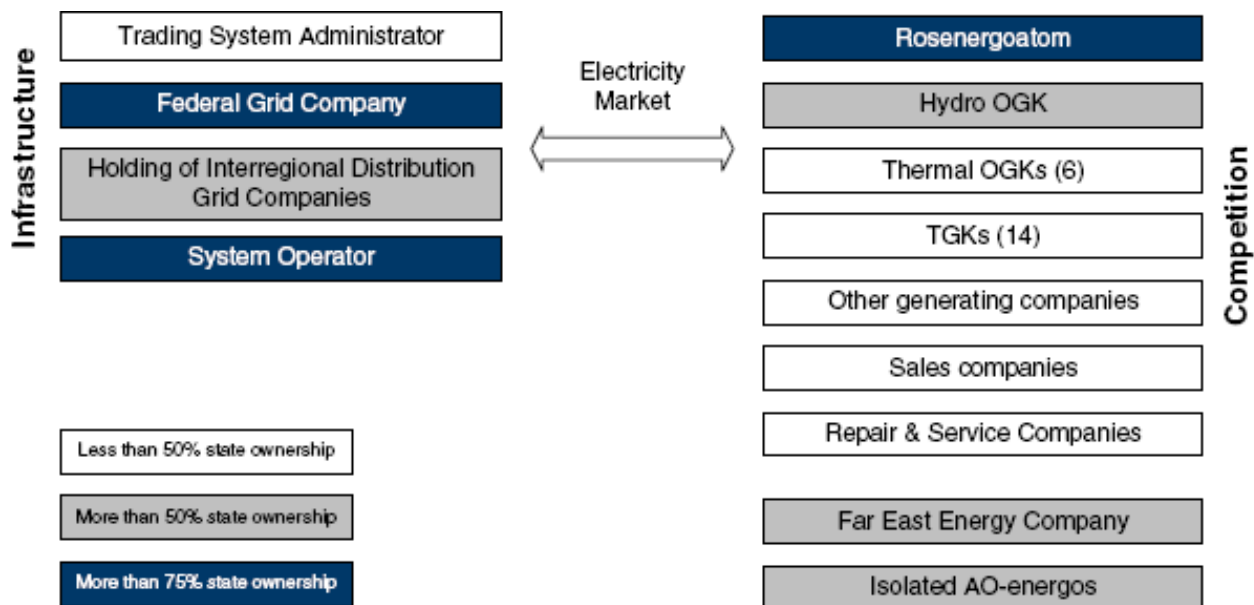


## The RAO UES restructuring and the Russian electric power sector reform is approaching the final stage.

The main target of the power industry reshuffle is to separate natural monopoly spheres (transmission, dispatching) and potentially competitive business fields (generation, sales, repair & services). According to the reform concept, generation, sales and repair companies are to be privatized and compete with each other in the free market going forward, implying the market price is formed on a demand and supply basis. In contrast, the state is to increase its control over the infrastructural spheres in order to ensure easy access and unbiased treatment for all market participants.

### RAO UES restructuring: Target structure

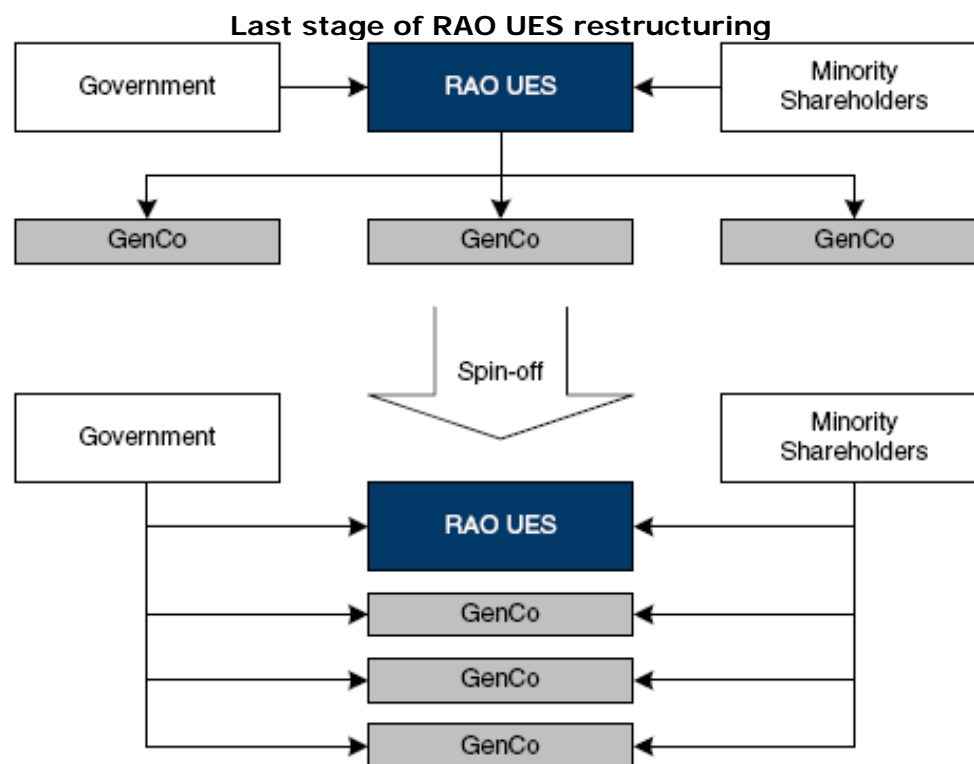


Source: RAO UES, Credit Suisse research

To date, the UES restructuring for the most part has been completed. As a result, a vertically integrated value chain was unbundled and new companies for generation, distribution and supply emerged. A new electricity market infrastructure based on the System Operator, the Federal Grid Company (FSK) and the Holding of Interregional Distribution Grid Companies was created. Competitive wholesale and retail markets for electricity, organized by the Administrator of the Trade System, were launched. To finalize the restructuring, however, it is still necessary to complete the formation of several TGKs and the reorganization of AO-Energос as well as make decisions on whether the state's stake will be increased in FSK and the System Operator.

The first stage of UES restructuring, scheduled for mid-2007, was completed with spin off of two assets (OGK-5 and TGK-5). The two companies have become first generating companies resulted from the reform. Both have placed additional issue of shares. As of the current date overall capitalization of OGK-5 and TGK-5 exceeds 170 billion rubles.

At the second stage, planned for mid-2008, UES will be split into the companies that form the targeted market structure and thus will cease to exist itself. After the company's reorganization, UES shareholders will become direct owners of the spun off assets on a pro-rata basis.



Source: RAO UES, Credit Suisse research

The final stage of UES reorganization was approved by the major shareholders (Russian government, Gazprom, Norilsk Nickel and SUEK – all four control 67.7% of shares) at an EGM on October 26, 2007. After completion of the reform on July 1, 2008, shareholders will obtain shares of the following companies: OGKs/TGKs (except OGK-5 and TGK-5, which have already been divested), HydroOGK, FGC (electricity transmission holding), MRSK Holding (low-voltage distribution companies), Far East Energy Company (FEEC), and Inter RAO (electricity export and import monopoly).

Here is a roundup of information on the OGKs and TGKs, including a table showing the stake held by UES, the new or expected controlling stakeholder where known, and the planned dates for completing new share issues to raise investment funds:

Name	Region	UES stake, %	Share placement	New / Plans
OGK - 1	Power plants: Gas: Perm, Nizhnevartovsk, Urengoi, Irikliino (Orenburg region). Coal/gas: Kashira (Moscow region), Verkhnetagilsk (Sverdlovsk region).	91.7	Feb. 2008	OGK-1 has a \$2 billion plan to increase capacity to 12.5 GW by 2012. OGK-1 may issue up to 11 billion new shares, equal to 19.7 % of expanded share capital. A share issue may include a London market flotation.
OGK – 2	Power plants: Gas: Surgut, Pskov. Gas/Fuel oil: Stavropol.	65.5	to Gazprom*	OGK-2 sought to issue up to 12 billion new shares, or 31.18 % of its expanded equity in October, but it managed to place only 6.623

Name	Region	UES stake, %	Share placement	New / Plans
	Gas/coal: Serov (Sverdlovsk). Coal: Troitsk (Chelyabinsk).			billion shares. Of the \$1.05 billion it raised, \$640 million came from Gazprom, which maintained control it had gained through a share swap scheme. The company may issue more shares or convertible bonds to fully fund its \$1.68 billion investment program.
OGK – 3	Power plants: Gas/fuel oil: Kostroma, Pechora. Coal/fuel oil: Gusinozersk (Buryatia), Kharanorsk (Chita), Cherepetsk (Tula). Gas/coal fuel oil: Yuznouralsk (Chelyabinsk)	37.1	to Norilsk Nickel	OGK-3 plans to invest money from its March share placement in adding 2.8 GW of capacity by 2012. OGK-3 in March sold new shares equal to 37.9 % of its increased share capital to Norilsk Nickel for \$3.1 billion, about \$610/KW. Norilsk plans to make it the core of a new electricity holding company to be spun-off next year.
OGK - 4	Power plants: Lignite: Berezovsk (Krasnoyarsk). Gas/coal/peat/fuel oil: Shatura (Moscow region). Gas/coal: Smolensk, Yayva (Perm region). Gas: Surgut.	22.5	To E.On	Germany's E.ON won a tender on Sept. 15, 2007 for 47.4 % of OGK-4, offering \$3.9 billion, or \$0.12 per share. E.On offered a record \$750 per kilowatt of installed capacity. OGK-4 will place additional shares (22 percent of its post-money equity) for the same price paid by E.On. A 79 billion-ruble investment program plans to add 3.1 GW by 2011.
OGK - 5	Power plants: Gas: Konakovo (Tver region), Nevinomyssk (Stavropol), Sredneuralsk (Sverdlovsk region). Coal: Reftino (Sverdlovsk region).		to Enel	The firm sold about 14.4 % of its equity for \$459 million in Oct. 2006 and UES sold a further 25.03 % at auction on June 6 to Italy's Enel for 39.2 billion rubles. Enel has since raised its stake to 30 %. UES sold off its remaining holding in September, making OGK-5 the first generating company to be fully broken off from the former monopoly. It has a 57.3 billion ruble (\$2.21 billion) investment program meant to add 2.4 GW by 2012.
OGK – 6	Power plants: Coal/gas/fuel oil: Ryazan, Novocherkassk (Rostov region), Cherepovetsk (Vologda region). Gas/fuel oil: Kirishi (Leningrad region). Coal/fuel oil: Krasnoyarsk. Gas: SDPP-24 (Novomichurinsk, Ryazan region).	93.5	to Gazprom*	Investment program of 49.1 billion rubles could add 1.9 GW of capacity by 2010. OGK-6 may issue up to 11.85 billion new shares, equivalent to 30.71 percent of its expanded equity. As a result, UES's stake will fall to 41 %, while Gazprom can increase its holding to 52 % via share swaps. The share sale was postponed in September after OGK-2's placement met weak investor demand. UES said it would hold the offering by the end of 2007.
TGK - 1	Provides power to St Petersburg and areas bordering Finland.	13.6	to Gazprom**	Shareholders include Fortum with slightly more than 25 percent and Interros with 5.6 %. Effective control of TGC-1 went to Gazprom on Sept. 15, 2007 for \$2.8 billion after an investment arm of the gas monopoly won a tender for 37.8 % of TGC-1's capital before the sale. With a stake of 47 % Gazprom is expected to buy out minorities.
TGK - 2	Serves regions north and northwest of Moscow.	49.2	First 2008 half	Plans new share issue worth 9 billion rubles (\$352 million). The issue is planned for February-March 2008 and may coincide with

Name	Region	UES stake, %	Share placement	New / Plans
				the sale of UES's 49.4 % stake in TGK-2. Investment fund Prosperity Capital Management owns around 29% through its electricity holding company New Russian Generation, which will issue shares this year. Gazprom, Norilsk and Transnafta have expressed an interest in buying into TGK-2.
Mosenergo	Serves Moscow and environs.	36.2	to Gazprom	Gazprom has secured majority control after buying a supplementary share issue, bringing its stake to 52 %. It has regulatory approval to raise its stake to 63.83 % and Gazprom plans a buyout offer to minority shareholders, sources say. Proceeds will fund a \$2.1 billion investment programme.
TGK - 4	Serves regions south of Moscow.	47.3	November	The board of directors of UES expanded the investment program of TGK-4 to 18 billion rubles (\$724.6 million) raised the size of the planned share offering to 586 billion shares. In November, TGK-4 will therefore issue 29.6 % of its expanded capital, rather than the 27.1 initially planned. At the same time, UES will sell the government's stake in TGK-4, which is equal to 448 billion shares. UES's stake would drop to around 16 % after the sales.
TGK - 5	Serves regions east of Moscow.	47.5	to IES	Czech utility CEZ (CEZPsp.PR) is seeking to become a strategic investor in TGK-4. Existing shareholders bought 21 % of a new issue in May 2007, and Integrated Energy Systems (IES), also known as ZAO KES, the investment vehicle owned by Viktor Vekselberg, bought the remaining 79 percent for about \$400 million, or \$501/kW. Vekselberg has about 41 percent of the firm and has offered to buy out minorities at 0.0353 rubles per share. The state maintains a blocking stake of 25 percent.
TGK - 6	Serves regions to the southeast of Moscow, with stations in Nizhny Novgorod, Vladimir, Ivanov and Penza.	50.2	First half 2008	TGK-5 will be one of two firms, along with OGK-5, to be fully broken off from UES in the first phase of restructuring. Shareholders include Intergrated Energy Systems (IES), with 19.7 % and Prosperity Capital Management with 18.53%. IES has said it wants control. TGK-6 plans new share issue in 2008 to raise up to \$1.5 billion to fund a new power station.
TGK - 7	Serves regions around the Volga river.	54.5	First quarter 2008	Company can issue 3.859 million new shares, equal to 12.87 percent of the expanded share capital, by open subscription. Integrated Energy System (IES) has built up a 23 percent stake in TGC-7 and plans to participate in its IPO, which is due to be held in the first quarter of 2008, as does Gazprom.
TGK - 8	Serves six regions in the southeast of Russia, including the resort town of Sochi.	11.0	To managers of LULOIL	On Oct. 17, 2007 control of TGK-8 went for \$1.7 billion to IFD Capital, owned by the top managers of Russia's second largest oil firm

Name	Region	UES stake, %	Share placement	New / Plans
TGK - 9	Serves the Urals region.	50.0		<p>LUKOIL , including its president Vagit Alekperov and vice president Leonid Fedun. Fedun said the group was looking to by another generating company of similar size. The UES stake dropped to 14 %.</p> <p>TGK-8 serves parts of regions that are strategic to LUKOIL's oil business, and LUKOIL said it will provide much of the fuel for TGK-8's 18 power stations in the form of associated gas.</p> <p>Promenergoholding and Energostrategiya jointly hold 30 % of TGK-8 and have also been linked to LUKOIL. A buyout offer of minority shareholders is expected at 0.0035 rubles per share, the price LUKOIL paid for control.</p> <p>Integrated Energy Systems (IES) already has around 25 % and plans to gain control in the new share issue, which will represent 39.2 % of the share capital.</p> <p>UES will accept bids for the government's stake in TGK-9 until Dec. 15 at a price no less than 0.00854 rubles per share.</p> <p>A public offering and/or private placement of 39.2 percent of the expanded capital is planned for Oct. or Nov.</p>
TGK - 10				
TGK - 11				
TGK - 12				
TGK - 13				
TGK - 14				

Source: Factiva, RAO UES corporate web site

**Useful links:**

<http://www.rao-ees.ru>  
<http://www.fsk-ees.ru>  
<http://www.gidroogk.ru/>  
<http://www.so-cdu.ru/>  
<http://www.interrao.ru/>  
<http://www.mrsksevzap.ru/>  
<http://www.mrsk-1.ru/>  
<http://www.mrsk-sib.ru/>  
<http://www.mrsk-uv.ru/>  
<http://www.lenenergo.ru/>

**TGK sites (clickable links):**

[ТГК-1](#)  
[ТГК-2](#)  
[ОАО "Мосэнерго" \(ТГК-3\)](#)  
[ТГК-4](#)  
[ТГК-5](#)  
[ТГК-6](#)  
[ОАО "Волжская ТГК" \(ТГК-7\)](#)  
[ОАО "ЮГК ТГК-8"](#)  
[ТГК-9](#)  
[ТГК-10](#)  
[ТГК-11](#)  
[ОАО "Кузбассэнерго" \(ТГК-12\)](#)  
[ОАО "Енисейская ТГК" \(ТГК-13\)](#)  
[ТГК-14](#)

**OGK sites (clickable links):**

[ОГК-1](#)  
[ОГК-2](#)  
[ОГК-3](#)  
[ОГК-4](#)  
[ОГК-5](#)  
[ОГК-6](#)