatization And UVA

If the state decided to suddenly privatize the companies it controls, then the potential buyer would obtain the state's stake and all the UVA. As we assume the buyer would know the Ukrainian energy market and could estimate the UVA, he is likely to be ready to pay a premium to visible value:

Value	Of	State's	Shares	١f	Privatized:

			Value of Sta	Price per	Upside To		
	Stake	Scenario1*	Scenario 2*	Scenario 3*	Weighted	share USD	Portfolio Inv.
CHON	46%	36.5	19.4	18.1	23.6	0.35	37%
DNON	75%	213.6	187.0	244.6	199.4	44.38	11%
HAON	65%	91.1	80.6	79.8	83.1	0.50	24%
HMON	70%	20.9	18.6	24.2	19.8	0.21	14%
KREN	70%	62.5	56.5	37.9	56.1	0.46	21%
TOEN	51%	14.2	8.2	10.3	9.9	0.32	25%
VIEN	75%	21.9	17.7	21.2	19.1	8.23	10%
VOEN	75%	13.4	13.2	17.2	13.6	0.04	13%
ZAON	60%	89.7	59.6	75.3	68.7	0.64	12%
ZOEN	75%	9.5	5.9	13.9	7.6	0.08	5%
Probability		25%	65%	10%			

Source: company data, Energo Business, NERC, Concorde Capital estimates * For scenario descriptions and values estimates, refer to pages 52-53



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Concorde Capital
72 Chervonoarmiyska St.
2nd entry, 6th floor
Kiev 03150, UKRAINE

Tel +380 44 206 8370 Fax: +380 44 206 8366 www.concorde.com.ua office@con-cap.com

CEO Igor Mazepa	im@con-cap.com
Chief Operating Officer John David Suggitt	js@con-cap.com
Directors, Investment Banking Nick Enukidze Vitaly Strukov	ne@con-cap.com vs@con-cap.com
Director, International Equity Sales Peter Bobrinsky	pb@con-cap.com
Equity Sales Marina Martirosyan Lucas Romriell Alexis Stenbock-Fermor Anastasiya Nazarenko	mm@con-cap.com lr@con-cap.com asf@con-cap.com an@con-cap.com
Director, Research Konstantin Fisun, CFA	kf@con-cap.com
Utilities (Telecom, Energy) Alexander Paraschiy	ap@con-cap.com
Oil & Gas, Pipes, Metals Andriy Gostik	ag@con-cap.com
Machine Building, Chemicals Olga Pankiv	op@con-cap.com
Banking & Macroeconomics Alexander Viktorov	av@con-cap.com
Editor Nick Piazza	np@con-cap.com

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