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INDIA'S ONGC: BALANCING DIFFERENT ROLES, DIFFERENT GOALS

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About the Policy Report

The Changing Role of National Oil Companies in International Energy Markets

Of world proven oil reserves of 1,148 billion barrels, approximately 77% of these resources are under the control of national oil companies (NOCs) with no equity participation by foreign, international oil companies. The Western international oil companies now control less than 10% of the world's oil and gas resource base. In terms of current world oil production, NOCs also dominate. Of the top 20 oil producing companies in the world, 14 are NOCs or newly privatized NOCs. However, many of the Western major oil companies continue to achieve a dramatically higher return on capital than NOCs of similar size and operations.

Many NOCs are in the process of reevaluating and adjusting business strategies, with substantial consequences for international oil and gas markets. Several NOCs have increasingly been jockeying for strategic resources in the Middle East, Eurasia, and Africa, in some cases knocking the Western majors out of important resource development plays. Often these emerging NOCs have close and interlocking relationships with their national governments, with geopolitical and strategic aims factored into foreign investments rather than purely commercial considerations. At home, these emerging NOCs fulfill important social and economic functions that compete for capital budgets that might otherwise be spent on more commercial reserve replacement and production activities.

The Baker Institute Policy Report on NOCs focuses on the changing strategies and behavior of NOCs and the impact NOC activities will have on the future supply, security, and pricing of oil. The goals, strategies, and behaviors of NOCs have changed over time. Understanding this transformation is important to understanding the future organization and operation of the international energy industry.

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INTRODUCTION[1]

Starting out life as a small directorate in the government of India's Ministry of Natural Resources and Scientific Research in 1955, the Oil and Natural Gas Corporation (ONGC) had the highest net worth and second highest market capitalization of all corporations in India by 2007.[2] ONGC, The country's largest oil and gas company,[3] ranks 20th in *Platt's* annual survey of global energy companies[4] and 239th on *Forbes'* Global 2000 list.[5] As India's largest exploration and production (E&P) company, the state-owned ONGC alone holds the exploration (as well as mining) rights for more than half of the hydrocarbon

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[1] Sections of this paper are based on research done by the author for "India," The Brookings Institution Energy Security Series, November 2006.
[2] "In the league of extraordinary companies," *Financial Express*, April 29, 2007. It was estimated in June 2007 to be U.S. $48 million. See Nidhi Verma, "India's ONGC Q4 net falls 13 pct, lags f'cast," *Reuters News*, June 25, 2007.
[3] Measured on the basis of total production and proven reserves. See Oil and Natural Gas Corporation Limited, "Final Sale Prospectus," March 2004, p. 30
[4] Platts, *Platts Top 250 Global Energy Company Rankings* (http://www.platts.com/top250/oilnatural.xml)
[5] Forbes, *The Global 2000* (http://www.forbes.com/lists/2007/18/biz_07forbes2000_The-Global-2000_Rank.html)

acreage licensed out by the Indian government.[6] It accounts for a little more than three quarters of Indian crude oil production and more than two-thirds of its natural gas production.[7] Recently, the company also ventured into coal-bed methane (CBM) exploration.[8] Though traditionally its core focus has been in the upstream sector, over the past few years ONGC has moved toward becoming an integrated company, foraying into refining (its subsidiary MRPL owns nine percent of the country's refining capacity)[9] and dabbling in retailing as well. In addition, ONGC owns and operates close to 11,000 km of pipelines across the country and offshore.[10] Moving beyond the hydrocarbon sector, the company has recently also gone into the power generation business with investment in a 750-MW gas-fired power plant.

ONGC's domestic ultimate reserves of oil and oil equivalent gas stand at 2.2 billion tons (1.28 BT of oil and 942.2 billion cubic meters (BCM) of gas), almost 70 percent of the country's total.[11] Most of its proven reserves are in western India (both onshore and offshore) and in the Upper Assam basin.[12]

Headquartered in the northern hill town of Dehradun, ONGC employs 34,722 people, of which about one-third are non-technical employees.[13] Unlike a number of other national oil companies (NOCs), ONGC, with state ownership of 74.11 percent, pulls double duty as both a state-owned company and a publicly-listed commercial entity.

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[6] 53.91 percent to be exact. Directorate General of Hydrocarbons, "Petroleum Exploration and Production Activities in India 2005-06," October 2006, p. 26 and p. 34

[7] 75.8 percent and 70 percent, respectively. Ministry of Petroleum and Natural Gas, "Annual Report 2006-07," p. 157. Figures are for 2005-06

[8] Pratim Ranjan Bose, "ONGC may kick off Jharkhand coal-bed methane project soon," *Business Line*, May 29, 2007, p. 10

[9] MPNG, "Annual Report 2006-07," p. 158. Figures are for 2005-06.

[10] ONGC, *Our Company: Profile* (www.ongcindia.com/profile.asp [May 26, 2006]).

[11] Figures as of April 1, 2006. DGH, "Petroleum Exploration and Production Activities in India 2005-06," p. 11

[12] ONGC, "Final Sale Prospectus," p. 17

[13] Oil and Natural Gas Corporation Limited, "Annual Report 2005-06," p. 54

In 2005-06, its total net worth stood at U.S. $12 billion,[14] and buoyed by high crude oil prices, over the last couple of years, ONGC has recorded the highest profits in the country.[15] In 2006-07, the company declared a net profit of U.S. $3.6 billion -- less than analysts expected, but still rising approximately 11 percent from the previous year [See Appendix I].[16] Analysts expect its profits to cross U.S. $5 billion in 2007-08. [17] Also, in 2006-07, the company's net sales hit U.S. $13 billion and it is sitting atop reserves of U.S. $13.5 billion. Its return on invested capital stood at 28.6 percent.

At first glance, a company that is the largest producer of oil and gas in a country that has about 0.5 percent of the world's proven reserves might seem unremarkable. But its size and strategy abroad have made ONGC an object of global attention. Beyond the company, the size, growth and energy needs of the country in question -- India -- and ONGC's role in its energy strategy, make the company worthy of interest.

At the onset of the current century, the author of a book on energy in Asia referred to India as a "lumbering elephant."[18] Seven years later, while it may not be hurtling at quite China's pace, India has moved on from its days of seemingly aimless plodding. As a former senior Indian official noted, India is at a "new threshold of growth."[19] Energy is fueling the sped-up Indian economy, which in turn is fueling demand for even more energy. India today is the fifth-largest consumer of energy in the world, accounting for 3.9 percent of the world's consumption. Its primary commercial

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[14] ONGC, "Annual Report 2005-06," p. 16
[15] "In the league of extraordinary companies."
[16] ONGC makes its data available in rupees. The exchange rate used is as of March 31, 2007 when U.S. $1=Rs. 43.44.
[17] "India's ONGC Q4 net falls 13 pct, lags f'cast."
[18] The title of his chapter on India. See Robert A. Manning, *The Asian Energy Factor* (New York: Palgrave, 2000), p.119
[19] N. K. Singh, "Introduction to Conclave," presentation for conference on "India's Energy Security: Major Challenges," National Conclave, Observer Research Foundation, New Delhi, February 14, 2006. (N. K. Singh was a senior official in the Indian bureaucracy.)

energy demand (involving coal, oil, gas, and electricity generated from nuclear, hydroelectric and renewable sources) is expected to almost triple between 2005 and 2030 from 379 million tons of oil equivalent (MTOE) to 1,105 MTOE.[20]

India's energy mix is (and long has been) coal-dominant, but oil accounts for almost a third of its primary commercial consumption. Though India's addiction to oil is not as strong as that of the United States (both in terms of actual oil consumption and as a percentage of total energy consumption), its consumption of oil is growing. It will soon be the world's fourth-largest consumer of oil; currently it is the sixth. India has been guzzling increasing amounts of oil, fueling an economy that has been growing at more than seven percent a year since 2003. While this growth rate is expected to slow, the Indian economy is still expected to grow at more than five percent a year over the next 25 years.[21] Correspondingly, while global oil demand is expected to increase at an annual average rate of 1.6 percent, India's demand for oil is expected to increase at an average rate of 2.9 percent annually from 2002 to 2030.[22]

India is a relative newcomer to the use of natural gas. In the 1970s and 1980s, natural gas accounted for a negligible part of Indian energy consumption; its use only picked up after the Bombay High field went into production in 1974. More recently, gas accounted for about 36 MTOE, or 8 percent, of India's total commercial energy consumption.[23] Today, it is one of the fastest growing sources of energy in India. While the International Energy Agency estimates that, over the course of 2002–30, Indian oil

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[20] International Energy Agency, *World Energy Outlook 2007* (Paris: OECD, 2007), p. 600 and BP, *BP Statistical Review of World Energy* (June 2007), p. 40. These figures do not include the energy that is consumed from traditional sources by 66 percent of Indian households.
[21] From data derived by analyst Gerald Walsh using data from the Central Statistical Organization. EIU Data Services, *EIU Country Data*, (https://eiu.bvdecom/cgi/template.dll?product=101 [May 23, 2006]).
[22] International Energy Agency, *World Energy Outlook 2004 (Paris: OECD, 2004),* p. 82
[23] BP, *BP Statistical Review of World Energy,* p. 41

consumption will grow at 2.9 percent a year, it expects the use of natural gas in the country to grow at a rate of 5 percent a year over the same period.[24]

Where this oil and natural gas is going to come from is a matter of great interest in India. Concern about India's energy requirements is not new -- at least in India. The degree of concern, however, has increased recently, as has the fact that this sentiment is now echoed abroad -- partly a result of the country's pace of consumption, partly of the increasing international dimension of India's energy strategy, and partly because any significant slowdown of the Indian economy will likely have an effect on the world economy. The Indian government's quest for energy is taking it down two paths -- one domestic, the other international. It considers ONGC to have a significant role in both strategies. Thus, while ONGC produces only a small amount of the world's energy and controls a small portion of global reserves, it figures as a central entity in the search for energy by one of the fasting growing consumers of oil and gas in the world. ONGC's performance (or lack of it) will affect India's energy-related plans for the future. Thus, besides the importance of ONGC for its own sake, it is the importance of ONGC in the eyes of the Indian government that make it worth studying.

Having provided a brief overview of the company's size and performance, and its importance to India and thus the international energy market, this paper first looks back at the creation and evolution of ONGC. ONGC's history is intimately tied to that of the Indian oil and gas industry, and reflects the Indian government's shifting attitude toward the oil and natural gas sectors and the economy more generally. The paper then considers the present status of ONGC, the impact of government ownership on the company, and

[24] International Energy Agency, *World Energy Outlook 2004*, p. 498

its strategy for the future. It then considers the challenges that lie ahead for ONGC and the path it is likely to follow.

FROM A DIRECTORATE TO A CORPORATION

Unlike a number of national oil companies, which were taken over by governments later in their existence, ONGC was a creation of the Indian government. Many aspects of ONGC's existence today -- its structure, behavior, and relations with the government -- can be traced back to its roots. The form the company took (and the form of the sector it has operated in domestically) was the result of a broader ideological debate within the Indian political and bureaucratic leadership in the first decade or so after independence about the way forward for India economically. Contrary to popular belief,[25] in the years after India gained independence in 1947, there was no single prevailing school of thought among the leadership about the role of the state in the economy or consensus about the "need and extent of the public sector."[26] One group within the government expounding the doctrine of socialism sought self-sufficiency, seeing nationalization and a dominant public sector as the way to get there. Another group preferred a mixed economy, while others favored private enterprise, believing it to be the fastest and most efficient track to economic development.

The nascent Indian leadership saw the oil and natural gas sector as key to this development because of its impact on the industrial, transportation and defense sectors. Thus, it caught the attention of the leadership as early as March 1931, when the Indian

[25] The idea tends to persist that there was unanimity among Indian decision-makers about the "ideology of economic development." (See J. Bandyopadhyaya, *The Making of India's Foreign Policy: Determinants, Institutions, Processes, and Personalities* (Bombay: Allied Publishers, 1970), p. 52) While admittedly there were "powerful socialistic overtones," there was a significant minority that believed growth and justice could be achieved through non-socialist means.
[26] H. N. Kaul, *K.D. Malaviya and the evolution of India's oil policy* (New Delhi: Allied Publishers, 1991), p. xiv

National Congress called for state ownership of mineral resources in an independent India.[27] When the Indian leadership formed a national planning committee in 1938, it identified the oil industry as one of the key group of industries that required state planning.[28] In fact, a sub-committee at that time recommended that the government create "an ecological prospecting department with modern equipment and skilled staff to carry out an intensive search for petroleum resources in the country."[29] There was a debate, however, about whether industries in the oil sector should be state-controlled or owned, with a "substantial minority" arguing that control rather than ownership would prove sufficient.[30] On the other hand, there were some leaders who believed, either for ideological or pragmatic reasons, that the private sector should be left to do the heavy lifting.

These discussions, while mostly theoretical since the British were still in control of India, indicate the diverse inclinations of the future leadership and the contours of the debate that continues even to this day. They continued after independence. Those advocating government dominance of the oil industry argued that this was necessary because it was a vital industry and most private investment would come from foreign sources, which had in the past, they believed, "exercised a measure of control over India's economic and political life which ha[d] both warped and retarded national development."[31] A number of Indian industrialists, hoping to keep the sector closed to outsiders and not really interested in getting involved in the industry themselves at that time, supported this position. Those who argued against it believed that the private sector

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[27] Ibid, p. viii
[28] Ibid, p. ix
[29] Ibid, p. x
[30] Ibid, p. ix
[31] The National Planning Committee's Resolution on Foreign Capital Investments. See Kaul, p. xi

would more effectively exploit India's mineral resources and thus should be given incentives to operate in the sector.

Although equally desirous that India should stand on her own two feet, a centrist group led by then Prime Minister Jawaharlal Nehru realized that immediate nationalization, while desirable to socialists and even Nehru, was not feasible. This was especially true because the sector had been badly affected by the turmoil of partition that had accompanied independence, and needed to get back on its feet quickly to fuel national development. The government had limited resources, which needed to be directed toward other priorities. Furthermore, there was limited in-country expertise. Finally, the country had just come through tremendous political upheaval and the government needed to find a way to reconcile rather than exacerbate political and policy differences. Therefore, what resulted from the debate was a classic Nehruvian compromise, a middle-path solution -- the mixed economy. The Industrial Policy Resolution (IPR) of 1948, which laid out the government's approach to industrial growth and development, gave the government exclusive control of only arms manufacture, atomic energy production and the railways.[32] The resolution highlighted the need to develop the country's petroleum industry. Its drafters placed the oil industry in the category of industries in which only the government could set up new projects (it could, however, do so in cooperation with the private sector). While maintaining the right to take over existing private operators, the government gave them another decade to function, after which there would be another policy review.[33]

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[32] Kaul, p. xiii
[33] Ibid, p. xiv

Private operators had led the quest for oil in India, which had begun in the 1860s with exploration in Assam in the northeastern part of what was then British India. The Assam Railways & Trading Company Limited (AR&T) had made the first commercial discovery in that region at Digboi in 1889.[34] A decade later, the Assam Oil Company (AOC) took over AR&T before itself being taken over by the Burmah Oil Company (BOC) in 1921. Before 1947, AOC-BOC was one of only two companies prospecting in British India -- the other was the Attock Oil Company in the northwest. At the time India gained her independence, foreign oil companies showed little interest in exploring further in the country -- they found it to be cheaper and easier to find and produce oil elsewhere. India had not been surveyed extensively and the government was unwilling to offer financial incentives to encourage domestic exploration.[35]

At independence India consumed 55,000 barrels a day (B/D), with domestic production standing at only 600 B/D.[36] Most of the oil Indians consumed came from the Persian Gulf and Sumatra, sold at prices determined by the oil marketing companies operating in India at the time (Burmah Shell, Standard Vacuum Oil Company/Stanvac and Caltex). The Indian government was concerned about overpricing and/or that the companies could hold India hostage by withholding supply. But, with other dominant priorities, the sector was not initially the focus of much state attention. Matters came to a head, however, with the nationalization of the Iranian oil industry in 1951. A large portion of India's oil came from the Anglo-Iranian Oil Company (AIOC) refinery at Abadan and its nationalization led to a disruption of supply to India. India's

[34] Anecdotal evidence indicates the name comes from the phrase "dig boy, dig!" shouted at workers.
[35] Kaul, p. xvi
[36] Peggy Williams, "India Offering Exploration Success to Western Producers," *Oil & Gas Investor*, May 1, 2007, Number 5

policymakers, ever more aware of the country's vulnerability to such disruptions, subsequently approved the establishment of foreign-owned refineries in India.

The events in the Middle East also spurred the Indian government to go into the oil business.[37] It did this through an ultimately unsuccessful joint venture with Stanvac in 1953 for exploration in West Bengal. At that time, there was still bureaucratic and political resistance to establishing a government oil exploration division on the grounds that the government just did not have the required infrastructure or expertise. In fact, when then Natural Resources Minister K.D. Malaviya, one of the most vocal and ardent supporters of such a division, prematurely announced that the government would be setting up an exploration division -- hoping that a public declaration would force Nehru's hand and seal the debate -- Nehru chastised him for overstepping his brief.[38]

Over time, the drive toward a national oil industry got a boost within the government as the feeling grew that India had been shortchanged by the Indo-Stanvac project and by the terms of the contracts signed with the three foreign companies operating refineries in India. Taking advantage of the prevailing sentiment, supporters of government participation in the sector argued that, by looking abroad for help, the government had departed from the spirit of self-reliance enshrined in the IPR of 1948 and had been burned as a result. They stressed that the foreign companies had not delivered on their promises mentioned in the contracts (by not providing enough training for local employees, for example). To highlight what they considered the dangers of foreign participation and influence in the sector, they further pointed to the situation in Brazil where the president had committed suicide in August 1954, blaming the country's

[37] Kaul, p. xvii
[38] Ibid, pp. 43-45

economic crisis on foreign interests. In September 1954, with rival Pakistan joining the Southeast Asian Treaty Organization (SEATO) collective defense system, a powerful section of India's strategic community -- which was concerned about the military consequences of India's continuing vulnerability to supply disruption -- joined the chorus demanding government initiative in the oil sector. Later that month, those in favor of the exploration division won out, with the cabinet deciding to set up a "full-fledged prospecting and drilling agency and not just an experimental outfit."[39]

After cabinet approval, the government set up the Oil & Natural Gas Directorate (ONGD) under the Ministry of Natural Resources and Scientific Research in 1955. In October 1955, a directive specified that the public sector would dominate E&P and have a monopoly over setting up new refineries. ONGD, however, would not have exclusive exploration rights in the country, and foreign companies would continue to be welcome. An updated IPR of 1956 further allowed existing private sector entities to function in the oil sector indefinitely, with the state promising "fair and non-discriminatory treatment" to both private and public sector players.[40] But the resolution placed the mineral oils industries under its Schedule-A, which meant that the state would undertake all new development in this sector (with a few exceptions).[41]

The lack of clarity about the government's approach ensuing from these directives was a result of the continuing debate within the government about what the state could feasibly achieve in the oil sector. The Finance Ministry and Planning Commission (PC), which were concerned with allocating funds to various sectors, continued to be unhappy

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[39] Ibid, p. 46

[40] Ibid, p. xiv. By this time, concerned about left wing extremism and desiring joint ventures with foreign companies, Indian industrialists supported this stance.

[41] Ministry of Commerce and Industry, *Industrial Policy Highlights* (eaindustry.nic.in/handbk/chap001.pdf [May 23, 2006]).

about a "public sector-oriented oil policy." With oil accounting for only five percent of India's energy consumption, the PC did not include oil exploration as a "core" area of emphasis in the second of India's Five Year Plans (1956-1961), which laid out the road map for economic development.[42] In the initial two Five Year Plans (covering the 1950s), in fact, the PC had subsumed planning for oil under the larger section on "Development of Mineral Resources." Natural Minerals Minister Malaviya grumbled that even though the oil exploration division had received project approvals, it was not being given sufficient priority or funding. The debate over whether to divert more government resources to the sector continued to be bitter and sometimes got personal. Malaviya accused the then head of the PC, V.T. Krishnamachari, of relying too much on foreign oil business magnates "in a sort of blind way." Krishnamachari returned the favor, reportedly calling Malaviya a "Bolshevik."[43]

Continued opposition from key members of the cabinet and pragmatism kept Nehru from nationalizing the sector completely. But, Malaviya found support for additional funding for the oil exploration division in the defense committee of the cabinet -- which post-SEATO and post-CENTO (the Central Treaty Organization, which Pakistan had also joined) -- was concerned about oil supply to the military in an emergency. In a report in March 1956, the defense committee stated that "we must go ahead as fast as we can with oil exploration and exploitation in India."[44]

In 1956, the Indian government elevated the directorate to a commission, intending to give it additional power and flexibility.[45] A year later, the government made

[42] Kaul, p. 87
[43] Ibid, pp. 111-112
[44] Ibid, p. 90
[45] ONGC, *Our Company: History* (www.ongcindia.com/history.asp [May 23, 2006]).

the renamed Oil and Natural Gas Commission (ONGCom) a statutory commission with additional financial powers.[46] While the purpose of upgrading the directorate had been to give it greater autonomy from the ministry, this autonomy was more theoretical than real because the commission continued to have limited financial and administrative powers and the Indian government still controlled purchasing decisions and personnel management. The government did enhance ONGCom's role somewhat. Along with undertaking surveying, drilling, prospecting and production, the government charged ONGCom with acting as its technical advisor, administering and implementing agreements with other oil companies and inspecting oilfields held by others if delegated to do so by the government. This role seemed slightly odd considering the evident conflict of interest. By this time, though, Malaviya was winning more bureaucratic and policy battles, and in 1957, the Indian government also took over 33.3 percent of AOC-BOC, forming Oil India Limited (OIL). It then wrested control of the company's pricing policies and administration, also playing a role in the distribution of its crude.

While expanding the commission's role and clinging to the mantra of self-sufficiency, it was obvious to India's policymakers, however, that the country could not go it alone, even when it came to ONGCom's own development. For a number of reasons -- the unwillingness of many in the U.S. government to aid the development of a public sector enterprise; the pro-Soviet instincts of Malaviya; and the willingness of a post-Stalin U.S.S.R. to seek a greater role in India -- the Indian government turned to Moscow to help with the development of ONGCom and the oil industry. But not exclusively. Nehru was reluctant for India to become too dependent on the Soviets and also did not

[46] Kaul, p. 105

want to upset the Western bloc, which was India's largest provider of development aid.[47] Therefore, to balance things out, his government encouraged Canadian, French, Italian, Romanian and West German participation in projects in the oil sector.

In 1958, Malaviya and ONGCom's other supporters felt vindicated when the commission first discovered oil in Cambay in western India. ONGCom's Technical Member A.N. Ghosh's reaction reflected the sentiments of the commission and its supporters in government and offers an inkling of what was driving them in part: "Cambay is ours. No foreigner can lay claim to this precious treasure. It belongs to nobody else."[48] ONGCom made further discoveries in the western part of the country and also forayed into Assam, where it struck oil in 1960. Then, in 1963, a team led by a Soviet geologist discovered oil in the structures of Bombay High, off the coast of Bombay.

Meanwhile, the PC, which had been in the process of developing India's third Five Year Plan (for the period 1961-1966), had given the oil sector a higher priority, establishing a working group devoted to it.[49] In the plan itself, there was now a section devoted to "Minerals and Oil." The government had also created a downstream company in 1959 (Indian Oil Company), set up its own refineries, and upped its stake in OIL to 50 percent. Despite this greater attention, and prodding by Malaviya and then Defense Minister Krishna Menon, Nehru did not nationalize the sector. There also continued to be considerable opposition to proposals to reserve the most promising acreage for ONGCom. One reason was ONGCom's level of efficiency (or rather lack of it) -- despite its initial successes, it had failed to find oil at Jawalamukhi, where it had devoted

[47] Ibid, p. xx
[48] Ibid, p. 101
[49] Ibid, p. 138

considerable resources, and the work at Cambay had been proceeding at a very slow pace.[50]

The PC and Finance Ministry questioned whether ONGCom had the technical and financial ability to undertake widespread drilling.[51] They labeled Malaviya's contention that India could be self-sufficient in oil by 1965-67,[52] along with his demand for a Rs. 500-crores allocation for the sector in the Third Five Year Plan, irresponsible. India's planners were worried also that Malaviya's statements would likely drive away investors.[53] As it was, finding costs continued to be relatively more expensive in India -- 35 cents a barrel as opposed to 10 cents a barrel in the Middle East.[54] Nehru, in turn, remained concerned that such statements would drive away development aid. He insisted that oil exploration be seen within the framework of India's broader needs -- the reality was that India needed money from the West for its Third Plan and could not afford to alienate its donors.[55] As a result, Nehru refused to rule out even private investment, stating that depending on the terms offered, "[b]roadly speaking we ourselves are of the opinion that we should encourage private enterprise to explore oil in some parts of India and to exploit this if discovered."[56]

Throughout these discussions, two competing goals were evident: economic development, which would require efficient exploitation of India's natural resources; and self-reliance, talk of which, however, drove away the very people who could ensure the achievement of the first goal. Nehru prioritized the first in practice (though not

[50] Ibid, pp. 130-131
[51] Ibid, p. 154, pp. 158-9
[52] Estimates indicated that India would require 14 MT of oil by 1966.
[53] Kaul, p. 127
[54] Ibid, p. 105
[55] Ibid, p. 143
[56] Nehru in a letter to Mountbatten in July 1959, Ibid, p. 132

necessarily in his rhetoric), arguing that it was the only way to achieve the second goal in the long-term. The Third Plan, therefore, did not mention that the government would reserve the best acreage for ONGCom. Few major foreign exploration companies, however, remained interested. They were being offered better terms elsewhere and India was still an unknown quantity. So the government instead invited international contractors to work with ONGCom.[57]

By the mid-1960s, ONGCom had "ground to a halt." Senior company officials had been stressing drilling above all else; the company's equipment had worn out and its training programs and machinery were not up to speed.[58] In addition to the commission "ag[ing] in its infancy,"[59] other contemporary events pushed the government to alter its approach as well.[60] A change in leadership at the Mines and Fuel Ministry in 1963 with the resignation of Malaviya, and a war with China in 1962, during which the Soviet Union had remained ambivalent, had diminished pro-Soviet voices. The war had also made India's need to hasten development more essential. Thus the government decided to invite independent international oil companies to operate in India, welcoming in a few (mostly Western) companies, including Carlsberg, and Reading and Bates (many of whom later withdrew after being unsuccessful).[61]

Toward the end of the 1960s, with India's oil import bill growing, the government, which had restricted ONGCom to drilling 100 wells a year,[62] asked the company to re-examine Bombay High. The commission submitted a work plan for

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[57] Ibid, p. 173
[58] Ashok Desai, p. 195
[59] Kaul, p. 199
[60] Ibid, p. 183
[61] TERI, *New Exploration Licensing Policy: Will It Strike Oil?* (static.teriin.org/energy/nelp.htm [May 23, 2006]).
[62] Ashok Desai, p. 201

exploration in April 1970, and subsequently, then Prime Minister Indira Gandhi approved the "assisted ownership-operation."[63] The "assistance" came in the form of imported equipment and, from 1973, the outsourcing of drilling to an American firm.[64]

The 1970s was a busy decade in the region. It started with a war between India and Pakistan in 1971, during which Western oil companies suspended supply to the Indian military. The first international oil crisis followed in 1973–74; though foreign producers maintained supplies to "friendly states," India found that it was not considered one of them. Its import bill rose (from U.S. $3 billion to U.S. $5 billion),[65] as did inflation, which in 1974–75 reached 25 percent. At that time, India did not import significant amounts of oil, and analysts believe that its rising inflation was due more to drought than the oil price spike. The World Bank assessed, however, that the price hike did hamper India's development prospects. [66]

There was some good news for ONGCom. In 1974, the company made its first offshore discovery at Bombay High. With this discovery, Indian domestic production went from less than 500,000 tons in 1961 to 10 MT in 1977, taking care of 38 percent of domestic consumption.[67] The news was not so good for the foreign refiners operating in India. For domestic political and strategic reasons, Indira Gandhi's government took over Esso's operations in India in 1974; Burmah Shell and Caltex's operations met the same fate in 1976. The Indian government also formed an oil coordination committee to ensure a steady oil supply and keep prices stable, and introduced the administered pricing

[63] Kaul, p. 185
[64] Ashok Desai, p. 201
[65] Surjit Mansingh, *India's Search for Power: Indira Gandhi's Foreign Policy, 1966-1982* (New Delhi: Sage Publications, 1984) p. 370
[66] Mansingh, p. 370
[67] Nitin Desai, p. 178

mechanism to set the price of petroleum products. The government nationalized more companies (including OIL in 1981) following the second international oil shock in 1979,[68] at which point India was importing a greater quantity of oil and again suffering from drought. As a result, India's GDP shrank by 5.2 percent.

Over the period of 1970–81, the country had imported two-thirds of its oil needs. By the mid-1980s, the balance flipped, with two-thirds of oil coming from indigenous sources, especially from ONGCom's operations.[69] India even exported some oil from Bombay High to the U.S.[70] But, during this decade, the domestic oil sector led by ONGCom went through a period of stagnation with little competition, increasing inefficiency, outdated technology, and inadequate funding. By the beginning of the 1990s, India was again more dependent on imported oil.

In 1990–91, India's economy was already suffering when the first Gulf War sent oil prices above U.S. $40 a barrel and Indian inflation to 13 percent. With barely U.S. $1 billion in foreign exchange reserves, India's balance of payments went deep into deficit.[71] Just as crises in 1951 and the early 1970s had prompted the Indian government to take action in this sector, this shock spurred the state into greater liberalization of the Indian economy. It opened up the E&P sector to private investment in a bigger way than it had for years and as part of the restructuring, in 1993, it incorporated ONGCom, which became the Oil and Natural Gas Corporation (ONGC).

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[68] OIL, *Our Company: Backdrop* (oilindia.nic.in/ourcomp_backdrop.htm [May 23, 2006]).
[69] Planning Commission of India, *8th Five Year Plan*. (planningcommission.nic.in/plans/planrel/fiveyr/8th/vol2/8v2ch8.htm [July 1, 2006]).
[70] Robert W. Bradnock, *India's Foreign Policy Since 1971*, (London: Royal Institute of International Affairs, 1990), p.15
[71] Sajal Ghosh, et al., *Energy Security Issues–India* (New Delhi: Confederation of Indian Industry: 2003), p.3.

The Corporate Life

From 1993 to 1997, in an effort to raise domestic production, the Indian government awarded 28 blocks to private companies or joint public-private ventures for exploration. In 1997, as India's dependence on imported oil continued to grow, the government introduced the New Exploration Licensing Policy (NELP) to encourage greater private sector participation, which had stayed low because of what remained a poor investment climate. In addition, to improve ONGC's performance, the government granted the company *navratna* status, designed for nine public sector undertakings (PSUs) with a relatively good track record on profits and productivity (literally the term *navratna* means nine precious stones).[72] With this designation, elite PSUs gained increased financial and operational autonomy, especially in their ability to form joint ventures, strategic alliances, and subsidiaries; in the amount of capital expenditure they could incur; in ensuring better auditing mechanisms; and in the composition of their board of directors.[73]

In 1998, the center-right BJP-led National Democratic Alliance (NDA) came to power and set a target for disinvestment of some of the Indian government's stakes in public sector undertakings. The NDA wasn't unique in its desire to start taking the government out of the business arena. The Congress-led government from 1991-1996 had kick-started the economic reform process and even unsuccessfully attempted to plan a public sale of ONGC shares, while its successor -- the United Front (UF) coalition -- had established a disinvestment commission to advise the government. But, reform stalled

[72] In Mughal ruler Akbar's court, nine of his most eminent and talented courtiers were given this designation (also the case for some other Indian rulers).
[73] See Article 1.3 of Ad Hoc Group of Experts, *Report of Ad Hoc Group of Experts on Empowerment of Central Public Sector Enterprises* (New Delhi: Department of Public Enterprises, 2005).

due to the fragility of the minority UF government and the opposition of the left-wing parties that were members of the governing coalition or supporting it from the outside. The short-lived NDA government that followed planned high-profile disinvestment efforts that were designed to reduce the budget deficit but couldn't really deliver. In a last-minute effort to bolster the state's finances before the fiscal year ended, the government directed ONGC, Indian Oil Corporation Ltd. (IOCL) and Gas Authority of India Ltd. (GAIL) to buy shares in each other that the government had held. An analyst caustically noted that the government was, in effect, "removing the shareholdings from its jacket pocket and putting them into its waistcoat pocket, instead of passing them to other buyers."[74] Soon after, the NDA government fell.

On returning to power in 1999, the NDA created a Department of Disinvestment that became a full-fledged ministry in 2001. The government reiterated its desire for disinvestment, but as far as the major oil and gas companies were concerned, it emphasized that it had no intention to reduce its stake in ONGC, GAIL or IOCL below 51 percent. In early 2002, it did decide to take a crack at selling part of the government's stakes in the downstream companies, Bharat Petroleum Corporation Ltd. (BPCL) and Hindustan Petroleum Corporation Ltd. (HPCL). However, the plan ran into trouble not so much from outside the government but within it. The disinvestment minister and the petroleum minister led two factions, each with very different ideas of what the disinvestment should look like. The former wanted to sell strategic stakes in the companies, while the latter wanted a public sale of shares and to let other state-owned companies participate in the buy-out. The plan was soon abandoned, however, with the government faced with an Indian Supreme Court ruling to the effect that the companies

[74] "India: Privatization," *Cambridge International Forecasts*, February 1, 1999.

could not be sold without legislative changes. Dissension among the coalition partners, upcoming state elections, opposition from labor unions and MPNG officials, and the inability to forge a compromise on the sale also scuttled the plans. Having successfully resisted the sale of strategic stakes in BPCL and HPCL, the petroleum minister instead proposed the sale of minority stakes (five-10 percent) in ONGC, GAIL and IOCL to meet the disinvestment target. Having collected less than U.S. $300 million of its target of more than U.S. $3 billion with just a few months left before the end of the fiscal year, the rest of the cabinet agreed and approved the sale of varying amounts of the government's stakes in six companies, including ONGC.

In March 2004, the government sold 10 percent of the corporation, netting it more than U.S. $2 billion -- until April 2007, ONGC's public offer was the largest Indian equity offer.[75] The need to bolster the budget wasn't the only cause for the sale (or its timing). There was increasing concern that India was losing investment to China, with potential investors getting turned off by lack of progress in India's disinvestment efforts. ONGC's balance sheet had benefited from some of the pricing reforms that had gone into effect in 2002 and it seemed like it would attract investors. The Indian stock market had been hitting record highs and the government wanted to cash in.[76] Finally, with national elections around the corner, the BJP saw an advantage in giving its middle-class voter base (especially in the urban areas) a chance to cash in as well and it set aside 18 percent of the shares for retail investors.

The government now owns 74.11 percent of the company. Foreign institutional investors hold another 8.3 percent while individual investors hold less than two percent.

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[75] ONGC, "Final Sale Prospectus."

[76] Some analysts believed the government could have cashed in more than it did if it hadn't rushed the sale, especially lumping it together with that of shares of five other companies.

In addition, in a pattern of cross-holding that is mirrored across the spectrum of state-owned companies, fellow PSUs IOCL and GAIL own 7.69 percent and 2.4 percent of ONGC, respectively.[77] IOCL's share is a reduced one -- it sold a little less than two percent of its holding in ONGC in the recent past. There have been reports that GAIL is also considering selling some part of its stake to finance its planned expenditures for the next four years.[78]

Over the last decade or so, ONGC has significantly expanded its E&P operations. Even under NELP, ONGC has continued to garner a significant share of acreage in the country. In the sixth round of NELP, the government awarded 60 percent of the blocks to either ONGC or a consortium that it was part of -- a decrease from the 70 percent in the fourth round, but still a significant increase from the fifth round [See Appendix II]. There is a perception among private players that state-owned companies, especially ONGC, still get preferential treatment and more and better acreage. This was the case initially, at least, when the government awarded ONGC and other PSUs what were considered the best blocks and the rights to more than 60 percent of all the blocks offered in the second, third, and fourth NELP rounds. On the other hand, the Indian government did not offer these PSUs some of the concessions and terms that it gave private participants, and the PSUs had to sell their oil at a much lower rate at home than that they could get on the global market.[79] The government contends that ONGC wins as many bids as it does because it offers aggressive work programs.[80] Some analysts argue that ONGC's success in bidding rounds also owes in part to its officials' knowledge of how the system works.

[77] ONGC, "Annual Report 2005-06," p. 127 OR ONGC, *Distribution of Shareholding* (www.ongcindia.com/download/jan18_06_company.htm [May 26, 2006]).
[78] "GAIL to Invest Rs. 28,000 crore for 7 New Pipelines (by 2011)," *Economic Times*. June 22, 2007.
[79] TERI, "New Exploration."
[80] Interview, July 2007.

This has, in fact, led to a number of private companies submitting joint bids with the PSUs and in the fourth and fifth NELP rounds, the government awarded 25 and 39 percent respectively of the blocks to such consortiums.

ONGC has also expanded its portfolio [See Appendix III] to include two key subsidiaries -- one that has taken it abroad and another that has taken it into the refining sector in a big way. ONGC Videsh Ltd. (OVL) is focused on acquiring and developing overseas assets. ONGC has 100 percent ownership of OVL, which began life as Hydrocarbons India Pvt. Ltd. in 1965. In terms of reserves, OVL claims to be India's second largest E&P firm, with 92.82 MT of oil and 113.37 BCM of gas reserves.[81] The company has offices in Cuba, Iran, Iraq, Kazakhstan, Libya, Qatar, Russia, the U.A.E., Venezuela, and Vietnam (other subsidiaries have offices in Bermuda, the Netherlands, Nigeria and Sudan).[82] It has invested between U.S. $5-6 billion abroad -- which it claims is the largest amount invested by an Indian corporation abroad -- and has assets in a number of countries, including Angola, Libya, Iran, Iraq, Myanmar, Russia, Sudan, Syria, Venezuela, and Vietnam.[83] OVL is also looking to invest in Algeria, Indonesia, and the United Arab Emirates (UAE).[84] [For a list of its assets abroad, see Appendix IV]

Since 2003, ONGC has also owned 71.62 percent of Mangalore Refinery & Petrochemicals Limited (MRPL). This subsidiary's main asset is the country's second largest refinery in the southern state of Karnataka.[85] MRPL considers itself the "balancing refinery for th[e] country," covering shortfalls at other state-run refineries

[81] ONGC Videsh Ltd., "Annual Report, 2005-06".
[82] ONGC Videsh Ltd., *Offices* (http://www.ongcvidesh.com/Offices.asp).
[83] "Curtains for Raha; Sharma acting CMD of ONGC," *The Press Trust of India*, May 25, 2006.
[84] ONGC, *Our Company: Profile*.
[85] ONGC, "Annual Report 2005-06," p. 29

when required.[86] It has posted a profit for the last three years; in 2006-07, it posted a profit of U.S. $120.8 million, up 41 percent from the year before.[87] The company plans to expand its refinery's capacity from 9.69 million tons per annum (MTPA) to 15 MTPA (at an expense of nearly U.S. $2 billion),[88] and convert it into an export-oriented unit in the near future.

MRPL already exports about 70 percent of its production.[89] But, the change in designation would give it the advantage of a 100 percent income tax holiday and other tax exemptions, such as the duty-free import of equipment and crude.[90] MRPL currently sources most of its crude through automatically-renewed one-year contracts with Saudi Aramco and the National Iranian Oil Company and, more recently, from ONGC's domestic and international assets**.** In 2007 MRPL also started issuing monthly spot tenders, buying oil from Yemen and Nigeria.[91]

ONGC is also a partner in a number of joint ventures. It has a 12.5 percent stake in Petronet LNG Ltd., which owns and operates a liquefied natural gas (LNG) terminal at Dahej in western India and is building another terminal at Kochi in the south. The other partners are IOCL, GAIL, BPCL, and Gaz de France. ONGC also has a 23 percent interest in Petronet MHB Ltd., the owner and operator of the Mangalore-Hassan-Bangalore pipeline (other partners are HPCL and Petronet India Limited). The ONGC Tripura Power Company is another one of ONGC's joint ventures (with the state government of Tripura and IL&FS). The company, in which ONGC has a 26 percent

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[86] "Indian MRPL to buy more spot crude, cut jet exports," *Reuters News*, June 1, 2007.
[87] "MRPL achieves excellent all-round performance; steps up dividend to 8%," *ONGC Press Release*, May 11, 2007 (http://www.ongc.net/press_release1_new.asp?fold=press&file=press246.txt).
[88] Soma Banerjee and Rajeev Jayaswal, "MRPL, Chennai Petro to try Reliance taxsaver trick, *The Economic Times*, April 24, 2007.
[89] "MRPL, CPCL set to hop on to EOU cart," *The Economic Times*, April 24, 2007.
[90] Ibid**.**
[91] "Asia Crude-India's MRPL buys Aug Masila in tender," *Reuters News*, June 25, 2007.

stake, will run a natural gas-based power-generating project. In addition, ONGC has a 21.5 percent stake in Pawan Hans Helicopters Ltd., which among other things, provides helicopter services to its offshore facilities. ONGC also has stakes in three special economic zone (SEZ) projects in the country.

LIFE AS A STATE-OWNED COMPANY

As ONGC has expanded its operations, there continues to be debate about the costs and benefits of government ownership, and questions about the extent of government influence. Majority state ownership has meant both formal and informal government control. On the formal side, all Indian PSUs fall under the administrative control of designated ministries. ONGC comes under the purview of the Ministry of Petroleum and Natural Gas (MPNG), which is responsible for overseeing policy toward the exploration and production of oil and natural gas; refining, distribution, and marketing of petroleum products; and the conservation, import, and export of oil and natural gas.

A union minister (part of the cabinet) heads the MPNG, often in conjunction with a deputy, the minister of state. Ministers in India are members of the ruling coalition and have to be elected members of either the upper or lower houses of the Indian parliament. In the case of MPNG, the minister is usually a member of the party leading the coalition, as MPNG tends to be one of the most coveted ministries among potential ministerial candidates and coalition members. Some analysts say that this is because it is a high-profile office; it also offers a number of opportunities to direct projects and employment toward one's constituents. Others simply refer to MPNG as a "party fundraising

machine."[92] The leadership of MPNG also includes a secretary, the senior-most bureaucrat in the ministry. The post is almost always assigned to a career civil servant, who is supposed to be appointed by the cabinet; in reality, his or her appointment can be fairly dependent on the preferences of the petroleum minister. [For ministry and company organization chart, see Appendix V]

MPNG also controls the other major state-owned oil and gas companies: BPCL, HPCL, GAIL, IOCL, and OIL. ONGC is linked to these other companies in various ways. As mentioned above, one way is through cross-holding -- ONGC owns 4.83 percent of GAIL and 8.93 percent of IOCL. In addition, ONGC's board invites the chairman and managing director (CMD) of OIL and OVL to sit in on its meetings. IOCL and ONGC each have a nominee on the other's board. Leadership and personnel also move across the PSUs. For example, the former ONGC and the current GAIL CMD originally worked at IOCL.[93] This is not an isolated case. In 2004, all of the top candidates for the job of IOCL CMD were either from one of the other oil and gas PSUs or from IOCL itself.[94] Operationally, the companies work together on projects, including through joint bids for oil and gas blocks.

But it is not all smooth sailing. At the end of the day, these companies have to compete with each other. With ONGC moving into refining and retailing -- where BPCL, HPCL and IOCL have dominated -- the competition is likely to increase. A former minister has also spoken of "serious personality clashes among the honchos" of the companies that have, on occasion, exacerbated the tension.[95] When disputes arise, the

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[92] Interviews with an economic analyst and a strategic analyst. February 2006.
[93] "An Old School Oilman," *Business Today,* October 21, 2005.
[94] "Hunt for new IOC chief takes off," *Indian Express*, November 22, 2004.
[95] "Aiyar laments India's lack of synergy in energy," *Platts Commodity News*, December 2, 2005, 04: 25.

companies are supposed to resolve them bilaterally or through MPNG. If one PSU wants to pursue arbitration against the other, as ONGC did recently against GAIL for non-payment of dues, it has to seek the permission of a committee of disputes.[96] In practice, much to the chagrin of the ministry, the companies sometimes have taken their disputes public to bolster their case.

While the Indian government has already restructured some of the state-owned companies -- IOCL, for example, bought out retailer IBP and refiner BRPL -- there have been further proposals to merge the PSUs into one large integrated company, but these schemes have been dismissed. Instead, the government seems more inclined to suggest policy changes and management improvements to strengthen the individual companies.[97]

In terms of the impact of state ownership, a government official describing the Indian government’s role in ONGC stated that, through MPNG, it “provides general direction” to the company.[98] This is a bit of an understatement. In the recent past, the government has granted ONGC increased autonomy and there have been positive changes in government-company relations. There is, however, some concern, even among an expert committee appointed by the government, that these changes have been too “incremental.”[99] While ONGC has become more independent, the Indian government’s influence is still unmistakable. There continue to be both formal and informal lines of authority and the government directly and indirectly continues to affect ONGC’s strategy and operations in various ways.

[96] “ONGC seeks ministry's nod for arbitration against GAIL,” *Indian Express*, June 8, 2007.
[97] “India Energy Panel Advises against State Oil Companies Merger,” *Dow Jones International News*, July 11, 2005.
[98] Interview, February 2006
[99] See Article 1.4 of Ad Hoc Group of Experts.

Personnel

The management of ONGC is led by a CMD. The previous two CMDs -- Subir Raha and Bikash Bora -- had worked in the oil industry for most of their careers before rising to the top of ONGC. The CMDs before them had either worked in the oil industry, been Indian administrative/civil service officers, or been executives from non-oil and gas PSUs with engineering backgrounds. Directors head each of the six major departments in the company (finance, human resources, onshore, offshore, exploration, and technology & field services). The senior officials have not, in general, tended to be affiliated publicly with particular political parties. The CMD and departmental directors also function as full-time directors on ONGC's board. In addition, IOCL has a nominee on the board and OIL and OVL each have an "invitee" director. The other board members are independent ("non-official") and government ("official") directors. Currently, the ONGC board has three independent and two government directors; the latter generally tend to be officials nominated by the government from MPNG and the Finance Ministry at the additional secretary level.

With advice from the finance and human resources directors of the company, the government also appoints the other executive directors. In addition, it has a role in approving the independent directors of the board. These independent directors are supposed to be eminent persons or professionals appointed by the cabinet from a list put forward by the Public Enterprises Selection Board (PESB), which operates under the government's Department of Public Enterprises.

The professionalization of ONGC's board was intended to bring about "quicker decision-making," motivate employees, and improve overall performance.[100] The inclusion of independent directors was also required under the guidelines of the Securities and Exchange Board of India (SEBI – India's version of the U.S. Securities and Exchange Commission). Assessments indicate that these directors have brought in "fresh thinking."[101] In addition, they actively participate in the company's strategy meetings held every 12-18 months.[102]

Some experts, however, have criticized the choice of directors, stating that the composition is not very differentiated.[103] There is also widespread criticism that ONGC's board is not truly empowered and that appointments can be politically motivated.[104] Critics contend that the government role in the process of selecting independent directors means that they are independent in name only since they owe their positions to the government and are unlikely to stray far from the accepted government approach. This might overstate the case a bit. The current independent directors are well-respected. The ONGC board, for example, includes the head of an eminent energy policy research institute and the director of India's premier management institute. There are indications that independent directors have not hesitated to make clear their views on the strategic approach the company should follow. They do realize, however, that trying to totally overturn strategy would be fruitless and believe that it is better to work for incremental reform from within the system than not be in a position to do so at all.

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[100] See Article 1.3 of Ad Hoc Group of Experts.
[101] See Article 1.3 of Ad Hoc Group of Experts.
[102] Interview, July 2007.
[103] Interview, July 2007.
[104] "Get professional," *Hindustan Times*, May 29, 2006.

Governments have been known to politicize decisions on board appointments to try to maintain influence. The current United Progressive Alliance (UPA) coalition government, for example, had said that it would devolve complete managerial and commercial powers to the *navratnas*. In 2005, however reports indicated that the petroleum minister had asked the secretary to consult the Law Ministry about how almost all the independent directors -- who had been appointed by the previous government to the *navratna* boards and still had time left in their assigned terms -- could be replaced.[105] The same year MPNG had also proposed increasing the number of government directors on the board, going so far as to nominate additional ones. But, reports indicated that SEBI threatened to de-list ONGC if there was an increase in the number of its government directors. At the time, with three government directors already in place on the board, two additional ones would have fallen foul of SEBI regulations that required at least 50 percent of board members to be non-executive directors (i.e. non-company and non-government).[106] Having received a lot of flack, the Indian government reduced the number of its directors to two.

There has also been criticism about delays in board appointments, with positions lying vacant for spells of time. In the past, PESB has had to send reminders to MPNG on occasion to submit proposals for vacant posts at the board and management levels.[107] In 2005, the Indian government's delay in making a decision on the names put forward by

[105] "Govt now plans to sack independent directors of all oil navratna PSUs," *Indian Express*, September 6, 2005.
[106] "ONGC may be out of bourses," *The Times of India*, May 19, 2005.
[107] "Despite 20 reminders, Ministries make PSUs wait for top jobs," *Indian Express*, May 28, 2006.

PESB almost caused SEBI to penalize the state for missing a deadline to appoint enough independent directors on the board.[108]

The Indian government also has the dominant role in appointing ONGC's senior management, with the PESB responsible for putting together search panels for senior appointments. The recent search committee for the appointment of the ONGC CMD consisted of: the chairman and secretary of the PESB; its two members (one a former special secretary in MPNG); the petroleum secretary; a former finance secretary; and the director of IIM-Ahmedabad, who is also a member of ONGC's board.

The PESB search committee receives proposals from MPNG for vacant posts, invites applications for these positions, and then generates a shortlist of candidates, which it forwards to the ministry. A senior official involved in the oil sector noted that during this selection process prospective candidates intensely lobby bureaucrats and politicians, putting themselves in a position that, if appointed, leaves them obligated toward their supporters.[109]

The PESB cannot ensure that its suggestions are followed; a minister can derail these, often through delaying tactics. The selection board has itself not been without controversy -- its members have close ties to the Indian government and are indeed appointed by the government. There have occasionally also been accusations that the body has lowered criteria for certain positions to allow the government to appoint a preferred candidate.[110]

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[108] "Navratnas to miss Dec 31 deadline to recast board," *The Economic Times*, August 11, 2005.
[109] Interview, July 2007.
[110] Sunil Jain, "Mr Ramalingam's five fingers," *Business Standard*, June 20 2005, p. 11

Once MPNG decides on a candidate, it makes a recommendation, which it sends -- following clearances by the Central Vigilance Commission and the Central Bureau of Investigation -- to the appointments committee of the cabinet for final approval.

While management positions are generally filled for a period of five years, the leadership of MPNG can grant extensions to senior personnel based on performance reviews. These reviews are not a mere formality, as was made evident by the case of Subir Raha, former CMD of ONGC. In 2006, Raha lost out on a two-year extension because of criticism of Raha's handling of a major fire at Bombay High in 2005 that crippled production.[111] Raha also received not-so-flattering reviews from former Petroleum Minister Mani Shankar Aiyar and former Petroleum Secretary S.C. Tripathi , both of whom he had frequently clashed with. Though ONGC's profits had more than doubled during Raha's tenure, Tripathi contended that the CMD had done nothing to increase the country's energy security and that the profits were more a result of high international oil prices than Raha's performance.[112] Aiyar reportedly castigated Raha for "insubordination and indiscipline" and for not being a team player.[113] Raha, in turn, contended that he had been exonerated in an investigation into the Bombay High fire and stated that Tripathi was prejudiced against him. On the sitting petroleum secretary's recommendation, Raha was allowed to continue at the company for three additional months, but the Indian government denied him a longer extension.[114]

Raha's tenure (and that of his successor) provides an interesting reflection of the possibilities and limits of the company's autonomy. Raha had publicly resisted

[111] "Uncertainty prevails over ONGC chief's tenure," *Business Line*, May 25, 2006, p. 8
[112] "PMO says no to ONGC head's extension," *The Press Trust of India*, May 25, 2006.
[113] "Raha's term comes to an end; Govt says no to extension," *The Press Trust of India,* May 24, 2006.
[114] "Raha writes to Murli Deora," *The Statesman*, May 30, 2006.

government control, stating that "no company can function with multiple bosses;"[115] clashed with Aiyar over spinning off OVL into an independent company; and even managed to resist the appointment of two additional government directors to the ONGC board, threatening to resign if the appointments went through. In the latter case, Raha even took the unusual step of airing his differences with Aiyar publicly, placing full-page advertisements stating his case in English language newspapers.

The limits of his power, however, eventually became evident. Typically, the Indian government grants the heads of PSUs whose tenure ends before they turn 60 an extension until they reach that retirement age, and it is unusual for the government to formally consult former ministers about these extensions. While there were questions about Raha's effectiveness, other former secretaries gave him good reviews (including the sitting cabinet secretary, who stated that the accusations against Raha were unverified).[116] Some analysts believe that the unusual step of soliciting the views of an ex-minister was taken not only because the sitting minister had not had much experience with Raha, which was the reason put forward. They posit instead that the sitting minister and secretary (the latter had been one of the two people who Raha had resisted being put on ONGC's board) might have wanted to replace Raha as well, but did not want to bear the brunt of criticism for discontinuing the service of a successful CMD.

Denying Raha an extension was an atypical step, and probably the ministry's way of making clear who was in control. R.S. Sharma, the interim chief appointed at the time, quickly went out of his way to state that his priority would be to "resolve all conflict issues" and work for better relations with MPNG. Sharma soon found that his own

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[115] "An Old School Oilman," *Business Today,* October 21, 2005.
[116] "PMO says no to ONGC head's extension," *The Press Trust of India*, May 25, 2006.

transition from temporary to permanent head of the company would be anything but smooth. Placed in the position temporarily, there was speculation for more than a year about whether Sharma would be made full-time CMD or not. In August 2006, the PESB, having considered a few other, mostly internal, candidates, recommended that the government appoint Sharma as full-time CMD. In February 2007, the Prime Minister's Office (PMO) told the PESB to go back to the drawing board, on the grounds that the search committee had not considered enough external candidates. A month after restarting the search, the panel narrowed the pool of applicants to about two dozen candidates, which included Sharma, all of the ONGC functional directors, a GAIL director and senior managers from the private sector. Few in the private sector seemed to want the job, however, and some ruled out appearing for the interviews. Many feel that the job comes with too many strings attached -- strings mostly attached to the government's hands.

After the interviews them, the panel again recommended Sharma. As their second choice, they listed Najeeb Jung, whose ties to ONGC's main private sector competitor, Reliance Industries, made him an unpalatable choice to the Communist parties, on whom the current government depends for support. They argued that when Jung had been a joint secretary in MPNG, he had been involved in the controversial decision to assign a major oil and gas block to a consortium that included Reliance; after he left MPNG, he worked at a think tank that Reliance funded.

The second time around the PMO approved Sharma's appointment. But the year of uncertainty while Sharma had pulled double duty, managing the company as well as its

finances as director-finance, had an adverse effect on ONGC's progress and performance, according to a number of analysts.

Apart from appointments and extensions, the Indian government, as part of its oversight duties, can start investigations of ONGC officials, which can be (and some experts indicate has been) used to apply pressure on them. The government can also put up obstacles to a senior manager's post-retirement plans. In a number of cases, for example, job appointments with competitors within a certain period after retirement require government permission, which can be delayed.

Production Allocations and Targets

The Indian government also plays a role in determining ONGC's production targets and allocations. The company's proposed E&P and other activities for the subsequent five years, financial outlay for them and expected output are outlined in the government's Five Year Plans (based on consultations between MPNG and the company). Production targets for ONGC, like all *navratna* oil companies, are set annually through memorandums of understanding (MoUs) between MPNG and the company.[117]

In addition, the government allocates a large portion of ONGC's crude production to the state-owned refiners (the volume is specified in MoUs between ONGC and the refiners).[118] In 2005-06, the Indian government required ONGC to allocate 14.536 MT to the PSU refineries; in 2006-07, this rose to 16.896 MT.[119] Company officials have complained about the process and amount of allocation, pointing out that the alteration of

[117] "ONGC, Petroleum Ministry sign MoU," *Hindustan Times*, April 10, 2006.
[118] ONGC, "Final Sale Prospectus," p. 17
[119] "ONGC seeks early crude allocation for PSU refiners," *Financial Express*, April 23, 2007.

allocations that sometimes occur mid-financial year makes planning and operations difficult (In 2006-07, the government, for example, changed the allocation several times).

Pricing

The government still controls to a large extent the pricing of petroleum products in the country, and affects the amount that ONGC charges state-owned refineries for its crude oil and gas. Out of genuine concern for large sections of society and/or out of fear that their constituents will punish them at the polls for high prices, India's politicians have traditionally chosen to keep petroleum product prices low. An example: between September 7, 2002 and September 7, 2005, the price of Dubai crude rose almost 111 percent. The retail price of regular gasoline in the United States, during the same period, increased 124 percent; in India, the retail price rose only 49 percent.[120]

The true cost of international price increases is borne largely by the public sector oil companies, which absorb the losses, and by the Indian government, which bails them out. While the oil marketing companies are most directly affected, ONGC is not insulated as a mainly upstream company. The government requires it, along with the other state-owned upstream oil and gas companies, to absorb about one third of the subsidy burden. A former minister called this "equitable burden sharing."[121] In 2005-06, MPNG estimated that the state-owned oil companies subsidized U.S. $8.7 billion in petroleum products.[122] ONGC alone absorbed about U.S. $2.5 billion worth of the burden through

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[120] Crude oil and Indian retail price data from Indian Petroleum Planning and Analysis Cell (http://ppac.org.in/OPM/Price_revision_other_cities_MS.htm and http://ppac.org.in/ppac_0506/international_price_0506.htm); US retail price data from EIA, "Retail Gasoline Historical Prices". (http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_history.html).

[121] Mani Shankar Aiyar, "Interview," *Seminar* #555 (November 2005), p. 59

[122] "High oil prices to cut Asian economic growth: ADB," *Agence France Presse*, May 4, 2006.

sale of its domestic crude to PSU refineries at a discount.[123] In 2005-06, this discount was U.S. $17 a barrel, while in 2006-07 it went up to U.S. $22.11.[124]

ONGC's share of the subsidy burden has been affecting its profit margin [See Appendix I]. In the fiscal 2006-2007 year, its share was almost U.S. $4 billion, up more than 40 percent from the previous year. This affected its bottom line with profits in the January-March 2007 fourth quarter falling below analysts' forecasts.[125] While fiscal year profits rose, they too were lower than expected partly on account of the subsidy burden.[126]

The company's bottom line has also been affected by natural gas prices, which the Indian government still administers to a degree. Gas from fields operated solely by ONGC and OIL sells at about U.S. $2.26/mmbtu. Compare that to the U.S. $7.50-$10.50/mmbtu that some companies charge for the LNG they import. Or the U.S. $5.70/mmbtu that a Canadian company operating in India charges for the gas from its offshore field. This Canadian firm and others like it signed production-sharing contracts with the Indian government for blocks they were awarded and were allowed to negotiate prices. Even if ONGC is part of a consortia that operates such a block, however, it is sometimes required to charge customers less, especially state-owned ones. For example, in the case of the Panna-Mukta and Tapti fields, BG sells its share of gas for U.S. $5.57/mmbtu, while ONGC charges U.S. $4.75/mmbtu.[127]

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[123] "ONGC at Rs. 154.85 Bn net profit is India's most valuable corp," *The Press Trust of India*, April 16, 2006.
[124] "India's ONGC Q4 net falls 13 pct, lags f'cast."
[125] Analysts expected a 33 percent rise in profit. See Hiral Vora, "India's ONGC Q4 net seen up 35 pct on higher output," *Reuters News*, June 24, 2007; profits, however, rose only about 8 percent.
[126] "India's ONGC Q4 net falls 13 pct, lags f'cast."
[127] "Reliance's Indian Pricing Plans," *World Gas Intelligence*, May 9, 2007.

Processes

There has been concern that the Indian government continues to interfere in the day-to-day affairs of ONGC, particularly in purchasing decisions, giving rise to accusations of corruption and delays. ONGC has to issue tenders for all procurement. This system had been put in place to ensure fairness and standardization. But, the system also creates an environment that almost invites inefficiency and corruption. The country's Comptroller and Auditor General (CAG) has taken ONGC to task for awarding contracts to vendors that were clearly not in a position to complete the required work. The tender system also slows down ONGC's operations; NK Mitra, director-offshore, noted the effect this has had: "Being a public sector undertaking, we do not have the freedom to buy technology whenever we want. Reliance has the advantage of buying the latest technology off the market whenever they need it. Our procedures are prolonged and this is affecting the new discoveries."[128]

The government also continues to control most management travel, and a number of proposals still require approval. In addition, ONGC cannot participate in a joint venture without government approval if the investment involved exceeds U.S. $45 million. The government also conducts quarterly performance reviews of ONGC.[129]

But in terms of day-to-day technical operations, the government's role tends to be limited. Company officials note that the situation has improved since it received *navratna* status; before that, it had to jump through hoops on a daily basis.[130] The Indian government now generally leaves ONGC to make these operational decisions -- even if it

[128] Sumana Guha Ray, "`Net production from Bombay High is rising'," *Business Standard*, June 11, 2007, p. 8
[129] The Ad Hoc Committee recommended that this be reduced to twice a year.
[130] Interview, July 2007.

wanted to interfere, most government officials at MPNG lack the technical ability to do so. It serves ONGC's purposes, however, to let it appear more often than not that the ministry officials are the ones giving direction.

Oversight

While MPNG oversees the functioning of the corporation more generally, India's upstream regulator, the Directorate General of Hydrocarbons (DGH) -- which also falls under MPNG, serving as its technical advisor -- oversees ONGC's E&P work. In the past, if ONGC failed to complete the minimum work program it had submitted to DGH, the regulator asked the company to surrender the blocks concerned. Recently, DGH questioned ONGC's reserves estimate of 20 trillion cubic feet (TCF) of gas for one of its assets in the Krishna-Godavari basin, instead estimating that the block only contained 2.09 TCF of gas. ONGC's initial estimate had led MPNG to project a surplus of natural gas in India by 2009-10 and had sparked much investor interest in the area. The vast difference between claimed and actual estimates not only upset projections of India's gas supply but also affected potential gas pricing in the country.[131]

ONGC subsequently vociferously denied ever having gone public with (or claiming) any estimates. A parliamentary standing committee soon stepped in to ask both DGH and ONGC to not air their differences publicly because of the effect this had on potential investors and share prices. In an earlier case, ONGC's share price had fallen after DGH had not approved ONGC's estimates of another field because of the kind of testing it had done.[132]

DGH's oversight, however, is limited. ONGC sometimes tries to circumvent the

[131] "DGH Slashes Gas Estimate Claims," *The Economic Times*. June 22, 2007.
[132] "DGH, ONGC advised to settle disagreements internally," *The Press Trust of India*, April 26, 2007.

regulator's authority by appealing to MPNG to allow it to re-bid on blocks it has previously had to surrender (this is usually not permitted). Even though the ministry was heavily involved in formulating the rules that DGH enforces, it sometimes overrules DGH and supports ONGC's stance. For example, in the sixth round of NELP, DGH argued against granting ONGC twelve blocks on the grounds that it had earlier relinquished these. MPNG intervened, arguing that past performance had not been specified as a criterion for evaluating bids. Furthermore, the ministry is resisting adding this criterion (the others are technical capability, fiscal package and work program) on the grounds that it would be difficult to judge past performance across the board because companies operate in different countries where conditions vary. An official admitted, however, that if the government included such a criterion, it would probably have an adverse impact on ONGC's chances.[133]

DGH's oversight can also be affected by the fact that most of DGH's employees (who conduct assessments of ONGC's work) are on detail from the oil PSUs or have previously worked in one of them, which creates potential conflicts of interests. Senior DGH officials recognize this problem, tracing it to a shortage of available expertise. DGH has put forward a proposal to create and train an independent cadre of regulatory officials, but so far the government has not approved this proposal.

Politics

Government ownership has also meant that politics -- of the bureaucratic, electoral, and central/individual state kind -- has impacted ONGC's operations from its infancy. Bureaucratic turf battles ensued from the day the decision was made to create the

[133] Rajeev Jayaswal, "Nelp-VII not to let cos rebid for relinquished blocks," *The Economic Times*, May 19, 2007.

directorate. There were arguments about which agency it should be housed in, with some bureaucrats arguing that the directorate's role was similar to operating a mine, and therefore, it should be located in either the Ministry of Production or the Ministry of Commerce and Industry instead.[134] Later, the Ministry of Natural Resources and Scientific Research, which successfully gained control of the directorate, clashed with the Planning Commission and the Finance Ministry on the grounds that they interfered in its operations while not giving the directorate the priority and funds it deserved. Indeed, as mentioned above, the Finance Ministry and PC, with their broader responsibilities, did not think the directorate deserved immense resources. This back and forth had a significant impact on ONGCom's operations at the time. The Natural Resources Ministry's quest to prove to its bureaucratic antagonists that ONGCom deserved funding was a significant reason for urging ONGCom to emphasize deep drilling even though it had limited resources to do so. The ministry needed a major success quickly to prove to naysayers, especially within the government, that India had reserves of oil and natural gas, or at least to combat their contentions. These bureaucratic battles continue to this day and have been known to cause delays, especially since a number of agencies can impact ONGC because of their administrative or financial control; with each of them having different priorities, ONGC can get caught in the middle.

Tug of wars between the center and the state governments have also affected ONGC. In the early stages of the company's existence, for example, the Assamese government delayed land allotments to ONGC to pressure the central government into giving it a larger share of royalties.[135] Similarly, when the central government was

[134] Kaul, p. 46
[135] Ibid, p. 105

deciding where to construct a refinery in the 1950s, the Assamese government lobbied intensely for it to be located within the state. The city of Calcutta and the state of Bihar were other possible locations. On practical grounds, many experts believed Calcutta -- as a port and major center of consumption -- made the most sense. But for political reasons, the central government decided instead to construct the refinery in Bihar -- more specifically in Barauni, which was in a flood-prone area, but benefited from an intervention by the country's president at the time, whose ancestral village was nearby.[136] To assuage the Assam government, the central government decided to build another refinery in that state, which had not been on the cards earlier.

At both the central and the state levels, the electoral benefits that might stem from the revenue and employment that ONGC's projects are expected to generate increase the interest of politicians in the company's operations. The central government and state governments do not hesitate to take credit for the investments that ONGC makes or they encourage it to make in particular regions. Recently, for example, a member of the Congress party in Karnataka gave credit to the party president body for the choice of Mangalore as the location for ONGC's SEZ project.[137]

The question of what to do with the crude oil produced from Cairn India's Mangala field in the state of Rajasthan, in which ONGC has a 30 percent share, highlights how the political environment can affect ONGC's operations. ONGC initially had proposed building a refinery onsite to process the crude but the central government dissented. In the past, ONGC has not hesitated to exploit rifts within the central government and between the central and individual state governments when it has suited

[136] Ibid, p. 74
[137] "Poojary sees smear campaign against Sonia, *The Hindu*, June 7, 2007, p. 3

its purposes and, in this case, it tried to use the state government's support to bolster its proposal.[138]

Then the roles flipped. ONGC changed its mind and, along with Cairn, proposed the construction of a 580-km pipeline at a cost of almost U.S. $800 million from the field to refineries in western India, ruling out the onsite refinery on the grounds of costs (more than U.S. $2 billion). With production from the field scheduled to start in mid-2009, time was also a factor -- a refinery would take four years to construct versus the 12-18 months estimated for pipeline construction.[139]

By this point, however, the central government with its shifting priorities had begun arguing in favor of a refinery.[140] The Rajasthan state government headed by the BJP (the Congress party's main opposition), which had been lobbying for the refinery, had been asserting that the Congress-led central government was hindering growth in the state by opposing the refinery.[141] With elections due in the state in 2008, the central government did not want this argument gaining traction and hoped that by pushing for the refinery it could get credit for it.[142] This back and forth delayed progress on the project, which had been expected to boost domestic production. The uncertainty might also adversely affect the Indian government's attempts to attract future investment in the sector.[143] Realizing this and because of strident opposition to the refinery plan from Cairn (and ONGC), the central government in August 2007 gave approval to the pipeline. It likely consoled itself that at least the BJP government in Rajasthan couldn't take credit

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138 Interview, July 2007.
139 Rakteem Katakey, "Ministry backs DGH on Cairn finds," *Business Standard*, June 6, 2007, p. 3
140 "Government nod to Cairn pipeline plan," *Business Standard*, June 26, 2007, p. 1
141 "Raj BJP executive accuses UPA for inflation," *The Press Trust of India*, August 4, 2007.
142 "Talks with ONGC on refinery positive: Rajasthan," *Indo-Asian News Service*, June 13, 2007.
143 Sanjay Dutta, "Cairn in for crude shock," *The Times of India*, June 1, 2007.

for a refinery having been built on its watch. The state government, meanwhile, has insisted that it will build a refinery in the area no matter what the central government's position.

The impact of politics and politicians is not necessarily direct or explicit. Asked whether governments pressured ONGC to undertake or not undertake certain projects, an industry expert noted that even if the government does not apply such pressure, company officials sometimes expect and anticipate it, and act accordingly.[144]

While politicians no doubt impact ONGC's operations, and coping with the demands of new governments can pose challenges for the company, any government involving the Congress Party or the BJP is unlikely to radically change the economic and energy policy priorities that affect ONGC. Both major political alliances have outlined in their election manifestos, for example, that they will encourage the profit-making PSUs to look toward the international capital markets for funding. Moreover, they share the prevailing sense among Indian decision-makers that high oil prices are here to stay, causing them to hesitate to derail any efforts by domestic oil and gas companies such as ONGC to expand their operations.

Parliamentary shifts can have somewhat more of an impact on who leads ONGC. Given what amounted to one-party rule for a large part of independent India's existence and most CMDs' backgrounds as career officials, party affiliation wasn't a consideration when appointments were made. Since 1989, however, CMDs appointed by one administration have occasionally been eased out by the next -- most notably, S.P. Wahi (1981-1989) and Subir Raha (2001-2006). To a certain extent, this resulted from incoming ministers wanting to influence who is in key positions and/or believing the

[144] Interview, July 2007.

chiefs to be too attached to the previous government. But the replacements were also a consequence of the desire to clip the wings of CMDs who were perceived as having become too powerful. Senior company officials, in turn, have gotten better at keeping on good terms with a broad range of political parties.

Governments at the center have become careful about politics not impacting ONGC's performance too much -- the company is not just key to India's energy security plans, but it is also a major cash cow for the government. Thus, ONGC's partial privatization, which makes the market a constant and public assessor of the company's value, has proved to be somewhat of a check on the influence of politics on the company. Senior officials at ONGC, in fact, have even learnt to exploit the Indian government's sensitivity to the potential reaction of the market when pushing for or against certain policies or projects.

STRATEGIES

As a result of high crude oil prices, one constraint that ONGC has faced in recent years is funding for its current and future projects. Buoyed by reserves that have more than doubled since 2001-02, today exceeding U.S. $13.5 billion,[145] ONGC is following a two-pronged strategy -- one domestic, the other international.

Domestic

Increasing E&P Efforts

According to initial reports of the latest Five Year Plan (2007-2012) ONGC intends to spend U.S. $19 billion to achieve the production targets that have been set for it by the Indian government for the plan period -- 140.06 MT of oil and 112.39 BCM of

[145] Ammar Zaidi, "Sharma Makes it to the Top Again," *Press Trust of India*, June 19, 2007.

natural gas.[146] This more than doubles the company's planned outlay of U.S. $7.6 billion that had been specified in the last Plan. ONGC expects to finance 85 percent of the expenditure from internal resources, with the rest financed by loans.[147]

To achieve its targets, the Indian firm has been developing partnerships with not just other PSUs but also the private sector. ONGC has bid jointly for blocks in India with companies like ENI and Cairn. In the fifth round of NELP, the government awarded seven of 18 blocks to such public-private consortia, with the private sector partners acting as operators in five of the seven. The private sector companies bring better technology and know-how to the table; ONGC brings access and local knowledge.

ONGC has also signed a joint study agreement with Canoro Resources Ltd. to collaborate on potential projects in the northeast, especially Nagaland, where it had suspended work in 1994.[148] This is part of ONGC's larger plan to spend U.S. $2 billion to substantially increase its oil production in the northeast.[149] The company is also developing marginal fields in the vicinity of Bombay High since it believes that high crude prices make this viable. It has signed a MoU with a Romanian university for technical advice to aid its operations in the Himalayan region as well.[150] The company also has wide-ranging MoUs with private companies like Shell, but while the intentions behind these agreements are good, the translation from paper to practice can be slow

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[146] Ministry of Petroleum and Natural Gas, "Report of the Working Group on Petroleum and Natural Gas for the XI Plan (2007 – 2012)," p. 82

[147] Ibid, p. 105

[148] CNS, "News Release: Canoro, ONGC sign joint study deal for India blocks, June 21, 2007.

[149] "India's state-owned Oil and Natural Gas" *Petroleum Review*, June 13, 2007, p. 5

[150] "ONGC signs MoU to tap oil in north India," *The Press Trust of India Limited*, May 10, 2007.

partly as a result of the slow speed of decision-making, and partly as a result of changing personnel and priorities at ONGC and MPNG.[151]

ONGC is also attempting to move into deepwater exploration in a big way.[152] One of its main obstacles in this arena has been that the company lacks the technology and expertise for deepwater exploration. In the past, ONGC has had to surrender deepwater blocks that DGH had awarded it because of its inability to undertake work on the projects. The company has tried to make up for its shortcomings by signing agreements with companies like Norsk Hydro and Petrobras for technological assistance.[153] ONGC is also encouraging companies like Petrobras and ENI to take a stake in some of its discovered gas blocks.[154] Furthermore, to make a stronger case for its bids for deepwater blocks on offer in the current round of NELP, ONGC is also in talks with BP, BG, ENI and Petrobras for joint bids.[155] There is some debate about this strategy, however, with some in the company (and government) arguing that it should focus on onshore rather than deepwater blocks in the next round of NELP because of the lack of availability of rigs and data about the area, its lack of expertise, and its existing commitments.[156]

ONGC is also moving into CBM exploration. The government has awarded ONGC (as a member of different consortia) some CBM blocks. ONGC is aiming to

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[151] http://www.business-standard.com/common/storypage.php?autono=294191&leftnm=1&subLeft=0&chkFlg=
[152] Piyush Pandey, "ONGC may tie up with global giants for NELP bids," *The Economic Times*, June 7, 2007.
[153] "Petrobas signs agreement to exploit deepwater blocks in India," *Economist Intelligence Unit – ViewsWire,* June 14, 2007, p. 6 and "Norsk Hydro to Give ONGC Technology for K-G Gas Output," *Business Standard*. June 20, 2007, p. 2
[154] "Reliance bids for 3 blocks in Australia," *Business Standard*, June 13, 2007, p.8
[155] "ONGC to Team up with Global Energy Giants," *The Economic Times*, June 7, 2007.
[156] See email: "ONGC says it will Concentrate on Onshore Blocks in NELP-VII".

produce 1.24 BCM of CBM by 2011-12 (up from 0.3 BCM in 2007-08).[157] The company is also looking into underground coal gasification projects, aiming to produce 2.99 BCM of gas through this process with the help of Coal India Limited and a Russian mining institute.[158] Yet, ONGC has had problems meeting even its 2007-08 targets because of delays in land acquisition related to its CBM projects.[159]

Improving Recovery

Also in its core upstream business, ONGC is aiming to improve the recovery factor at its existing fields from 28 percent to 40 percent. Of the planned expenditures for the fiscal year of 2006-07, almost three quarters had been put aside for developing existing fields.[160] But good intentions have not translated into good performance in the past. For the period 2002-2007, the Indian government had approved 18 oil recovery projects for OIL and ONGC (including the Mumbai High Redevelopment projects) at a cost of more than U.S. $2.5 billion with an expected gain of 120 MT by 2030.[161] By April 2006, however, ONGC was already falling short of the targets -- the incremental production from these projects had fallen short by 28 percent, with the company having spent only 89 percent of the expenditure allotted for the period up until then.[162]

The government is trying to encourage ONGC to allow foreign companies like Shell to buy into more of its producing fields, contending that these companies can help ONGC improve recovery from existing fields.[163] Other than in a few cases, however, ONGC has so far resisted the government on this point, trying to restrict its cooperation

[157] "Report of the Working Group on Petroleum and Natural Gas for the XI Plan (2007 – 2012)," p. 76
[158] Ibid," p. 78
[159] Utpal Bhaskar, "2-yr delay in ONGC Jharkand blocks," July 17, 2007.
[160] "Outlay for exploration up 20%," *Business Standard*, April 17, 2007, p. 5
[161] "Report of the Working Group on Petroleum and Natural Gas for the XI Plan (2007 – 2012)," p. 26
[162] Ibid," p. 27
[163] "ONGC Faces Farm-In Pressure," *International Petroleum Finance*, May 3, 2007 and "Indian Oil Minister Pushing ONGC to Welcome Foreign Farm-Ins," *International Oil Daily*, May 1, 2007.

with private companies to exploration. Instead, it prefers to partner with contractors like Halliburton to provide up-to-date technology to improve production in Assam.[164]

Integration & Diversification

Over the past few years, ONGC has moved towards becoming an integrated company, entering into the refining sector through its purchase of MRPL. It also has major projects in the works in the petroleum, chemical and petrochemicals investment regions (PCPIRs) planned across the country. ONGC's SEZ plans, for which it is considering seeking external funding, include an existing project in Dahej. In Dahej alone the company has invested more than U.S. $3 billion -- and is looking to invest close to U.S. $400 million more -- in installations including a hydrocarbon processing plant.[165] At Kakinada, it plans to invest close to U.S. $6 billion in a 15 MTPA refinery. And in Mangalore, ONGC and MRPL intend to spend U.S. $8 billion on, among other things, a petrochemical complex and a LNG regassification plant.[166] Each of the SEZs will also have power-generating stations.

In recent years, ONGC has also been considering participation in the retail sector for petroleum products and had received approval to set up 1,000 retail outlets (of which it has only set up one so far).

Another major strategy for ONGC going forward is to diversify its interests, moving beyond the hydrocarbon sector. Calculating that power production is the next big thing, it has bought a stake in a 740-MW power generation project in the northeastern state of Tripura. The company is also in talks with the state-owned National Thermal

[164] "ONGC to Increase Oil Production," *The Hindu*, July 8, 2007. (http://www.hindu.com/2007/07/08/stories/2007070860580800.htm).
[165] Shubhlakshmi Shukla, "ONGC plans to tap equity market soon," *Indian Express*, August 6, 2007.
[166] "Petro Hubs to Come Up First in Andhra Pradesh, Gujarat," *The Economic Times*, May 9, 2007.

Power Corporation to create a joint venture to develop gas-fired power projects, although a similar proposal in 1998 went nowhere.[167] ONGC has also set up a 50 MW pilot wind-based power project in western India and is considering establishing 150 MW wind-based power plants elsewhere.

International

ONGC's overseas forays do not represent a new phenomenon. The company considered exploration in Nepal in 1958, but that attempt stalled for political reasons. In the 1950s and early 1960s, Kuwait, Saudi Arabia and Iran -- each looking to guarantee markets and to expand the range of companies operating in-country -- approached India for collaboration. They even offered oil concessions if New Delhi brought in other foreign partners. But, at that time, still convinced that oil would be found domestically, India's decision-makers wanted to concentrate activity at home. Some of them also pointed out that the country lacked technical know-how, and that any international foray might adversely affect perceptions in the U.S., which was then providing substantial aid.[168] Undecided, India stayed away when Iran opened the bidding for blocks, but when Tehran gave India another chance, ONGC took a 1/6th stake in the Rustom offshore lease (with AGIP, Philips and NIOC).[169] In 1973, ONGC also was awarded a service contract for an offshore field from NIOC and later took up service contracts in Iraq and Tanzania.[170]

This was just a small taste of things to come. Over the last six years, ONGC subsidiary OVL has undertaken more than two dozen projects in over a dozen countries,

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[167] Piyush Pandey & Nevin John, "Power Play: ONGC, NTPC to Form JV for Mega Projects," *The Economic Times*, July 26, 2007.
[168] Kaul, p. 194
[169] Ibid, p. 198
[170] Ashok Desai, p. 202

producing 4.73 MT of oil and 1.71 MTOE of gas in 2005-06.[171] It has surpassed its tenth Five Year Plan targets for oil and gas production (5.2 MT and 4.94 BCM, respectively),[172] producing 16.83 MT of oil and 5.41 BCM of gas over the plan period.[173] The ambitious plans abroad continue. OVL's share of planned expenditure is likely to increase from U.S. $3.2 billion in the tenth Five Year Plan to more than U.S. $13 billion in the next plan (about half from internal resources, the rest from ONGC and FIIs). ONGC expects OVL to produce 20 MTPA of oil and oil equivalent gas by 2020. This date has already been pushed back, however -- in 2004, OVL's aim was to produce 20 MTPA by 2010.[174]

There is some debate about OVL's quest abroad. Some decision-makers consider equity oil cheaper and therefore "worthwhile" to acquire.[175] They believe that acquiring upstream assets abroad will "ensure cheap and reliable oil supply."[176] Detractors, however, contend that ONGC is using the rubric of "energy security" to get government and public support for OVL's investments, pointing out that currently only a small amount of equity oil is coming into the country. Estimates are that only 25 percent of India's oil needs could be met even if all its companies' overseas assets were producing oil.[177] In fact, the Indian government, concerned about the company being distracted

[171] "ONGC keen on setting up Kakinada refinery," *Business Line*, June 18, 2007, p. 3
[172] Planning Commission of India, "Mid -Term Appraisal of the
Tenth Five Year Plan (2002-2007)," p. 346
[173] "Report of the Working Group on Petroleum and Natural Gas for the XI Plan (2007 – 2012)" p. 29
[174] "India's ONGC aims for 417% rise in foreign oil, gas output," *Platts Commodity News*, June 4, 2004.
[175] I. P. Khosla, "Introduction," in *Energy and Diplomacy*, edited by I. P. Khosla (New Delhi: Konark Publishers, 2005), p. 11
[176] Srinivasan, "Energy Cooperation," p. 60
[177] Rajat Gupta et al., "Securing India's Energy Needs," *The McKinsey Quarterly* (2005), p. 95

from its domestic operations, does not want ONGC to aim for more than one quarter of production to come from abroad.[178]

There are also occasional murmurs of concern that acquisitions abroad cause ONGC to divert its resources and attention away from its domestic operations. For example, ONGC had to provide an offshore rig to OVL for drilling in the Farsi block of Iran at a time when rigs were in short supply for its domestic fields.[179] Critics assert that instead of directing money and other resources toward acquiring assets abroad, the company should invest in improved technology to enhance domestic production.[180]

There has been concern abroad as well about some Indian companies' international deals. The oil majors believe that ONGC makes transactions on terms that they would not find commercially viable or that ONGC wins deals because of the Indian government's support.[181] The Indian government and ONGC argue that their efforts provide much needed investment in the international oil sector. Critics counter, however, that while ONGC might bring funding, it does not have access to the advanced technology that would ensure that these overseas resources are exploited to their maximum potential.

From ONGC's point of view, its overseas efforts reflect a desire to both expand supply and enhance revenue. Even detractors acknowledge that, at the very least, this policy has been providing better returns for companies like ONGC than their investments at home. From the Indian government's perspective, while the acquisition of upstream

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[178] Interview, July 2007.
[179] "India's OVL Begins Drilling in Iranian Block," *Asia Pulse,* May 15, 2006.
[180] Debnath Shaw, *Securing India's Energy's Needs: The Regional Dimension* (Washington, DC: Center for Strategic and International Studies, 2004), p. 11
[181] "India, China Energy Deals with Iran 'raise concerns': US," *Asia Pulse*, July 28, 2005. Indeed, in Libya, when 44 blocks were for sale, signature bonuses ranged from U.S. $1 million to U.S. $8 million; OVL paid U.S. $6 million. See "IOC-OIL, OVL bag onshore block apiece in Libya's second licensing round," Indianpetro.com, October 4, 2005 (oilindia.nic.in/libya_oil.htm [May 23, 2006]).

assets abroad is definitely not the "silver bullet" that will single-handedly take care of India's energy security needs, it is a "necessary but not sufficient" element of India's energy security strategy. While acknowledging that these efforts will be of little help in a real crisis, government officials assert that India must pursue every possible option to diversify and supplement sources of supply.[182] Thus for the time being, with more than U.S. $270 billion in foreign exchange reserves in the bank, whatever the criticism, the Indian government on the whole has given OVL its blessing to go forth and explore.[183] And it has done so.

OVL usually generates the proposals for acquiring stakes or assets abroad, though occasionally Indian embassy officials alert it about possible opportunities. While OVL no longer requires prior approval from the Reserve Bank of India,[184] proposals for any OVL project above U.S. $45 million (which, in this arena, essentially means every proposal)[185] have to be approved by an empowered committee of secretaries and then the cabinet committee on economic affairs.

This approval process is not simply a formality. In 2005, for example, OVL lost a bid to acquire producing assets in Ecuador (producing 75,000 B/D) when the Indian government did not let it raise its bid of U.S. $1.4 billion. In December 2005, the government also blocked OVL from acquiring a 45 percent stake in Nigeria's Akpo field -- which was expected to begin production in 2008 -- on security grounds; China National Offshore Oil Corporation (CNOOC) picked up the stake instead. Recently, OVL did not bid on blocks in Nigeria ostensibly because of a lack of attractive fields on offer, but

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[182] Interview with Planning Commission official. February 2006.
[183] Esther Guan, "Scale of Taiwan foreign Exchange Reserves Falls to World No 5 Role as India Replaces Taiwan in Fourth Rank," *Taiwan Business News*, February 6, 2008
[184] "Navratna oil PSUs allowed to invest abroad," *Business Line,* May 19, 2007, p. 6
[185] ONGC, "Final Sale Prospectus, p. 22

analysts point out that the Nigerian government was offering preferential terms and blocks. The reason the company stayed away probably had more to do with the Indian government's hesitation because of security concerns,[186] along with concern that a new government taking over in Nigeria might not respect contracts signed by its predecessor.

There is a good deal of unhappiness in the company when the Indian government blocks acquisitions. However, security presents real concerns. For example, there have been reports of work delayed at one of OVL's Sudanese blocks for security reasons. The government also has commercial conditions: it requires that OVL only invest in projects where it can at least get an internal rate of return of 12 percent -- a requirement that OVL is trying to get reduced.[187] Government officials, on their part, insist that these procedures are intended to prevent OVL from getting carried away and overbidding for projects or investing in unviable or insecure ones.

The procedures do not seem to have dissuaded OVL too much. It is moving ahead abroad, learning on the job and attempting to change and adapt to make its bids more competitive. It has formed partnerships with other domestic and foreign companies, both from the public and private sector. It is currently working, for example, with Reliance Industries to acquire a block in Iraq. Earlier, in 2005, ONGC and Mittal Investment Sarl decided to form ONGC Mittal Energy Ltd. (OMEL) to jointly pursue oil and gas projects in more than two dozen countries in Central Asia and Africa. With Mittal's existing presence in some of these countries, its reputation for effective deal making, and its

[186] Cuckoo Paul & Piyush Pandey, "Oil expansions hit terror bump," *The Economic Times*, May 21, 2007.
[187] "Chinese onslaught forces OVL to seek lower hurdle rates," *Indian Express*, July 25, 2007.

quicker access to capital, this partnership offered OVL some advantages.[188] For Mittal, it brought the backing of the Indian government and its energy diplomats.

In January 2006, Chinese and Indian NOCs, including OVL, agreed to bid jointly for stakes in companies and blocks as part of a larger set of cooperative energy agreements signed by their governments. Indeed, Chinese and Indian companies have jointly purchased assets in Cote d'Ivoire, Colombia, Syria and Sudan. OVL also signed a MoU in 2006 with the Japanese agency JOGNEC, with the intention that OVL and Japanese companies will jointly bid on assets in Southeast Asia and consider doing so in Libya and Russia.[189] Parent company ONGC is also in discussions with companies like Chevron, Total and Royal Dutch Shell regarding swapping stakes in oil blocks.[190]

As its efforts continue, OVL is also learning to deal better with local politics, leaders, and social groups who want to have a say in how it develops these ventures. It is also sweetening its bids with offers to undertake a slew of projects in host countries. OVL is already, for example, taking up refinery upgrades and pipeline contracts in Sudan.[191] ONGC is planning a joint venture in Ecuador with PetroEcuador and Petroleos de Venezuela to establish a refinery and petrochemicals facility.[192] It is also training oil workers in Algeria and Sri Lanka, and offering Syria help with improving recovery.[193] OMEL, on its part, is investing billions of dollars in the rail, refining and power generation sectors in Nigeria.[194]

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[188] "India's ONGC, Mittal team up for energy projects," *AK&M Russia*, July 25, 2005.
[189] Sanjay Dutta, "OVL, Japan agency eye S-E Asia fields," *The Times of India*, June 12, 2007.
[190] "India's ONGC Q4 net falls 13 pct, lags f'cast".
[191] "Reliance cements Ras Issa refinery stake," *Middle East Economic Digest*, May 19, 2006.
[192] "ONGC to Set Up Joint Venture in Ecuador," *Modern Plastics & Polymers*, May 31, 2007, p. 14
[193] "India to import natural gas from Algeria," *Indo-Asian News Service*, June 20, 2007.
[194] Thomas Pearmain Kissy Agyeman, "Trade Unions in Nigeria Press Ahead with Strike, But Oil Still Pours Forth," *Global Insight Daily Analysis*, June 20, 2007 and Barry Morgan, "Indian pair show colour of money," *Upstream*,April 27, 2007, p. 81

ONGC ABROAD: DRIVING DIPLOMACY OR DRIVEN BY DIPLOMACY?

In its actions abroad, ONGC can neither be purely described as a leader nor a follower of the Indian government. It more often than not takes the lead in proposing projects in various countries. So much so that government ministries complain that OVL sometimes tends to charge ahead on deals and, after completing three quarters of the groundwork, calls them in for help -- whereas they believe that Chinese companies plan their inroads together with their government in advance. At the same time, it is clear that with its control of the approval process, the Indian government has the final say, which means that ONGC finds itself impacted by the government's broader foreign policy priorities and security concerns. The country's foreign policy approach, however, is not always a restriction on the company; it can, in fact, facilitate the company's actions. A senior company official, when asked whether the government's foreign policy hinders or helps the company, remarked that overall it helps ONGC because India's foreign policy decision-makers -- with their policy of "no permanent allies, lots of good friends" -- have cast a fairly wide net across the world.

Companies like ONGC have benefited from the Indian government's efforts, and simultaneously served as an indispensable part of the government's energy strategy abroad. The government's energy diplomacy is not just designed to aid Indian companies in their bids, but also to diversify and supplement supply, lay the groundwork for future cooperation, and attract investment and technology. In addition, the government believes that energy diplomacy will advance India's influence more generally in a number of regions.

India's growing energy needs, and the government's decision to allow its companies to explore opportunities abroad, has meant that India's foreign policy decision-makers have been paying greater attention to the energy dimension of foreign policy, which has translated into a renewed, concerted effort to woo energy producers. Their energy diplomacy has involved cooperative agreements, high-level bilateral visits and hosting conferences, as well as deploying military and economic tools at their disposal. For example, in January 2006, India's Exim Bank extended two Lines of Credit (LOCs) to Sudan worth U.S. $391 million to set up power plants. Compare this to the U.S. $50 million given to Sudan two years before, as well as to the LOCs extended to other African countries (all under U.S. $100 million).[195]

In addition, India has offered the prospect of military cooperation, though agreements in this arena tend to be more understated. A few examples illustrate such cooperation: in 2002, India signed a memorandum with Kazakhstan to help with military training and naval development;[196] in 2005, the head of the Indian army visited Nigeria -- the first to do so in thirty years -- and pledged to help train and modernize the Nigerian military;[197] and in 2006, Uzbek troops began training at India's Counter Insurgency and Jungle Warfare School.[198]

Energy diplomacy is not just being directed at producers but encompasses consumers as well, as is evident from India's efforts at working with China and Japan. Reflecting on the agreement with the China, in particular, helps to highlight some of the

[195] Export-Import Bank of India, *Performance Highlights 2005-06* (www.eximbankindia.com/ph.pdf [May 23, 2006]).
[196] Marat Yermukanov, "Kazakhstan-India Relations: Partners or Distant Friends," *Eurasia Daily Monitor,* November 16, 2004. (www.jamestown.org/edm/article.php?article_id=2368860 [May 23, 2006]).
[197] "India Pledges to Help Modernize Nigerian Army" *People's Daily,* November 29, 2005.
[198] Ministry of Defence, *Uzbekistan Special Forces Training: 2006*, January 2, 2006. (pib.nic.in/release/release.asp?relid=14709 [May 23, 2006]).

motivations and actors involved in India's energy diplomacy. The stated reason for cooperation, according to a former minister, was that the two countries had "realized that when we compete in an unhealthy manner to acquire oil fields in third countries, we only end up driving costs for each other… We have ended up paying billions of dollars more by trying to outbid each other everywhere."[199] Reports indicate that a number of groups were pushing for an agreement on the Indian side: the companies who were losing deals; a petroleum minister who had been lobbying for a move away from the West; a foreign ministry that saw it as fitting into the broader improvement of Sino-Indian relations and also wanted to protect its turf; and a finance ministry that believed the Indian companies were spending more on assets abroad than they were worth out of a desire to match Chinese bids.

The China-India MOUs also point to the limits of such cooperation. Neither country (nor its companies) views the relationship as exclusive. They have more of an understanding than an agreement, and that understanding operates on a case-by-case basis. There was talk about setting up "some form of a mechanism of mutual consultation regarding third-country properties," but this has not yet materialized.[200] While India will continue to attempt to collaborate with China, any visions of "complementary strategies executed by their state-owned energy enterprises, unique bilateral E&P programs, specialized division of labor, [and] financial burden sharing" are probably premature.[201] Sino-Indian energy cooperation will continue but on an *ad hoc* basis. The level of trust and institutional mechanisms required for deeper cooperation do not exist at this stage.

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[199] M. K. Venu, "India, China pump up the energy levels," *The Economic Times*, January 13, 2006.
[200] Himangshu Watts, "India aims to team up with China in oil asset race," *Reuters News*, February 1, 2005.
[201] Steven Knell, "India Views Partnerships Abroad to Service Soaring Energy Needs," *Global Insight Daily Analysis*, August 8, 2005.

There is a tendency in some quarters to blame "non-Asian interests" and private actors for the lack of trust between the two countries. However, the distrust of China in India that persists, though to a lesser degree, is rooted in history.[202]

Finally, the bilateral MOUs allow a glimpse of how the level and kind of involvement of ministries and companies can depend on who is leading these entities. When Aiyar (an ex-foreign service officer) was petroleum minister, he traveled extensively, and his ministry and ONGC -- headed at the time by Raha, an equally prominent individual -- were much more visible internationally. Some in the Ministry of External Affairs (MEA) grumbled that Aiyar was "playing foreign minister" and would not always coordinate his "independent foreign policy" with the MEA, creating complications with some of their diplomatic efforts. The MEA contended that it had to look out for all India's global interests -- not just energy-related ones -- and balance them. A case in point for the ministry was the discussion with Bangladesh about a potential Myanmar-Bangladesh-India natural gas pipeline. As Aiyar himself states, he had explicit instructions from the MEA for initial negotiations with his Bangladeshi counterpart specifying the promises that could be made and the language that could and could not be used in any declaration that might emerge from the meetings. Aiyar changed the language somewhat, and when the MEA expressed consternation, he said that he could not understand what all the fuss was about. He later admitted that the very issue that MEA had been concerned about -- that Bangladesh would block the trilateral negotiations about

[202] Girijesh Pant, "India and the Asian Energy Initiatives: Partnership in Development," in Khosla, Energy and Diplomacy, p. 106

the pipeline over bilateral issues that it wanted to discuss with India -- subsequently came to pass.[203]

Aiyar and Raha's departures did not mean the near-disappearance of their erstwhile employers' involvement in international energy initiatives. Their successors, while keeping a lower profile, continue to play a role. But the MEA has made clear its intention to be the lead agency in coordinating activities abroad with the creation of the position of joint secretary in the ministry in charge of energy security. The MEA move stemmed not just from a desire to reclaim its turf, but also, in terms of energy security imperatives, a sense that in an energy crisis, relationships will count for more than ownership of assets. Moreover, the foreign ministry (and the government more broadly) realizes that India's energy-related activities are not playing out in a vacuum. They are occurring in the context of India's developing strategic relationships with a number of other countries, some of which view a few of these "energy relationships" with concern. For example, though India is developing a strategic partnership with the U.S., New Delhi's interests clash with Washington over the Iran-Pakistan-India pipeline project (a project that has stumbled for a number of reasons including pricing, concern in India over the reliability of Iran as a supplier following a stalled LNG deal, and continuing doubt among the strategic community about Pakistan's reliability as a transit country), as well as its stance toward some of its energy suppliers like Myanmar, Sudan, and Venezuela. In each instance, therefore, India will have to consider its other strategic interests and weigh the trade-offs before acting on its energy security imperatives -- considerations that India's foreign policy decision-makers do not want to leave to ONGC or any other PSUs.

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[203] Mani Shankar Aiyar, "Energy Cooperation: India and Its Neighbours," in Khosla, *Energy and Diplomacy,* p. 35

Overall, India's energy interests will not trump its broader strategic goals. Any of ONGC's international energy initiatives will have to fall in line with India's efforts to become more influential globally. One could ask, what about India's mild reaction to the recent military crackdown against protesting monks in neighboring Myanmar where Indian energy companies have interests -- isn't that an example of energy needs trumping India's strategic goals? After all, India's soft power took a beating when Indian Foreign Minister Pranab Mukherjee refrained from criticizing the junta, saying, "It is up to the Burmese people to struggle for democracy, it is their issue," a far cry from India's trenchant criticism two decades ago when the junta took over.[204] But, a second look would indicate that the picture is more complex. Energy needs alone cannot explain India's decision to look the other way; for one, Indian companies including ONGC have actually not fared that well compared to their Chinese rivals in getting natural gas out of Myanmar. India's concerns in Myanmar are more strategic: its overarching interest is to limit China's influence and power in the country.

Furthermore, India's policymakers will not completely reorient its foreign policy to gain or maintain access to oil and natural gas. The country's vote against Iran's disputed nuclear program at the International Atomic Energy Agency in 2005 (and then decision to abstain from a second vote in 2006) while the U.S.-India nuclear agreement was being negotiated offers a good reflection of its priorities. If New Delhi is convinced that a certain path of action holds long-term strategic benefits -- even if it hurts its energy interests and its companies in the short term -- it is likely to take that path.

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[204] http://news.bbc.co.uk/2/hi/south_asia/7013975.stm

THE CHALLENGES AHEAD

Performance

While ONGC has healthy profits and an ambitious strategy, it continues to struggle in terms of its operations. A planning commission working group for the eleventh Five Year Plan succinctly refers to what many observers' assess as ONGC's major challenge: "No major discoveries have been made by ONGC/OIL. However, private/JV companies have shown better exploration efficiency."[205] When asked to compare ONGC's efficiency to that of private sector companies, an energy expert laughed and added that such an exercise was fruitless since ONGC's efficiency was simply not comparable.[206]

ONGC has had a relatively poor record of discoveries. Former Petroleum Minister Aiyar mocked ONGC for being unable to find new fields while others, like Cairn Energy, had made discoveries. ONGC's discovery-to-exploration record from 2000 to 2005 stood at 42 percent, while others, like RIL and Cairn, had far better records of 71 percent and 80 percent, respectively.[207] ONGC claims that its recent efforts have borne fruit, pointing to the 22 oil and gas discoveries it made in 2006-07.[208] A critic of the company's efforts noted that these discoveries are an example of ONGC "plucking the low lying fruit."[209] Others point out that the statistics do not tell the whole story. Of the newly discovered reserves ONGC is claiming, many are probable, not proven, reserves.[210] In addition,

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[205] "Report of the Working Group on Petroleum and Natural Gas for the XI Plan (2007 – 2012)" p. 29
[206] Interview, July 2007
[207] Sunil Jain, "Performing-well capped," *Business Standard*, May 29, 2006, p. 6
[208] Rakteem Katakey, "Success, at last" *Business Standard*, May 13, 2007, p. 5
[209] Interview, July 2007
[210] Rakteem Katakey, "Success, at last" *Business Standard*, May 13, 2007, p. 5

critics contend that the discoveries the company has made[211] do little more than replace its existing fields that have been going offline.[212]

While ONGC has more E&P experience in the country than other companies, its domestic oil and gas production figures have been dismal and unable to keep up with demand, despite the company's investments. As an observer noted, ONGC has been "living off old finds."[213] Even before 2004-05 there had been no major increase in oil production, while gas production had been decreasing since 2002-03. From 2004-05 to 2005-06, ONGC's production actually decreased [See Appendix VI]. There was a major disruption in 2005 due to a fire at the offshore Bombay High field, which even in 2005-06 accounted for almost 71 percent of ONGC's production of oil and gas and 52 percent of production in the country.[214] Thus in 2005-06, ONGC failed to meet its production targets, falling short by eight percent, though it has met its targets for 2006-07.[215] Critics argue that in any case these targets are kept on the low end and do not tend to be ambitious or hard to achieve.

Company officials lament that one of the major reasons for ONGC's poor performance is lack of (or slow) access to modern equipment and technology. The company is hobbled by the procurement system in place. The delays that result have been mentioned above; the system also leaves open the possibility of corruption. Instances of corruption are not generally well-documented for obvious reasons but they are acknowledged and the CBI has registered some cases in the past against ONGC

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[211] "ONGC high fives in new record for finds," *Upstream*, June 15, 2007, p. 38

[212] "India's State Energy Co. Announces New Oil, Gas Finds," *BBC Monitoring South Asia*, August 14, 2005.

[213] Balaji Chandramouli, "Newsmakers: R.S. Sharma," *Business Today*, July 29, 2007

[214] MPNG, "Annual Report 2006-07," p. 157

[215] This was partly a result of the fire at Bombay High in July 2005. See "ONGC at Rs. 154.85 bn net profit is India's most valuable corp."

officials.[216] In 2001, former CMD Raha admitted that when it came to corruption, ONGC "had a bad reputation."[217] He listed combating corruption as one of his priorities at a time when the company's vigilance officer was investigating more than 100 allegations of corruption.[218] Hoping to improve its credibility, especially post-partial privatization, ONGC signed a MoU with Transparency International to develop an "integrity pact." According to new associated regulations, an independent external monitor will oversee any tender valued at more than U.S. $34 million. But that still does not deal with what an official who has worked in the industry for years noted as another reason for the corruption: the company's uncompetitive salary structure, which leads to some officials collecting "post-retirement benefits" while in a position to do so.[219]

Critics point out that while ONGC blames the PSU procurement system for its performance setbacks, the company even has problems maintaining the equipment that it already owns. A recent example: an ONGC vessel sank off the coast of Mumbai, which is not the first time this has happened. Subsequently, the Directorate General of Shipping recalled more than two dozen of ONGC's 46 supply ships for inspection. To minimize disruption, ONGC had to hurriedly procure additional vessels from the Shipping Corporation of India.[220] There are similar concerns about the vulnerability of ONGC's facilities to natural disasters. While ONGC often recovers its financial losses in case of such disasters through insurance claims, as it did after floods in western India in 2006, the loss in production has a major impact.

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[216] Central Bureau of Investigation, "Press statement by Shri U.S.Misra, Director, CBI" September 30, 2005 (http://www.cbi.gov.in/pressreleases/PRelease2005/p30sep05.htm)
[217] "Production Pays," *Business World,* June 5, 2006
[218] Sunil Jain, "When ONGC ran out of cover," *Rediff.com*, October 6, 2003
[219] Interview, July 2007
[220] "ONGC Initiates Negotiations with Shipping Companies for Extra Vehicles," *Business Standard*, July 31, 2007; "DG Shipping Recalls 27 ONGC Supply Vessels," *Marine Link*, July 31, 2007

Other security threats could also negatively affect ONGC's performance in the future. ONGC's offshore assets continue to be the target of terror threats. The Indian navy and coast guard currently protect these offshore facilities, while the Central Industrial Security Force guards the company's onshore facilities. Prodded by the government's concern about the security of its facilities, ONGC has decided to upgrade its patrol craft and use a radar-based surveillance system to protect its offshore facilities. It also intends to strengthen coordination with the coast guard, navy, and air force.[221] ONGC's security problems are compounded by the fact that a number of its assets are located in politically unstable areas in Assam, Nagaland, and Tripura. In Assam, insurgents have sabotaged or stolen ONGC equipment or pilfered its oil. Senior officials have been kidnapped for ransom on a number of occasions. This situation has resulted in a shortage of manpower in some regions.

Human Resources

Personnel problems have especially overwhelmed ONGC's northeastern operations. In Assam, which contributes about five percent of ONGC's total output, this labor shortage has been one of the major reasons for the company's production decreasing by 23.12 percent over the last five years.[222] Overall, in fact, the company identifies attrition as one of its biggest challenges.[223] In 2006-07, 150 drillers left the company. Available estimates indicate that it lost more than 500 technical employees

[221] "Radars to thwart terror attacks on ONGC offshore assets," *Indo-Asian News Service*, 22 June 2007
[222] Rakteem Katakey, "ONGC N-E output down 23.12% on staff shortage", *Business Standard*, June 25, 2007, p. 2
[223] Interview with senior ONGC management official, July 2007

over 2002-2006, with 260 leaving in 2006 alone.[224] An official wryly noted that the people finding oil for companies like Reliance were former employees of ONGC or OIL.

The company is trying to replace the personnel it is losing by offering to re-employ people[225] and is even assisting in the establishment of a two-year petroleum geology course at an Indian university to train potential employees.[226] But it contends that it has been losing talent to the private sector due to uncompetitive salaries and benefits, which the Indian government controls. ONGC employees regularly threaten to go on strike demanding larger salaries but reform of personnel matters has been slow.[227] This state of affairs is partly a result of the nature of the Indian system -- even if one ministry (MPNG in this case) wants to address the problem, it is the Department of Public Enterprises in the Ministry of Heavy Industries that has to agree to a hike in salaries.[228]

MPNG officials recognize that attrition is a problem, but they believe that the extent of the problem and its impact is somewhat exaggerated. They contend that ONGC has enough employees, including a number of lower-skilled workers that are underemployed. These ministry officials argue that, in fact, the size and characteristics of ONGC's workforce brings problems of its own. In 2006-07, for example, the company had to pay out retirement and medical benefits totaling more than U.S. $250 million,

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[224] Piyush Pandey & Nevin John, "Soaring charter rates force oil exploration giants to buy rigs," *The Economic Times*, June 6, 2007

[225] Richa Mishra, "Over 300 ONGC ex-staff apply for re-employment," *Business Line*, May 1, 2007, p. 3

[226] "Indian bred geologists in demand with upswing in petro sector," *The Press Trust of India Limited*, May 20, 2007

[227] They threatened to go on strike in May and September of 2006 and then again in August 2007. See "Oil sector strike may hit fuel supply," *The Hindu*, May 30, 2006, p. 5 and "India's state-run oil companies' workers call off indefinite strike," *AFX News*, August 21, 2007 (http://www.forbes.com/markets/feeds/afx/2007/08/21/afx4038339.html)

[228] "Oil sector officers to go on strike from May 31," *Business Line*, May 28, 2006, p. 1

which affected its profits.[229] This problem is likely to reoccur in the near future since one quarter of ONGC's workforce is between the ages of 51-60.[230]

MPNG officials and others, including ONGC officials, also note that a certain level of attrition is natural with the opening up of the energy sector providing opportunities elsewhere. They add that the problem is not so much the numbers leaving but the quality of the people departing ONGC. A company official lamented that even if ONGC had new technology in place, "if the fields are microscopic and the skills are microscopic," little can be done to improve the company's performance.[231] These critics note that, in this case, merely throwing money at the problem is not the solution; the problem is not just money, but motivation. There is little incentive at ONGC for creativity or taking the initiative. To stem attrition, critics argue, the company needs to focus on providing opportunity, especially for its younger employees. In order to attract potential employees, ONGC also needs to provide incentives since in an increasingly competitive environment; the best recruits who earlier would have naturally gravitated to ONGC are more likely to look elsewhere. This could affect the quality of ONGC's middle and senior ranks in the future, since as a PSU, the company is unable to hire personnel at the middle or senior levels.

ONGC's performance is also hampered to a certain degree by human resource policies related to promotions. Promotions at the company take place based on seniority, not performance. Yet, as a government official noted: "Seniority does not always equal superiority."[232] The company does conduct performance reviews, but these can be

[229] "India's ONGC Q4 net falls 13 pct, lags f'cast"
[230] ONGC Annual Report 2005-06, p. 54
[231] Interview, July 2007
[232] Interview, July 2007

haphazardly performed and can often tell an incomplete story. In 1998, the then CMD of ONGC hurriedly concluded a two-year review of his director of operations one day before he had to submit it to the government, which subsequently rejected it. A comment by the subject of that review reflects why these reviews also fail to accurately capture an individual's performance. Arguing that he could not be held responsible for poor production, the operations director stated: "You can't put the blame on just one person. The way we are structured, the director (exploration) and the director (drilling) are also in charge of different aspects. No one is solely responsible for any one field."[233]

Interviews indicate that this structure has not changed very much. As a consequence, the committee style of decision making that prevails at ONGC results in not just an inability to accurately assess a person's performance, but also leaves a big loophole in the accountability process. An industry expert noted that this management structure and style is "outdated" and results in employees trained over the years not to take decisions lest they be held responsible, thus weakening the company.[234]

Pricing

ONGC's financial performance continues to be saddled with a subsidy burden, which increased from about U.S. $620 million in 2003-04 to nearly U.S. $4 billion in 2006-07.[235] While there have been attempts at price reform in the energy sector, it has been the toughest nut to crack for the Indian government because it runs up against a number of other interests. Perhaps most important is the fact that in a democracy, a politician's worst nightmare is to be blamed by the electorate for its economic woes. As

[233] Sunil Jain, "Ministry rejects ONGC chief's review," *Indian Express*, August 20, 1998 (http://www.indianexpress.com/res/web/pIe/ie/daily/19980820/23250084.html)
[234] Interview, July 2007
[235] "ONGC seeks review of subsidy norms," *Hindustan Times*, June 7, 2007

one analyst indicated, the government is in a no-win situation. If it passes on the international price increases to consumers, the economic situation becomes more difficult for the poorer sections of society -- a socio-economically and politically unpalatable situation. However, if the rising costs are not passed on to the consumer, the government and its companies end up footing most of the bill.[236]

A couple of years ago, the Rangarajan Committee, an expert panel constituted by the government, made recommendations on fuel pricing and taxation policy. The head of the committee called for the government to stay "at arm's length from price determination."[237] Among other recommendations, the committee's report, released in February 2006, called for the Indian government to cease asking ONGC and other upstream companies to bear a direct portion of the subsidy burden. It recommended funding subsidies through levies that the upstream companies already pay to the oil industry development board (which the committee suggested could be increased) and directly from the government's budget. There was criticism that while the recommendations would make for a more profitable industry, they did not address underlying problems. In any case, very few of the suggestions have been implemented. The Indian government, in fact, reduced petroleum product prices in February 2007, and although crude prices[238] have risen considerably since then, there has been no retail price rise during the period.[239]

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[236] R. K. Pachauri, "Oil in India's Energy Future," *Seminar* #555 (November 2005), p. 54
[237] "Rangarajan panel for reduction in Customs duties on petrol, diesel—Report submitted to Petroleum Minister," *Business Line*, February 17, 2006. Also, former chairman and managing director, National Thermal Power Corporation, D.V. Kapur, presentation to conference at "India's Energy Security: Major Challenges," National Conclave, Observer Research Foundation, New Delhi, February 14, 2006.
[238] The Indian crude oil basket consists of Oman-Dubai sour crude oil and Brent dated sweet crude oil (58:42 ratio). See "No immediate hike in petrol, diesel: Deora," *Press Trust of India*, June 18, 2007.
[239] Nidhi Verma, "India's oilmin, PM to meet on surging oil prices," *Reuters*, November 1, 2007.

More recently, the government has been re-examining the pricing of natural gas. A committee of secretaries consisting of representatives from the petroleum, power, fertilizer, expenditure and law ministries has been conducting hearings on the issue; the issue is likely to go up to the ministerial level. ONGC has argued for an increase in natural gas prices but there has been no decision on the matter yet. With state elections due in some states and possibly even a national election in 2008, the Indian government is unlikely to make any major moves with regard to pricing, especially since the government's coalition partners have already being giving it grief over prices being fixed by the private sector for the gas from the blocks they were awarded.[240]

Setbacks Abroad

ONGC's efforts abroad through OVL have also met with some setbacks. OVL has drilled dry wells in Australia, Libya, and Cote d'Ivoire. It has also lost a number of bids to other companies (often Chinese)**.** In August 2005, OVL lost the opportunity to acquire majority stakes in two blocks in Nigeria to the Korean National Oil Company (KNOC), despite a higher bid. In the same month, OMEL lost a bidding war to the China National Petroleum Corp for PetroKazakhstan.[241] A year later, OVL failed to outbid Sinopec for the producing OAO Udmurtneft fields in Russia.[242] More recently, in June 2007, the Caspian Energy Group rejected OMEL's bid to buy its 51 percent stake in Shirvan Oil in Azerbaijan due to its low offer. OMEL reportedly offered only U.S. $300 million, while others were offering more than U.S. $1 billion.[243]

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[240] "CITU objects to private companies fixing price for gas", *Business Line*, June 23, 2007, p. 10
[241] "China and India bid for PetroKazakhstan," *Greenwire*, August 16, 2005.
[242] "ONGC loses one more Russian oil asset to China," *The Economic Times,* June 21, 2006.
[243] Andrew Neff, "Sale of Azerbaijan Field Operator Caspian Energy Group Reportedly Generating Strong Interest," Global Insight Daily Analysis, June 19, 2007.

Some analysts believe that such setbacks are due to OVL's late start in the acquisitions game, as well as its (and the Indian government's) lack of ability and willingness to offer more direct and indirect incentives. Something of a blame-game often plays out in the media; the race to acquire assets has generally captured the imagination of the media, which follows the matter closely (though not necessarily deeply), sometimes chiding the government and sometimes OVL for failed bids. Questions are asked about whether India is being aggressive enough without asking whether it should be seeking some of the assets in the first place.[244]

The fourth estate play up feelings that OVL lags behind its Chinese competitors because of slower decision making.[245] OVL has also learned how to use the media to berate the government for every deal it loses. Former ONGC CMD Raha publicly complained that India lost out on deals because of bureaucratic red tape (one reason why apparently ONGC sought a partnership with Mittal).[246] When OVL lost a bid to KNOC in Nigeria, company officials blamed the Indian government for not clearing its U.S. $1.4 billion bid in a timely fashion.[247] Other reports, however, indicated that the loss was also because the KNOC offer came with a South Korean pledge to invest more in infrastructure.

There are certainly problems on the government side with delays and a lack of coordination. A minister once remarked that the government of India was the biggest hurdle to overcome to win overseas deals: "Dealing with foreigners is always a cakewalk

[244] Siddharth Varadarajan, "India and China: Rivals or Partners?" in Khosla, *Energy and Diplomacy,* p. 152
[245] Srinivasan, "Energy Cooperation," p. 60
[246] "Indian ONGC gets acting chairman following Subir Raha's exit."
[247] "Govt loses by refusing to let ONGC acquire Nigeria oilfield," *The Press Trust of India*, April 28, 2006.

compared to dealing with our own ministries."[248] But others in government note that the decision-making process had ensured that, unlike China, India had not overbid as much or invested in as many insecure areas. They believe that, in the long term, OVL will get better bang for its buck compared to Chinese companies, thanks to this process.[249] Company officials themselves acknowledge that OVL does benefit from its association with the government, especially the government's diplomatic efforts, and from being a PSU since some countries prefer to award blocks to state-owned companies.[250]

Industry observers point out that the spotlight should extend beyond government shortcomings to OVL as well. Some government officials suggest that OVL is not as competitive as its Chinese counterparts and, as mentioned above, rushes ahead without much advance planning or coordination with the government. Other critics find that, especially compared to its Chinese competitors, OVL lacks a major presence in or local knowledge about producing countries and has not established an extensive a network of permanent offices in countries of interest. An observer cites an official at the Indian embassy in Kazakhstan, who pointed out that at the time of the PetroKazakh deal, OVL did not have any offices there, while the Chinese companies did.[251]

OVL has also had trouble with some of its partnerships, most notably with Mittal. Reports and interviews indicate that the leaderships on both sides have mixed feelings about the partnership. On the Mittal side, there is frustration about the speed of decision making at ONGC and OVL.[252] Some ONGC officials, in turn, are resentful of Mittal

[248] Aiyar, "Energy Cooperation: India and Its Neighbours," p. 36
[249] Interview, July 2007.
[250] Interview, July 2007.
[251] Varadarajan, "India and China," p. 152
[252] "ONGC-Mittal Joint Venture Lumbers On, Despite Growing Strains," *International Oil Daily*, April 23, 2007.

pursuing projects solo in countries where they had agreed to work together, such as Nigeria and Russia.[253] This tension came to the fore when Mittal announced in April 2007 its purchase of 50 percent of Lukoil's Caspian Investment Resources. Mittal subsequently retreated, announcing that it will offer to transfer this stake to OMEL.[254]

Some observers are even more forceful in their criticism, stating that both the Indian government and OVL have "lousy game plans, obsolete strategies, and a parsimonious mindset."[255] Though OVL does not lack experienced and trained professionals to embark on projects abroad, critics further contend that the company and the government lack specialized teams of technical and business-savvy professionals to plan and undertake bids on projects. A number of OVL's bids have been submitted without offers of aid or investment or with offers that pale in comparison to those from other countries. In Angola, for example, China promised development assistance totaling U.S. $2 billion, whereas India offered to undertake a U.S. $200 million rail project.

Providing more fodder for the critics is the dearth of clear guidelines surrounding acquisitions, as well as for the lack of a more rigorous and regular assessment process to decide which projects to undertake and which to offload.[256] This problem has become more acute with some of OVL's existing projects running into trouble or stalling. Its plans to get equity gas from Sakhalin-1, for example, have been dashed with Gazprom's announcement that gas from the project would go to domestic consumers in Russia. OVL has also been waiting for two years for the Iranian government to give it the development rights for the Jufeyr field and the 10 percent stake in the Yadavaran field that Iran had

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[253] "Mittal tieup causes ructions within ONGC," *Energy Compass*, April 27, 2007.
[254] "ONGC MIttal to get Lukoil Assets," *The Economic Times,* July 26, 2007.
[255] Ajish Joy in *ORF Strategic Trends* (April 2006).
[256] Shaw, *India's Energy's Needs: Regional*, p. 14.

promised the company.[257] A critic noted that such problems are only likely to increase since OVL rarely has an exit strategy or contingency plan.[258]

CONCLUSION

Despite some setbacks abroad, ONGC is unlikely to give up its international efforts. But the pressure on it to produce better results both at home and abroad is constant and results in missteps such as the premature release of sometimes inaccurate assessments of new reserves (such as in India and Iran).[259] ONGC is trying to combat the belief that its profits are merely a result of high crude oil prices and government support in the domestic market. The company recognizes it needs an infusion of new technology, and there are indications it could do with better management practices and the ability to meet global benchmarks for efficiency.

Some industry experts believe, however, that even with such "tinkering," as long as ONGC remains a PSU, it will be unable to achieve higher standards of efficiency and be competitive in a truly level playing field. Others have suggested that if the Indian government at least reduced its role – for example, by setting up a holding company to manage its interest – and gave the company greater autonomy, it could strengthen ONGC and allow it to attract better talent and make better alliances.[260] There are few, if any, indications that the government will substantially reduce its role in the near future. In addition, while ONGC is planning to look to external financing for some of its SEZ projects, the company does not seem to intend to go public again in the near term. ONGC, along with OVL, is looking to fund most of its planned five-year U.S. $26 billion

[257] "Iran calls for resolution to India gas deal," *Platts Oilgram News*, April 27, 2007, p. 6, Volume 85, Issue 83.
[258] Interview, July 2007.
[259] "Iran cannot confirm Indian report of big gas find," *Reuters News*, May 11, 2007.
[260] Gupta et al., "India's Energy Needs," p. 98.

expenditures from internal resources.[261] Though it sometimes seems as if ONGC's leadership is straining at the leash, it too is loath to give up the benefits the company derives from its association with the Indian government that many private sector players are quick to point out. Thus, even though company officials grumble about ONGC having to behave as a national oil company when it should be treated as a commercial entity, they acknowledge that abroad, for example, they rather like the company being treated as an NOC.[262] Robert Manning has called this kind of relationship between the energy bureaucracy and the state-owned companies in India "mutually reinforcing." The government exercises control. The companies get preferential treatment and still operate in a controlled market.[263]

Although there largely tends to be political agreement that ONGC needs to improve its performance, the main political parties disagree about how to achieve reform.[264] While the previous NDA coalition government had a Ministry of Disinvestment, which privatized some PSUs and approved ONGC's public offering, the current UPA coalition government has stated in its manifesto that no profit-making PSU would be privatized. In other words, the Indian government would not reduce its stake to below 51 percent. This leaves some room for selling more of ONGC's equity, but for now, the government intends to try to reform ONGC under the current ownership structure.

The government and the company, however, seem to have different diagnoses of the performance problem and therefore emphasize different solutions. ONGC believes

[261] "ONGC Group To Invest $26B On Capex In Five Years-Chmn," *Dow Jones International News*, June 25, 2007.
[262] Interview, 2007.
[263] Manning, *Asian Energy*, p. 127.
[264] G. Ganesh, "The politics of disinvestment," *Business Line*, June 6, 2005, p. 8.

that the Indian government is holding it back with subsidy burdens, uncompetitive salary packages, and a system that slows down its acquisition of assets, technology and partnerships. The government, in turn, asserts that ONGC is losing personnel because of the lack of opportunity within the company, not necessarily just lack of financial compensation on offer. The Indian government defends its careful consideration of ONGC's proposals for partnerships, stating that it is necessary to ensure that ONGC does not go on a signing spree without considering how its agreements with other companies will be implemented and whether there are real synergies involved. A government official also noted that ONGC seems to seek partnerships to avoid making the investments necessary in enhancing its in-house capabilities.[265] Finally, the Indian government acknowledges that subsidies constitute a burden on the company but points out that ONGC does not lack for money for investment so much as initiative, especially in its core E&P business.

These differences between the government and ONGC stem from their different ranking of priorities. While both want to increase returns and production, the Indian government's major interests is energy security, which for it means not just ensuring a reliable, ample supply of energy, but an affordable one. The government has therefore been emphasizing E&P, especially domestically. The company, while paying lip service to energy security, has been seeking a higher rate of returns, even if this has meant attempts at integration and diversifying its investments away from E&P.

ONGC CMD Sharma has emphasized that the company's "three priority areas…include consolidation of the exploration and production business, integration and

[265] Interview with senior government official, July 2007.

diversification."[266] The latter two are the subject of much contention between the Indian government and the company, especially since high oil prices resulted in ONGC sitting atop a large surplus. Former CMD Raha insisted that such a strategy would result in better returns.[267] But MPNG wants to "rein ONGC in" and believes that integration and diversification detract from what should be its major priority, consolidation.[268]

The ministry wants each of its oil and gas companies to concentrate on its area of "core competence" and believes that considering ONGC's track record of poor performance, the firm should be pursuing E&P with refocused attention, rather than investing in different activities and unnecessarily competing with other PSUs.[269] MPNG disapprovingly asserts that the company keeps trying to find easy returns; indeed, a few officials noted that in a risky business, ONGC is ironically a risk-averse company and seems to prefer to go for sure things. An official contended that ONGC is not even being very smart about its investments in these other activities -- investing in refineries, for example, when there was a capacity shortage without considering the medium- to long-term implications of a capacity glut. The company has also invested in projects like the Tripura power generation plant without considering whether the region can absorb the amount of power that the plant needs to produce to be a successful venture.[270]

Appraising the oil and gas PSUs performance during an assessment of progress on the tenth Five Year Plan, the PC disapprovingly noted that the oil PSUs were haphazardly trying to become "integrated oil companies on the strength of public funds at their

[266] "ONGC is undervalued, says R.S. Sharma," *Business Standard*, July 10, 2007, p. 6
[267] "Production Pays"
[268] Interview, July 2007.
[269] Interviews; see also "Report of the Working Group on Petroleum and Natural Gas for the XI Plan (2007 – 2012)" p. 55. This is line with the recommendations of an Advisory Committee on Synergy in Energy constituted by the government, which stated that "the focus of upstream companies should be primarily on E&P, without distraction and dissipation of energy and resources in other activities."
[270] Interview, July 2007.

disposal." The report further noted that such an approach offered no "strategic advantage" and led to "suboptimal investments." The PC advised MPNG to either re-structure and consolidate the companies into two vertically integrated companies, or alternatively "to mop up surpluses generated by the oil companies to limit suboptimal investment patterns."[271]

The Indian government declined to do the former, and has tended to try to do the latter, by demanding high dividends;[272] this has also been one of the motivations -- but by no means the only one -- for the government's decision in July 2007 to allow ONGC and other PSUs to invest up to 30 percent of their reserves in mutual funds operated by state firms. The government also has other ways of reining in ONGC's focus on diversification. The government-specified financial outlay for the company's next five years emphasizes E&P. When allocating ONGC's production, the government has also not included an amount that the firm could market itself, a clear attempt to limit ONGC's retail ambitions. These efforts have met with some success. While the company's new leadership has emphasized that projects already committed to will be completed, the prevailing sentiment is that ONGC's major focus over the next few years will be E&P. This does not, however, mean an end to integration or diversification. Now that ONGC is a publicly-listed company, even the government's ability to direct the company is limited.

Its desire to limit the company's activities is also questionable. The Indian government's negative attitude toward integration and diversification has hardly been consistent and it has sent mixed messages to ONGC on the subject. The government, after all, encouraged ONGC to go into refining with the purchase of the stake in MRPL at

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[271] "Mid-Term Appraisal of the Tenth Five Year Plan (2002-2007)," p. 348
[272] Sucheta Dalal, "Contradictions in the divestment policy," *Rediff.com*, February 8, 2003.

a time when there was a refining shortage and the refiner needed a cash infusion. While the Indian government as a whole firmly contends that ONGC should concentrate on its area of core competence (E&P), when some powerful decision-makers believe that a project in the power or refining sector might be politically advantageous, they urge the company to invest in it. ONGC's proposed refinery project at Kakinada in Andhra Pradesh provides an example of this. Two years ago, ONGC had proposed building a 7.5 MTPA refinery there; however, under new leadership and with a glut in refining capacity anticipated, more recently ONGC has been hesitant to move forward with the project unless given substantial incentives by the state government. Unfortunately for ONGC, the project happens to be in a state ruled by the Congress Party -- which also leads the coalition government at the center -- and the state government has been lobbying party headquarters to ensure that the project goes through.

The inconsistency is a result of the fact that the Indian government has different, often competing, priorities. At varying points in time -- depending on the international economic environment, the energy market, India's energy situation, as well as the domestic political situation -- its emphasis changes. And with a change in emphasis comes a change in the Indian government's answer to the question: to diversify or not to diversify?

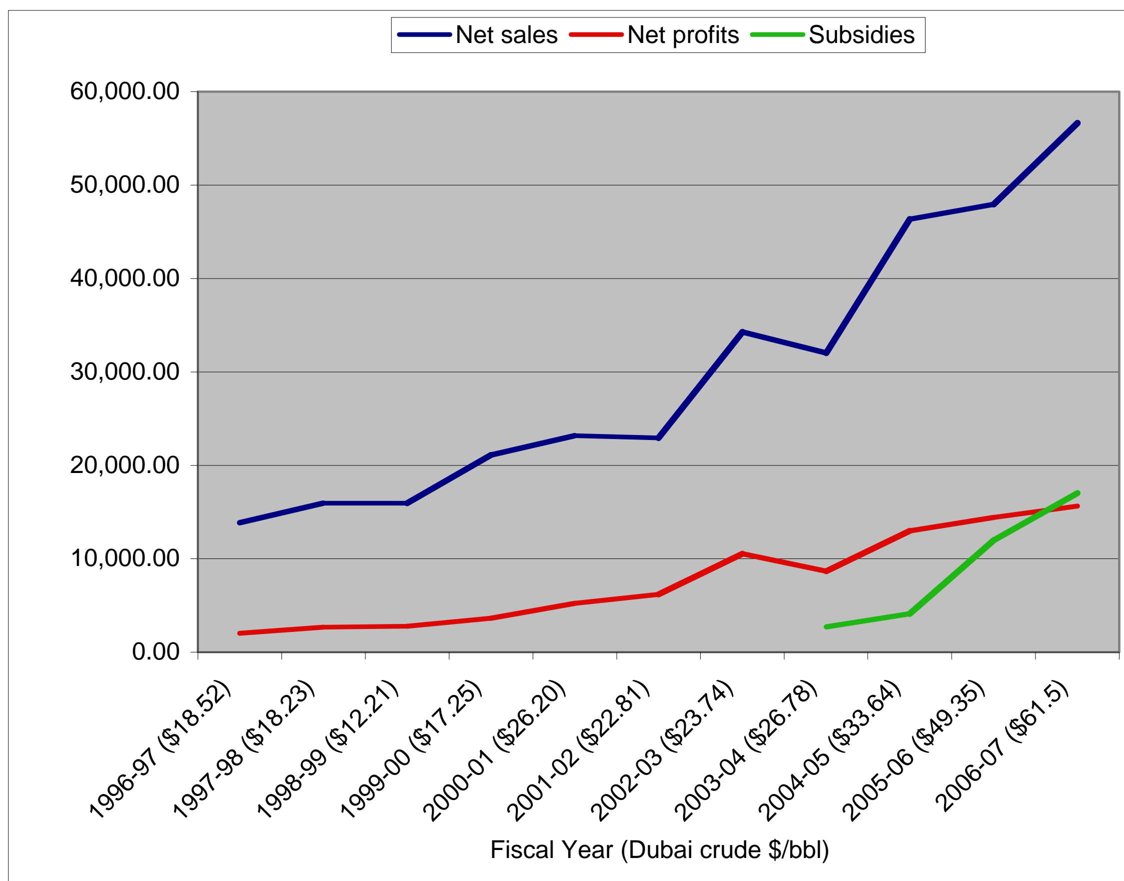
ONGC has a similar problem of different and competing priorities, which result from it being a state-owned company -- with a mandate to increase production and play a role in ensuring that the government can provide consumers with affordable oil and gas -- as well as being a publicly-listed corporation that wants to ensure that at the end of the year it turns in an impressive balance sheet. Ultimately, just in case the company forgets

which of its masters -- the market or the government -- is the "decider," the following statement by the junior Minister for Commerce on the Kakinada project serves as a clarifying reminder: "The Prime Minister has said categorically that the ONGC refinery would come up at Kakinada…The Prime Minister has also conveyed this to the Petroleum Ministry."[273] He may as well have added at the end, "and that's that."

[273] "ONGC's refinery will come up at Kakinada: Ramesh," *The Press Trust of India Limited*, August 19, 2007.

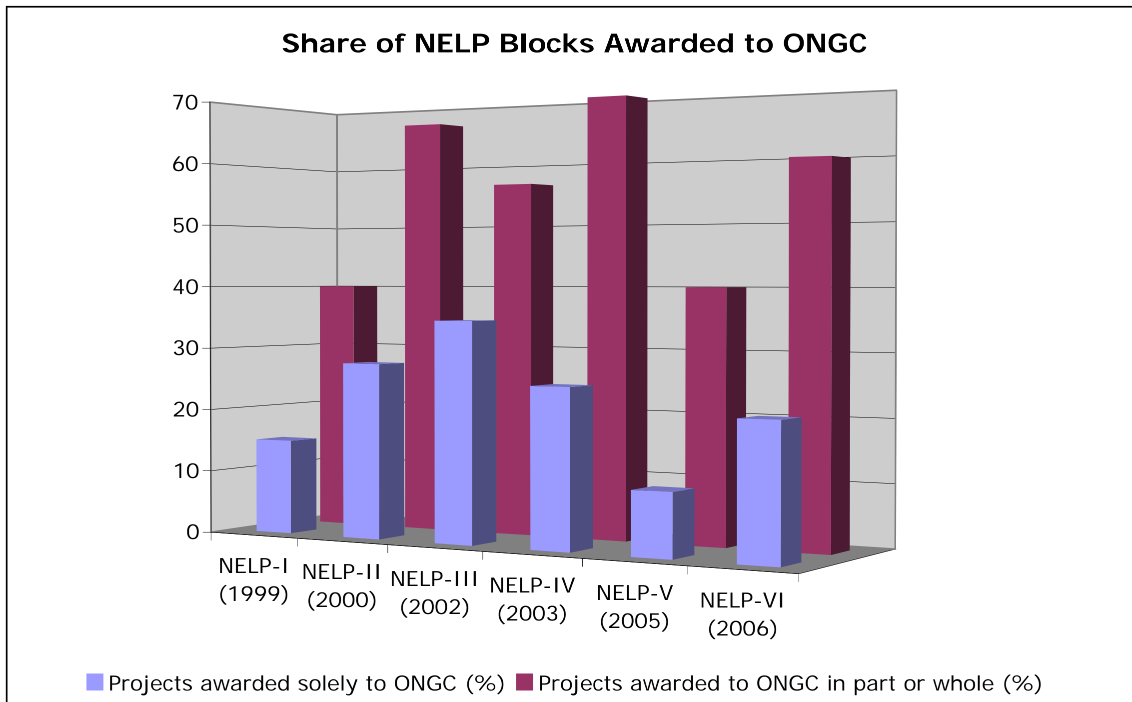
APPENDICES

APPENDIX I: ONGC'S NET SALES, NET PROFITS AND SUBSIDY BURDEN



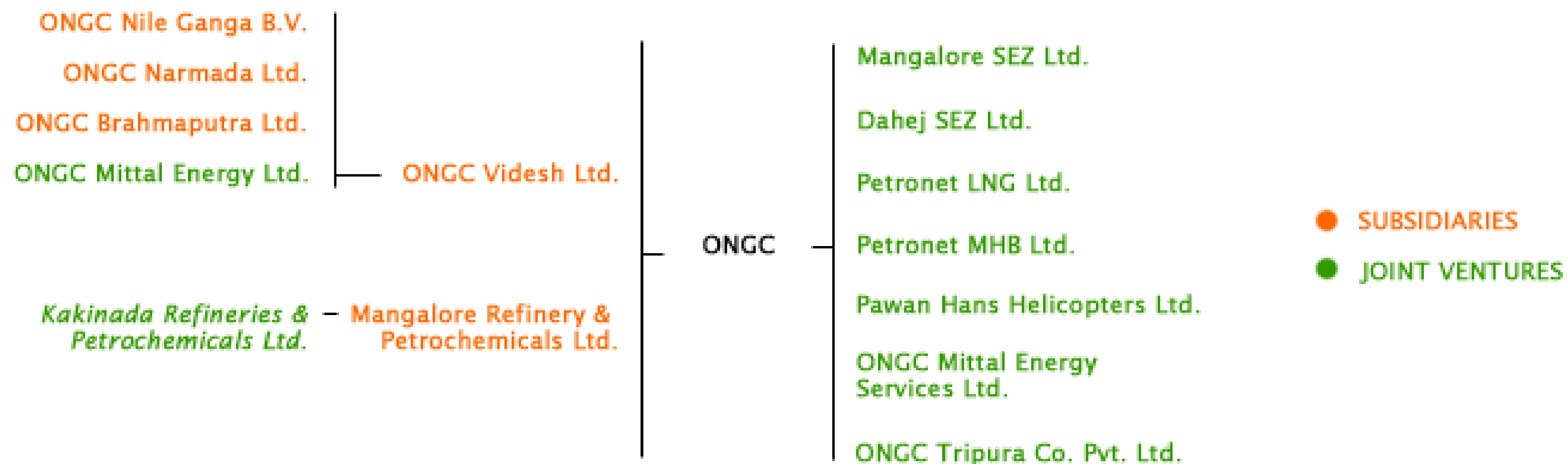
Source: ONGC, "Financial Results" (http://www.ongcindia.com/financial.asp)

APPENDIX II: SHARE OF NELP BLOCKS AWARDED TO ONGC



Source: Data from DGH, "Petroleum Exploration and Production Activities in India 2005-06" and www.dghindia.org

APPENDIX III: ONGC'S SUBSIDIARIES AND JOINT VENTURES



Source: ONGC and OVL, Annual Reports, 2005-06 (Italics used for proposed entities)

APPENDIX IV: ONGC EQUITY INVESTMENT OVERSEAS

Note: Bergomo Holding funded by CNPC (50%) and ONGC Nile Ganga (50%). Latter funded by OVL (77.95%) and Mittal Investment (22.05%)

I. Active Assets

Country/Asset	Acquired	Estimated Oil Output 2006 (MBD)	Estimated Gas Output 2006 (MM CFD)	Notes
SUDAN				
Blocks 1, 2, 4 (25%)	Talisman	400	---	Greater Nile Petroleum Operating Company is joint operator; Buy-in 2003. Partners: CNPC (40%), Petronas (30%), Sudapet (5%)
Block 5A (24%)	OMV	25	---	Startup mid-2005 Thar Jath discovery. Operator Petronas. Known as 'White Nile' project; Buy-in completed 2004. Partners: Petronas (67.875%), Sudapet (8%)
Karthoum-Port Sudan Products Pipeline; Khartoum Refinery Upgrade	CNPC	---	---	Service contract, no formal equity, 1,235 km pipeline, 56 MBD capacity, option to buy into project at later date. Refinery expected to cost $1.2 billion and the pipeline $200 million. Contract awarded in 2005.
Mangalore Refinery (not an overseas asset, but fits with above)	Mangalore Refining	184	---	Partial buy-in in 2003; Sole owner by 2004. Has proposed 150 MBD JV refinery with Cairn at Barmer.
RUSSIA				
Sakhalin-1 (20%)	Buy-in ExxonMobil PSA	40	177	Reserves of at least 2.5 BN BBLs of liquids and 9 TCF of gas. First phase peak at 250 MBD; 708 MBD gas output. Initial cost $1.7 BN. ExxonMobil is operator. Farm-in 2001; First production 3Q, 2006. Considering buy-in for Sakhalin-III exploration tract. Partners: Exxon (30%), Sodeco (30%), SMNG (11.5%), RN Astra (8.5%)

VIETNAM				
Blocks 6-1 and 6-3 (45%)	Partner	Condensate: 4	280	Holds 45% of upstream; 51% of South Con Son gas-gathering system. Partners: British Petroleum (35%), PetroVietnam (20%)
SYRIA				
Al-Furat Gas & Petroleum Company	Petrocanada	NGLs: 20	140	200 MM BOE reserves; Consists of Dair al-Zoar, Deir EZ, Deir EZ Annex (37.4%) & Al-Shaun tracts. Also gas pipeline, NGL plant. Jointly held with CNPC (17%); Bought in early-2006. Bergamo Holding has a 33% stake in the Al-Shaun tracts, and a 37.5% stake in the others. Shell is also a partner.

COLUMBIA				
Omimex de Columbia (50%)	Ominex Resources	20	---	Untested gross reserves of more than 300 MM BBLs. First joint purchase with Sinopec. Tracts include 100% Velasquez production area, 50% Nare & Cornica blocks, where Ecopetrol is operator. Includes 190 km crude pipeline. Purchase mid-2006.
BRAZIL				
BC-10 Block (30%)	ExxonMobil	---	----	By 2008, output of 60-100 MBD. Shell operator (50% stake); four commercial finds in block; Will produce from FPSO – good experience for ONGC for technically challenging project. Crude heavy (17-24 API), sweet & waxy and similar to Indian grades. Later signed strategic co-operation accord with Brazil's Petrobras. In 2006, OVL paid $170 million for the stake and committed another $234 million towards the development cost.

II. Acreage

Country/Asset	Acquired	Type	Notes
SUDAN			
Block 5B (24%)	OMV	Exploration	Petronas operator; Seismic done exploration drilling underway. Partners: Petronas (39%), Sudapet (13%), Lundin (24.5%)
MYANMAR			
Block A-1, A-3 (20%)	Daewoo	Exploration/ Development	Farm-in with Indian company GAIL; Daewoo has remained operator. Gas finds include Shwee, Shwee Phu & MYA totaling at least 5.7 TCF gas. Development options, pipeline, LNG or CNG undecided. ONGC and GAIL will contribute $20 million to feasibility studies and $400 million to development. Parners: GAIL (10%), Daewoo (60%), KOGAS (10%)
Blocks AD-2, AD-3, and AD-9		Exploration	Deepwater blocks off the Rakhine coast; ONGC committed to investing $150 to explore for gas over the next seven years (exploration at block AD-2 will take 5 years; for blocks AD-3 and AD-9, it will take 7 years).
VIETNAM			
Block 127, 128 (100% and operator)	Bid Award	Exploration	Three—year exploration phase, with three well commitment; Blocks 16,000 sq km each
Block 6-1	Bid Award	Exploration	ONGC acquired the block in 1988; by 2000, ONGC has a 45% equity in the Lan Tay and Lan Do natural gas fields (both located on block 6-1); approximate value of the project is $2 billion. BP Amoco is currently the operator of the block.
TUNISIA			
Fejaj permit (45%)	Command Petroleum Limited	Farm-out	By 1995 agreement, ONGC Videsh will pay $700,000 for seismic surveys and data processing and will invest a further $650,000 to cover part of the drilling costs.

NIGERIA			
OPL 209 & 212; OPL 279 & 285	Bid Award	Exploration	First acquisitions by ONGC/Mittal JV. In conjunction with $6 BN infrastructure investment promised with JV, Nigeria will give further access to upstream tracts with production of up to 650 MBD; guaranteed 120 MBD term crude sales and share of new LNG output. Signed by ONGC Mittal Energy Limited (EMEL), one of two ONGC/Mittal JV companies.
Block 2 (Nigeria/Sao Tome and Principe JDZ)	Bid Award	Exploration	ERHC, Addaz, and Sinopec share a 65% joint operating interest, ONGC has a 15% joint stake with Equator Exploration, A and Hartman have a 10% stake, and Foby Engineering and Momo Oil and Gas both hold a 5% stake.
CUBA			
N-34, N-35	Bid Award	Exploration	100% PSC and operator; 4,300 km sq total
Blocks 25-29, 36	Farm-in	Exploration	ONGC 30% share; Norsk Hydro remains operator. Partners: Norsk Hydro (30%), Repsol-YPF (40%)
TRINIDAD & TOBAGO			
NCMA-2	Bid Award	Exploration	Omel won exploration rights in August 2007.
QATAR			
Najwat Najen PSC (70%)	Bid Award	Appraisal of block	Awarded in 2005; ONGC has 70% equity, if commercial oil found; 300 MM BBLs reported in place.
EGYPT			
Block 6 (70%)	Bid Award	Exploration	Joint operator with IPR Red Sea for 290 sq km tract. Oil in place of 600 MM BBLs estimated in the North Ramadan block. Half dozen prospects identified.; Signed mid-2005.
North Zaafarana exploration concession (50%)	British Gas	Farm-out	ONGC took 50% stake in British Gas' offshore concession in Egypt's Gulf of Suez; agreement announced on June 27, 1995.
SYRIA			
Block XXIV (60%)	Bid Award	Exploration	Awarded in May 2004 to OVL and IPR Mediterranean Exploration Limited (IPRMEL); IPRMEL has a 40% stake and is the operator for the block. The 3853 sq. km block is in central eastern Syria.

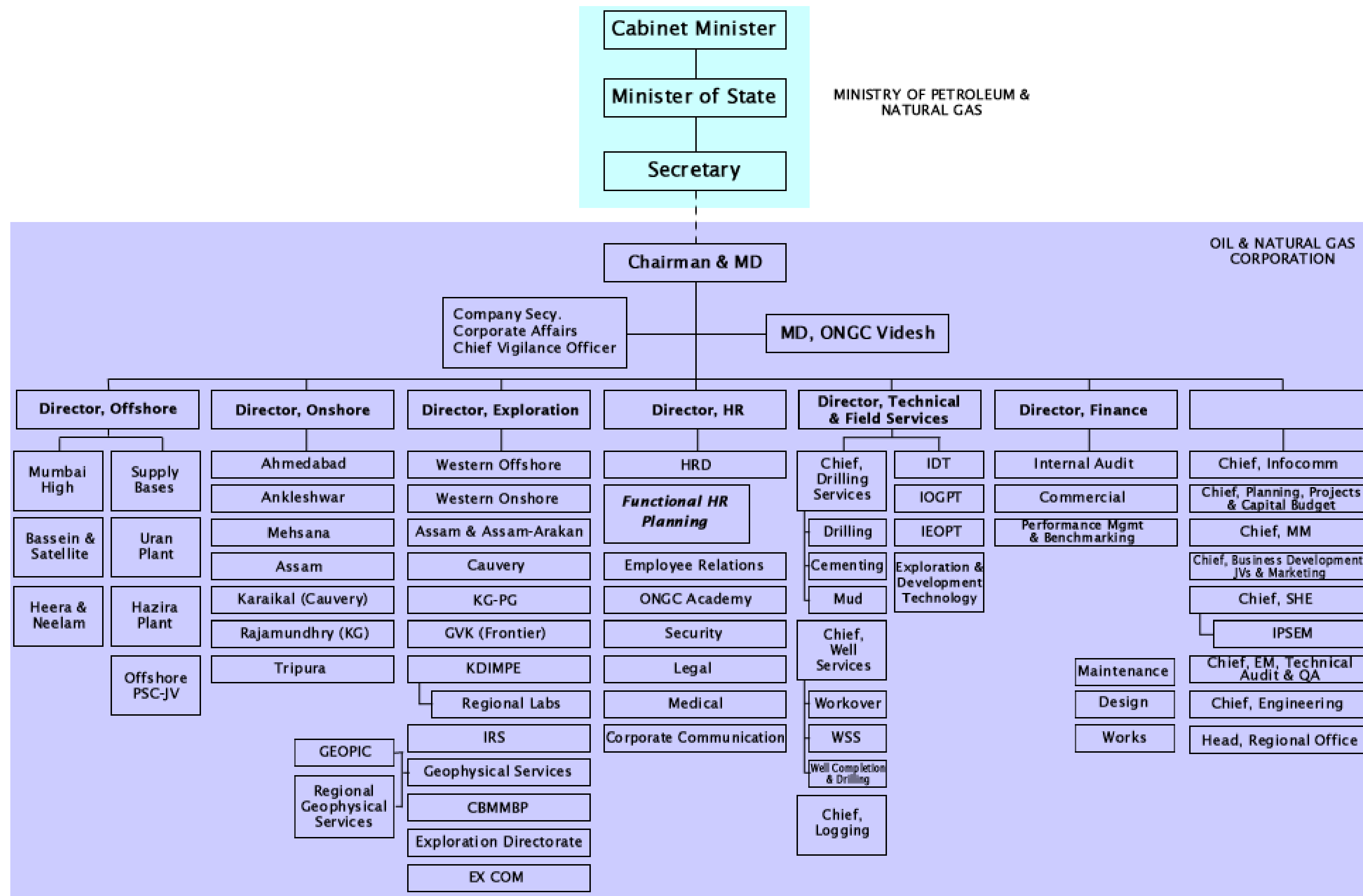
IRAN			
Farsi Block (40%)	Bid Award	Exploration under buy-back contract	ONGC operator with IOC (40%) and OIL (20%) partners. 4-well program and seismic required; Signed end-2004.
Pending	Govt. to Govt.	Development rights Yadavaran field; Buyback contract for Jefeyr oil field.	Upstream contracts were quid-pro-quo for India buying 7.5 MM MTA of LNG. LNG sale appears shelved and upstream projects in limbo.
IVORY COAST			
CI-112 (23.5%)	Vanco	Farm-in	Vanco is operator in 4,116 km sq offshore block. OIL and Sinopec also partners. One well drilled in 2005.
EQUATORIAL GUINEA			
Blocks EG-12 and EG-13	Bid Award	Exploration	Secured blocks in September 2007
LIBYA			
Nc-188 & 189 (49%)	TPOC	Farm-in	Onshore blocks totaling 8,646 km sq; TPOC, the Turkish national oil company, remains operator (51%).
Block 81-1	Bid Award	Exploration	Awarded exploration rights in October 2005 for this 1,809 km sq. block in Ghadames Basin.
Area 43 (28%)	Bid Award	Exploration	Offshore block in the Murzuk Basin; awarded in January 2007.
COLOMBIA			
Block 10 (50%)	Bid Award	Exploration	Awarded block in October 2007; joint partnership with Ecopetrol. The two groups together committed $5.3 million in exploration investment.
Block 8 (40%)	Bid Award	Exploration	Awarded block in October 2007; partnership with Ecopetrol (40%) and Petrobras (20%); all three together committed a total of $5.3 million in exploration investment.
YEMEN			
Block 38	British Gas	Exploration	Agreed in 1996 to work with British gas in exploring the block, which is off Socotra Island. Plans are for it to be a two-phase, $20 million project.
AUSTRALIA			
Block WA 306P (55%)	Antrim Energy	Farm-in	ONGC bought 55%, but Canada independent Antrium still operator. Block is in prospective Browse Basin.

IRAQ			
Block 8	Bid Award	Exploration	Status of contract awarded under Hussein regime uncertain. Untested reserves in range of 645 MM BBLs in onshore block bordering Kuwait.

III. Failed Attempts 2005-2006

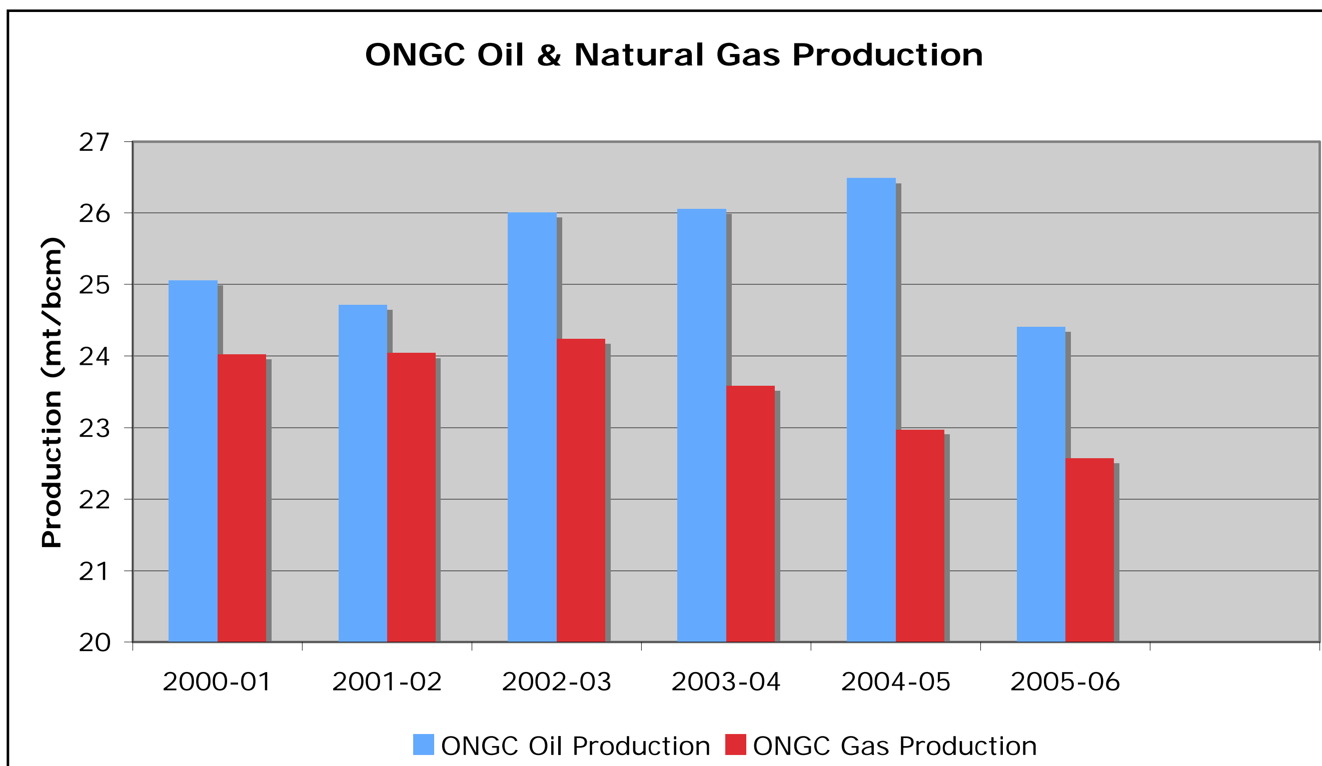
Country/Asset	Type	Notes
NIGERIA		
OPL 246	Exploration	Indian cabinet rejected $2 BN bid as "too risky"; OPL 246 was hived off of Akpo find now under development offshore
OPL 321, 323	Exploration	Lost out to KNOC.
ECUADOR		
Half dozen tracts	Encana Assets Production & Exploration Tracts	Lost out to China consortium at bid of $1.42 BN. Crude output of 90 MBD.
KAZAKHSTAN		
Acreage & Kumkol Production	Exploration & Production	Lost PetroKazakhstan to China's CNPC $3.6 BN bid. Kumkol produced 150 MBD in 2005 of light sweet crude. First attempt to bid with Mittal JV. ONGC still negotiating for two separate exploration blocks.
ANGOLA		
Acquisition 50% of Block 18	Exploration & Part of Project under Development	Sale by Shell nullified by Angola government and awarded to Chinese interests by 2004. Part of BP's Greater Plutonio development, which will pump 200 MBD by 2009.

APPENDIX V: MPNG & ONGC ORGANIZATION CHART



Source: MPNG (http://petroleum.nic.in/organisation.htm) and ONGC (http://www.ongcindia.com/organogram.asp)

APPENDIX VI: OIL & NATURAL GAS PRODUCTION (2000-06)



Source: Data from MPNG, "Annual Report, 2006-07"