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BAKU-CEYHAN: ANATOMY OF A PROJECT UNDER SIEGE

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Introduction

Baku-(Tbilisi)-Ceyhan, one of several options considered as the main export route (MEP) to move Azeri oil to Western markets (Fig. 1), has had a rocky past and uncertain future. Azerbaijan International Operating Company (AIOC), that is producing oil in the Azeri-Chirag-Guneshli (ACG) fields off the Caspian coast, initially gave little chance to Baku-Ceyhan. It resisted the project almost relentlessly, arguing that the pipeline is uneconomic. It preferred the Baku-Supsa and Baku-Novorossiysk routes, and unofficially the "southern" Iran route.

With rare exceptions, AIOC's position went pretty much unchallenged in the West. Commentators in the press and pundits in think tanks and academia generally followed AIOC's line and called Baku-Ceyhan a "political project" that was removed from economic reality. Some analysts even ridiculed Azerbaijan, Turkey, Georgia and U.S. for their support of Baku-Ceyhan. Government-controlled Russian and Iranian press joined the chorus of criticism.

Against these criticisms, Turkey's defense of the project was almost non-existent. Turkey, along with Azerbaijan and Georgia, with strong backing of the United States, lobbied for Baku-Ceyhan on political grounds, but could not defend it on economic grounds. For the oil companies, economics, not politics, mattered.

Even on environmental grounds Turkey's defense of Baku-Ceyhan was largely ineffective, although this is beginning to change. For the oil companies, the fact that their preferred routes, Baku-Supsa and Baku-Novorossiysk, entailed increased oil tanker passage through the heavily populated and heavily congested Bosporus, was not a deterrent. Some of these companies such as ExxonMobil will use the Bosporus to export large volumes of Kazakh and Russian liquid hydrocarbons from the north Caspian region (Tengiz, Karachaganak, Kashagan and possibly Khvalinskoye fields).

Despite these obstacles, lately the tide has turned in favor of Baku-Ceyhan, and the project is set on a promising track. Still, there are hurdles that lie ahead, and the project is not certain.

The economic argument

AIOC's argument that Baku-Ceyhan is uneconomic, while deserving some legitimacy at the outset, has lost its validity.

One linchpin of this argument, the high construction cost, suffered a setback when the German firm PLE, from the feasibility study it conducted in 1998, estimated the cost at $2.4 billion against AIOC's own estimate of $3.7 billion (including $800 million contingency). Turkey's offer of tariff incentives and its guarantee to cover up to $300 million any cost overrun above $1.4 billion for the section of the pipeline running through its territory, further weakened the cost argument.

The other linchpin of AIOC's economic argument, reserves insufficiency, was more intractable and persisted virtually unabated in public forums. Before long, reserves insufficiency became the bane of Baku-Ceyhan. Commentators in the West repeated and spread the news as the Gospel truth.

AIOC's contention regarding insufficiency of reserves, however, has not been convincing. Traditional conservatism in reserves estimates in the industry, the distinction between proved and probable (and even possible) reserves, unknown appraisal status of the ACG fields, and potential recovery from other, including mature, fields in Azerbaijan, are factors that cast serious doubt about AIOC's contention.

Fig. 1 – Crude oil pipelines from the Caspian region.

To bring greater transparency to this issue, this author has suggested that an independent party audit the ACG reserves.

It was also curious that the economic breakeven throughput for Baku-Ceyhan, initially set at 800,000 b/d by AIOC, was subsequently raised to 1 million b/d (50 million tons/year) despite higher oil prices. There has been no public explanation for increase in the breakeven throughput.

Insofar as reserves, this author has maintained for long time that there are adequate reserves in Azerbaijan that could feed Baku-Ceyhan to its economic potential. This was already evident by summer 2000. According to AIOC's estimates, the ACG reserves as of last summer were 4.6 billion barrels (up from 4 billion barrels initially). When the Shah Deniz condensate reserves of 1.8-2.0 billion barrels are taken into account, the liquid reserves add up to about 6.5 billion barrels, more than the 6.0-billion-barrel economic threshold set by AIOC.

In addition, reserves announced by operators from reactivation of onshore fields such as Gobustan and Mishovdag fields could boost the total producible resources to nearly 8 billion barrels. These volumes exclude reserves that potentially exist in prospects that are in exploration stage, e.g., Inam, Alov and Absheron offshore prospects. Azerbaijan has signed 21 PSAs (production sharing agreements) related to E&P. Pooling resources from non-ACG fields for Baku-Ceyhan would require new alliances to be formed among different producers in Azerbaijan. Commercial alliances are commonly formed in the industry to serve common interests.

AIOC's economic argument has also lost steam after the upturn in oil prices in early 2000. With real-term oil prices forecast to remain above $20/barrel in the foreseeable future, at least (OPEC's informal target price range is $22-28), AIOC's earlier economic evaluation of Baku-Ceyhan, that must have assumed the $15 benchmark as a base case, can no longer be valid. An effect of higher oil price is to depress the economic reserves threshold for an upstream project.

The foregoing argument applies, of course, if the companies that have a stake in oil production also own Baku-Ceyhan, and the pipeline is an integral part of an E&P project. If oil production and oil transportation are de-coupled, the argument may not apply if owners of the pipeline receive a fee-per-barrel from the producers. Even in this situation, however, the fee charged, instead of being fixed, would be indexed to prevailing oil price. High oil price would thus impact economic viability of a stand-alone pipeline project.

An indication that some partners in AIOC recently began to view Baku-Ceyhan economic came indirectly from Norway's Energy and Petroleum Minister Olav Akselsen. During his visit to Turkey in November, Mr. Akselsen remarked in a press interview that Baku-Ceyhan is "economically feasible." Mr. Akselsen was no doubt conveying the opinion of Statoil, Norway's national oil company and a member of AIOC.

Shell's announcement last fall that it would join Baku-Ceyhan if the Inam prospect (in which the company has 25% interest) off the Azeri coast proves to hold commercial reserves, further reinforces economic viability of Baku-Ceyhan. Inam is currently under exploration. (Drilling was suspended in February 2001 due to unexpectedly high reservoir pressures). Chevron's overture early this year towards Baku-Ceyhan (see "Developments as of end-February 2001") is also an encouraging sign in the same direction. Recently (February 2001), BP has sent signals for the first time that it views Baku-Ceyhan as economically viable.

Jockeying for Iran route

The essence of the problem with Baku-Ceyhan, as partners in AIOC have known but have not publicly enunciated, is ***lower*** economic viability compared to its competitors. In other words, while Baku-Ceyhan is economically viable, because of its relatively higher construction cost, it does not offer the higher profitability margins that the competing routes (Supsa, Novorossiysk, Iran) do.

Due to its lower cost, the Iran route has become a favorite choice for oil companies. As the Supsa and Novorossiysk routes began to lose, for several reasons, their appeal (at least for some companies) to serve as MEP, attractiveness of the Iran option has increased. An advantage of the Iran option over the Black Sea options is that it is not associated with the Bosporus stigma.

However, the Iran option has been effectively closed to oil companies due to U.S. trade sanctions against Iran. So, the oil companies, while hoping for the Iran sanctions to be lifted, adopted a wait-and-see policy vis-à-vis Baku-Ceyhan. They withheld their support for the project while at the same time refraining from openly criticizing it. Concurrently, they intensified their lobbying efforts for lifting of the sanctions. Their prevarication stymied or slowed progress in the project.

The companies were encouraged when Dick Cheney last summer became the running mate of Republican presidential candidate George W. Bush. As the CEO of Halliburton, the giant oil services company based in Dallas, Texas, Mr. Cheney had criticized the Clinton administration on its Iran policy. Furthermore, Mr. Bush himself was an oilman from Midland, Texas. When the Bush-Cheney ticket was declared as the winner of the American presidential elections in late last year, the oil companies' expectations were heightened.

Realistically speaking, however, the chances that the Iran sanctions will be lifted in the foreseeable future appear slim. The Bush administration has given no signal that it intends to lift the sanctions; if anything, it has signaled just the opposite. Political tensions prevailing in the Middle East have reinforced the likelihood that the Bush administration will renew the Iran sanctions when they expire in August 2001.

Even if the Iran sanctions were to be lifted, U.S. oil companies would have to overcome several hurdles to do business with Iran, among them complications with the tax regime and reluctance of some parts of the Iranian society to accept foreign investment and foreign influence.

France's TotalFinaElf, with the backing of the French government, recently jumped into the Iran fray and advocated Iran route for export of Caspian oil. TotalFinaElf, not a member of AIOC but a member of OKIOC (Offshore Kazakhstan International Operating Company) that holds license to Kazakhstan's Kashagan field, was asked by the Kazakh government to participate in a feasibility study of a Kazakhstan-Turkmenistan-Iran oil pipeline. The company has also tried, though unsuccessfully, to secure a leadership role in OKIOC (see "Developments as of end-February 2001").

Why Baku-Ceyhan?

If Baku-Ceyhan is economic, but not most profitable, it is relevant to ask why oil companies may want to support Baku-Ceyhan.

The answer to this question lies, firstly, in the need to safeguard safety and environment in a business enterprise. The precept of "good corporate citizenship" or social responsibility implies that oil companies, in their pursuit for profit, should not ignore safety and environmental risks. That would give Baku-Ceyhan advantage over the Supsa and Novorossiysk routes.

Major oil companies, Shell and BP in particular, have long incorporated into their business doctrines respect for environment and the welfare of the local community in which they serve. In an international oil conference held in Istanbul in July 2000, the Shell representative publicly expressed his company's concern for using the Bosporus for additional tanker traffic. In the TURKIOG 2000 conference held in Istanbul in November, the BP representative did the same.

Likewise, during his visit to Turkey in November, Norway's Energy and Petroleum Minister remarked that the Marmara Straits are not proper for oil transportation. Undoubtedly, Statoil would agree.

Such public expressions are an indication that oil companies, at least some of them, no longer see the Bosporus as a primary export route for Caspian oil. While such sentiment is not expected to impact oil companies' plans to use the Caspian Pipeline Consortium (CPC) pipeline to export north Caspian oil via Novorossiysk and the Bosporus, it does advance the cause of Baku-Ceyhan.

Early last October the U.S. Supreme Court sent a powerful message on the seriousness of ecological damage in oil industry. The court rejected ExxonMobil's appeal of the $5 billion punishment leveled by a lower federal court against the company in connection with the devastating oil tanker (Exxon-Valdez) spill off the Alaskan coast in 1989. The verdict was on top of $3.5 billion that the company had paid earlier for cleanup and compensatory damages. Whether the court's decision will affect ExxonMobil's strident opposition to Baku-Ceyhan remains to be seen.

A second reason to support Baku-Ceyhan is energy security. One fundamental principle of energy security is multiplicity of oil and gas export routes. The West already depends to a large extent on Iran for its oil supply (currently Iranian oil makes up nearly 15% of OPEC supply), and soon Iranian gas will be reaching Western markets as well. Political turmoil in the Middle East could seriously disrupt energy supply from Iran. Baku-Ceyhan would provide a safe export route for Caspian oil to reach Western markets.

A secure supply route is also of prime consideration for oil companies.

A third reason concerns physical accessibility. Baku-Ceyhan would enable easy access to ultra large crude carriers (ULCCs) and provide the shortest, most direct tanker route to markets in the Mediterranean. With Supsa and Novorossiysk routes, tanker loading could be problematic in bad weather. High demurrage costs and the necessity to navigate through a relatively congested Aegean Sea would be additional problems. Likewise, the Iran route would entail long, tortuous maritime travel to reach Western markets – though not the Asian markets.

A fourth reason to support Baku-Ceyhan is the political aspiration of Azerbaijan, which is the resource owner. Azerbaijan has expressly stated that it wishes to export its oil through Baku-Ceyhan, an aspiration that the oil companies can ill-afford to ignore.

In our view, the reasons cited above should provide sufficient motivation for oil companies to support and invest in Baku-Ceyhan.

Baku-Ceyhan, of course, also has economic and strategic value for Turkey. Likewise, it holds clear strategic advantage for U.S. in terms of a secure supply of oil to the Western markets, in buttressing a trusted NATO ally and a secular Moslem country in a critical region, and in promoting the welfare and independence of the ex-Soviet states in the Caucuses and Central Asia. These "purely political" considerations, however, give little incentive to oil companies to support Baku-Ceyhan.

Forming of the sponsor group: a new phase begins

Despite oil companies' reluctance and prevarication to support Baku-Ceyhan, the decision of SOCAR to form the Baku-Ceyhan sponsor group last October has put the project on a new promising tract. All but three partners (Lukoil, ExxonMobil and Pennzoil) composing AIOC have joined the sponsor group. Agreements have been signed between the sponsor group and Azerbaijan, Turkey and Georgia to form an eight-member sponsor group. The latter is intended to be the pre-cursor of MEPCO, a new company that would finance, build and own the pipeline.

If the project were to be completed before the end of 2004, as planned, there was indeed precious little time to lose. SOCAR wanted to take a decisive action on the choice of MEP, and most AIOC partners saw it in their interests to join the sponsor group. Otherwise, the main development phase of the ACG fields would be unduly delayed.

However, forming of the sponsor group has not come without hitches. Conditions were attached to financing the construction phase of the project, and a new throughput problem was created - unintentionally. As a result, full commitment to the project is yet missing, and financing for the construction phase hangs in balance. In fact, the only financial commitment that the sponsor group has assumed is underwriting the basic engineering study ($26 million).

The sponsor group signed documents with the regional countries with the proviso that it would continue evaluating alternative routes to Baku-Ceyhan while the engineering studies are underway. The reason for such contingency, reportedly, is that the sponsor group should be prepared to switch to an alternative route if unexpected "difficulties" with Baku-Ceyhan were to emerge during these studies.

A benign, and likely, explanation for the sponsor group's reservation is that the construction cost could well exceed the earlier $2.4 billion estimate. Before proceeding with the construction phase, the sponsor group evidently wished to have a more reliable cost estimate than was available from PLE's 1998 feasibility study. The basic engineering study would provide a more reliable cost estimate than the feasibility study.

The other, more skeptical interpretation is that some partners in the sponsor group introduced the contingency clause to gain time and use presumed "difficulties" in the engineering study phase as a pretext to switch to an alternative route at a later date, or to use the contingency clause as a vehicle to extract additional concessions from the governments involved. Such skepticism is not unreasonable in the light of the fact that, of the AIOC partners, so far only SOCAR and TPAO have openly supported Baku-Ceyhan.

As for the throughput problem, it stems from the decision of Lukoil, ExxonMobil and Pennzoil (a subsidiary of Devon Energy) to opt out of the sponsor group. The three companies, with their combined 23% share in AIOC, might not only decline investing in Baku-Ceyhan, but they might also seek alternate routes to export their production quotas. For those non-AIOC companies contemplating investing in the project, and for international credit agencies wanting to extend credit for the project, withdrawal of almost a quarter of ACG's future production from Baku-Ceyhan is not an auspicious development. The project needs a broader investor support than is implicit in the present sponsor group.

In the event of reserves shortfall, contribution from Kazakhstan's new Kashagan field significantly enhances Baku-Ceyhan's prospects. Kashagan was discovered last summer by Kashagan East-1. A second well, Kashagan West, is now drilling. After drilling several appraisal wells in a core area, "early oil" from Kashagan could come as early as 2005, when Baku-

Ceyhan would be in its first year of operation. Kazakh President Nursultan Nazarbayev has stated that he would like to see Baku-Ceyhan extended eastward to Aktau on Kazakhstan's Caspian coast (although other Kazakh officials on several occasions have also talked, in the context of "multiple routes," favorably of the Iran option). Turkey actively sought Kazakhstan's participation in Baku-Ceyhan, and Azerbaijan said it would welcome Kazakh participation.

Of the AIOC partners that have not joined the Baku-Ceyhan sponsor group, Lukoil's decision to opt out is not surprising, considering the fact that Russia has persistently opposed Baku-Ceyhan. Undoubtedly, Lukoil will want to use its production quota from ACG to keep the existing Novorossiysk line (or its bypass) busy.

However, the decisions of ExxonMobil and Pennzoil to elect out are more contentious and could cause a rift between these companies and Azerbaijan. SOCAR claims all production from the ACG fields should be exported through Baku-Ceyhan, a claim disputed by the oil companies. The dispute may go all the way to court. ExxonMobil, in particular, with its signature on five E&P projects (outside AIOC) in Azerbaijan, can ill-afford to have strained relations with the Azerbaijani government. It would not be surprising, therefore, if ExxonMobil would drop its objections at a later date and join the sponsor group. Pennzoil may follow suit.

Developments as of end-February 2001

In late 2000 through early 2001, Baku-Ceyhan witnessed several significant developments.

One of these developments was the publication of several U.S. foreign-policy reports highly critical of Baku-Ceyhan by Washington think tanks: Cato Institute, Carnegie Endowment for International Peace, and Center for Strategic and International Studies (CSIS). While varying in detail, the general tone in these reports is that the new (Bush) U.S. administration should abandon the pro-Baku-Ceyhan policy of the Clinton administration, lift the Iran sanctions, and support Russian and Iran routes for export of Caspian energy resources. The CSIS report, sponsored by U.S. Congress, was similar to the one that the Center had issued in August 2000

Another development was the appointment of Spencer Abraham, an ex-senator from the state of Michigan, as the new U.S. energy secretary. Mr Abraham, an antogonist of Turkey and a sympathizer for Armenian causes, called Baku-Ceyhan a "dream project" while serving in the U.S. Congress during 1994-2000.

The announcement of Mr. Abraham's nomination as the U.S. new energy chief in early January roughly coincided with the release of the Cato Instiute and Carnegie reports. The coincidence led to an avalanche of gloomy news about Baku-Ceyhan in the Turkish press. Commentators opined that Baku-Ceyhan had received a serious blow, and that the project was in jeopardy.

Such doomsday commentaries, however, are unrealistic. The think-tank reports contain little new territory, and the analyses related to energy matters are in many respects flawed. Considering their foreign-policy ramifications, there is little chance that the recommendations will be adopted by the Bush administration (ref. 23). Also, Mr. Abraham's appointment does not necessarily herald a change in U.S. policy towards Caspian energy matters.
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Another development concerned strategy moves by oil companies participating in OKIOC. TotalFinaElf, one of the majority stakeholders, agreed to buy the minority shares of BP and Statoil in OKIOC, thereby becoming the largest stakeholder (28.6%) in the consortium.

TotalFinaElf had hoped that its strong equity position in the consortium would ensure the company the operatorship of Kashagan. In a surprise move marked with back-room maneuvers, however, Agip, a subsidiary of the giant Italian energy concern ENI, was selected by the consortium as the operator of Kashagan. The Kazakh goverment approved selection of Agip as the operator.

These strategy moves give TotalFinaElf and Agip significant influence in the exploitation of Kashagan, including the choice of oil export routes. While the Italian group's position on Baku-Ceyhan is not clear, the French-Belgian group has opposed Baku-Ceyhan in preference to the Iran route. In contrast, both BP and Statoil, since summer 2000, have been supportive of Baku-Ceyhan, having taken part in the sponsor group. The change in equity positions in OKIOC, therefore, is not particularly helpful for Baku-Ceyhan. Although the Kazakh government would have a major say in the decision whether to contribute Kashagan oil to Baku-Ceyhan, the key influence of TotalFinalElf and Agip in OKIOC has the potential to hamper or postpone Kashagan's contribution to Baku-Ceyhan.

Another, and most significant, development was the move made by Chevron. The American oil giant, which recently merged with Texaco, made a surprise move in February and expressed interest in joining the Baku-Ceyhan sponsor group. Chevron's overture was met with excitement in Azerbaijan and Turkey, as it signalled for the first time serious interest in Baku-Ceyhan by a company outside AIOC.

It was also ironic that until its announcement, Chevron had maintained a posture that was consistently pro-Russia, pro-Iran, and anti-Baku-Ceyhan.

Chevron decided to join the sponsoir group in consideration of the Absheron exploration prospect being tested by Absheron-1 off the Azeri coast, to the east of the Shah Deniz gas-condensate field. Chevron is 30% stakeholder and operator of the licence block, the other partners being SOCAR (50%) and TotalFinalElf (20%). If Absheron proves to contain commercial liquid hydrocarbons, it could solve the throughput deficiency problem in Baku-Ceyhan that was artificially created when the sponsor group was formed. It could obviate the need for contribution from Kazakh sources, including Kashagan.

While terms of Chevron's participation in the Baku-Ceyhan sponsor group have not ben made public, there is little doubt that the company made its participation in the sponsor group conditional on the Absheron prospect bearing commercial hydrocarbons, in particular oil. If Absheron proves to be dry or uneconomic, Chevron would want to retain the option to withdraw from Baku-Ceyhan.

Thus Chevron's interest in Baku-Ceyhan signals an intention rather than commitment to join the sponsor group. By joining the sponsor group, and sharing in basic engineering study costs, Chevron gave itself the strategic flexibility it needed vis-a-vis the outcome of Absheron-1 (ref. 26).

It should be added that Chevron has no stake in Kashagan, and its production from the Kazakh Tengiz field is totally committed to the CPC pipeline. Thus, if it eventually joins Baku-Ceyhan, Chevron willl not bring in any Kazakh oil – except possibly through Texaco, e.g. the North Buzachi oil field.

Finally, BP has been giving signals recently that it considers Azeri reserves to be adequate for Baku-Ceyhan (ref. 27). This is a dramatic shift from the previous stance.

Conclusions

From the beginning, Baku-Ceyhan has been a project under siege. For a long time, it had little or no support from AIOC, and it received a barrage of almost continuous criticism from analysts and commentators abroad, in particular, the U.S. Lately, however, the tide has turned significantly in favor of the project. Discovery of the Shah Deniz and Kashagan fields, surge in oil prices, concern for the Bosporus (although not shared by all oil companies), and unwavering U.S. support, have been crucial sustaining momentum in the project.

Chevron's recent interest in Baku-Ceyhan has also given a psychological boost to the project. Real and substantive support from Chevron will only come, however, if the Absheron prospect proves to contain commercial hydrocarbons, in particular oil. (Presence of gas in Absheron may give Chevron strategic incentive to remain in the sponsor group, see ref. 26). If Absheron is found to be oil-bearing, Baku-Ceyhan may not need contribution from the Kazakh side.

In any case, Chevron's interest in Baku-Ceyhan does not signal any commitment to the project. At present, Chevron's interest is merely a signal of intention to participate in the construction phase of Baku-Ceyhan.

Difficulties facing Baku-Ceyhan at present concern investment support for the construction phase. Financing will be facilitated if construction cost is not significantly higher than $2.4 billion. A broader investor support beyond the present sponsor group will also be helpful. There are indications that companies other than Chevron might participate in the sponsor group. The U.S. financing and credit agencies OPIC and Exim Bank have declared their readiness to support the project. Although such support is useful, it does little good to non-American investors.

For AOIC, the fate of the Baku-Supsa line (currently carrying some 105,000 b/d oil) once Baku-Ceyhan becomes operational is an outstanding issue. It is doubtful that by year 2005 the consortium will have recovered $600 million investment it sank into this pipeline. Baku-Novorossiysk will mostly likely remain in use even if Baku-Ceyhan is in place, to ship Lukoil's production entitlements from ACG and other Azeri oil fields in which the company has interest.

Currently, the most serious threat to Baku-Ceyhan comes from the Iran route. The Iran policy that the Bush Administration will adopt may play a pivotal role in this regard. Signals coming from the Bush administration to date do not point to a significant shift in U.S. policy towards Iran in the foreseeable future.

In the meantime, both Russia and Iran continue to undermine Baku-Ceyhan.

Taking all considerations into account, at present this author sees 70% chance that the project will materialize.

For the project, critical investment decision point will be the coming summer. By summer, basic engineering work will have been finalized (and cost better defined), Kashagan West and Absheron exploration drilling programs will have been completed, and the Bush administration's Iran policy clarified. (Exploration results from Inam will not be available before Quarter 3, 2001, at the earliest). Before summer, any throughput contribution to the pipeline (e.g. from the

Kazakh side) or new investor interest in the project will almost certainly be provisional (indicating intention) rather than firm. It is unrealistic to expect a real breakthrough in the project before summer.

Regrettably, Turkey has been rather ineffective responding to negative publicity launched against the project in the West. Repeated and unwarranted claims of reserves insufficiency, for example, could have been rebuffed with a sustained campaign involving lectures and articles in foreign journals and newspapers. In this context, highlighting the significance of the Shah Deniz condensate reserves for Baku-Ceyhan alone would have dispelled doubts in many minds. Negative publicity concerning economic viability could have likewise been countered. A proactive role trying to convince international credit agencies of the economic worthiness of the project would have been helpful. Instead, Turkey chose to lobby only on the political front and confined its efforts to the region, in fact mainly to Turkey.

A direct, substantial investment in the project by Turkey (other than through TPAO) would also go a long way shoring up investor confidence. In view of two major financial crises that the country experienced in the last few months (in November 2000 and February 2001), however, the likelihood of this happening is virtually zero.

Post script: latest developments as of end-June, 2001

By end-June 2001, further developments took place that could be characterized as a near-breakthrough for Baku-Ceyhan. These developments can be listed as follows:

1) Basic engineering study was completed on May 25, 2001. The revised cost estimate was put at $2.8-2.9 billion. The new estimate included items such as upgrade of Sangchal terminal operations in Azerbaijan that had not been included in the earlier estimate.
2) The sponsor group authorized expenditure of $150 million for detailed engineering work, which started in mid-June and is expected to be completed by next summer. Botas selected the consortium ILF (Germany) - Yüksel Proje-Temelsu as the contractor for detailed engineering work for the Turkish sector.
3) ENI expressed interest in joining the detailed engineering phase (ref. 28). ENI’s interest was probably triggered in part by criticism levied against Blue Stream in Turkish media in recent months. (ENI’s subsidiary Saipem will lay the subsea portion of Blue Stream pipeline).
4) While Chevron did not announce the results of Absheron-1 (most likely the well found at least gas), it announced that it wants 10% share in the Baku-Ceyhan sponsor group. TotalFinaElf expressed similar interest, another indication that Absheron-1 found hydrocarbons.
5) Russia, in an attempt to deflect intense criticism of Blue Stream in Turkish media in recent months, softened its criticism of Baku-Ceyhan. It announced Russian firms would be interested in bidding on Baku-Ceyhan construction tender.
6) Kashagan West well found oil, which was in communication with oil found in Kashagan East-1. This boosted the viability of Kashagan as a major field. In early March, Kazakhstan re-stated its intention to join Baku-Ceyhan.
7) The Bush administration announced it would continue the energy policy of the earlier Clinton administration in the Caspian region, reaffirming support for Baku-Ceyhan. Thus, concerns raised by many regarding Dick Cheney and Spencer Abraham taking

positions in the Bush administration had proven to be ill-founded. All indications are that the U.S. sanctions against Iran will not be lifted in the foreseeable future.

8) BP solidified its support for Baku-Ceyhan (ref. 29). In the "The Story of Three Seas" conference held in Istanbul on June 19-22, 2001, BP's chairman Sir John Browne announced unequivocally that Baku-Ceyhan was no longer a political project, that it was commercial, that reserves in the ACG fields (at 5 billion barrels) alone were sufficient to make the project economic, and that construction of the pipeline would be completed before the end of 2004. A subsequent BP announcement (ref. 30) noted that until year 2012, BP planned to use production from the ACG fields and Shah Deniz alone to fill Baku-Ceyhan. In other words, contribution from other sources including Kazakhstan, while welcome, was not needed until 2012.
9) Several pro-Armenian U.S. congressmen introduced a resolution in the U.S. Congress to urge the Bush administration to drop its support of Baku-Ceyhan and instead support an oil pipeline crossing Armenia. The resolution has a slim chance of passage, and even if passes, it will most likely carry no weight.
10) A report issued by the Baker Institute for Public Policy at Rice University in Houston, Texas, mimicking earlier reports by other think tanks in the U.S., urged the Bush administration to move closer to Russia and Iran and drop its support for Baku-Ceyhan, which it considered to be uneconomic.
11) Devon Energy, which earlier had purchased the mere 0.60% stake of Ramco in the sponsor group, backed out of the sponsor group.

With the exception of the negative developments noted in items 9-11, of which cumulative effect is negligible, developments listed above converge to make Baku-Ceyhan almost a certainty, with a 90-95% chance that it will materialize. A project once "under siege" and branded as "political" and a "pipe dream" had turned into an economic project with solid prospects and favored by many. The turn-about was nothing less than dramatic. And the turn-about, as predicted, happened within the last few months.

By the same token, had this contribution been written originally at end-June 2001, its title would have been different to reflect the dramatic shift in Baku-Ceyhan's prospects.

Looking back, discovery of Shah Deniz and U.S. support were pivotal in bringing Baku-Ceyhan to its current stage. As noted earlier, discovery of Shah Deniz not only prompted BP to change its stance toward Baku-Ceyhan from a strategic point of view, but also secured additional liquid reserves for the pipeline. Subsequently, with oil prices surging and oil-price forecasts for the foreseeable future remaining bullish, the project gained renewed momentum, although oil companies including BP were slow to admit it publicly and the pundits in many think tanks remained oblivious to changing circumstances. Continued U.S. support to the project kept the Iran option effectively closed. With the Iran route likely to remain closed for the foreseeable future, there emerged gradually an element of "inevitability," admitted publicly by BP early this year, about Baku-Ceyhan. Oil companies, in particular BP, were no longer willing to "wait and see" for the Iran route to open. This would have meant continued uncertainty and further delay in full-field development of ACG, something that oil companies did not want to see happen. BP led the drive to give major impetus to the project.

Discovery of oil in Kashagan and heightened concern for the Bosporus further strengthened the prospects of Baku-Ceyhan.

The economics of the project was also helped by technology. Thanks to high-angle well deviations and better sand control techniques, in the ACG fields development wells that were originally predicted to produce 5,000-7,000 bo/d came onstream at double these rates, some reaching 30,000 bo/d (ref. 20). Undoubtedly, this reduced the number of producing wells and cut development capex . Multi-lateral wells and smart well completions will probably further boost oil productivity and cut development cost in the ACG fields.

This author has long argued in public forums, almost as a lonely voice and against most analysts in Western think tanks and media, that reserves in the ACG fields plus the condensate in Shah Deniz, combined with robust oil prices, were more than sufficient to render Baku-Ceyhan economic. With the recent admission by BP regarding reserves and economic viability concerning Baku-Ceyhan (refs. 29, 30), the author feels fully vindicated. Proven reserves in the ACG fields now stand at 5 billion barrels (vs. 4 billion barrels initially and 4.6 billion barrels a year ago), and will probably further increase as development continues.

It remains to be seen whether the three “pariahs” in AIOC, that is Lukoil, ExxonMobil and Pennzoil (now Devon Energy), will eventually join the Baku-Ceyhan MEP group of investors. Even without their participation, however, there is now little that stands in the way of Baku-Ceyhan. Barring extraordinary circumstances, investment support for the construction phase appears all but certain. Detailed engineering study will last 12 months, followed by 32 months of construction. Construction is scheduled for completion end-2004, with “first oil” early 2005.

Author’s note: This is a revised, re-revised and expanded version of a contribution originally submitted (in English) to the 1st Turkish International Oil and Gas Congress and Exhibition (TURKIOG 2000) held in Istanbul on November 16-18, 2000. The account given represents the author’s view of the Baku-Ceyhan project as an “outsider,” i.e., someone who was not involved in the project itself. The account reflects the situation as of end-February 2001. Following dramatic developments in Quarter 2, 2001, an update as of end-June 2001 was incorporated into the contribution as a “post-script” – without changing the earlier version. The contribution is submitted here at the invitation of the Turkish Association of Petroleum Geologists.

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