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Executive Level Simulation on Petroleum Issues

Executive Summary

A research and assessment project in support of the Office of Net Assessment, Department of Defense

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Executive Summary

INTRODUCTION

On 13 January 2007, Georgetown University and the Institute for International Strategic Studies of the Central Committee Party School of the Communist Party of China convened in Beijing a fully interactive, executive-level simulation, exploring the key resource flow, economic, and political variables surrounding a petroleum supply crisis of global impact. This cross-cultural, simulation, the first of its kind to be held in China, involved former senior U.S. government officials, members of the U.S. private sector and experienced executives and scholars from Chinese industry, academia, the Communist Party, the Central Government and the Chinese military (PLA). At the request of the Central Party School, the January simulation was a one-day "unofficial" practice session, intended as a prelude to a larger and more complex two-and-a half-day simulation on energy security they propose to conduct in June-July 2007. IHSI and Georgetown University have been informed that the simulation result far exceeded the Chinese expectations. The positive results have reportedly convinced the Central Party School's leadership of the desirability of utilizing simulations as a regular part of their curriculum. Additionally, the leadership of the Chinese government State Council Development Research Center (DRC) has proposed to work with Georgetown University to develop a model to 'game' provincial emergency management plans. Given this encouraging news, discussions with our Chinese interlocutors about the way forward are currently underway, and tracking in a very positive direction.

Though a tactical success, the January simulation experienced a number of missed strategic opportunities, highlighted by the absence of executives from any major U.S. or western oil corporation. For a variety of reasons, outside the control of the simulation's organizers, all invited U.S. and multinational oil companies declined participation. Though credible experts were assembled to role-play the U.S. corporate oil team, real executives would have greatly enhanced simulation play and credibility. In response to the diluted U.S. corporate participation, the Chinese made a number of last-minute substitutions to their very impressive intended-participant list, which had previously included high-level executives from China's state-owned oil majors (CNPC, CNOOC and SINOPEC) and banks. Though this was a disappointing development to many, it did not close any doors. The Chinese participation still included significant representation from the CCP (Party), government, corporations, academia and even the PLA. All 39 participants and supporting personnel played out the simulation with energy and dedication.

An important foundation has been laid to 'game' challenges to American and Chinese interests. This simulation only brushed the surface of Sino-U.S. cross-cultural challenges, which are fraught with misunderstandings and misinterpretations. The simulation highlighted the need for more such interactive forums to discuss various topics of the day that hold strategic economic and national security interest to both nations. Future simulations can only increase awareness of the potential for miscalculated decision-making on both sides due to a fundamental lack of understanding for each other's motivations. With the necessary financial and strategic support, IHSI and Georgetown University are fully prepared to take the valuable logistical lessons and substantive insights gained during this executive level simulation and parlay that into a more complex and involved simulation on energy security, with the potential to meet a number of strategic government and corporate objectives.

DESIGN / OBJECTIVES

The simulation was designed around two threads. Each required attention and resolution within the simulation:

- Petroleum prioritization policies and intergovernmental communications, and
- Corporate economic implications, solutions and options

Both threads supported the overarching objectives of the simulation which were:

- To gain insights into government and private stakeholder interaction during an international oil petroleum disruption
- To understand how competing interests are addressed and prioritized
- To highlight how public-private communications are undertaken and effective strategies are implemented throughout the crisis

The simulation design was based on two moves. The first move was designed to draw the participants into the scenario and to challenge their operating norms. The second move was designed to heighten stress, present alternatives, and move participants towards resolution and a shared understanding of potential solutions and issues. For each of the moves, a scenario was presented to the participants to set the simulation and intellectually engage them.

In move one, participants were faced with the temporary closure of the Malacca Straits, due to a collision in the narrow Philips Channel between a supertanker and a large cargo ship carrying volatile explosives. As participants were beginning to cope with and manage the subsequent challenges, move two presented further disruptions. A major terrorist attack on Saudi Arabia's Ras Tanura offshore oil facility took 6 million barrels/day off the market, and concurrently, a major earthquake occurred in China's Shanxi province, an important coal-producing region, causing perturbations to domestic coal supply flows.

TEAM ORGANIZATION

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Key Findings

No global forum exists involving all major consumers and suppliers of oil. The United Nations (UN), International Energy Agency (IEA), Asia Pacific Economic Cooperation (APEC) Energy Working Group (EWG), and the Organization of the Petroleum Exporting Countries (OPEC), each suggested as forums for discussion during the simulation, fall short in providing an equitable forum for all elements of the petroleum industry. The problem is particularly acute in Asia. The IEA, founded by the Organization for Economic Cooperation and Development (OECD) countries to manage energy supplies during the 1972/73 energy crisis, does not include China or India as a member. Energy suppliers are represented primarily by OPEC.

China is less vulnerable to oil supply disruptions than the United States. China currently appears more capable of withstanding significant oil supply disruptions in large part because its heating and power systems (coal-fired power plants provide for approximately 85% of electricity supply) are burning primarily domestically-produced coal, not oil. Further, domestic oil prices are controlled by the government, mitigating consumer economic impact, and the oil companies have the benefit of seeking, and likely receiving, emergency government subsidies to maintain financial equilibrium.

Chinese simulated corporations coordinated closely with Chinese Economic Interest Team. MingQing Petrochemical and China Yuan Bank teams made thorough, independent crisis assessments which included seeking comment from the Chinese Economic Interest team, their foreign private sector counterparts and contacts on the Regional Interest and Energy Suppliers teams. MingQing and China Yuan issued initial reports to the China Economic Interest team and updated it as they continued to receive new information during the simulation. Potential domestic social and economic impacts were carefully assessed by all Chinese teams, and swift actions were taken by the government to increase imported oil from unaffected supply routes and countries, while MingQing took the lead in rerouting domestic oil supplies to meet localized shortages. The government seemed to rely heavily on industry for domestic assessments, action items and even specific policy advice, focusing on external efforts, coordinating with foreign entities, and providing necessary support to industry as needed. By collaborating, the three Chinese teams were able to quickly take steps to mitigate the domestic social and economic impact of the crisis. Surprisingly from a western perspective, the two Chinese companies also offered their own and other governments specific policy advice. For example, MingQing advised the China Economic Interest team to be in direct coordination with Malaysia, Singapore and Indonesia in the cleanup efforts and advised the Regional Interest team that the APEC Energy Working Group would be a useful forum to discuss solutions to the crisis. The China Yuan bank advised the China Economic Interest team to build a new oil transportation channel in Thailand and conveyed to the U.S. Economic Interest team that it would not be wise to move U.S. Navy vessels into the Straits of Malacca.

China expressed desire for stable oil supply flows to Japan and Korea. Chinese participants stated their interest that Japan and Korea be considered in allocating reduced oil supplies during a major supply crisis. Objectives were two-fold; broadly, as a confidence-building measure for 'regional harmony' and on a more practical level, concern for day to day viability of the Japanese and Korean economies. However, as demonstrated in the Malacca Straits closure scenario, China faced major domestic stresses of its own, thus the extent of assistance China would be willing to extend is in question, and was not determined in this simulation. Chinese teams took no direct steps to increase the oil supply to Japan and Korea.

Government teams rejected repeated U.S. calls to manage the crisis under UN auspices. China and ASEAN did not want to consider the United Nations as an umbrella under which to secure the affected sea areas. The China national team was however willing to hold a bi-lateral meeting with the U.S. Economic Interest team to discuss the crisis. They expressed willingness to coordinate oil supply re-routing with Japan and Korea as noted above, but did not agree to a U.S. team proposal to include Japan in discussions of the crisis (Note: this may very well have been due to unfamiliarity with simulation play).

China desired to keep security coordination in the Straits of Malacca on a regional basis. China rejected calls from the U.S. for the navies of Japan, China and the U.S. to work in concert to stabilize and secure the Straits of Malacca. The Chinese desired to leave these issues to the littoral states—Malaysia, Indonesia, and Singapore—if possible. If additional support was required, the Chinese preferred to then leave it to the littoral states plus regional partners such as Thailand and the Philippines or other ASEAN countries. Post-simulation, the Chinese commented that they would have gladly provided assistance had it been requested by the littoral states but not by the U.S.

The U.S. did not share China's sensitivities and those of other countries of the East Asian Region about cooperative responses. Two moves* by the US Economic Interest Team revealed that the U.S. was not sensitive to China's stated desire to be a cooperative regional player in East Asia and may have failed to recognize, and capitalize, on the desire of Japan and Korea in the north, and Malaysia and Indonesia in the south, to engage in a regional response albeit with quiet support from the United States. The U.S. tended to militarize everything: unilaterally deploying the U.S. Navy to the Straits of Malacca and seeking to enroll China, together with Japan, in a naval effort in the Straits of Malacca and beyond.

* These moves were:

1. Unilaterally deploying the U.S. Navy to the Straits of Malacca
2. Seeking China's participation in a naval effort in the Straits of Malacca, rather than creating a regional response including all ASEAN countries

U.S. proposals for counterterrorism were viewed cautiously by the regional countries and China. The incident leading to the closure of the Malacca Straits was a suspected incident of terrorism and the closure of Ras Tanura was determined to be terrorist activity. The Chinese government urged caution in identifying the Malacca Straits incident as terrorism, encouraging deeper investigations and identifying appropriate measures to help the regional states fight against terrorism, and "eliminate the course of terrorism." The Chinese did however publicly condemn terrorism, and agreed to improving cooperation in counter-terrorism with the U.S. government team. However some U.S. participants viewed China and regional countries as exhibiting minimal concern with terrorism, which they thought was either unrealistic, or directly attributable to the world being satiated by the current U.S. focus on terrorism, at the expense of almost everything else.

Corporate profitability versus corporate citizenship is prioritized differently for Chinese and U.S. companies. Major international companies will consider responsibilities as a corporate citizen when determining response to a crisis. However, the primary responsibility is to shareholders and the organization. Chinese companies give priority to social responsibilities and operational costs are considered secondary.

U.S. corporations placed high consideration on maintaining good relations in China. Both Titan Energy and Mega Bank took great care to engage their Chinese joint venture partners and the Chinese government team, making assurances of their commitment to prior agreements, despite the oil crises, and by offering assistance where applicable. In return, both corporations remained in good standing with their Chinese counterparts, and the Chinese government team, receiving offers for assistance from both.

Government information flow and understanding of corporate risk limitations needs improvement. In a crisis situation, like the closure of the Malacca Straits, commercial organizations need timely and complete information from the involved governments. Corporations are accustomed to dealing with expected commercial risks, yet the addition of issues such as terrorism creates a need for government support. Corporations may take actions aimed at mitigating risks to their shareholders that are at odds with the priorities of government and other industries. This was exemplified when Mega Bank (representing in part a major international insurer) dropped insurance coverage in the Straits of Malacca, citing lack of information from U.S. and Regional governments as a prime motivator. A profound predilection of the world financial markets to look for firm signals from the U.S. before stabilizing was evident throughout the simulation. Similarly, the oil suppliers wanted "appropriate measures" taken by the U.S. before they would ease their fears.

Oil supply crises presented opportunities for alternate energy investments and cooperation. The Chinese publicly released news that they were ramping up coal-liquid technology investment. The Petroleum Suppliers team, representing OAPEC, offered to buy coal-liquids technology from China and help develop it. Specifically, the Saudi's offered to extend Ras Tanura reconstruction contracts to Chinese entities, in return for opening up this investment to Saudi Aramco. Saudi Aramco expressed interest in building and supplying oil reserve facilities for China. MingQing Petrochemical also advised that it was taking steps to develop more alternative fuels such as bio-diesel and ethanol.

Cross-Cultural Observations

The immediate post-simulation atmosphere among both Americans and Chinese was one of having just participated in an insightful and worthwhile exchange. Actual simulation play was highly interactive, resulting in mass e-mail communications and several face-face meetings. Post-simulation analysis of team presentations, email communications, team-room notes and facilitator reports, has demonstrated an impressive quality of thought-process by participants. In addition to the substantive findings discussed in the prior section, many important insights for improving facilitation and process of a cross-cultural simulation were shared by participants, demonstrating their satisfaction for the usefulness of the simulation forum and an enthusiastic desire to improve the process. These insights have bestowed great benefit to the conveners of the simulation for planning and implementing future interactive simulations between U.S. and Chinese participants.

As was anticipated, simulation-play reflected various cultural differences. Chinese participants pointed out that in the beginning of the simulation U.S. reactions were very fast, and the Chinese responses and communications were slower to occur, because the Chinese were busy doing research and carefully formulating their responses. One challenging issue raised by some Chinese participants, was that even though the simulation was a non-attribution forum, many of the senior-level Chinese participants were initially concerned about being quoted in the plenary sessions attended by all participants, yet were far more willing to share openly within the confines of the team rooms. Despite this initial reservation, the Chinese fully participated in the plenaries, conducting team briefings, responding to questions and asking questions of other team briefers. However, Chinese participants on the Regional Interest and Petroleum Suppliers teams (which consisted of Chinese and U.S. participants) appeared either unfamiliar or uncomfortable with the role-playing concept, observing game play and injecting comments rather than assuming 'different identities'.

The Chinese national team at all times emphasized its ability to master the situation, proceeding calmly and deliberately to mitigate economic disruptions for the Chinese population. The Chinese had been advised in advance that the scenarios would involve an obstruction in the Straits of Malacca bringing a temporary halt to a significant quantity of petroleum supplies to Asia. Their national interest team was confident in its responses to this element in the scenario; however, it brushed aside efforts by the design team to create stress in the Chinese energy supply chain via an earthquake in a major coal-producing province. Chinese participants exhibited a strong reaction, both during simulation play, and in the post-simulation brief-out, suggesting that such a scenario would not cause a major coal supply flow problem, citing China's extensive experience with earthquakes in that region, and the sufficient mechanisms in place to deal with such a crisis. In simulation play, the Chinese government claimed to have restored daily life to normal order in the Shanxi region, after very little time had passed. American participants, for the most part, viewed this as unrealistic and accounted it to either gamesmanship or simply Chinese overestimations of their domestic response capabilities.

There are several interesting observations here. The Chinese participants, reacting in an almost 'defensive' manner, were likely reflecting their perceived lack of consideration for China's extensive and unfortunate history of dealing with numerous severe natural disasters, and their ability to institute swift and effective disaster response efforts. It is possible that the Chinese-side thus reacted with an oversimplified response, i.e., "order has been restored", because they perceived an oversimplified scenario. U.S. participants did not seem to analyze the Chinese reaction deeply and wrote it off as unrealistic and/or gamesmanship. It is possible that Chinese participants felt this scenario blatantly singled-out a Chinese domestic response, as no such stresses were concurrently bestowed on the U.S. Economic Interest team, and it is possible they were simply saying, "we're not going to let you single us out". Whatever the impetus for the strong reaction from the Chinese side, in future simulations scenarios must be more carefully vetted to address Chinese sensibilities and to keep all participants comfortable to encourage open, candid discussions. This example highlighted the difficulty of keeping all participants, the Chinese in particular, from "fighting the scenario" rather than just going with the flow.

This simulation only brushed the surface of Sino-U.S. cross-cultural misunderstandings and misinterpretations. The simulation has highlighted the need for more such interactive forums, as there is clearly a huge gap in mutual understanding, particularly between governments. Future simulations can only increase awareness of the potential for miscalculated decision-making on both sides. The simulation format removes many of the political and other pressures found in other forums such as conferences, allowing participants to interact around issues that need frank discussions. The simulation provides an informed "back channel" for communication, in which both senior and working-level participants can fully engage in an intellectually challenging, pressured environment, encouraging decisions and insights to all participants.

Simulation Findings – Chronological View

MOVE ONE

Scene Setting

The simulation begins in April 2007. The Straits of Malacca are closed due to a collision in the Phillips Channel, located at the narrow mouth of the eastern end of the Straits, involving a fully loaded supertanker heading to China and a large container ship. 10,000 containers are reported lost or damaged and oil is leaking into the water from the damaged tanker. The cause of the collision is currently unknown and a number of terrorist organizations have claimed responsibility. It is suspected that the collision was caused by piracy or terrorism and the two may even be linked. Indonesia, Malaysia, Singapore, Australia and the U.S. are currently involved in developing the appropriate strategy to remove the ships and debris. Cargo on the container ships included volatile explosives, and their exact location and status has yet to be determined. This, in conjunction with heavy fog and smoke from forest fires in Indonesia, are presenting challenges for cleanup and moving the ships out of the narrow passageway. Maritime authorities have issued a navigation warning to all vessels, recommending a speed not in excess of 3 knots.

Global business communities are anticipating sharp economic impact to the flow of commerce. The CEO of Titan Energy, owner of the damaged oil tanker, has received a number of phone calls from governments and industries. Mega Bank, the insurer for both damaged vessels, is assessing financial impacts and security risks. Market speculation is that insurance and other operating costs will go up. Global market oil prices are also expected to rise.

U.S. Economic Interest

Critical Issues

- Determine the cause of the accident (i.e. terrorism)
- Assess severity of the accident and status of clean-up operations
- Assess global supply consequences and effects on global oil prices
- Determine ramifications of the crisis on Chinese, Japanese and U.S. relationship in the event of a prolonged crisis (i.e. how could it harm relations)
- Determine stability of regional economies (particularly Japan)

Actions Taken

- Determined the key reference documents for this situation were: Law of the Sea (LOS), Malacca Straits Coordinated Patrols (MALSINDO)[1], Eyes in The Sky (EIS)[2], UN Protection of Shipping
- Requested a report from Titan Energy on the status of its disaster response

[1] Countries directly involved in patrols are Singapore, Malaysia and Indonesia

[2] Maritime and air surveillance involving Singapore, Malaysia, Indonesia and Thailand

- Reviewed U.S. actions to support insurer risk. Mega Bank asked the U.S. Government for a briefing on the accident to help it make decisions on present and future insurance coverage (No direct guidance was communicated to Mega Bank in this regard)
- Sought to coordinate countries directly involved in the crisis under UN auspices. Reached out to Japan and China to coordinate leadership together with the U.S. in addressing the crisis. The Team also sought to include Russia, specifically in "salvage operations"
- Expressed support for ASEAN in regional efforts to deal with the crisis. Specifically reached out to the littoral countries of the Malacca Straits and asked what was needed from U.S. to make for more timely clean-up efforts
- Offered U.S. Naval assets for safe transit in international shipping lanes. The principal goals were to ensure that all international straits stayed open during the crisis (Lombok etc.), to protect the Malacca Straits and other shipping lanes from potential terrorist attacks, and to help with clean-up efforts at the site of the accident in the Phillips Channel.
- Later in Move One the U.S. deployed naval ships to the Malacca Straits to ensure free passage. Told all parties that it would keep regional countries informed of locations and intentions, in accordance with LOS provisions
- Expressed support for global redistribution of oil supply to alleviate localized shortages. These plans included releasing oil stocks from Alaska to be shipped to Northeast Asia (was not clear if this initiative was ever realized)

China Economic Interest

Critical Issues
- Determined that details of the exact location and information on the level of impact of the accident are a priority
- Suggested internally that China should coordinate with the U.S. and set up an investigation team
- Assessed need to closely work with the littoral countries of the Malacca Straits
- Assessed transportation costs and insurance fees
- Determined that the supply impact is a short term crisis and China could rely on national reserves to meet short term needs

Actions Taken
- Offered assistance to the littoral countries of the Malacca Straits
- Stated publicly that China would like to coordinate oil supply rerouting with Japan and Korea, given concerns expressed by the Petroleum Suppliers of being seen as "playing favorites" in the region
- Made a public statement informing all parties of China's discussions with other countries to find alternate supply channels/routes
- Accepted a bi-lateral meeting between the U.S. Secretary of State and Foreign Minister of China. Chose to exclude the Regional Interests team (specifically Japan, which the U.S. had suggested involving) and postponed decision to involve the UN
- Stated publicly that China viewed the crisis as "short-term" and would make decisions accordingly
- Reached extensive agreements with Russia, Kazakhstan and other Central Asian countries to increase petroleum import in the short term (isn't clear whether this was discussed with the

Petroleum Supplier team. Did the Chinese Economic team make this up on their own? How much oil could realistically be brought in?)

- Authorities reported publicly that oil prices in China did not experience large fluctuations. The statement said the Chinese government had "already adopted all kinds of measures to ensure petroleum price stability in the long-run"
- Specific domestic measures taken: Implement energy savings plans in China; develop coal mines and railways; speed up development of Northeast and Northwest energy transportation routes; engage in nuclear energy development; search for other opportunities
- Decided on long-term domestic plans to mitigate supply impact: increase oil reserves; strengthen multilateral cooperation in the Straits of Malacca and build emergency preparation paradigms to ensure secure transport through the Straits; create more alternate supply routes (and with different countries) for importing oil; increase domestic oil production; increase alternative energy resources

Regional Interests

Critical Issues

- Need to restore operability of maritime routes and implement interim alternatives
- Clean up the damaged tankers and goods
- Assess supply and demand impact; should monitor potential profiteering at the well-head
- Assess costs and economic impact; should request international efforts to maintain stable insurance and transportation costs

Actions Taken

- Singapore directly assisted Titan Energy by towing the damaged ship to its port
- Reached out to the U.S. government for security assistance in securing shipping lanes, coordinating clean-up and U.S. Naval involvement (suggested Malaysia lead the clean-up)
- Asked the Chinese government if there would be interest in convening the APEC Energy Working Group to discuss disaster response, and suggested involving the IEA
- Rejected U.S. calls to meet and coordinate crisis response efforts under UN auspices, and given the need for immediate actions, requested an ad hoc approach that was timely, practical and effective (suggested a similar approach to that used for Tsunami response)
- Expressed concerns to Mega Bank about their suspending insurance coverage in the affected region, felt it was a short-sighted move and warned that such actions could result in the regional countries "reassessing" licensing of financial companies
- ASEAN held press conference testifying to the region's ability to keep its own affairs in order, despite deep U.S. involvement in cleanup and security efforts

Petroleum Suppliers

Critical Issues

- Need assurances from insurance companies that alternate transport routes are "safe"; consuming countries will likely need to create a special reinsurance pool
- There will be a slowdown in manufacturing in China due to delayed oil supplies

Actions Taken

- Major oil producers (including OPEC & Russia) conferred privately about the crisis, and publicly offered to rearrange supply arrangements and shipping routes
- Warned the U.S. government that without re-arranged shipping routes, and the uncertainty of regional countries' demand for oil, suppliers may be forced to shut down oil fields given the potential reduced demand
- Reached out to all participants to assist with shipping lane security, did not state any preferred mechanism, nor specific countries to coordinate these efforts
- Used the supply crisis as an opportunity to offer increased cooperation on Mainland China, by offering assistance in increasing the quantity of petroleum reserve storage on the Mainland
- Offered to increase Middle Eastern and African oil supplies to Europe, to free Russian supplies for transport to East Asia; however made it clear that the Suppliers did not want to play favorites (China, Japan, and Korea) and asked these countries if they were coordinating the reroute of imports. The Suppliers later proposed a specific oil SWAP, sending oil from the Middle East, Africa and Russia to the U.S., in exchange for U.S. release of supplies in Alaska and Mexico for transport to East Asia
- The China Economic team reported that Russia offered to increase petroleum supplies from Siberia in order to help China cope with petroleum supply problems (no mention of Japan or S. Korea)

MingQing Petrochemical

Critical Issues

- Determined that the incident is not big enough to threaten economic security, but will have significant impact on oil supply and utilization
- Investigate impact of incident, and identify ships belonging to MingQing in or around the Straits
- Assess inventory in relevant refineries
- Assess potential social impact of supply disruption
- Determined that coastal regions will be more significantly impacted
- Need to find alternate routes for supply and open up strategic reserves
- Concerned with timeliness of cleanup efforts in the Straits; and how traffic will be managed once cleanup is complete

Actions Taken

- Discussed internally some responsive measures to deal with supply shortage: First, Ming Qing would increase self-produced oil and take advantage of any surplus oil deposits; Second, evaluate whether oil tankers can transport the oil through a third country (countries with ports like Thailand and Burma); Third, establish an importer consortium made up of countries related to the Malacca Straits.
- Discussed internally the need to launch an "accident subsidies fund" to subsidize the oil enterprises' economic losses
- Wrote a detailed report to the Chinese government assessing the situation, and measures taken by MingQing. Suggested:
  - Direct coordination with Malaysia, Singapore and Indonesia in cleanup efforts

- Begin using national oil reserves
- Explained that rising costs of product would result in the need for higher prices. Suggested that the government provide subsidies in order to curb prices, or adjust finished oil product prices to discourage consumption

- Offered assistance to its joint venture partner Titan Energy
- Affirmed to Regional Interests that the APEC Energy Working Group could be a useful forum to discuss solutions to the crisis
- In the middle of Move One, reported to the Chinese government that finished oil product inventory was very low in East China, and estimates were for supply to last only seven days. Stated its plans to limit supply to gas stations, and asked the government to coordinate the supply of resources
- Dispatched three trains with finished product to Eastern China and reported to the government that there were long lines at gas stations that required government attention
- Determined that MingQing's cost increase due to the crisis was around 6 Billion RMB, or about 10% of monthly revenue

China Yuan Bank

Critical Issues

- Need to set up an emergency team and assess current status
- Strategic investment impaired
- Oil companies will face negative financial impact, causing a potential credit risk; international clearing business is reduced
- Fear of oil supply shortage; could cause prices to fluctuate and could cause a "run on the banks" for cash
- Potential for impact on domestic financial market and fluctuations in bank's stock prices
- Potential for energy crisis, which could affect financial markets and lead to a systematic crisis

Actions Taken

- Asked the U.S. government if there was any expected impact on U.S. interest rates and exchange rates, and if the U.S. economy would be adversely affected due to Malacca crisis
- Asked Chinese government for an assessment of measures it was taking due to the crisis. Specifically: does it have measures in place to ensure confidence in China's banking system; and what are the government's plans to increase supply in the short-run?
- Asked Regional Interests if there have been any precedent incidents in the Malacca Straits; what is the impact on the global "oil economy" and oil supply in (East Asian) region
- Suggested to the Chinese government that they build a new oil transportation channel in Thailand, and explore other alternate channels
- Strongly advised the Chinese government to increase oil supply route options and raise the amount of oil reserves substantially
- Conveyed to the U.S. government that a gathering of U.S. Naval ships will make it easier for terrorists to attack. Given the nature of the crisis, naval ships could not be deployed in large numbers or they may further exacerbate ship traffic flow
- Internally decided to take the following measures:
  - Communicate with oil customers and offer/provide assistance

- Start an emergency system that focused on: public relations; stabilizing financial markets; financial mobility management; monitoring the exchange rate; and preventing large cash withdrawals
- Improve risk management by: monitoring key industries and enterprises; conducting simulation tests; monitoring ship transportation credit risks; and improving industry analysis, and modeling cost allocation in the transportation, oil & gas, and manufacturing industries

Titan Energy

Critical Issues

- Concerned about the environmental impact of leaking oil and potential for negative public relations fall out
- Determine legal implications surrounding collision with Galaxy cargo tanker
- Establish location of all Titan Tankers and assess status
- Determined Titan's supplies were not impacted
- Viewed the incident as a transportation issue
- Titan will lose money on loss of tanker and rerouting assets; however will earn higher profits in the short-term with higher oil prices
- Need to assess how markets will react to the crisis
- Concerned about potential for long-term high oil prices (i.e. substitution for oil)
- Concerned about MingQing's perception of Titan if it begins to make large profits as a result of the crisis and higher oil prices

Actions Taken

- Titan sent out a press release to mitigate bad press of the potential environmental impact of the oil spill
- Sent an emergency response team to the scene; attempted to determine cause of accident (terrorism, other)
- Contacted the Regional Governments and asked for assistance in towing the damaged tanker to port; requested and received assistance from U.S. government in coordination with the regional governments
- Asked the U.S. government to ensure security for Titan's assets world-wide, given concerns of terrorism
- Sought to assure all Chinese interests that Titan was seeking all available alternative transportation routes to China to ensure stable supply
- Attempted to parlay the crisis into an opportunity to suggest increased cooperation with its joint venture partner MingQing Petrochemical
- Internally took several actions
  - Reached out to Green Peace
  - Mobilized all resources to mitigate bad press
  - Increased private security measures, could not rely entirely on U.S. Navy

Mega Bank

Critical Issues

- Need full information on details of the collision
- Need timely and complete updates from governments
- Need governments to provide and coordinate security
- Determined closing of Straits would add 3-4 more days of shipping costs to reroute
- Need to protect shareholder value
- Desire to be seen as supportive and responsive by Chinese government, to build and protect confidence

Actions Taken

- Mega bank, as insurer of both vessels involved in accident, immediately asked the U.S. government and Regional Interests (separately) for a briefing on the situation to make decisions on current and future coverage
- Mega Bank did not receive any direct guidance on the facts of the incident and situation from U.S. (received little feedback from Regional governments), which they said created unnecessary instability in financial and oil markets, and was a factor in their decision to suspend insurance coverage in the affected region
- China Economic Interest and Regional Interests responded negatively to news of suspended insurance coverage
- Asked Petroleum Suppliers if they would provide reinsurance in the current crisis. The Suppliers refused, citing insurance must remain the responsibility of the buyer
- Kept China Yuan Bank and China Economic Interest engaged, and shared information with them to try and reassure government worries about dropping coverage; shared displeasure and anxiety over lack of updates/information from Regional Interests and U.S. government
- Claimed that if the U.S. had ensured free passage with its Navy in a more timely manner, much of the uncertainty which led to lifting of insurance coverage may have been avoided

MOVE TWO

Scene Setting

The collision and ensuing cleanup requirements of the incident in the Malacca Straits highlighted significant communications problem among regional actors. As a result, a number of countries called for a conference on understanding and cooperation. Reactions from the financial and energy markets were ongoing, as there was great uncertainty as to downstream perturbations to these markets. Petroleum suppliers introduced ideas of petroleum swaps to help alleviate regional shortages, involving China, Japan, Korea, U.S., Russia, and major oil producers from the Middle East and Africa. The European Union was concerned that supply would be diverted and insisted on full delivery of contracted supplies to Europe. Major oil consuming countries all approached petroleum suppliers to act with restraint on raising crude oil prices as a result of the Straits of Malacca accident. Oil producers received numerous phone calls from countries demanding to be "first" in priority for petroleum supplies. Industry, which closely monitored all major disruptions, perceived a lack of coordinated government actions, leading to greater levels of uncertainty.

As governments and corporations began to adjust to disruptions in the Malacca Straits and reroute supply flows, move two set in motion additional resource flow disruptions. China's Shanxi Province experienced a major earthquake, causing significant disruptions in and around some of the largest coal fields in China. Concurrently, several large explosions at the Ras Tanura offshore oil loading facility in the Persian Gulf were reported. Ras Tanura is the largest facility serving Saudi Arabia, thus causing significant perturbations to oil flows coming from the Persian Gulf. As Move two progressed, it was revealed that the explosions were the result of terrorist acts and the global price of oil reached $135/barrel.

Titan Energy

Critical Issues

- Perceived a lack of coordination among governments
- Was confused by proposed oil SWAPs in Move One
- Identified that the closing of Ras Tanura along with Malacca Straits crisis creates the largest oil supply disruption in modern times, with huge ramifications for all oil users

Actions Taken

- Publicly denied accusations from Galaxy Transportation that the accident in the Malacca Straits was the fault of Titan, stating that Titan was reviewing its (legal) options. The Chinese government publicly offered Titan assistance/support in the legal process
- Titan sought timely updates on oil price fluctuations, as the market price of oil had large ramifications for Titan's financial standing
- Upon conferring with Petroleum Suppliers, it was determined that Titan is relatively independent of the Middle East for its oil supplies, purchasing around 160,000 bbl/d from Saudi Arabia. Titan was told around 48,000 bbl/d is available to Titan post-Ras Tanura crisis (this news was well received by the Titan Board, which now felt very little pain from the global crisis compared to others, making it a prime resource for those seeking emergency supply assistance and rerouting)
- Was surprised at the lack of inquiries (by consuming nations in particular) to Titan for assistance in rerouting oil supplies

MingQing Petrochemical

Critical Issues

- Upstream operations will remain normal, but the downstream market will be significantly affected by the crude supply shortage; the degree of impact will depend on how long it takes to restore Persian oil supply capacity
- Priority will be given to social responsibilities first and then to cost control of the company's operations
- Government stakeholders need to understand the supply shortage dilemma and related challenges, and have a balanced viewpoint on any new policies issued

Actions Taken

- In response to Malacca crisis and other supply disruptions, MingQing maximized its domestic output of crude oil to compensate for delayed imports

- Restructured its downstream products to enhance the fuel output to ensure market demand
- Stated publicly that it was under intensive consultations with its peers (in the oil industry) and the Chinese government
- Increased security at all facilities
- Directly due to explosions at Ras Tanura, MingQing decided to produce more gasoline and diesel, but less petrochemical products for aviation, hospitals and other industries
- Decided to reduce export volume of domestic oil
- Said it would utilize alternative energies to meet the demand of the market, such as bio fuels (this seems more long-term). Later disclosed that they were taking steps of M & A to bio diesel and ethanol fuel
- Offered technical support and cash donations to help with relief efforts due to Shanxi earthquake
- Internally made the following judgments
  - Impacts of cost and finances should be assessed with a long-term perspective
  - MingQing should shift feedstock supply from domestic sources to overseas; and import final products instead of producing them domestically

Mega Bank

Critical Issues
- Mega Bank's stock price and earnings have been depressed as a result of the supply crises
- Loan portfolio is at risk due to economic decline
- Reduces Mega Bank's ability to take on new ventures in important emerging markets (i.e. China)
- Depending on length of supply crises, all of the above negative impacts could be short term (i.e. two fiscal quarters)
- Perceived both U.S. and Regional governments to be unresponsive to Mega bank's requests for information on fundamentals of the crisis
- Felt crisis management capabilities, and information movement between industry and government was inadequate
- Felt there was inadequate government understanding of commercial risk and information needs

Actions Taken
- With the removal of hazardous cargo from the Philips Channel and assurances of increased security provided by the US Navy, Mega bank reinstated insurance coverage in the Straits
- Called for the creation of government-backed facilities to provide extraordinary terrorist coverage to shippers and producers, to stabilize markets
- Pledged relief funds to the earthquake victims in Shanxi, China, and for the development of improved miner safety in Shanxi Province
- Upon inquiries of China Yuan bank, Mega Bank proposed a number of initiatives to China Yuan (copied Chinese government): (1) establish a joint risk management team, including terror risk assessment, PR communication and energy security task force; (2) explore creation of workers' compensation and other insurance products to protect Chinese workers; (3) finance viable alternative energy projects, could include loans, private equity and other vehicles;

(4) create proprietary derivatives and futures products for the China market to mitigate risks in the financial and commodity markets (China Yuan bank nor Chinese government responded to this email)

- Internally made the following judgments:
  - Implement measures to better manage risk in the future
  - Sustain and grow relationship with China Yuan Bank and the Chinese government

China Yuan Bank

Critical Issues

- Need to pay close attention to the terrorism incident in Middle East; the domestic market reacted "very calmly" to the incident, however China Yuan is worried about the systematic risk
- Shanxi earthquake drove up domestic energy prices

Actions Taken

- Sought to discern the effects of the Ras Tanura crisis on China's financial markets; Chinese government put the responsibility on China Yuan Bank to research the effects and submit a report to government authorities
- Conveyed concern to all governments that alternate supply transportation routes could be targeted by terrorists as well; Chinese government concurred
- Assisted with the Shanxi earthquake efforts
- Inquired with MingQing as to their financial status
- Inquired with US government as to status of American financial market
- Inquired with Petroleum Suppliers as to efficacy and cost of potential SWAP arrangements
- Inquired with Mega bank as to their financial status and progress of claims management during the crisis
- Decided internally to:
  - Launch emergency measures
  - Engage in crisis public relations management
  - Pay close attention to new moves of the government, investors and banking customers
  - Strongly recommend that China, U.S., Russia and other major countries hold a summit and launch regional cooperation mechanisms to deal with the crisis
  - Suggest to the government that they take measures to curb domestic price rises

China Economic Interest

Critical Issues

- Nearly half the gas stations in SE and SW China have no petroleum supplies
- The domestic market price of oil is still regulated by the government
- Need more information on Ras Tanura crisis, should ask U.S. and petroleum suppliers
- If terrorism is the determined cause, China should cooperate with "major countries dealing with the crisis"

Actions Taken

- Reported that oil imports declined dramatically, noting that citizens are greatly worried about the supply disruptions
- Chinese authorities released a statement that order has been restored to "normal life" very quickly in the Shanxi area affected by the earthquake, stating that they already had measures in place to react, given the frequency of earthquakes in that region
- Encouraged talks of using this incident as an impetus to bolster alternative energy investments and research; encouraged potential cooperation on these initiatives, if on a "win-win" basis

US Economic Interest

Actions Taken

- Offered humanitarian assistance to the Chinese government for the Shanxi earthquake; the Chinese accepted offer of material supplies, but assured the U.S. that they had rescue/recovery efforts under control
- Took actions to mitigate rising oil prices:
  - Released strategic reserves
  - Deployed ships to the Persian Gulf to provide protection for sea lanes of communication
- Proposed tri-lateral cooperation with Chinese and Japan to work together on terrorism and protecting sea lanes
- Proposed a bi-lateral meeting with China Economic Interest (who accepted) to discuss counter-terrorism and related security issues. Results of the meeting:
  - Agreed to have defense representatives meet and discuss common efforts to protect sea line of communication
  - Agreed to announce areas of energy efficiency that will be undertaken by the two governments to reduce oil demand
  - Agreed to further enhance cooperation on counter-terrorism
- Invited all parties to a meeting on energy efficiency initiatives

Regional Interests

Actions Taken

- Asked the Saudi's what their plan was to get oil back online and informed them of regional country efforts to find surplus refining capacity
- Invited the Chinese government to join the Asian-Pacific countries to discuss regional energy supply and demand status (included U.S. Government on email). The Chinese accepted and joined them for a meeting hosted by the Regional Team
- Korea took several actions:
  - Implemented voluntary reductions on consumption
  - Reduced working hours
  - Increased use of alternate fuels
  - Prioritized industrial supply to essential uses
- Invited the Petroleum Suppliers to a meeting; Suppliers responded that the appropriate forum for such a meeting was OPEC, and they would shortly convene a meeting in Vienna and invited Regional Interests to attend, therefore they could not send a delegation to the

Regional Room due to time constraints and their own upcoming meeting. Petroleum Suppliers also suggested creating a new forum of major oil importing and exporting nations (US Economic Interest supported the idea)

- Regional Interests disagreed with suggested OPEC-parameters and insisted on hosting the meeting, to discuss on a regional basis. Indicated that they liked the idea of the new forum but felt it was not relevant at the moment given need for timely reactions to the crisis at hand; OPEC responded and agreed it was a long-term initiative, suggested again that this and current crisis be discussed at Vienna, where bi-lateral discussions with SE Asian countries could also be held

Petroleum Suppliers

Actions Taken

- Saudis informed all parties that Ras Tanura is responsible for about 7% of world oil supply, and said they had increased security at all facilities
- Saudis informed all parties that they would divert oil to their other coast, through the Red Sea port of Yanbu, but the capacity of the pipeline was limited, and diverted supplies would take a week or two to arrive (authorities estimated a maximum of 1 million barrels/day could be diverted)
- Saudi Aramco informed China Economic interest that it was beginning to receive proposals for engineering and reconstruction services of its facilities, and it extended the opportunity for Chinese companies to make proposals, specifically suggesting Saudi investment in Chinese coal conversion technologies, in trade for these services, thus proposing a "win-win" basis. Chinese government responded by saying it would encourage its corporations to get involved, and that the government would provide help if needed
- Informed all parties that the oil producing nations decided to suspend spot market transactions and give preference to holders of long-term supply contracts. Given adverse effects of this decision on poorer nations and third world countries, OAPEC concurrently announced a special program of support for Islamic users of energy (Regional Team reacted negatively to this initiative and the "religious-based favoritism" it exemplified, saying spot markets were the best mechanism given the nature of the crisis. Indonesia and Malaysia were specifically mentioned as agreeing); Petroleum Suppliers wrote-off Regional Interest's objections
- OAPEC offered to buy coal-liquids technology from China and help develop it

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Participants

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