

# Small power plants

## Hope for energy starved Bangladesh

MUHAMMED AZIZ KHAN

**B**ANGLADESH energy sector is afflicted by shortages of gas and electricity, slow economic growth and lack of social welfare. We have ample gas resources, estimates vary from 15 trillion cubic feet (TCF) to 70 TCF. The best transformation of natural gas for Bangladesh is to electricity, which can be applied for maximum value addition. The challenge that we face today is to provide electricity where most of our people live, the villages. It is the villages that the development of our countries depend on.

Bangladesh lacks investment ability and requires foreign investment in infrastructure sector, specially power. As foreign investment pours into the energy sector the challenge is how to pay for them in foreign currency, how to transfer the technology to local companies thereby enabling the indigenous private sector. Paying in US dollars where the revenue is in local currency poses a major risk, knowing that developing countries are susceptible to depreciation in exchange rates. Also, important in a capitalistic or free market economy is the local entrepreneurs, local capital market (stock exchanges) and debt market (banks). To alleviate the apprehension of all these, small power plants hold out hope, as the right solution for Bangladesh and South Asia. In Bangladesh REB's purchase of electricity from small private generators have proved to be most successful.

**Lead time**  
Any day without electricity is a huge loss to our productivity. Time lost and the productivity lost will never return. Small power projects can be implemented within a year as demonstrated by a 100 percent Bangladeshi company, Summit Power Co. for REB. Quite to the contrary a large project typically takes four years. This allows implementation of small power plants to existing demand rather than waiting for years.

**Electricity demand curve of Bangladesh**

The demand of electricity in Bangladesh has a 40 percent difference between peak demand and off peak demand. At 8 pm, at night demand is about 3600 MW, compared to 2160 MW during, say, 3 am at night. Small plants can be shut on and off in tandem with the demand curve. Large power plants on the other hand can not handle this variation in demand, resulting in huge inefficiency. Large power plants can only work as base load plants with continuous operation.

**Less need of transmission**  
Small power plants being situated at the load center does not require transmission lines, vis a vis huge

investments and time necessary for transmission of electricity produced by centralised large power plants. London Economies' report of 1996 estimates cost of transmission system at US\$ 0.55 per mwhr in Bangladesh. Further system loss during transmission is also high, according to Dhaka Electricity Supply Authority (DESA) transmission system loss is 6.5 percent. Maintenance of transmission line is also expensive. These are saved with small power plants.

require huge investment, large projects are implementable typically by multinational companies.

**Sense of belonging**  
Smaller power plants being distributed around the country brings in a sense of belonging to the villagers around the plant and provides a ripple effect on the local economy. This will not only provide impetus to growth but also provide customers encouragement to pay their bills.

**Equal opportunity to local**

**The constitution promises electricity to all the citizens of Bangladesh (Article 16 of the constitution of The People's Republic of Bangladesh), only 30 percent of Bangladesh's population has access to electricity. It is a shame to say we have about 30 TCF gas and our people do not have electricity. Through small power plants we can achieve socially and environmentally sound economic growth providing electricity for all by 2025 if not 2020.**

**Gas grid or power grid**

Government of Bangladesh (GOB) has rightly put emphasis on gas transmission. In our National Energy Policy (NEP), as is being implemented, we see gas network will be extended all over Bangladesh. To our satisfaction gas has now gone west to Sirajganj. As (i) we have a huge reserve of gas (ii) gas transmission is much more economic (iii) all the areas of Bangladesh deserve gas for their various usage and should get gas (iv) there is little or no system loss in gas transmission and (v) less maintenance is necessary for gas transmission lines, we must all hope and believe gas network will be expeditiously implemented all over the country. However large power plants require more electricity transmission capacity and stability at huge cost and expenditure. A parallel electricity transmission network with a gas transmission network is certainly a waste. It will be inappropriate to transfer two easily convertible energy in parallel. A good solution for Bangladesh is to set up small power plants along the gas network. This is also suitable from the socio political economy of Bangladesh. Let us take:

**Enterprise**  
The basic factors of production, land, labour, capital and enterprise. For small projects in Bangladesh, we have the entire aforementioned ingredients available in Bangladesh. A 30 MW power plant would require about US\$ 20 million, for which equity is available within our private sector, debt is available from our banking system. Whereas for the large projects these are not available as they typically

**entrepreneurs**

Infrastructure such as electricity is very sensitive and our governments should provide if not more, equal opportunity to local entrepreneurs to get involved in this sector. Unfortunately, today the bidding process followed by government of Bangladesh not only supports foreign companies but often effectively bars local companies from participation in the electricity sector. For example GOB discounts prices received over a period of time at 12 percent whether the offer is in taka or in US dollars. This is unjustified as taka interest rates are 12 percent vs 5 percent for dollar. In our country, US dollar also appreciates by about 7 percent per annum. These should be considered in the evaluation process of a tender.

**Recent GOB initiative for 30 MW power plants**

Small power plants with appropriate bidding process can provide opportunity to local entrepreneurs and provide benefit to GOB by making the cost of electricity affordable and payable in taka. Presently GOB's step in tendering for about 20 power plants with 10 MW-30 MW capacity is a commendable decision. Appropriately managed these can provide 600 MW of electricity to the national grid in under 18 months. That is about 18 percent increase in electricity supply. These distributed electricity will be available in taka from the local electricity companies for the local people.

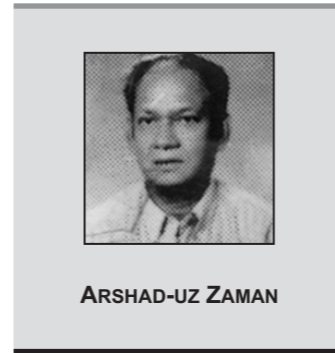
**Taka vs dollar and stock market:**  
Entrepreneurs investing in taka will seek their equity return in taka. Should

the local banks provide fund the debt repayment would also be in taka. There is another dimension to it. If part of the equity comes from the stock exchange, the local stock market will get a boost from these quality stocks, therefore the infrastructure of capital market itself will improve. On the other hand, debt provided to these generating companies are of best quality, and local banks will have better loan portfolios. Local bank's understanding of the business and project financing will improve the country's overall banking sector. As a consequence utilities will be able to buy electricity in taka and relieve the pressure on foreign exchange reserve.

**Conclusion**  
Bangladesh needs power, which is a basic infrastructure. Still the constitution promises electricity to all the citizens of Bangladesh (Article 16 of the constitution of The People's Republic of Bangladesh), only 30 percent of Bangladesh's population has access to electricity. It is a shame to say we have about 30 TCF gas and our people do not have electricity. Through small power plants we can achieve socially and environmentally sound economic growth providing electricity for all by 2025 if not 2020.

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# The new Pope takes over



ARSHAD-UZ ZAMAN

**P**OPE John Paul II is dead. Pope Benedict XVI has been elected the 265th Pope. The whole affair has been one of pomp and splendour due to the circumstance and demonstration of Catholic faith. Pope John Paul II had served for 26 years, the third longest service in the history of the papacy, and the first from Poland. He is the most traveled Pope in its history and has been a visible symbol throughout the world. When ill health restricted his movement and he became target of assassins, he started traveling in his "papamobil" with its plastic bulb top. In his battle against death, his spirit never flagged and he managed to make a last appearance at the window of his Vatican and bless the faithful. His funeral became a grand event attended by monarchs and heads of state from near and far. It has been truly said that Pope John

## THE HORIZON THIS WEEK

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Paul II went to the people throughout the world and the whole world came to his funeral.

Once the funeral was over the world braced for the election of a successor. Contrary to expectations of a prolonged process among the 115 Cardinals, the election was surprisingly smooth, and at the end of four ballots, with the passage of barely 24 hours, white smoke rose from the Chimney of the Sistine Chapel of the Vatican. Shortly thereafter, Cardinal Joseph Ratzinger, who had donned the Papal name of Pope Benedict XVI was presented to the cheering crowd before the Vatican.

Pope Benedict XVI is 78 and was born in the Catholic-dominated Bavaria region of Germany. He is not expected to match the 26 years of his predecessor. However, he is German and is reputed to enjoy good health. I recall that in post Second World War Germany, the 80 year old Adenauer took over as Chancellor, ruled West Germany with a firm hand, and

with his friend Charles de Gaulle of France put a firm stamp on Europe, which we see today as the powerful European Union.

Whereas Pope John Paul II took the medieval papacy to the modern age, he made no compromises on the question of divorce, opening the doors to female priests, homosexuality, or contraception. The new Pope is reported to be a firm believer in "the Doctrine of the Guardian of the Church."

Pope Benedict XVI has the reputation of being close to John Paul II, and there is speculation that he may not bring about changes to the Vatican, which would bring it closer to the modern world.

He is the first German Pope elected in over a thousand years. Opinion was sharply divided in Germany regarding the new Pope. Whereas some felt a little pride in having a German Pope, others denounced him in severe language. Bernd Goehring, Director of the German Ecumenical Group Kirche von Unten

termed the election "a catastrophe" and predicted that "even more people will turn their back on the Church."

People around the world got to know about Catholicism thanks to the indefatigable traveler and ambassador, Pope John Paul II. Pope John Paul II maintained a running dialogue with all faiths and gave them their due. Interfaith understanding will remain one of the monuments of Pope John Paul II. Pope Benedict XVI is expected to build on it.

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# America's relations with countries in south Asia

## Quest for peace

MOHAMMAD AMJAD HOSSAIN

**P**RESIDENT Bush's announcement to sale F-16 fighter jets to Pakistan has caused wide speculation in America's media about the shift of policy on South Asia region. This announcement was, however, communicated to Indian Prime Minister by President Bush over telephone. It was a good gesture, but it was not received with positive note, which has been reflected in the comments of the spokesman of the Prime Minister's office, who reportedly said, "the prime Minister expressed India's great disappointment at this decision which could have negative consequences for India's security environment". This offer to Pakistan can be seen against the backdrop of Pakistan's steadfast support to the actions by Bush administration to drive out Taliban regime from Afghanistan and war on terrorism.

America barred sale of weapons to Pakistan in 1990 when Pakistan carried out undeclared nuclear weapons test programme. But on attacking Afghanistan Bush administration had already awarded Pakistan by opening up financial assistance, which was suspended following the latter's test of nuclear bomb. Pakistan was granted \$ 700 million aid in 2004. Bush administration has written off Pakistani debt and promised to offer \$ 3 billion over five years. Over and above, Bush administration declared that Pakistan was symbolically 'a major non-NATO ally'. This announcement by former Secretary of State in Islamabad in March, 2004 after his visit to India might have contributed to the fall of BJP government of Vajpayee, according to some analysts because BJP government had reportedly been competing against Pakistan to draw sympathetic attention of Bush administration. BJP government signed an immunity agreement with America not to accuse latter's army to the International Criminal Court if it committed crime on India's land, which in a way undermines the importance of the International Criminal Court.

I am not blaming President Bush for siding with Pakistan's undemocratic military regime as the trend of America's alignment with military regime in Pakistan is not a new phenomenon. All the Republican governments, somehow or other, maintained excellent relations with Pakistan's military regimes in particular. During President Eisenhower's time American administration had developed relationship with Pakistan through

SEATO (South East Asia Treaty Organisation) and CENTO (Central Treaty Organisation). Thus Pakistan became eligible for arms aid. America also signed a bilateral agreement with Pakistan during Eisenhower's regime when military junta of General Ayub Khan was in power.

Another secret aide memoirs sent to Pakistan in 1962 by Democratic government of President Kennedy was on to come to Pakistan's aid against Indian aggression. During the liberation war of Bangladesh the Republican administration of Nixon sided with Pakistan's military regime of Yahya Khan ignoring America's values and democratic principles.

Nixon administration made it clear that American administration would honour its commitments by informing the Soviet Union (by Henry Kissinger on December 10, 1970) referring to the aide memoirs of November 5, 1962 in which America promised to assist Pakistan in case of Indian aggression. By December 16, India accomplished its goals of liberating East Pakistan in collaboration with Mukti Bahini (Freedom Fighters). America had ordered dispatch of fleet Enterprise to the Bay of Bengal where the Soviet union already stationed a SAM-equipped destroyer and a second mine sweeper. Therefore, the entering of America's seventh fleet in the Bay of Bengal during our war of liberation remained a myth. In other words, American administration betrayed the desire of President Yahya Khan. What America did was that Soviet Union was urged to restrain India from spreading the war to Kashmir or western front.

America also sought Security Council approval on December 4, 1971 for a cease-fire, but Soviet Union vetoed the resolution. Soviet Union sided with India and exercised veto power in the Security Council to block America's resolution for cease-fire until India completed its task. It was not until December 21, that the Soviet Union allowed passage of a Security Council resolution demanding withdrawal of Indian forces.

Subsequent governments in Pakistan acted in collaboration with America to build up resistance groups in Afghanistan against the occupation of the Soviet Union in 1979. Following the terrorist attacks on America on September 11, 2001 Bush administration developed excellent relations with Pakistan's military ruler. Bush administration considers Gen. Musharraf's help crucial in the

battle against terrorist groups of Al-Qaeda. Exchanges of intelligence information and stationing of American troops in Pakistan are indicative of the amount of increasing relations.

This growing relation with Pakistan, however, does not mean America is abandoning India from its strategic alignment. President Bush's announcement was followed by intimation of intent to sell fighter planes to India simultaneously. It said that it would allow US firms the right to provide India the next generation of sophisticated, multirole combat aircraft.

Given the growth of economy of China and India, both countries are considered by policy makers in Washington as growing giants in Asia which will be dominating balance of power in the region in near future.

American administration has established and intensified military cooperation with India. India soon would become a permanent member of the Security Council along with Japan.

In spite of the US administration's hobnobbing with Pakistan, the latter had never found the sympathy in America that India enjoyed, at least among opinion-making groups. It did not represent principles with which Americans could identify as readily as with those of the world's largest democracy. In today's America the media have been advocating against giving leverage to Pakistan. For example, the *Washington Post* of April 02, 2005 commented harshly on President Bush's policy towards Pakistan President Musharraf and said that the Bush administration needs a policy for Pakistan that is designed to

outlast Pervez Musharraf. The fact remains that supply of F-16 fighter planes to Pakistan means militarily strengthening Pakistan at a time when both India and Pakistan are advancing towards peaceful resolution of their disputes through dialogue and agreements. One cannot rule out the possibility of deteriorating the climate of peaceful negotiations between the nuclear arch rivals if the balance of power is lost. It is imperative that goodwill and political sagacity prevail among neighbours in South Asia.

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