THE BROOKINGS INSTITUTION

ENERGY AND SECURITY IN SOUTH ASIA: COOPERATION OR CONFLICT

Washington, D.C.
Wednesday, November 2, 2011

Introduction:

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P R O C E E D I N G S

MR. INDYK: Good morning, everybody. I'm Martin Indyk, the director of the Foreign Policy Program at Brookings. Welcome to Brookings and thank you for joining us this morning.

I'm delighted to have the opportunity to chair this session, which is the official American launching of Charlie Ebinger's latest book, *Energy and Security in South Asia: Cooperation or Conflict?* I say the American launching because Charlie's already launched it several times in different parts of South Asia in the last month or so and it's time to bring it back home, as it were.

Charlie is the director of the Energy Security Initiative here in the Foreign Policy Program at Brookings and a senior fellow at Brookings. He is a man who has had a distinguished career and a set of experiences in the international energy arena that is in many ways unmatched. And he served as senior advisor at the International Resources Group before he came to Brookings and in that capacity advised over 50 governments on various aspects of their energy policy.

During that period he spent a good deal of time in South Asia and developed an encyclopedic knowledge of the energy industries in South Asia and government policies towards them. And that is what is captured in this latest book in which Charlie reviews the various policies of the important South Asian countries and then makes some very important and fairly critical conclusions about the problems of developing energy policies in these countries and some important recommendations about what needs to be done about it.

So, without further ado I'm going to ask Charlie to present the principal findings of his book and then we're going to have an opportunity to have a discussion with two important experts in their own right on this subject, Ron Somers and Steve Cohen. I'll introduce them after Charlie's had a chance to speak to you. Charlie?

(Applause)

MR. EBINGER: Thank you, Martin, for that very gracious introduction. Before commencing I would just like to recognize a few people without whose help this book would never have seen the light of day. First are the two people it's dedicated to, my wife Putnam, who kept me going when I was ready to stop on various occasions. And I'd like to recognize the other person the book is dedicated to is my dear Pakistani friend, Mr. Dao Beg, who unfortunately is deceased, but he taught me so much that I know about South Asia and I had the privilege to work with him professionally as well Noreen and Coreen Beg are here today and we're absolutely delighted to have them.

I obviously want to thank Martin and his predecessor Carlos Pascual, who both as vice presidents of foreign policy helped me preserver in the efforts. And I would be remiss not to note my own staff, Kevin Massey and Govinda Evasarala, who were absolutely invaluable in the whole effort.

Let me begin with an overview. I'm going to first set the stage, then talk about the domestic resources available in the region for energy use, talk about the problems with production and the generation of electricity of various resources, look at the whole issue of energy imports for the various countries and the security concerns, some of those options raised, and then we'll kind of look forward to what may happen in the future.

In almost all these countries it's fair to say that the biggest problem confronting these nations is the supply and imbalance of energy. These are attributable largely to obviously still very high levels of population growth, urbanization at a level that you can hardly believe. Just to give you an idea, there's a statistic frequently cited that in India alone that 85 percent of the commercial buildings that will exist by 2035 have not even begun construction. Imagine with the electricity loads and the potential for air-conditioning loads what that portends alone in just one sector of the energy economy.

Obviously fast economic growth, we all think of India as a miracle in terms of how fast it's growing, but in reality even countries we think of as mired in difficulties, such as Pakistan and Bangladesh or Nepal. The reality is still seeing growth in excess of 4 to 5 percent per annum. And so even in those less fortunate countries economically speaking, there's upward pressure on price.

We also see the necessity of bringing electricity to the masses. The reality is we still have hundreds of millions of people in the region that have no access to electricity, and by "no access" I mean, no light bulb, no fan, nothing. And so when you're talking about the spurt in the modern economy, which is growing so quickly, and meeting the electricity demand for that, you also have to think about how do we bring these other people into the 21st century.

And we also have reasons for downward pressures on supply and one of the biggest problems we have is skewed pricing signals. In almost every one of these countries energy in some form is subsidized. In many states in India, for example, electricity for farmers is literally free and surprise, surprise, when a commodity is free, demand shoots through the roof, and this is exacerbating the situation.

And finally we have major issues relating to governance and bureaucracy, bureaucracies that simply move too fast, bureaucracies with often different organizations of the governments having diverse mandates or diverse special interests, which makes it difficult to effect a national or a domestic energy policy.

And yet, South Asia has major domestic resources. We are increasingly realizing that gas, while perhaps not as great in the existing fields as we had thought, there's still a great optimism for gas in India. India is believed to have something in the neighborhood of 63 trillion cubic feet of shale gas, but there's still great hope for conventional gas. Pakistan is an anomaly because Pakistan was one of the first countries to embark on a major utilization of gas going back after the discovery of the

giant Sui field in the 1950s to have a gas in hydro-based economy. But here, again, because of the poor pricing of gas both at the retail level and at the well head, there is absolutely no incentive for people to look for natural gas.

And yet, anyone you talk to in the petroleum industry whose company has been involved in Pakistan looking for energy will tell you that it is a gas-prone area and especially, and unfortunately, in the tribal areas of Balochistan and perhaps offshore the Makran Coast. So, again, that adds to an unwillingness to take high risk.

Pakistan was also one of the first countries to make a major commitment to diversifying its automobile fleet, to compress natural gas. It might surprise many of you in the country -- in the meeting to understand that Pakistan is the largest user of CNG in an automobile fleet of any country in the world.

We have voluminous volumes of coal. India is, again, a very strange situation. Lots of coal in the country and yet currently we have a huge number of coal-fired stations that have no more than a one-day supply of coal. And this is primarily because of poor infrastructure. Their railroad system is woefully inadequate. It also has been affected by some very adverse floods recently, but it's basically a lack of infrastructure so a coal-rich country such as India is now importing a great deal of its coal, which doesn't make a lot of sense. And coal is very critical in India because it's also a huge generator of employment and particularly in some very important political states that any government that comes out against a coal policy runs the risk, at the center, of losing dramatically at the poll.

Pakistan, in the southeast corner of the country, almost adjoining the Indian and -- heart of the Indian industrial nexus in Gujarat, Pakistan, in this area called the Thar Desert, has potentially some of the largest coal resources in the world.

All kinds of reasons you can be cynical about their development: it's in an area where there is literally no infrastructure, no roads, no airports, lack of water, you

name it. And yet you're sitting on a resource that is absolutely huge. And as I argue in my book, it's tragic when you've got this huge demand literally sitting adjoining where these fields are in India, that India and Pakistan have not been able to move beyond their political differences and find a way to do that.

I have proposed for a long time that there could be a win-win situation if Pakistan were able to develop the Thar and sell the power to India, and in turn India could build some plants of various kinds. They could be renewable, they could be nuclear, they could be whatever in the Indian part of the Punjab, and export power into the Pakistani part of the Punjab, which is absolutely suffering, all the industry there, for lack of basic electricity.

Hydropower. One of the great tragedies of the region, and one that I literally spent 10 years representing the government of Nepal on funded by various donor agencies, is the fact that in Nepal you have a country that the total installed capacity -- electric capacity -- in the country is around 600 megawatts. That's the total. That's the size of one coal plant in the United States. And yet, they sit there with 83,000 megawatts of potential hydroelectric capacity, which most observers would argue, at least in something in the low 40s, 42-, 43,000 megawatts, is commercially developable.

For 10 years our team argued that because building these dams would dislodge farmers and poor people from where they live in Nepal, the fact that India would gain major irrigation and downstream flood control benefits, that these ought to be considerations in the electricity tariff that would be negotiated on a particular project, and for 10 years I heard respective Indian power ministers and secretaries say no. Not, no, we will negotiate, but no. To be fair, to the Indian side, in the 10 years I worked there, I had no less than 14 secretaries of energy on the Nepali side, so that every time we would get the minister up to speed on what we were trying to do with trading with India, the government would fall and we'd have a new person we'd have to bring up to speed.

And finally, Bhutan. Bhutan is a great success story, has very high levels of trade for the size of the Bhutanese economy with India. And to just give you an idea, when the first hydro deal went into effect it had a dramatic increase, we'll see in a minute, on the Bhutan GDP.

And finally, there is a great potential for renewable energy, particularly in off-grid applications.

Let's turn quickly to the problems with domestic production. In terms of natural gas, we have the reality that pipeline networks are still not well connected, and this creates major problems with getting access to land for pipeline problems. Just recently, GAIL, the Indian company that builds the pipeline situation, has announced that many of its proposed extensions of the pipeline network will have to be delayed because of local conflicts with the citizens who are in the right of way.

Ron Somers may want to say more about land title rights because he, as a developer, has firsthand experience with that and is perhaps not as jaundiced as I am about how big a problem it is.

We have -- in many parts of the country we have murky land title rights. You don't even know who owns the land. So you come in as a developer of electricity line or of a gas pipeline, who do you talk to? Cairn Energy told us an incredible story of building a relatively small pipeline but they had to deal with something like 2- to 300 villages, village leaders, different state governments. Remarkably they got the deal done, but it's not easy.

We have the whole problem of pricing reform, as I mentioned, that at the well head, prices have to be right to develop oil and natural gas particularly or there's no incentive for people to go in.

And we have disputes between state and federal government over royalty payments. This has been particularly pronounced in Balochistan where for many

years, I would argue, the insurgency in Balochistan has waxed and waned in direct proportion to whether Islamabad treated the government in Balochistan decently or not, and most of the time the answer was not.

In the electricity sector we still have inefficient grids that can't move power, so we often have a situation where a brand new power plant actually comes into production, but there's no way to move the power to where the demand is. We have massive investment needs. What India alone needs to spend in all its energy sector infrastructure over the next 10 to 20 years tops close to a trillion dollars. Where's that money going to come from?

We've had privatization, which has, for the most part, not worked all that well, even after years of effort to get the right laws and regulations into effect. We have, as I mentioned, transportation and quality issues relating to domestic coal. I didn't say that, but the other problem in India particularly -- well, all the countries that have coal -- Pakistan, India, Bangladesh -- that coal is a very poor quality for the most part.

Just to give you one anecdote, in the state of Bihar, the railroad infrastructure is so poor that 160-unit car trains get loaded with coal and it can only move along the tracks at about 5 miles an hour. Little kids climb on the train, steal the coal, and throw it off to their relatives. At the same time, the coal is so subject to spontaneous combustion that it ignites, so that by the time the 160-unit train gets to Delhi, you have about 40 percent of the original amount of coal put on. Until you see one of these trains you just can't believe it.

We have problems with distributing, as I mentioned, natural gas. And we have very serious problems of energy subsidies that lead to skewed consumption and the massive need in all the countries for major bureaucratic reform.

South Asian nations will have to bridge the supply-demand gap, I believe, through imports of various fuels. This slide is showing India's attempts to import

more and more liquefied natural gas. They have a number of terminals already and are building more, but the natural gas -- the LNG market in Asia is getting increasingly tight. Particularly after the Fukushima disaster, Japan is now looking for more LNG. So it's not at all clear that LNG is going to be a very stable commodity in terms of price, and it will undoubtedly be a very competitive market down the road.

This is a slide that shows some of the other potential pipeline routes, rather than LNG routes, that have been talked about, but all are plagued with uncertainty. Many of you may be aware of the famous attempt for what we call the TAPI -- Turkmenistan, Afghanistan, Pakistan, India -- potential. This would draw on the great gas resources of Turkmenistan and move them to the subcontinent, but the only problem is you have to transit Afghanistan and you have to transit some very dangerous regions of Pakistan. The United States Government has waxed and waned on its attitude towards this. Right now there's a very pro attitude towards the TAPI project.

The other problem has been major disputes between the various countries that would be involved over the price of natural gas transit. You have problems that the Indians don't want part of their gas supply to be dependent on Pakistan, who they continue, for political reasons, not to trust, and so India dithers here and there. And while India is dithering, I will warn us right now, the Chinese have made it clear: India drops out of the project, they will be there and they will be there very soon, and we'll talk about another effort where India lost a great potential market to the Chinese for much the same reason.

We then have an even more controversial pipeline called the IPI, which is Iran, Pakistan, India. The IPI would bring gas from Iran, across Pakistan, again through some very dangerous territory in Balochistan, and on to India. Many of the same problems from the Indian perspective exist towards this pipeline.

The United States Government has been vigorously opposed to this

pipeline for many years as our containment of Iran strategy. In the book I take a very forceful stance, which is controversial, that I think that's a very shortsighted point of view, that this pipeline will be in the energy infrastructure in Pakistan particularly for at least the next 50 years. And I try to argue that Pakistan, if all the terrorists and all the dissidents and all the people we see as hostile to our interests were to disappear tomorrow, Pakistan would remain a failed state because of the lack of energy. You now have most of the Pakistani cities don't have power anywhere from 12 to 18 hours a day. Textile production, which is lost if you have any shortage of electricity during a run, is collapsing. Thousands of people are being thrown out of work giving further fodder to the Taliban. So, that is another pipeline. And, again, the Chinese have made clear if India drops out, they will -- it sounds bizarre, but they say they'll come in and join the pipeline and somehow get it north into China across some of the highest mountains in the world.

We talked about electricity, hydroelectric potential from Nepal particularly. It's fascinating, given the potential that I outlined for you, that any long-term electricity plan you look at for India projecting power needs out 10 to 20 years has no mention of Nepal, none. And yet the Indians have to realize that Nepal teeters on being a failed state. And outside tourism, Nepal has no resource other than hydroelectricity that will generate the revenue allowing them to improve their schools, their roads, and all other basic infrastructure.

India, I believe, should look for electricity imports from Bangladesh and Pakistan. Obviously, I mentioned the prospects for Thar coal, but this is obviously very controversial, although Steve Cohen may talk about recently some prospects for enhanced trade between India and Pakistan are on the table and those include trade in electricity.

Bangladesh, there's been attempts by Tata and others to build power plants in Bangladesh and sell power to the Indians, but they have met local opposition

over land acquisition as well as political problems between Bangladesh and India.

I would argue, in all these opportunities that exist, the central element that has been lacking by all the counties is political will. There is simply no reason these things can't be done, as the Bhutan example so dramatically shows, if the political will is there by all parties to do it.

We have a couple other pipelines that I just want to mention that have been very controversial, one is to move natural gas from Myanmar to India. That got mired down because it would have to transit Bangladesh, and that got mired down because the government of Bangladesh allowed for trade concessions with India that would allow Nepalese and Bhutanese goods to cross the so-called little narrow neck of Northern India, and the chicken neck, to remove some tariff barriers that they thought would increase the flow of goods through Bangladeshi ports. Once again the Indians have said no, no, no, and so that has been a problematic root. There's also been tensions for other political reasons.

And then when Myanmar discovered gas, the Indian companies were the first out there, actually negotiated some of the best leases for gas off the coast of Myanmar, but then they had to say how do we get it to India? And once again the prospects of crossing Bangladesh became a major political obstacle. And so the Indians decide, well, maybe we should build a pipeline up through the states in Northeastern India, think of a map, that are kind of on the other side of Bangladesh. The only problem is to build pipelines up there not only would escalate the cost dramatically, but it passes through some of the areas that have some of the heaviest rainfall in the world, are mountainous, and to put gas pipelines through areas that have 330 inches of rain a year in mountainous territory, probably not a good idea. And it would also pass through territory that has at least five major insurgencies against the central government of India in this region.

Governments need to take bold steps towards energy access. As I mentioned, this shows you the statistics, over 600 million people that have no electricity. And unless we can get electricity to these impoverished people, there is no prospect for the Indian economic miracle to continue. It's going to be very difficult, and power shortages are feeding unrest in the region. We've already seen major riots over lack of power in Pakistan and Bangladesh.

I'll go through this quickly. This is just a slide to show you how oil import-dependent this countries are, which of course have devastating impacts on the balance of payments of each country.

So, going forward, what do we need to do? All these countries cannot develop the energy they wish to have if they don't take on the difficult issue of energy pricing. You simply cannot provide energy to as many people as get it and have any prospect of getting developers coming in and looking to help you solve this problem.

This is not to argue that there shouldn't be lifeline rates for the poorest of the poor, but it's not the poorest of the poor who are the problem. The problem are rich landlords, agricultural interests, government bureaucracies that do not pay their energy bills, the military, which does not pay its energy bills, and this is true across the board in all these countries.

We need institutions and regulatory reform. We don't need, you know, almost a dozen entities in India that deal with energy policy in a vacuum, this energy source, that energy source, we need some place where effective coordinated policy happens.

We need regional cooperation on energy trade. We've talked about pipelines. And we need to build on resource complementarities, particularly in the power sector where seasonal variations may allow the transfer of power from one country to the other depending on what the load is at a given time.

We need to expect South Asia to depend on LNG for imports. We need more interconnections between India and Bhutan, and we need to input substantially more coal for electricity. This is the biggest problem. Nobody concerned about climate change wants to see India, Pakistan, or Bangladesh use more coal, but the reality is, they're going to use more coal. And so the best thing, I think, we can hope for is to help them develop clean coal technology, hopefully down the road carbon capture and sequestration. But to think just because the world is concerned about climate change that India alone is going to stop using coal, I think, is a bit naïve.

So, let me cut off there and we'll move to the discussion. (Applause)

MR. INDYK: Thank you very much, Charlie. That's a provocative presentation and it makes for provocative reading.

To join in the conversation about Charlie's book, we're delighted to welcome to Brookings Ron Somers. Ron is the president of the U.S.-India Business Council, which is the premier business advocacy organization in the U.S.-India relationship committed to strengthening commercial ties between the two countries and deepening two-way trade.

Previously, Ron was the Unocal Corporation's chief executive in India developing commercial opportunities in the emerging energy market there, and before that he was managing director for India on behalf of Cogentrix Energy, tasked with setting up a 1,000-megawatt electric power project in the Indian state of Karnataka. He, during that time in India, served on the board of directors of the Hindustan Oil Exploration Company, which was India's first private sector oil corporation.

Joining us with Ron and Charlie is Steve Cohen, our original South Asia fellow here at Brookings, a great expert in India and Pakistan, in particular. He's a senior fellow here in the 21st Century Defense Initiative, and is helping us stand up the India Initiative, soon to be announced, together with our Brookings Center in New Delhi.

Steve is the author of at least 14 books, the last of which was focused on the Indian military. It was called *Arming Without Aiming: India Modernizes Its Military*. His next book, which is in production now, is on Pakistan's futures, which is very encouraging news that Pakistan has a future, but having read the manuscript, it's not exactly -- the good news doesn't go much beyond that, but it will be a very important and timely study of Pakistan's problems.

What we're going to do is have a bit of a conversation between these three experts up here and then we'll take your questions. I wanted to start with Ron. Given your expertise in India and the many problems that Charlie has outlined here, in terms of pricing and infrastructure and regulations, I wonder how you react to his presentation and how you think India can cope with these kinds of problems.

MR. SOMERS: Wow. Well, first let me say thank you for having me here at Brookings. And, Charlie, a tour de force, that was a tremendous presentation. And it's my honor to be on the dais with Steve Cohen, who I worked closely with during the U.S.-India Civil Nuclear Initiative. I'd also like to acknowledge Minister Sento from the Indian embassy and Naveen Shavistiva, who are here from the Indian embassy, and my colleague Matt Shruhan from U.S.-India Business Council.

Let me start by putting a little point on the demand picture that Charlie painted in India, just to give us a sense of the magnitude of challenge and then how do we spin that into an opportunity.

Everyone in this room consumes about 14,000 kilowatt-hours per person per year. Everyone in this room. In India, it's 600 kilowatt hours per person per year. Okay? So, 14,000 versus 600. Compound that with the fact that you've got an emerging middle class, 300 million people, equivalent to the entire population of the United States. Take a look at the snapshot of 10 million cell phones being issued every month in India, so you have a growing IT technology-driven middle class and, therefore, greater

consumption of electricity. And then compound that and put this flashcard over it, which is 54 percent of the population, of 1.2 billion people in India are under the age of 25. So, you have a young population that's embracing technology that aspires to be part of a growing middle class. This middle class is going to be at least 600 million people by the mid-century, and you have this minor consumption of electricity per capita, 600 kilowatt hours per person per year, and that is going to grow exponentially, as Charlie has pointed out.

How do you get there? Fourteen thousand kilowatt hours per person per year here in the United States, 600 kilowatt hours per person per year in India, and frankly, in this entire region that Charlie just talked about -- Bangladesh, Pakistan, Nepal -- even less in those countries. India at 600- or 800 kilowatt hours per person per year.

So, all the generation that we can possibly produce is going to be required. And then here's the biggest challenge: how do you pay for it all? Because when you get to the numbers, India has an installed capacity of 150-, 160,000 megawatts of power and they need, tomorrow, 350,000 more megawatts of power added to that 150,000, so what took them 63 years of independence to generate at 150,000. We now need to double, treble, to 350,000 more in the next 5 years, and every 1,000 megawatts is a billion dollars. Every 1,000 megawatts, roughly, is a billion dollars. So, $350 billion at least for generation. And then Charlie mentioned transmission, add another $150 billion for generation, and then you have the distribution system. And all of this needs to be paid for. And I would argue that the Indian financial institutions can only tackle a fraction of that amount of installation and financing of new projects. And so much of this financing has to be mobilized through what you and I would call project non-recourse finance. It's got to be generated from the private sector and each project has to be financially viable.

Charlie mentioned that the power is given away for free to the farmers in

many Indian states; if not for free, at tremendously subsidized rates, so your power purchasers are nonviable as a creditworthy entity. And so the challenge is enormous here. How do you mobilize the resources of finance to put the 350,000 megawatts -- and this is just in India -- online, and then why do you need to do this? You need to continue to grow the Indian economy at 8 percent, 9 percent GDP, because if you don't grow the economy at 8 percent, 9 percent GDP, your young population doesn't have the jobs and the opportunity, and then democracy begins to break down.

So, I share Charlie's concern about the daunting challenge and of course what we all need to be thinking about is how now do we get more American companies, more private sector involvement, in this entire energy activity. And then I endorse fully the concept of regional energy cooperation. I mean, every one of these pipelines, every one of these transmission lines, every one of these cooperation measures are, frankly, peacemaking measures, it stabilizes the region.

So, let me end there by saying daunting challenge, major opportunity. How do we get involved in it? And I look forward to joining this conversation. Thank you.

MR. INDYK: We'll come back to precisely those questions in a moment. Steve, Charlie highlighted the way in which tensions and conflict between the states within the South Asia region is complicating the challenge of meeting the energy needs of a growing part of the world. Enlighten us on your views on that and what can be done about it to create an environment in which this challenge can be met.

MR. COHEN: Well, the book sits at the intersection of South Asia and energy and how they interact and it will have a long shelf life because South Asia is not going to go and energy problems aren't going to go away. So, I think this is going to be a book, Charlie, that's going to be used as a reference book for at least 10 years. I don't see anybody able to write a better book.

With regard to your question, Martin, I think you're the expert on the

Middle East. Imagine the Middle East transposed to South Asia. The same antagonisms, the same deep prejudices, the same blind unwillingness to cooperate, the belief that I can suffer more than you can suffer, which keeps the system going, that operates between India and Pakistan, but it doesn't operate between India and the other smaller countries -- Nepal, Bangladesh, and Sri Lanka, and Bhutan. There you have another attitude, in a sense, a dominant India unwilling or unable to make concessions to smaller countries, in part because it fears the intrusion of China.

Indian strategists now talk about China having entered South Asia first through Pakistan but also through Sri Lanka and Bangladesh, and the Indians are nervous about competition with China in these smaller countries, so they haven't come around to the idea officially that you gain more by being generous and magnanimous, rather than holding out and bargaining toughly with the Nepalese.

So, I think it's a self-perpetuating -- it's a problem that's deeply embedded in the psychology of the leaders of both sides and I don't see it going away. The book I'm now writing is going to be called *Shooting for a Century: The India-Pakistan Conflict Over 100 Years.*

MR. INDYK: It's a cricket book.

MR. COHEN: So, yeah, there's a cricket analogy. So, come back in two years, I'll have a book launch for that book, but I think this is going to last indefinitely.

There are some signs of India relaxing around the edges, but in practical terms, no, they're not really budging. They need to make the big generous gestures, which will win over their neighbors, and I don't see that happening with Pakistan. It could happen with the smaller states where there's very little to lose, in fact, but they're reluctant to do that, and I think the book is filled with examples of Indian inability to make concessions which would benefit India in the long-run by easing paranoia in the smaller states.

MR. INDYK: Just to focus a little bit more on China in this picture, and maybe, Charlie, you want to come back to it as well, because surely that is going to change the Indian attitude. Nothing concentrates the mind more than the threat of, in this case, of another power coming in and competing.

MR. COHEN: Well, the Indians see themselves in a competition with China all through Southeast Asia, and the U.S. Government has now invented a new region. We're abandoning some of the Cold War era studies' concepts. The new region is called Indo-Pacific Region, which coincides exactly with India's strategic division of itself, but the Indians cannot bring themselves to -- it's hard for them to imagine themselves competing effectively with China in South Asia.

When the British left South Asia, they left an integrated region dominated and protected by the British Navy and the old Indian Army. The Indians, in a sense, have allowed, by not accommodating with Pakistan over Kashmir and other issues, allowed the Chinese to enter into the region. Once China acquired the political military capabilities, now economic capabilities, to operate in South Asia. So, the Chinese are everywhere in South Asia. They're building ports in Sri Lanka, they're building ports in Pakistan, they're supplying the navies and the militaries of a number of countries. So Jaswant Singh, the former defense and foreign minister of India said, you know, we've lost our strategic influence in South Asia to China. And the Chinese are competing effectively in South Asia with India, and the energy arena is one area of the competition that's there.

Indians can't quite compete in reverse in Taiwan and Northeast Asia. They're developing capabilities, but that's part of the strategy. So, I think the Chinese are embedded. The Chinese are, in fact, a South Asian state.

Our policy, the U.S. policy, is, in a sense, to half support India in this larger, long-range competition with China, strategic competition with China. That's why we've invented the region called the Indo-Pacific Region, and we now call officially, the

U.S. Government -- I checked this out yesterday -- calls South Asia the Indian Subcontinent, and this is by design. It's called the Indian Subcontinent, so you're going to have to rename your book, Charlie. The Indian Subcontinent, and I think that's designed to demonstrate that we support India, perhaps over Pakistan, certainly over China, in a subtle way, but whether we're going to back this up with anything substantial, I just don't know.

MR. INDYK: Ron, did you want to come in on the China question?

MR. SOMERS: Yeah, a couple of points there. A couple of wins, recently, of note, India's, I think, really diplomatic success with Myanmar recently. I have been told for a dozen years or more that the reason, I mean, India has to be engaged with Myanmar is that as soon as they would leave, the Chinese would move in, and that's on the other side of Bangladesh near the Seven Sister Northeastern States. You've now seen the leadership of Myanmar move towards India, and I think that's an extraordinary tipping of -- an indicator that everybody's looking to that muscularity to the north, China, and India is, I think, grabbing this opportunity to their advantage.

You've seen India recently, in the last few days, start moving very quickly towards moving with Japan, and this relates to the Spratly Islands and the potential of oil and gas that China is looking at as well. You can appreciate why India is so concerned about American withdrawal from Afghanistan. I mean, in the end, that's going to leave India very vulnerable with China to the north as well. And then when you think about the Iran-Pakistan-India pipeline that Charlie mentioned, again, another peace pipeline if we can ever even think or imagine that it could be implemented, in the end, India has this extraordinary civilizational relationship with Iran. And how does India get to Pakistan? It's via Iran -- I mean, to Afghanistan is via Iran and, therefore -- and Iran, for India, is a major energy source, in this case LNG, but one day possibly a pipeline. In the end you've got India looking to the north and understanding that as its economy is growing,

it's going to need energy from every one of these regions: to the north, Nepal; to the east, Myanmar; to the west, Thar Desert and Pakistan, Afghanistan, TAPI, Iran-Pakistan-India pipeline. I mean, all of this is, like, how do we flex forcefully enough without triggering a flash point with our northern muscular neighbors, China?

It's going to be very, very interesting as we watch India emerge.

MR. INDYK: But the implication is that India has a strong interest now in -- this is really a question. Is the implication that, from all of this, that India has a strong interest in finding ways to resolve some of the longstanding tensions with some of these smaller neighbors? Don't you actually see this underway in various places, Bangladesh dealing with Pakistan?

MR. SOMERS: You know, I have to give -- I have to say, I'm very familiar with the Bangladesh-to-India gas pipeline and, therefore, the Myanmar-Bangladesh-to-India gas pipeline because Unocal Corporation actually discovered gas in Myanmar and we ended up putting a pipeline to Bangkok called the Yadana pipeline, just because that was the only real direction that we could flow the gas. In the end, Charlie mentioned how Gas Authority of India has discovered gas up in Myanmar and how there's a possibility of coming either through the sea route to India or through Bangladesh.

In the end, the Indians were always in favor of a Bangladesh-to-India gas pipeline. It was Bangladesh that was unwilling to let their gas be exported and they were afraid of even a transit pipeline through Bangladesh for fear that -- from Myanmar, for fear that some of that gas would end up in India. So, it was the Bangladeshis that were problematic.

India has developed the first private sector power line to Bhutan. That's a major peace initiative. It has benefitted both countries dramatically. That is a private sector power line financed by Tata, I think a real kudos to the Tata Group.

Nepal, the surplus hydroelectricity in Nepal, what a shame that we can't tap that. The tragedy there is that you have major dam construction that would be required by Nepal, and then you have states to the north of India that are not really financially viable from an electricity board standpoint to receive that power. So, again, payment security becomes a major issue.

The gas discovery in the Bay of Bengal, for India, by the Reliance Corporation, the biggest gas discovery in the world in 2004. That pipeline now runs from Kakinada in Andhra Pradesh up to Gujarat, the tip of Gujarat. That transnational pipeline for India will change the economy of the country.

So, I've seen a maturity in the Indian energy policy that has been quite impressive, but yet, as we mentioned earlier, 600 kilowatt hours per person per year compared to the 14,000 that we're consuming, we've got a long way to travel. And meanwhile, China is flexing muscles to the north.

MR. INDYK: Let's focus on Pakistan, Steve, for a moment. Charlie laid out a pretty depressing picture of the way in which problems in the energy sector are really compounding the problems in the political and security sectors to kind of give greater impetus to this sense of a failing state. Is that something that you also see?

MR. COHEN: Yeah, I think that the Pakistanis have been attempting to do alchemy, that is transform one substance into another, and they've transformed Kashmir into water. Pretty hard to do, but they've done it. All the emotions and passions that they attach to Kashmir are now attached to water. So, this is led by the army, in fact, the organization in Pakistan which you would assume would have the long-range strategic perspective, and they've started treating water as a deeply emotional issue. This is our water and the Hindus are intercepting it. They're going to drown us or they're going to flood us. And the Indians are doing this on the upper reaches of the water systems, which are of concern, but there's a treaty to deal with this. Charlie discusses

this in the book.

But the Pakistanis approach this in a way in which passion and emotion outweigh any other consideration, so I think it's politically difficult for the Pakistanis not to do an agreement with India. In fact, the one question I have for Charlie and for Ron is, would it be easier for a private corporation to do an energy deal than a government? Can they get away and under the radar in doing interesting energy deals?

MR. SOMERS: But before Charlie jumps in on that one, allow me to just say in India's favor, I mean, to his own peril, the prime minister of India has been reaching out constantly to Pakistan, I mean, to his own political peril, and keep in mind that 26-11-2008 is just three years in memory. The fact that India continues to reach out, understanding that they need to embrace the civilian government of Pakistan, that they do not want to see that turning into a black hole, I think, is admirable. Number one, it showed tremendous restraint that they didn't go in after 26-11 and they continue to try to engage Pakistan on a number of different commercial levels hoping that they can bring Pakistan closer to a free economy fold.

MR. COHEN: Yeah, I think that he's one of the very few people willing to do this. That's the problem, the prime minister.

MR. EBINGER: Well, he is the prime minister of the nation.

MR. COHEN: Well --

MR. EBINGER: Go ahead.

MR. COHEN: No.

MR. INDYK: Charlie?

MR. EBINGER: I think it's very difficult. Private sector opportunities in India, I think, there are a lot of opportunities, but in Pakistan I think it's very, very difficult given the makeup of the government and the corruption and the bureaucracy to get all the approval you would need and have a deal that was commercial viable at the end.

I led the team that did the whole privatization of the Pakistan power sector, and, you know, thinking along with Mr. Beg, thinking you have a good policy in effect, but then you start seeing we've got a lot of companies coming in and it was kind of, you know, first in, you got your project evaluated. And all of the sudden, as various Pakistani government officials come to realize there are some side deals they can make on this, you get projects jumping up the queue. And what was, I think, a very viable policy and on paper an excellent policy, just descended into complete and utter chaos for anybody with private sector concerns. And I don't think that environment has changed one iota to this day. In some ways it may be worse because I don't think the civilian government now has any real power to do anything if the military doesn't get a piece of the action.

MR. SOMERS: You know, interesting on that point is that I remember having a conversation with Mukesh Ambani after the discovery in the Bay of Bengal of the Krishna-Godavari gas --

MR. INDYK: Not everybody knows who Mukesh Ambani --

MR. SOMERS: The Reliance Corporation, India's largest private sector corporation, 35 years old and very impressive private sector company in India. The largest gas discovery in the world in 2004, and we're talking 30 trillion cubic feet of proven probably reserves, and unfortunately, for the gas discovery in the Bay of Bengal, it's little pockets. Now, the good news is that wherever there's one elephant, there are other elephants, so that means that there's a trend of gas discoveries yet to be made in the Bay of Bengal. The Bay of Bengal will be the next North Sea.

But I asked Mukesh, are you opposed to the -- Mukesh Ambani being Reliance, "Are you opposed to the Iran-Pakistan-India gas pipeline?" And he was favorably inclined towards it. I was surprised because I thought that there would be a price competition for his gas in the Bay of Bengal, which was obviously something he

wanted to bring into the country at a certain price level, and that would be competing against the price of gas coming in from Iran, Pakistan, into India.

He was favorably inclined. So, again, it's like India needs energy. How do you get as much energy into the country? In the end Iran gas would come into India at about $6 an MCF. The Bengal gas discovery of Krishna-Godavari is about $4 an MCF. So in a way it would almost pull the price of Bengal gas up higher so that there would be more revenues coming in to the Reliance coffers, but in the end he was taking a holistic view, as private sector, saying we need all the energy we can get from every possible source, and that would be his vision for the country.

MR. INDYK: Let's go to your questions. I'll ask you to wait for the microphone, please identify yourself, and please ask a question.

SPEAKER: Thank you. (inaudible), Carnegie Endowment. The last discussion focused a little bit on the larger political picture. In your very fascinating presentation you sort of painted a very daunting picture of multiple challenges that would need to be tackled simultaneously. I would like to come back to the question of domestic structural reform. The closing words were the lack of political will and we know that we have seen in India some privatization and generation and, as you just said, some even in transmission, but back at the tap it's still all government who runs the show.

And right now it's industry that subsidizes both agriculture and private consumer. And as we know, any government needs a rule vote. In your many conversations with states or with the union government, have you sensed any political will to change that scenario? Thank you.

MR. EBINGER: I think starting with India, I think all you need to look at is despite the very fine piece of legislation, the electricity reforms that were instituted in 2003, which really opened up the transmission system, opened up, you know, the distribution system in theory, you've really only had two private -- new private sector

opportunities: one in Orissa and one in Delhi, in their distribution system. So, despite the fanfare, there are still just too many obstacles relating to licenses, all kinds of issues, and they just take too long. Even if they occur, they take -- I think Ron the other day was saying there was still, what, 147 pieces of --

MR. SOMERS: Permits.

MR. EBINGER: -- permits that you need -- thank you -- permits that you need to do a significant project. And I think the other problem is that you've got too many institutions dealing with the energy sector without any coordination. In theory, there are bodies to do the coordination, but they don't seem to occur very effectively. And you also -- the most astounding thing to me about India in particular is you have government ministers that don't even start from the same basic data. So, you'll get the planning commission using one set of data and somebody else, the energy -- the power minister using another source of data, and you never know.

The craziest thing of all is that every 5-year plan falls short by about 40 percent of its goals, and yet the next 5-year plan is predicated as if it was made. And, you know, after three or four five-year plans, these numbers get just totally out of whack, so it's hard to know what the real situation is.

MR. INDYK: Ron, do you want to --

MR. SOMERS: Just a quick point on that is -- to your point, I think that if I were to put my finger on one issue that we need to be focusing on that would be very helpful for all of these different countries, and particularly India, is the privatization of the urban distribution setups. I don't even think that we can begin to think about rural electricity at this point. I mean, that's a big political challenge. That is the vote bank of all these elected leaders, but privatizing the urban centers where you have the middle class now very much entrenched, where all the young people of the country are migrating to. When we see Calcutta Electric Supply Company, when we see Bombay Suburban, which

is now Reliance Energy, when you see Delhi, which is privatized between Tata on one side and Reliance on the other, and we've seen commercial losses shrink from as high as 40 percent down now to the 19, 17 percent range, the model is there, where you've privatized your urban distribution, you're creating a creditworthy source of revenue from which you can then project finance new generation, new transmission, and, in fact, improved, smart distribution.

So, that's the model. Now, how do we keep it going? You've got the concurrent subject problem, you've got union and state problem where you've got the union government making the rules, the states doing the implementation -- big disjunct there -- but in the end I think you're going to see different chief ministers with different leadership skills start privatizing their distribution of their urban centers. That's going to make creditworthy entities enabling the development of new generation. Reliable power will be self-fulfilling.

MR. INDYK: Yes, please?

MS. BEG: Thank you. Noreen Beg, the World Bank. First of all, I would like to thank Mr. Ebinger for sharing the dedication to his book with Mrs. Ebinger. It's clear from your very powerful presentation not only your strong intellectual rigor and knowledge of the area, but your passion for the area and your commitment to development throughout the region. This is why you are held in such respect and affection by both past and present decision makers in the region.

Also a question, do you think that in any of the countries in the region renewable energy can play a significant role -- wind, solar, IMS, small hydro? And do you think off-grid renewable energy would be a viable means to perhaps combat political turbulence in Pakistan, Nepal, areas of India? Is that something realistic? Thank you.

MR. INDYK: Thank you for that. It's a good question. Charlie?

MR. EBINGER: I think -- Noreen, I think renewable energy is the future

of the entire region. We already -- as you know, in Pakistan there's some very exciting developments going on with wind down along the Makran Coast, and also from Karachi down to India. There's opportunities for solar. In India we now have -- you know, India is actually selling solar and wind facilities to Africa, so we have Third World transfer-to-transfer, not north-south anymore. Bangladesh has an active program, but somehow it doesn't seem to get that much off the ground.

Clearly, distributed generation at the local level, not connected to the grid, offers a tremendous opportunity for all these countries, and it is happening. The problem, I think, is one of scale that Ron highlighted, the amount of power that needs to be built. So, even though renewables in most of these countries are among the fastest growing energy resources, to begin to be up 10, 15, 20 percent, you're talking about a long haul, and that's the real difficulty. Not that they aren't there, not that it isn't happening today, but you just have such a volume of power that in many applications, except maybe in off-grid areas, it's difficult for these to compete against standard energy sources, particularly when they're subsidized.

So, the biggest -- you know, the best thing that would happen to renewable energy would be if we got rid of all the subsidies and let it compete effectively, because in a lot of locations it would compete effectively.

The other thing in addition to that that we didn't really talk about is the tremendous opportunity for energy efficiency. It still is the low-hanging fruit. I mean, it just astounds me, in Islamabad, a very fast-growing city, you go through the wealthy areas of the city where people are air-conditioning their homes. You know, they cut a hole before they bring the air conditioner. And as a result, the air conditioner is usually smaller than the hole. So, they put the air conditioner in, they start using electricity of that, and it leaks out the side, just kind of puts stuff in, you know, cotton, whatever they have. You know, these are sieves and the demand is going through the roof.

And so there's so much that can be done on efficiency and on renewable energy, but it doesn't -- it's never had the political backing that the bigger hydro projects or nuclear projects or more dramatic projects seem to get attention from the policymakers.

MR. INDYK: Ron, do you want to come in on renewables?

MR. SOMERS: I mean, just one last point on that, and that's payment security. I mean, the great challenge in the rural sector is how do you muster the financial wherewithal in order to enable all the stuff that we need to get done? Solar is clearly an opportunity. India is the fourth largest wind producer, wind developer in the world -- manufacturer in the world. Who would have known that? I mean, India has got a huge wind program, but, again, only 7 percent of the entire overall slice of the whole pie is renewable energy.

And then you get out in the rural sector, how do you finance that? So, again, my -- if I'm India, I'm thinking about how do I get more efficient? That's my first low-hanging fruit. How do I assemble my clusters of creditworthy load, which is my industry? And then I develop new generation that serves that load, that's off-grid, that's going right to those clusters of industry. And then how do you unlock the whole pricing of the fuel issue that Charlie mentioned? No one's going to drill for oil, no one's going to drill for gas, no one's going to lay a new pipeline unless there is a viable pricing. Big issue.

MR. INDYK: Yes, please.

SPEAKER: Ari Benaissa , U.S. Department of Energy. Could you comment on where you think there's opportunity for the U.S. Government to do more to help any of the countries in this region either with -- on the integration side or, I focus specifically on India, within India to meet these challenges?

MR. EBINGER: Well, one thing -- and this will be controversial -- one

thing we do not need the U.S. Government or the World Bank or anybody else to do is any more institutional or policy development because literally millions of dollars -- because I've done most of these projects -- millions of dollars have been spent --

MR. INDYK: So, you're a millionaire?

MR. EBINGER: -- and they have been wasted. I mean, they haven't been effectively implemented mostly across the board. I know Ron would agree with that. But in answer to your question, where we can help is to start doing some real concrete things like where you have congestion on power lines. Sadly, this requires much bigger money than we have traditionally given to these countries. But where you can help are helping with the bottlenecks and the transmission system, I think. I would stay with the high voltage stuff because if you get down to the distribution level, you get into -- it's where it's needed, but you get into political problems that you don't want to get into.

I would encourage -- this will obviate what I just said about no more institutional policy before, but I would support, as AID has done very effectively in India particularly, energy efficiency projects. Those would be the -- and I would push -- again, this is a policy issue, but I would tell them that any aid is conditional on pricing reform, and serious pricing reform and pricing reform now.

MR. INDYK: It really does raise the question, Steve, of the role of government here and what the United States can do in its government-to-government relations to effect government policy. So many of these things come back to government policy on the part of India or Pakistan or any of the other countries. Do you have any answer to that?

MR. COHEN: Yeah, I agree with Charlie that our refusal to allow the Iran pipeline to go through is silly. We're hurting one enemy, but we're also hurting two or three friends. I think the balance of this is to help the friends even though the enemy may

be hurt -- Iran, the hostile state.

But for political reasons we can't do anything which helps Iran in any way. The Indians and the Pakistanis see Iran as part of their region, part of South Asia, whether it's culture or whether it's energy, and why we cannot accommodate this, even though it may help Iran, baffles me.

MR. SOMERS: Could I just jump in? TDA, Trade Development Agency, is underfunded. We need to put more funding together for -- that's feasibility money so American companies can get overseas and help develop some of these projects, Overseas Private Investment Corporation, political risk insurance. For these multicountry pipelines, transmission lines, et cetera, there needs to be somebody standing behind saying that we'll accept some of this political risk. That enables the private sector financing to take place.

Ex-Im Bank. Ex-Im Bank is, again, underfunded. I mean, how do we get the administration to understand that these are the agencies that will drive American exports to these new markets overseas and we've heard the opportunity is huge. So, why are we not focusing more with these three agencies, TDA, OPEC, and Ex-Im?

MR. EBINGER: Very good point. Very good point.

SPEAKER: I'm Yuge Ma from University of Oxford, currently a guest researcher at John Thornton China Center in Brookings. My question follows up to the previous question, it's more concerned about the international finance in the energy sector in South Asia. We know that in 1970s the money from World Bank and USAID established the National Thermal Cooperation in India, which is now the major coal-based generation and leading corporation in energy efficiency in coal now in India. It was hoped to set a model for the EO operated states electricity boards, but the fact is that when the attention and resources are driven to the national sector, the states electricity boards remain the same or even worse. So, my question is, how can the international

finance play a more positive role in building the coordination and cooperation within the energy sector in India and the South Asian region, which is lacking now? Thank you.

MR. EBINGER: That's an excellent question. I don't know whether Ron and Steve would agree with me, but I think the NTPC is one of the best government-owned corporations in the entire region. Obviously it runs quite substantially -- tries to run, to the degree it can, as a private sector enterprise. And it's now, as you undoubtedly know, expanding its outreach even beyond India with plans to build up power plants in both Bangladesh and Sri Lanka.

I think, however, where international finance needs to do more is in the transmission sector. I don't think -- I think the generation sector is -- should, at least, be inherently competitive, if it's allowed to be, and under the 2003 Act, in theory, that should happen.

But the transmission and distribution sectors, which are very difficult, as we've said several times up here, to do politically, that is where the losses are. You still have transmission companies at the state electricity board level you were referring to losing in excess of 40 percent of the power, sometimes some are even higher than that, to both technical losses and to theft. And until -- when you just look at if that could be dropped to an average loss of say 6 percent, which is what a top-quality company like Reliance or Tata might do, just think the kinds of numbers Ron was throwing out that need to be built. If we could improve transmission by 30, 35 percent, that would obviate the need to build so much new generation capacity quite substantially. It wouldn't eliminate it, by any means, given the numbers he's cited, but that is where the money should go, I believe.

MR. INDYK: Ron, do you want to comment on that?

MR. SOMERS: I mean, we have another success story, Power Finance Corporation, which is also a World Bank-funded entity that enabled the establishment

and the development of National Thermal Power Corporation. I think a very interesting point, the Indians have figured out that they need to use the tools of these very powerful central government corporations that run very much like the private sector. I mean, they are as corporatized as you can imagine, running like a true corporation. They are not any longer allocating additional plan money to the various states unless the states pay up their laggard dues that they owe for electric power from the center.

So, there is a discipline that the government of India has now in-built into the plan allocation process where every state each year gets tax revenues given back to them from the central government that's being held back from the center until they pay up their electricity bills.

So, there's a discipline coming into effect. The question I ask is, is it happening quickly enough in order to mobilize the kind of resources that we just discussed at the front end of this discussion? Big, big challenFge.

MR. INDYK: Steve?

MR. COHEN: I think the point should be that it is happening not as fast as we would like, but it is happening. And those of us who have been going to India for the past 30, 40 years -- Charlie, myself -- really, it's a different country. A lot of it is still stuck in the 17th century, even earlier, but some of it's in the 21st century and the states are learning from each other, and the cities, urban areas, are learning from each other. And I've come to the view that you can't tell people what to do. They have to make their own mistakes and when they realize it's unprofitable or not a useful system, they will learn, they will change. And democracy has a way of throwing out the rascals and bringing in new ideas.

So, the process is working, you know, it's working slowly, but obviously not as quickly as we would like it to work.

MR. SOMERS: Could I just be a little bit controversial as well and say

that I -- not the U.S. Government, but the Indian government needs to get ratifying the convention of supplementary compensation, which is limiting the liability in the unlikely event of a civil nuclear accident. I mean, if they could get their liability legislation right, then their civil nuclear program will begin taking off. It will grow from a 3 percent sliver to a much larger piece of the pie, and that means that American and French and Korean and Russian companies will help India develop a very robust civil nuclear program in India. And why is that good? Because nuclear power doesn't generate carbon, and so carbon-free energy is a smart move for India, and they can't do that unless they limit liability to the providers of equipment so that our companies can participate.

MR. INDYK: Yes, please.

MR. GARRISON: Peter Garrison, Headquarters Air Force. Ron, you'd spoken about this tremendous opportunity and I'm just sort of wondering, to what extent is there an effort to enable U.S. companies with some kind of opportunity mapping? I'm imagining some kind of one-stop-shopping, a combination of Google Earth and Craigslist that would show where is the demand, how are -- because I hear that India's not a unified market, each of the states are different. What are we doing if there's going to be more than a trillion-dollar investment in this infrastructure alone, and we know there's that much more in other infrastructure? How are we seeking to enable U.S. companies to take advantage of that opportunity?

MR. SOMERS: Well, I've got to give credit to the agency that introduced me and Charlie, the Agency for International Development. At the outset, 1992, they opened up the India Private Power Initiative, which was exactly this kind of a mapping agency of opportunity for, frankly, American companies, but every country kind of came by that office looking for opportunities. Which states are the green states? Which states are the yellow states? Which states are the red states, the ones you don't want to go to, et cetera? That's not underway anymore and that's unfortunate.

The young lady asked about what could the U.S. -- what could the United States Government do? I mean, we should kind of help our companies a little bit more navigate the challenging landscape of India, and that was an AID program that is no longer in operation.

In the end, now we have to keep our eyes on the private sector. I'm sorry to say that there's only one American company, AES Corporation, that's attempting an independent power project in the state of Chhattisgarh. Charlie mentioned that they own half the distribution system in the state of Orissa. How are they faring? And unfortunately, I have to report that the news is not good. They were given a coal allocation for a 1,500-megawatt power project, and then the environment ministry canceled the coal allocation. They've now got a reallocation of coal, but, my god, this has been on the books and in discussion for more than seven years.

The project that Charlie mentioned in my introduction, that the ambassador mentioned, Cogentrix, it was started in 1992 by GE and Cogentrix. It finally got completed this year, 20 years later.

MR. COHEN: Ron, is it easier for American companies to do business in China or India?

MR. SOMERS: Well, AES would say we've got 5,000 megawatts of installed capacity in China and we've got 500 megawatts of installed capacity in India. There's something wrong with that picture. India is the largest free market democracy. That's Paul Hanrahan saying how do we do better.

Charlie put his finger on it at the outset, 147 clearances to do a power project, and then you have state and central permits, and then governments changing at the center, governments changing at the states, and for an American company to go in and navigate that, it is daunting.

MR. COHEN: That's the democracy techs.

MR. SOMERS: That is the democracy.

MR. COHEN: Techs.

MR. SOMERS: It's a clamorous, noisy democracy.

MR. COHEN: Techs.

MR. INDYK: Charlie, we have to close out the session, so I want to give you a chance for just some concluding remarks if you'd like.

MR. EBINGER: Thank you, Martin. I'd first like to thank you and the panelists for what I think has been a very exciting and engaging discussion. This is obviously a part of the world that the United States has to be engaged in, for obvious reasons. India is a vibrant economy, but what happens in India is going to effect all of its neighbors. And it offers tremendous business opportunities for American companies, as Ron said, if we use some of our institutions to further that along.

On the other hand, I think the United States too often views this region much more in foreign policy terms and foreign policy interests than it necessarily does in terms of financial or business interests, and I think that needs to change. I mean, things like the Iranian pipeline, I think, is a prime example of where the emphasis has been too oriented to foreign policy and not to our other interests in the region.

I personally remain very optimistic about the region. It may not sound that way, but I actually do remain optimistic about the region because at the individual levels, whether you're in Pakistan or India, particularly less so perhaps in Bangladesh, but in Bangladesh as well, at the individual level there are people trying to change the society. There are young entrepreneurs trying to institute the reforms, start new businesses where they're allowed to, and I think in the long run, that press of younger generations, as Ron was saying, is going to demand social change. We see it happening in spades now in India, and they aren't going to be willing to let the old-line bureaucrats get in the way.

So, I would just like to thank you all very much for coming and I would love to chat informally with any of you that can stay around.

MR. INDYK: Steve, Ron, thank you very much for joining us on the panel and informing us with your views. Charlie, congratulations.

MR. EBINGER: Thank you, Martin.

MR. INDYK: You do Brookings proud by presenting an in-depth study that's independent in its conclusions and informs the public policy debate both here and in South Asia and we're grateful to you for that. (Applause)

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