**A critique of proposed amendments to the Electricity Law of Vietnam**

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# Introduction

Vietnam’s power sector is dominated by Electricity Vietnam (EVN), which is the integrated state-owned monopoly that covers all elements from generation to retail. It is experiencing a number of serious issues that involve the efficiency of management of EVN, delays in upgrading the transmission/distribution system, and the inability to meet national demand without large-scale imports. The government bodies including MOIT (Ministry of Industry and Trade) and MOF (Ministry of Finance) both believe Vietnam needs to change the current sector arrangements, from price setting, to reorganization of EVN and to overall sector restructuring towards a market-driven system of supply and demand. In 2011, MOIT put forward proposals to revise the reform roadmap for the sector set out in Electricity Law 2004. A decision on these proposals is not expected until late 2012. The proposal is being questioned on grounds the rationality of bringing forward the introduction of a competitive retail market and on the inflationary effects of the proposed electricity price increases and the degree of efficiency improvement required of EVN. This paper provides a critique of the impacts of the proposal on Vietnam’s politics and economics and a global review of the electricity liberalization model that underlies such policy.

# The context

Since 2001, the Vietnamese government has acknowledged the need to increase generation capacity in the electricity industry to support annual economic growth averaging 7.3% between 2000 and 2009 (Business Monitor International, 2011). With unprecedentedly growing demand, triplinged in less than a decade, the electricity industry, however, commonly fails to deliver, most frequently during peak hours and dry seasons. It is reported that ‘in the whole country there were 3,000 blackout incidents due to system overloading during the first 7 months of 2008’, equivalent to ’14 blackouts a day’ (Nguyen and Dapice, 2010). As a way to mitigate this chronicle electricity shortage, the industry’s biggest player, EVN has to buy in all that is produced domestically and import from neighbor countries such as Laos and China. Yet, EVN, not only cannot satisfy its primary objective of ensuring security of electricity supply but also causes significant annual financial losses of hundreds of million dollars (in 2010, about $343 million-VND10000 billions; in 2011, VND8040 billions). EVN claims that too-low average pricing of electricity is the cause of this loss. In addition, audit reports revealed that EVN’s diversification policy had caused further losses. The inefficiency in infrastructure investment and inadequacy in organizational management have caused anger amongst the public, creating an extremely negative attitude towards the traditional monopoly structure of the electricity sector. As a way to deal with these issues, policy makers mainly favour the ‘marketisation’ or liberalization model that is, in theory, similar to the liberalization model implemented in the UK and EU since the 1990s. The main reasons behind the policy are: one, to assist the government in infrastructure investment (this was expected to cost $13.5 billion from 2005-2020); two, to expose EVN to competitive forces through encouraging private and foreign investment forcing it to improve its financial and operational performance

Until mid-2012, the electricity sector has supported this liberalization plan. A competitive market for generation (with a single buyer) was planned to be in operation by 20009 but the implementation has been delayed several times. The latest plan was to operate such a market from June 2012 but it has not yet been seen in place. Meanwhile, short-term solutions are being implemented to reduce the impacts of the previously mentioned inefficiencies. The sector authorities are continuing to try to deal with the issue of power shortages by better planning. Since the beginning 2012, they have been trying to combat the issue of operational inefficiency by changing the organizational structure of EVN and the issue of lack of investment incentives and financial loss by increasing price. In response to public anger at the waste of taxpayers’ money on inappropriate investment and possible cases of corruption, EVN’s Chairman (Chu tich Hoi dong thanhvien) Dao Van hung was removed from his position. And in 1/6/2011, Prime Minister Nguyen Tan Dung agreed to adjust the electricity price on the basis of actual costs, i.e. the sum of input costs, resulting in gradual price increases from this year on until average price truly reflects actual costs. This adjustment is controlled by the supervisory bodies, i.e. MOIT and MOF and has to be passed by the Prime Minister himself. However, these are temporary measures and cannot bring in as much change as the government wishes. The authoritarian and financial pressure on MOIT and MOF by the government and the public may cause hastiness in decision-making process. The authorities believe the process of market opening needs to speed up and the government needs to make amendments to the current Electricity Law 2004. Most noticeably, MOIT, with support from MOF, proposes in Draft 2: Proposals on amendments to Electricity Law 28/9/2011 that retail electricity price should be decided by market mechanism and rationed by the government *(“1a. Giá bán điện thực hiện theo cơ chế thị trường có sự điều tiết của Nhà nước*”), that the benchmark pricing from generation, transmission and distribution and organisational operation costs is calculated and consolidated by the related strategic energy companies, i.e. major state-owned enterprises*(‘2. Khung giá phát điện, giá truyền tải điện, giá phân phối điện, giá dịch vụ phụ trợ hệ thống điện, phí điều độ vận hành hệ thống điện, phí điều hành giao dịch thị trường điện lực, doanh thu cho phép của nhà máy thủy điện chiến lược đa mục tiêu do đơn vị điện lực có liên quan xây dựng trình cơ quan điều tiết điện lực phê duyệt’).*These amendments suggest a creation of a retail market for electricity, a reduction in the government’s involvement in setting electricity price and a shift of setting-price power from government authorities to strategic energy companies. This draft has drawn the attention of numerous government bodies and policy makers since it would be a significant change to the sector structure and a leap in the pathway to market formation. This proposal will be officially discussed and decided in the next Parliament meeting after a poll among stakeholders in Hanoi, Danang and Ho Chi Minh City is taken in June 2012.



Figure 1: Roadmap for Electricity Sector Reform, 2005, Reproduced from Lovells (2009)

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# Main critique

## Part 1: The electricitysector

### The sector under current arrangements is not readyyet

Under the Electricity Law 2004 and Prime Minister’s Decision 2005, the sector is moving towards a competitive generation market (with a single buyer) from 2005 to 2014, a fully competitive wholesale market from 2014 to 2022 and finally a competitive retail market from 2022 onwards. MOIT’s new proposal, however, aims to bring forward the retail competitive market by 10 years.

There are two main problems with this. First, there is barely a potential retail competitive market at the moment. In fact, EVN not only controls the transmission lines but also is the parent company of distribution and retail subsidiaries in all regions. Each subsidiary is in charge of supplying electricity to households and SMEs within a region. This business has not been open to any private or foreign firms. It is then questionable how rational it is to let the market decide the retail price where there is only one buyer.

Second, considering the rationale behind different stages in the roadmap, if a retail market is established before a wholesale market, it is highly unlikely any new companies will enter the market. Retailers will have to buy from one distributor, EVN, and may have to pay unfair prices. EVN’s subsidiaries will be offered a lower price than unrelated private businesses..

### The root causes of inefficiency

Under the proposal made by MOIT, the desired outcomes of competition and reasonable pricing are unlikely to materialise given the current structure of the sector, dominated by the state-owned monopoly, EVN. Any efforts in creating competition and improving efficiency will be wasted if the roots of the problems are ignored, such as bad management of the corporation, technical loss, inadequacy in infrastructure investment and allegedcorruption. In 2006, EVN was reorganised into a corporate group with more than 60 subsidiaries under one ultimate objective of servicing the electricity sector (‘Tập đoàn Điện lực Việt Nam có ngành, nghề kinh doanh chính là: Sản xuất, truyền tải, phân phối và kinh doanh mua bán điện năng’ – EVN 2012).

Yet, for the last 6 years, EVN has branched out investment to other sectors, including telecommunication (VND 3,000 billion in EVN Telecom), Securities (about VND 115 billion in CTCK An Binh ABS and in HASC), Banking and Finance (in ABBank, EVNFinance) and real estate (about VND 100 billion in CTCP Bat dong san SaiGonVina), etc. (Vietnam Economic Forum, 2011). State Audit reports show that the majority of such businesses make a loss or too little profits for EVN. Even though such investment takes up only 2.8% of total equity, the loss made in other sectors adds to the total loss of EVN, which is eventually paid for by the government, hence taxpayers.The distraction in board management this diversification causes has harmed the core business.

The bad managerial practices in EVN should be considered as one valid cause for the inefficiency of EVN and the bad image of state-owned companies in the public’s eyes. Another issue of inefficiency in the sector is the quality of transmission system. The latest report by ERAV (Electricity Regulation Authority of Vietnam) forecasts that in 2012, the electricity industry will be able to meet national demand. However, in major urban cities, there will still be blackouts as a result of system overloading in transmission, which was designed for only 77% of current generation capacity. BMI (2011) estimates that from 2008 to 2015, there will always be more electricity supplied than demanded according to the national construction plan. Yet, the annual technical loss averaging 10% of output decreases the actual consumption amount of electricity to below the demand level. In World Bank’s report 2011, Vietnam only ranks at 88 out of 125 countries on quality of electricity supply. Thus any efforts in increasing generation would be inadequate without properly maintaining and upgrading the transmission system.



Table 1: Vietnam Electric Power Transmission and Distribution Losses, Reproduced from Business Monitor International, Q4, 2011

## Part 2: Impacts on Polity and Economy

### The issue of regulatory stability

The liberalisation process of Vietnam’s electricity sector has been slow and painful. The Master Plan for Sector Reform has been written and rewritten several times. In 2011, the government announced the Seventh Power Master Plan. The content of these plans is not different from the original plan in 2006 other than that they are increasingly assertive in dealing with EVN’s reluctance and inefficiency. However, there are critical contradictions between the co-existing policies.

First, the Electricity Law 2004 paves the way for a future of a liberalized electricity sector with the opening of generation market in 2009, creation of a competitive wholesale market in 2016 and of retail market in 2024. However, in 2007, Prime Minister Nguyen Tan Dung declared that for the sake of national security, Vietnam needs to hold 100% ownership in electricity transmission lines and large generation companies and at least 50% ownership in medium-size generation companies. Those state-owned companies will take up major positions in the sector. EVN is destined to be the single buyer, while PetroVietnam (gas-fired) and Vinacomin (coal-fired) have unique input sources. The structure leaves the market that is open to entry too small or too unattractive for foreign and large domestic private companies. The Decision clearly closes the door to a proper liberalised sector as planned in the Electricity Law.

Second, there is a contrast between the establishment of a competitive generation market during 2009-2014 set by the Electricity Law 2004 and the signing of dollar-pegged PPAs (power purchase agreements) between EVN and foreign power producers for 20 years of electricity provision, namely Electricité de France (EDF), Sumitomo and the Tokyo Electric Power Company. Under such PPAs, EVN is forced to buy in any amount produced at the regularly exchange-rate-adjusted price. In fact, these producers do not face any competition even when the generation market is open. In Europe, it has been ruled that PPAs are incompatible with liberalised markets.

Last but not least is the contradiction that will be created if MOIT’s proposal is passed. A retail competitive market is last set up after a wholesale market because effective and fair competition (if achieved) in a wholesale market is supposed to ensure the procurement cost of retail companies is low enough to pass on to consumers and there is incentive for numerous retail companies to join the market. This will mean consumers will benefit from a fair and reasonable price. It would then be hard to attract private investors into the generation/wholesale business where there are significant sunk costs, when they can enjoy lower risks and lucrative profits in a retail market that is opened at the first stage. The three contradictions mentioned here represent the issue of regulatory stability that worries foreign and private investors. This incoherence of sector policies raises the risk of investment even higher in a high risk business environment like Vietnam (AMB Country Report 2011).



Table 2: Contradictory policies in Vietnam’s Electric Power Sector

### Negative impacts on the economy

The short run economic outcomes of the Proposal are already visible. Following the Prime minister’s Decision in Sep 2011, within one year, the price has increased in a number of steps by 15.28% in total. The buy-in price in 2012 is expected to increase by 4.6% but the retail price will increase by roughly 15.6% partly to make up for last years’ loss by EVN. EVN estimates that the current price is around 62% less than the market price, for some inputs like gas, less than the production costs and is at an unsustainable low level compared to other countries.

Yet, this is only the minimum price increase under current economic situations. There are three other factors which will continue to push up the price of electricity in the short and medium term.

Firstly, there is the annual increase in basic salaries (the base that salaries for the state workforce is calculated on) that is always one-year behind in the race with increasing inflation (The basic salary was increased by 26% in early 2012 to make up for inflation in 2011 of 25%; that in 2011 was 13.6% for inflation of 11.75% in 2010) (calculations based on General Statistics Office of Vietnam, 2012). Input costs will increase and so will electricity price.

Secondly, the international price of oil, coal and gas inputs to electricity generation is likely to continue to rise, and the devaluation of Dong will make these price rises even greater.

Thirdly, the operation of new nuclear power plants in 2020, in contrast to what many people believe, will not reduce the price, because the huge debt incurred in construction (estimated at $11 billion) will have to be paid off through the electricity price (World Nuclear Association, 2012).

Therefore, the retail price, if decided by the market mechanism, will sharply increase in the future - and it will constantly fluctuate under pressure of constant changes in input prices and the exchange rate. The clearest consequence of such increases is continuously higher inflation in living costs, given that electricity is in the CPI basket, which will hit poorest families the hardest will also increase costs for all companies, and so have a negative effect on GDP.

Since 2011, the constant increase in electricity price under Prime Minister’s Decision proves that the government wants the sector to be able to self-financing. This realisation of government withdrawing subsidies is also displayed in the proposal, suggesting that price should be at the market mechanism level, hence hopefully causing no deeper loss for EVN and other state-owned generation/distribution companies. Studies in China have shown that energy subsidies are equivalent to 1.43% of GDP, and that withdrawing these subsidies by increasing prices would result in massive economic and social consequences: a cut in living standards of 2%, a loss of 1.6% of GDP, and a fall of 1.4% in employment (Lin and Jiang, 2011). When government budget is tightened and subsidies are re-allocated, negative economic and social impacts are likely to incur, hence offsetting the marginal financial gain by the withdrawal of subsidies. Simply, raising prices does not constitute an improvement in economic position. More importantly, electricity should be made affordable to all.

## Part 3: The controversy of the liberalisation model and IFIs’ background noise

### Empirical studies on liberalised markets

Current empirical studies suggest that investment will not increase, price will not decrease and coverage will not improve as a result of opening the market. The main beneficiaries are not the local industry, the consumers or the government but the foreign firms. Private investment worldwide in infrastructure more than halved from 1997 to 2001. After then, investment rose in 2009-2010 then fell dramatically in 2011 following the shock in financial markets. The same trend is witnessed in the number of energy projects, total value of such projects, and in both Greenfield and concession project values. Overall, private investment has been fairly volatile (The World Bank Group- Energy Sector Snapshots, 2011). Private generators have to face demand risk, political risk, fuel risk, payment risk along with currency risk for foreign investors (Thomas, 2006; Woodhouse, 2006; Liong, 2008). Being risk averse, private investors do not have sufficient incentives to invest unless long-term contracts or capacity payment mechanism are offered to them by the government (Neuhoff and De Vries, 2004). However, if the government intervention in the sector is so important for getting private investment, it is questionable whether liberalization is needed in the first place.

The clearest consequence is seen in the change in price. Using data from 83 countries from 1985-2002 in Latin America, the former Soviet Union and Eastern Europe, Nagayama (2007) finds little correlation between unbundling, wholesale market competition and decrease in electricity prices. On the contrary, they are associated with a rise in prices. In 2010, an NUS Consulting Group report points out that global electricity prices have been increasing and will continue in the future. In particular, in 15 most expensive countries for electricity, prices are subject to rise from 3 to 33% per year. Among them are leading examples of liberalization, namely, Sweden, Austria, and UK. The cost of competition is in fact higher than the costs of maintaining a traditional monopoly system (Thomas, 2006). The combined cost of capital/loan, cost of market design, cost of marketing, cost of customer switching, cost of installation… is additional to generation costs that in the end, consumers have to pay.

A report by Electricity Consumers Resource Council (ELCON), representing the view of industrial consumers in the US, describes the current organisation of the market as ‘neither competitive nor sustainable’. The official UK Climate Change Committee in 2009 also concluded that ‘liberalisation is incompatible with developing renewable energy resources’. Besides, a 2009 global review of electricity liberalisation in 14 developed and developing countries including the US, UK, EU, Japan, Brazil, China and Thailand found that sector reforms are related to undesirable effects of ‘consumer opposition, lack of competition, higher prices’, ‘oligopoly, lack of investment or innovation’, ‘lower or unchanged efficiency, less use of renewable energy’ (Hall et al, 2009).

### World Bank on promoting reform policy in Vietnam

Erdogdu (2011) examined electric power sector liberalization in 63 countries, 31 of which are developing countries, from 1982 to 2009. It shows that despite economic differences, a number of developing countries are progressing towards a complete reform at a relatively similar pace as developed countries. The key reason for this is that they are more inclined to accept WB loans in order to expand their capacity, and liberalization of electric sector is one of the conditionalities of such loans (Hall et al, 2009). A similar process can be observed in Vietnam. So far, the World Bank has made 16 loans to the energy sector in Vietnam, of which only $606 million (23% of the total) are for infrastructure purposes while $2181 million (77% of the total) is for sector reform. The latest loan for a reform project, Power Sector Reform DPO2, worth $200 million, was requested in July 2011 and approved by the Bank in 22 March 2012. The project aims to assist power sector reform policy-making process by MOIT, specially targeting ‘electricity tariff reform’, ‘development of a competitive power market and subsidy reduction (The World Bank Group-Program Document, 2012). The pressure on MOIT, the main recipient of WB loans, is therefore certainly high, so that policy-makers are highly influenced by the constant background noise from the World Bank. Even though the Bank gives tremendous help to the country on development projects, its policies and decisions are still controlled by major donors such as the US, UK and France, whose economic interests will be built into these projects. It is not certain that the new policy proposal is also in the economic interests of Vietnam.

# Conclusion

The proposal seems to push forward a competitive retail market too soon to be effective, given the current sector arrangements. Instead, the issues of inefficiencies in the system should be tackled independently by directly addressing the root causes. Contrary to the expected gain in finance and foreign investment, the proposal is likely to create a perception of regulatory instability as a result of the complicated policy situation. The proposal risks deepening the impact of economic crisis, with lower national consumption and production when electricity prices rise to match market level. Vietnam needs to carry out studies of the possible social and economic impacts under the proposal in particular and the market-opening reform policy in general, along with possible ways of re-allocating government subsidies to minimize the social and economic damage.

There should be a review of global experience with liberalized electricity markets, where empirical research shows an increasing number of negative results. The most plausible reason for its popularity is the background noise by the World Bank, which commonly provides development loans tied with sector reform conditionalities that stem from the neo-liberal ideology in the West, rather than any successful empirical studies.

# References

AMB Country Report (2011), Vietnam, Retrieved online at <http://www3.ambest.com/ratings/cr/reports/Vietnam.pdf> (Accessed: June 2012)

Business Monitor International, Vietnam Power Report Q4-2011, Retrieved online at <http://www.vietnam-report.com/wp-content/uploads/downloads/2012/02/B-VN-Power-Q4-2011.pdf> (Accessed: June 2012)

Craig, J., (2002). Privatization and Indigenous Ownership: Evidence from Africa, Annals of Public and Cooperative Economics, 73:4, pp. 559-576.

ERAV- Electricity Regulation Authority of Vietnam, Official Website at <http://www.erav.vn/>

Erdogdu, E. (2011), The impact of power market reforms on electricity price-cost margins and cross-subsidy levels: A cross country panel data analysis, Energy policy, Vol. 39 (2011), pp. 1080-1092

EVN – Electricity Vietnam, Official Website at <http://www.evn.com.vn/>

Foch, A. (2012), Why the World Bank supports Infrastructure privatization in Sub-Saharan Africa?, Conference of the Italian Association of Transport Economics, Bari-Italy, June 2012.

Hall et al, 2009, Global experience with electricity liberalization, Public services international (PSI) for a conference at Paramadina University, Jarkata, 19th January, 2010

Lin, B. and Jiang, Z. (2011), Estimates of energy subsidies in China and impact of energy subsidy reform. Energy Economics 33 (2011) 273–283

Liong, S. (2008), Foreign Investment in Electric Power Generation Around the Globe: A study of Nine countries, Master Thesis: Erasmus Mundus Master in Economics and Management of Network Industries, Pontificial University of Comillas, Madrid, Spain, Retrieved online at http://www.iit.upcomillas.es/docs/TM-08-102.pdf (Accessed: November 2011)

Lovells (2009), Vietnam’s Independent Power Producers Sector: Toward Market Liberalisation, Online at http://www.hoganlovells.cn/files/Publication/2e8941d8-f8e9-4aeb-88dc-6a80844338a6/Presentation/PublicationAttachment/fc70ab90-eaf1-4c1f-82b4-fb9c782dec90/VietnamsIndependentPowerProducersSectorTowardsMarketLiberalisation.pdf (Accessed: November 2011)

MOIT - Ministry of Industry and Trade, Official Website at <http://www.moit.gov.vn/>

Nagayama, H. (2007), Effect of regulatory reforms in the electricity supply industry on electricity prices in developing countries, Energy Policy, Vol. 35 (2007), pp. 3440-3462

Neuhoff, K. And De Vries, L. (2004), Insufficient incentives for investment in electricity generations, Utilities Policy, Vol. 12 (2004), pp. 253-267

Nguyen, X.T. and Dapice, D. (2010), Vietnam’s Infrastructure Constraints, Vietnam Program, Ash Institute for Democratic Governance and Innovation, Harvard Kennedy School

General Statistics Office of Vietnam, Official Website at<http://www.gso.gov.vn/>

Thomas, S. (2006), Electricity Liberalization experiences in the World, paper to be presented at: 2007 Taiwan Power Labour union International Symposium – Electricity Liberalization International Experiences, Public services international Research Unit (PSIRU)

Thomas, S. (2006), Recent evidence on the impact of electricity liberalisation on consumer prices, Public Services International Research Unit (PSIRU), Business School, University of Greenwich

Vietnam Economic Forum (2011), ‘Những quả đắng của EVN khi lấn sân ngoài ngành’, Retrieved online at <http://vef.vn/2011-10-21-nhung-qua-dang-cua-evn-khi-lan-san-nganh-ngoai-> (Accessed: June 2012)

Woodhouse, E.J. (2006), The obsolescing Bargain redux? Foreign Investment in the Electric Power Sector in Developing countries, Standford University, USA, Retrieved online at http://iis-db.stanford.edu/pubs/21279/JILP\_Obsolescing\_Bargain.pdf (Accessed: November 2011)

World Nuclear Association (2012), ‘Nuclear Power in Vietnam’, <http://www.world-nuclear.org/info/vietnam_inf131.html>

World Bank (2011), Energy Sector Snapshots, Retrieved online at <http://ppi.worldbank.org/explore/ppi_exploreSector.aspx?SectorID=2> (Accessed: June 2012)

World Bank (2012), Program Document for a proposed loan to Vietnam DPO2- Report No. 62358-VN, 22 Febuary 2012,Retrieved online at <http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/03/02/000386194_20120302013220/Rendered/PDF/623580PGD0P1240Official0Use0Only090.pdf> (Acccessed: June 2012)