

SOME PECULIARITIES OF ACCESS OF SHALE GAS SUBSOIL PLOT

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Research of some peculiarities of access of shale gas subsoil was dedicated.

Oil and gas, land plot, mineral resources, subsurface use, shale gas subsoil plot.

In order to understand the peculiarities of shale gas production, it is necessary to understand what shale gas is and how it can be explored and produced. Shale gas is often referred to as so-called «unconventional gas». Conventional gas reserves are comparatively easy to develop as the natural gas usually lies in deposits under pressure and will naturally flow out when a well is drilled. In turn, unconventional gas occurs in formations where the permeability is so low that the gas cannot flow out easily or is adsorbed by the rock. Generally shale gas includes both hydrocarbons in rocks with low permeability and hydrocarbons ones which are «attached» to clay particles. That is why shale gas is extracted by the special techniques of horizontal drilling and hydraulic fracturing.

Going back to Ukrainian realities, we should note that our legislation does not correspond to the best practice for shale gas production. For example, the special permits for exploration of natural gas are issued for only 5 years, while permits for exploration and production combined are limited by a 20-year term [1]. In terms of adjusting Ukrainian subsoil legislation to the needs of unconventional gas development, it would make sense to introduce a specific type of special permit for combined exploration and production activities for a period of at least 30 years and preferably up to 40 years.

In terms of boundaries, the Ukrainian Oil and Gas Act [2] limits the acreage for the special permits to 500 km² onshore and 1,000 km² offshore, which is not enough to develop an the unconventional gas field. Oil and gas investors would definitely seek an extension of these limits. The only other way to date of obtaining a larger acreage is to sign a Production Sharing Agreement (PSA) with the Ukrainian Government [3]. A PSA should be more preferable to oil and gas companies as it allows them to lease a larger subsoil plot for up to 50 years. In light of the above, the successful development of shale gas reserves in Ukraine seems to be impossible without a transparent and stable mechanism for awarding special permits and PSAs for oil and gas deposits.

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Another issue will be the gas field infrastructure and access to pipelines. Americans say that any shale gas well is at most 10-15 km away from the nearest McDonald's. The US experience proves that local legislation must be in good shape to make unconventional gas development happen: it has to entitle gas companies to sign right-of-way agreements that will allow natural gas pipelines and gathering systems to be built across the land of property owners with compensation to be paid to the latter. Ukrainian legislation is yet to see these changes.

According to Ukrainian legislation currently in effect the rights to land for the purpose of exploration or production of minerals must be obtained separately from subsoil use rights as per the general procedure established by the Land Code [4]. As a result, the operator cannot start subsoil activities unless the land use rights were obtained from the local authorities prior to this, and the process is quite time consuming. Clearly, shale gas development would require a simplified procedure to be introduced to the Land Code for getting access to the land necessary for carrying out exploration activities and leasing out the land at the production stage. Ideally, a special permit for the combined exploration and production of shale gas should have a land lease attached to it.

Below the surface, oil and gas have the ability to move through the rock. Such mobility allows a well to drain oil and gas from the adjacent land (subsoil) plots. Thus, a well to drain oil or gas from the adjacent land (subsoil) plots. Thus, a well drilled on a separate land plot could drain gas from a neighbouring land plot if the well was drilled close enough to its boundaries. Likewise, a horizontal well started at one land plot may easily cross the boundary of an adjacent land plot. Stories about oil and gas companies blackmailing land owners with statements such as «Lease us your land now or we will drill on your neighbour's land and drain your gas without paying a cent!» were quite popular in the USA and the American experience proves that the absence of respective state regulations does not allow this to happen. Moreover, there are no legal tools in Ukraine which would provide for sharing (utilization) of the jointly owned oil and gas reserves – both internal and cross-border reserves.

Ownership of land in Ukraine can be private, communal, or state-owned. Land ownership laws, and the transfer of property, are subject to the Land Code of Ukraine and the Law of Ukraine on Expropriation of Privately Owned Land plots and Other Real Estate Objects located Thereon for Public Needs or on the grounds of the Public Necessity (hereinafter «Public Necessity Law») [5].

In the U.S. an operator is expected to make «a good faith effort» to negotiate a surface use agreement with the landowner to gain access to the property. In the event that a surface use agreement cannot be negotiated, the operator is allowed to post a surface use damage bond and use property while still accommodating the landowner's use of the land. Ukraine does not use surface use agreements to locate oil and gas facilities or infrastructure. Instead, the land where oil and gas wells, accessory facilities, and pipelines are located must be owned by the state or the oil and gas operator.

The Ukraine requirement that is purchased to locate oil and gas facilities has several advantages. The difficulty in the proper evaluation of the costs

associated with long-term use of the land is eliminated if the land is purchased outright. Purchasing the land also eliminates the ongoing conflicts that arise between the landowner's use of the surface, and the rights of the mineral lessee to use the surface access the minerals. But requiring the purchasing of land for oil and gas development can also be the cause of conflicts and unintended problems. If a landowner does not want to sell the property, that property must be condemned (or «compulsory expropriated»). There are also potential problems if a landowner does not have the clear title to the land.

The Public Necessity Law provides for two methods of obtaining title to land for oil and gas development: «layout» of the current owner, and «compulsory expropriation» of the current owner through court order (hereinafter referred to as «condemnation»). Both methods require some government approval, and are showing that there is «public need» or «public necessity» for the transfer of ownership. The state is typically made the owner of the land that was the subject of a buyout or condemnation. However, in the case of oil and gas development, the oil and gas operator, the oil and gas operator may obtain title to the property from the state.

«Buyout» of land plots, and other buildings on the property, is allowed so long as there is landowner consent and a demonstrated «public need» (Public Necessity Law, Article 1). «Public Need» is defined as the need for land plots based on national interests or the interests of the territorial community. The location of oil and gas wells, pipelines, production facilities, and underground storage facilities are considered as public need (Article 7).

The decision to initiate a buyout of a private property for oil and gas development is made by Ministry of Ecology and Natural Resources of Ukraine. Village, town or city councils are empowered to make the decision to initiate a buyout for oil and gas pipelines, or oil and gas terminals. Within five days of the decision to initiate the buyout, the Ministry of Ecology and Natural Resources of Ukraine must notify the owner in writing. If the owner cannot be located, the notification may accomplished through publication in the local paper.

The notification must contain the following information (Article 10):

- the location of the land;
- the purpose of the buyout;
- the buyout conditions (the tentative buyout price, the buyout period, the source of funding of the buyout-related expenses);
- the rights and duties of the owner(s) of the land plot;
- the information about the land and house, that could be provided in lieu of those bought out;
- a layout plan of the land plot (or a part thereof) to be bought out and a copy of the decision to buy out the property.

Once the landowner has received the notice, the landowner must notify the executive agency whether they agree or object to the buyout. Lessees of the property to be acquired are also notified and made a party to the negotiation. If the landowner agrees to the buyout, the executive agency and the owner negotiate price and other terms. The price offered should reflect all costs and

financial losses the current owner will suffer as a result of the sale. The price offered by the state is typically less than market value of the property.

The terms may include an exchange of the landowner property for a property of similar value. The value of the exchanged property may not be more than 10 percent greater than the property acquired by the state. If the exchanged property is of less value than the property acquired by the state, a financial settlement will accompany the exchange to make up the difference.

The decision to buyout the land will cease to be effective if the sale or exchange is not completed within one year of the decision to buyout the landowner. After the landowner has received notification of the buyout, any changes or improvements made to the property before the sale or exchange of the property will not affect the purchase price.

A property that cannot be purchased through the buyout procedures (described above) may be condemned if the land is needed for a «public necessity». For the purposes of the legislation, «public necessity» is defined as «overriding necessity based on the national interests or the interests of the territorial community... Main pipelines and oil and gas terminals are considered public necessities as are objects connected with production of natural resources of state importance» (Article 15).

The decision to allow a condemnation of property must be made by a court. The relevant executive agency must prove to the court that accomplishment of the public necessity is not possible without condemning the property. If the court allows the condemnation to proceed, it will also determine the buyout price.

There are many citizens of Ukraine who are living on land without clear title to this property. Much of the land in Ukraine was owned by the state when Ukraine was a part of the U.S.S.R. Since Ukraine only declared independence from the U.S.S.R. less than 20 years ago, there are still many properties that are owned by the state but farmed and/or occupied by citizens of Ukraine.

The issue of landowners without title has real implications for shale and gas development. If the family occupying the land does not have legal title to the land, their right to any compensation for the taking of that land would be in doubt. As a result, land that may have been farmed by a family for generations may be taken without any compensation.

Development of unconventional gas in Ukraine is definitely a long shot and will not make the Ukrainian energy sector completely independent from Russian supplies in the near future but it can be an opportunity to reduce that dependence. At the same time, the Ukrainian Government has to understand that in order to even take the chance of playing the «unconventional gas» card against Russia, it has to introduce significant changes to the Subsoil Code, the Land Code, the Oil and Gas Act of Ukraine and subordinate legislation with the aim of motivating international oil and gas majors to give it a try.

The list of the literature:

1. Subsoil Code of Ukraine: approved by the Resolution of Verkhovna Rada of Ukraine as of the date July 27, 1994 No. 132/94-VR: as of the date November 18, 2012 // Verkhovna Rada of Ukraine Vidomosti. – 1994. – No. 36. – P. 340.

2. Law Of Ukraine of Oil and Gas as of the date July 12, 2001 No. 2665-III // Uryadovuy Kuryer. – 2001. – No. 169 (19.09.2001).

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Досліджено особливості правового регулювання доступу до нафтогазоносної ділянки надр.

Нафта і газ, земельна ділянка, надра, надрокористування, нафтогазоносна ділянка надр.

Исследовано особенности правового регулирования доступа к нефтегазоносному участку недр.

Нефть и газ, земельный участок, недра, недропользование, нефтегазоносный участок недр.