

## **The New Oil Production Targets, New Terms and Implications**

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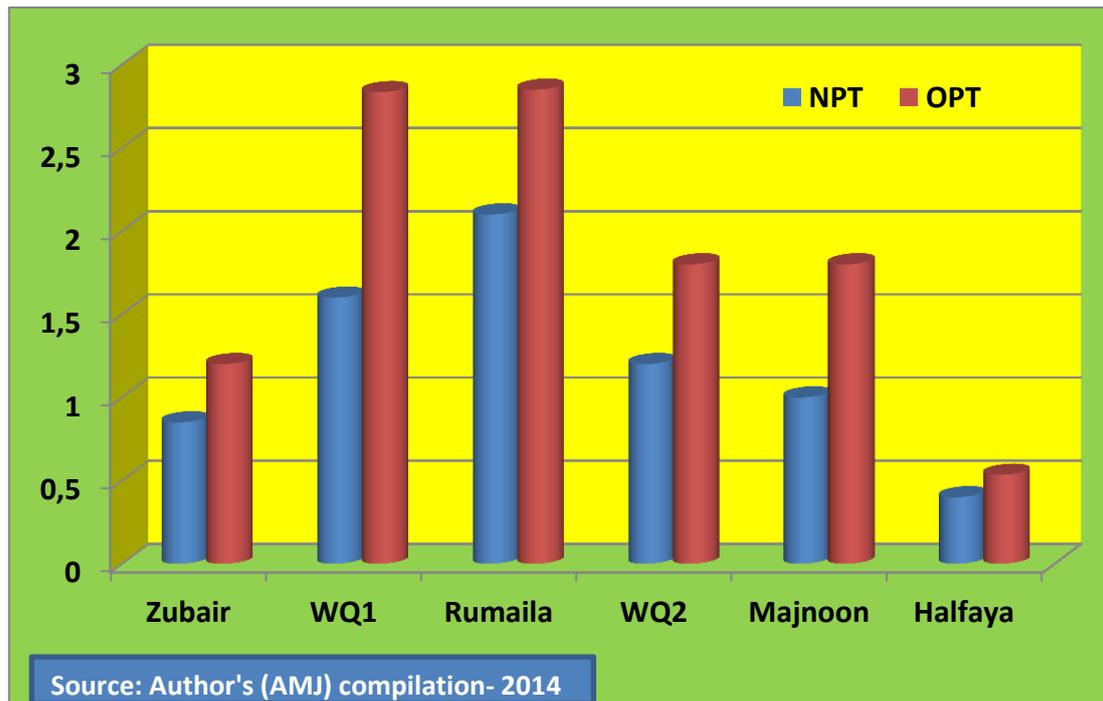
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Most petroleum professionals, including myself, had expressed their serious doubt about the suitability, attainability and sustainability of oil production plateau targets for many oilfields that were concluded pursuant to bid rounds one and two of 2009 and 2010. The Ministry of Oil-MoO and senior energy decision makers in government begun to rethink those production targets only after the findings of both the International Energy Agency-IEA (2012) and the Booz&Co., Integrated Energy Strategy-INES (2013) raised similar doubts on the likelihood of realizing the contracted plateau targets in volumes and on time; and both IEA and INES called for serious reduction on these contracted targets.

Recent information from various official, industry and specialized media sources tells that agreements between MoO and related IOCs have been concluded pertaining to Rumaila and Halfaya oilfields, while those for West Qurna 1 (WQ1), West Qurna 2 (WQ2), Majnoon, and Zubair giant oilfields were finalized earlier; and related contracts have already been amended.

Based on available brief information total production plateau from the above mentioned oilfields would be reduced from over 11 million barrels per day-mbd (Old Plateau Target-OPT) to 7.15 mbd (New Plateau Target-NPT). The following chart exhibits the old and new production plateaus (mbd) for these six oilfields.

### **Chart 1: Old and New Plateau Targets for Six Giant Oilfields (mbd)**

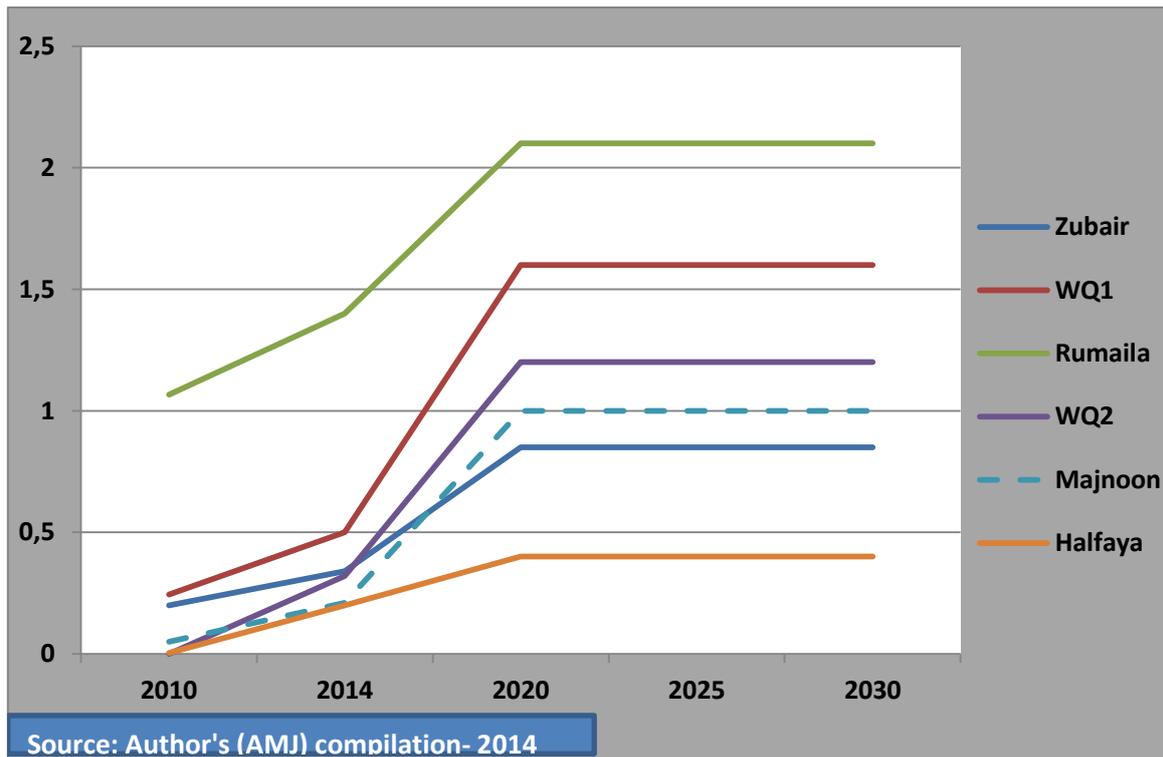


While total new plateau indicates 35% reduction from the old plateaus, this reduction is not unified among these oilfields. The highest reduction of 44% was in Majnoon and in WQ1, while the lowest of ca. 25% in Halfaya and in Rumaila. In between the WQ2 reduction is (33%) and (29%) in Zubair.

According to my database total production from these six oilfields has increased from 1.563 mbd in 2010, when the contracts for bid rounds one and two became effective, to 2.970 mbd in mid- 2014. An increase of 1.407 mbd over a period of more than four years only reflects different and complex difficulties encountered in the development efforts on these oilfields and highly likely had expedited the rethinking of the ultimate production target levels giving a total of 7.15 mbd during plateau period 2020-2030.

Based on these data and the new production plateaus the following chart 2 exhibits trend pattern of the production from these six oilfields.

**Chart 2: Production Profiles of the Six Giant Oilfields 2010-2030 (mbd)**



The above mentioned reduction in production plateaus would logically leads to corresponding reduction in installed capacities and consequently in capital cost requirements. IEA World Energy Outlook 2012 (Iraq) used (in \$2011) a range of \$7000/b-\$12000/b for expansion supper giant oilfields in the south (Rumaila, WQ1 and Zubair) and \$10000/b-\$15000/b for new supper giant oilfields in the south (WQ2, Majnoon and Halfaya). In more recent estimate Iraqi official sources use flat rate of \$15000/ per barrel of capacity. Using the latter estimate would imply a **total reduction (saving) in capital cost of \$58 billion resulting from these new production plateaus for the six oilfields.**

I assume the contracted plateau targets would remain the same for Alahdab; Missan 3 oilfields, Garraf and Badra. And assume further that those for Qaiyara and Najma will not be attained due to known reasons, and thus I excluded them from the New Production Plateau. With these two assumptions and the above mentioned new agreed-upon plateaus, total production plateau targets for the oilfields contracted according to the first two bid rounds and Al-ahdab will be reduced from 12.22mbd to 8.12mbd; **the corresponding investment requirements would be reduced from \$183 billion to \$122 billion.** Not only the reduction of \$61billion in capital cost is significant by itself, but the reduced new plateau production target is more realistic and could be sustainable if attained; but this largely hinges on other

logistics and infrastructure such pipelines, pumping stations, storage tanks, water injection, export terminals, among others.

In association with these reductions in the plateau targets there are other vital changes to the contracts. The first is the timeline for reaching the plateau target and this is among the critical factors for preparing the final development plan of the related oilfield. Instead of 2017 the new date for reaching the plateau target is 2020, which gives the IOCs even more time to achieve the reduced targeted production.

In this regard and for Rumaila the IOCs managed to introduce a condition linking the commencement of the plateau period with the availability of water for injection. On the other hand a new “performance factor” was introduced permitting reduction in the remuneration fee in case IOCs do not reach the plateau target on time. However, the practical modalities governing these two conditions are not disclosed, at least for the time-being.

The second change is the prolongation of plateau production period from seven to ten years for Rumaila, WQ1 and Zubair, and this contributed to increasing the length of the contract by five years. As for Halfaya its plateau target will be for 16 years, instead of 13 years, and the contract period was extended to 30 years, instead of 20 years. No information on this issue is known regarding Majnoon oilfield.

The third change has direct financial implication. The Rumaila renegotiated contract has reduced the participation interest of the State Partner, which is SOMO, from 25% to 6% in favour of BP and CNPC thus increasing their participation interests to 47.6% and 46.4% respectively.

These changes in the participation interest bring proportional changes in the share of the parties in the Remuneration Fee. The remuneration fee is paid per the incremental production over the baseline production level that is reduced at an assumed natural decline rate. For Rumaila the remuneration is \$2/b and baseline production is 1.066mbd.

Assuming an “R-Factor” value of less than (1) and considering the 35% Corporate Income Tax, Iraq retains 51.25 Cents (%) for every dollar it pays in remuneration fee while BP and CNPC receive 48.75 Cents (%) before introducing the recent contractual changes.

Due to these introduced changes Iraq’s share is reduced to 35.039 Cents while BP and CNPC share increased to 64.961 Cent of every dollar paid in remuneration fee. **In a specific fiscal term assuming a plateau target of 2.1mbd and baseline production is fully replaced, the State Partner’s share in the remuneration fee will be reduced from \$249 million to \$60**

**million per year; and this mean the remaining \$189 million per year will be given away to BP and CNPC.**

It is not clear whether this reduction in the participation interest of the State Partner from 25% to 6% impacts the State Partner's membership and status in the eight members of the Joint Management Committee-JMC. If it does then the Iraqi members in JMC will be reduced from five to four, though technically this has no effect since JMC decisions are taken by consensus.

There is no information whether the changes that are introduced for Rumaila are valid for other oilfields referred to above, especially with regards to related infrastructure and logistics such as water for injection and storage tanks facilities.

The Common Seawater Supply Project (CSSP) is a massive joint water injection project aiming to increase pressure and boost output from the oil fields of West Qurna 1 & 2, Majnoon, Zubair, Garraf, Rumaila and Halfaya that are the backbone of the country's oil expansion.

Since 2010 different capacities and cost estimates were suggested for CSSP. Initially, the project envisaged to have the capacity of 12 mbd of treated seawater from Basra Gulf, at a cost expected to exceed \$10 billion.

Recent information (PIW, Aug 25, 2014) indicates reduction in cost and capacity. The delays to the \$5 billion-plus CSSP, which aims to pump some 7 mbd, are forcing IOCs to seek alternative solutions. One option is to develop independent water projects separate from CSSP that would tap the Third River / Main Drainage. Eni (Zubair) and ExxonMobil (WQ1) consortia are understood to have approval to build their own 250kbd plants around the Third River, and Lukoil (WQ2) is investigating a similar-sized plant. Moreover, refurbishment of water injection facility at Qarmat Ali is currently provides water supplies to Zubair and Rumaila.

Other infrastructure such as the storage tank-farms, pipelines and export terminals would surely have critical impacts on production levels and could cause production curtailment. Storage Tank-Farm at Fao project, for example, comprises 24 tanks of 365kb each. As on April 2014 only four tanks are installed and operational and another four require testing; the remaining 16 were in various stages of construction. MoO envisions adding another eight tanks, bringing total storage capacity to 11.7mb.

The project requires also 10 gas turbine turbo pumps, which have a multi-year lead time to manufacture and take between six months and one year to install and test. It is envisaged to be implemented stage by stage and will take until 2017 to complete (IOR, 22 April 2014)

Yet, available information does not make reference whether the renegotiated contracts have changed the original provisions governing production curtailment resulting from lack of such infrastructure or left them intact.

From transparency and good governance perspectives the above mentioned changes to the contracts could have significant implications for Iraq in general and the petroleum sector in particular. Available information does not tell whether these contractual amendments were approved by the Cabinet and the Parliament or by the Cabinet only, especially when such changes are concluded during a political transition period involving new parliament and new government, which is not yet formed.

Moreover, without full disclosure of the agreed-upon amendments to the related contracts it becomes difficult to assess accurately and comprehensively the impacts of these changes. The ministry of oil is under Extractive Industry Transparency Initiative-EITI, which Iraq is a compliant member, obliged to disclose these changes; and the Iraqi EITI national secretariat (IEITI) has the duty to do so as well. Neither has done so, so far!

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7 September 2014