



**Comments of Reuters' Article:  
Russia ups crude refining with little regard for safety**

It is true that there have been a significant of accidents in the Russian oil industry over the course of the last year. I have been predicting increased losses for the past few years. However, I suggest that the root cause is operating Soviet assets in a Western regime rather than as suggested by the authors of this article. The recent insurance of BI has accentuated the losses.

I have never come across the sources of the article in 25 years in the Russian oil industry and I have no idea if they have ever set foot in a Russian refinery.

The author suggests that consolidation is one of the reasons for the losses in the last 12 months. The only recent consolidation has been TNK-BP's adsorption into Rosneft. The losses at Ryazan and Saratov were at former TNK-BP refineries, but how they were affected by the consolidation is not obvious to me. Besides BP's safety record worldwide leaves a lot to be desired.

Cost cutting is the second reason cited for the losses. In that run lengths have been increased I concur. However, in other areas I see little evidence of cost costing. Rather I have seen significant investment – not only in new facilities, but in bringing refineries into conformance with the latest standards. This includes the installation of ROVs, ESD systems and fire protection systems.

The third reason cited is negligence. I fail to understand what is meant by this.

“Analysts” call for “significant spending”. \$55 billion by 2020 is not a bad start. Where else in the refining industry is any money being spent on new construction? I presume nowhere as all the construction underwriters are interested in Russia.

There is a call for better qualified staff. Russian operations staff are better qualified than in most countries. Most operators in Russia are university qualified. Culture is another issue, but that is not addressed here.

I would not say that fires are frequent in Russian refineries. In the last year there have been a large number of significant losses, but the overall statistics do not support this statement.

Mr Kostin shows his Russian background by stating that 90% of losses are due to personnel. Russia has a blame culture and all loss investigations concentrate first on finding the culprit. As we have learned, the system is generally to blame, not the individual.

Refinery management is as technically-savvy as it has ever been. However, management is being forced to meet more and more aggressive targets by owners. Sound familiar?



I would not say the contractors are incompetent. I would say that they are poorly managed based on the Soviet concept that the expert knows best and does not need supervision. In this sense I am talking about 3<sup>rd</sup> party contractors. In most cases, the maintenance contractors are not third parties, but other companies in the group that have been hived off in the name of “outsourcing”. As such, the personnel involved in the maintenance activities have been employed at the refinery for many years.

Refining throughputs have increased due to the tax and tariff regime on crude oil and oil products. This factor and government pressure, are also behind the current massive investment.

It is not clear why Rouble depreciation, which is very real, is resulting in underinvestment in maintenance. Maintenance budgets are generally index linked and adjusted for turnarounds etc. Labour costs are totally Rouble nominated. Most equipment, and hence spare parts, are domestically manufactured. Hence only the imported parts are affected. It makes a difference, but not that significant a difference.

Mr Ryabov says one should not fix the old plant, but buy new. This is what the \$55 billion by 2020 is intended to do. However, a refinery cannot be instantaneously replaced and I would contend that greatest attention should be devoted to the integrity of the old equipment.

I would be interested to know who the disgruntled technologist is. The operators are grilled by a commission every year and are expected to know all details of the unit on which they work. They take part in emergency plan drills every month. Process simulator training is in its infancy at most Russian refineries, but all units are to be provided with simulators by the end of 2017. The simulator training at one refinery (Jeremy visited) involves both boardmen and field operators (Russia still has them!) and surpasses what is generally practised in the West.

The disgruntled technologist claims that operators do not care if 10 to 30 gauges do not work as long as the unit works. Certainly a visit to a Russian refinery will reveal unresponsive gauges and bypassed ESD systems. It would be unfair to say that the operators do not care, and culture, rather than their education and training, probably explains their lack of assertiveness in eliminating the problems.

Russian refineries have very hierarchical, perhaps dictatorial, management systems and an operator ignores instructions at his peril.

I had not noticed that chief engineers had disappeared. An engineer from a Romanian refinery appears to be ill-equipped to comment on this issue.

The chief engineer was in Soviet times, and has remained, the first deputy general director (i.e. he takes over if the general director is absent). He is responsible for almost all technical issues and invariably has a technical education (university level) and has worked himself up from an operator.



“Stricter safety measures will stop accidents in the coming three months, but more trouble is on the way once control slackens.” Safety improvement is a long term cultural programme and little can be improved in 3 months. Rosneft’s plan to appoint a vice president for safety would appear to be aimed at entrenching a safety culture and should be applauded.

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(Reuters) - A string of accidents in Russia's oil industry this year is due to industry consolidation, cost cuts and negligence, analysts and industry experts say, warning that any tightening of safety measures without improved staff training will bring little more than temporary relief.

Russia's oil sector saw 10 major accidents in the first half of 2014, including seven refinery accidents that killed nine. Analysts blame the disasters on long-lasting problems in the refinery industry, stressing the need for significant spending and better-qualified staff as a recipe against frequent fires.

"I see three main reasons - less technical-savvy management, staff and incompetent contractors," said Andrei Kostin, head of the research company Rupec, who says personnel were responsible for 90 percent of the accidents.

Russia has said it will spend \$55 billion on refinery upgrades by 2020, aiming to boost the quality of refined products and increase refinery yield – to 90 percent from the current 71 percent. That will result in lower output of fuel oil, whose share of oil product exports currently exceeds 25 percent. The refineries are expected to install close to 120



technological units, which will allow them to bring secondary refining capacity in line with primary refining, analysts say.

Russia's primary refining capacity totals about 300 million tons a year, while secondary refining capacity, indispensable for making high-quality gasoline, is about 200 million tons but could rise to 285 million by 2020.

Russian refineries increased refining by 7.4 percent to 117.4 million tons in the first five months of 2014, according to official data. The increase was due to primary refining, and the pipeline monopoly Transneft ([TRNF\\_p.MM](#)) expects crude oil producers to cut exports by further 10 million tonnes this year to free up the extra refining feedstock.

Whilst running refineries at full capacity, oil companies tend to underinvest in maintenance, sources say, partly due to ruble depreciation, which makes foreign equipment more expensive.

"In a situation like this, you shouldn't fix the old equipment, you need to replace it with new, competitive ones and thus lower the accident rate," Viktor Ryabov, who heads the Refining and Petrochemical Association, told Reuters.

A technologist at a major Russian refinery confirmed that companies have been underinvesting. Another reason for accidents is that requirements for staff expertise remain consistently low at all levels of the refining industry.

"The staff often don't know the units' detailed specifications and how technological processes work in emergency modes," the technologist who asked not to be named told Reuters. "And on top of that they ignore instructions and regulations. For example, they don't care if only 10 of 30 gauges are in order as long as the unit works."

"They are doing the bare minimum... It's a free market, of course, but they are getting too stingy and too rushed."

## CONSOLIDATION

After acquiring Russia's third largest oil producer, TNK-BP, in March 2012, Rosneft accounts for half of Russia's crude output and a third of its refining. Five of the seven refinery accidents in the first half of 2014 took place at Rosneft facilities.



"What is happening is the result of industry consolidation because that involves the cutting of maintenance costs," said United Traders analyst Mikhail Krylov, "That means lower maintenance spending per refinery."

After this year's biggest accident at the Achinsky refinery, which killed eight in June, Rosneft changed management at the refinery, but kept its two vice presidents responsible for that area. Rosneft's head Igor Sechin blamed the accident on contractors, adding that the company needed a vice president responsible for industrial safety.

"There will be more accidents as long as the company's head is handling them. Russia needs its chief engineers back, the ones who would see the whole picture and assume complete responsibility for the refinery," Alexander Gadetsky, Chief Engineer at the RAFO refinery in Romania, told Reuters.

Analysts believe stricter safety measures will probably help stop accidents at Russian refineries in the coming three months, but more trouble is on the way once control slackens.

"The situation is going to worsen because the management underestimates the staffing problem and the amount of money they need to spend on fixed assets," Kostin said.

(Writing by Denis Pshenichnikov)

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