



POSITION PAPER

Vietnam's Power Development Master Plan VII

The Issue

Vietnam's Power Development Master Plan VII (PDP 7) is currently being drafted by the Institute of Industry (IoE) for the Ministry of Industry and Trade (MOIT) for release in 2011. PDP 7 sets the planning basis for development of the electricity sector between 2011 and 2020, with higher level strategies out to 2030. Given the challenges to meet Vietnam's current and projected electricity demand, PDP 7 needs to be comprehensive and realistic and encompass input from key stakeholders. Up to this point, the process of PDP development has been internal to the various agencies and ministries of the Vietnamese government with only limited stakeholder involvement from the private sector.

Brief Background on Issue

The process of developing and implementing the PDP's has evolved into a five-year cycle. PDP 6 was approved by the Prime Minister on July 18, 2007 (No. 110/2007/QĐ-TTg) for the 2006-2015 period, with extended reach to 2025. MOIT owns the PDP process but the initial drafting is by the IoE. The PDP's include voluminous amounts of data gathered from the provinces regarding historical and prospective supply and demand balances, and then combined at the national level. In adopting the PDP, the PM's office summarizes the key data from the PDP and provides planning directives for load forecasting, generation and T&D infrastructure development, efficiency, and regulatory oversight.

The current PDP process has a number of points below that should be highlighted:

- The 5-year planning cycle keeps the PDP from becoming too far out of date.
- The 20-year outlook provides ample planning time for potential investors/developers.
- The power demand forecast planning approach is thorough, using three case models (direct, elastic, and GDP).
- The PDP includes a detailed list of planned or assumed new power plants (year by year over forecast period, indicating investor where available).
- Transmission investment plans are specific and mapped geographically.
- While data quality varies by province, the PDP includes over 500-pages of supporting data and documentation.

However, further review of PDP 6 indicated a number of areas of concern that should be highlighted and addressed as part of PDP 7:

- Installed capacity forecast does not seem to realistically tie to power demand forecasts
- Reasoning unclear for forecast installed capacity mix (coal, gas, nuclear, renewables, etc.)
- New plant build decisions among fuel alternatives not clearly defined
- Role of renewable energy projects (e.g., wind, solar, biomass) not clearly defined
- Method to incorporate environmental considerations unclear (greenhouse gas limits, carbon costs, etc.)
- Reliance on new coal-fired capacity will dramatically increase GHG emissions and make Vietnam a coal importer as early as 2015.

- Inclusion of nuclear power would require tremendous capital investment and personnel development to manage.
- Map indicating locations of forecast installed capacity incomplete and possibly inaccurate
- New build power plant locations should be summarized in better detail (province, fuel and gas supply, etc.)
- Supporting data provided on inconsistent basis, leading to confusion and data discrepancies (e.g., demand forecasts)
- Power demand forecasts all were overly aggressive, based on expected continued strong GDP growth, and did not tie to historical development of comparable countries or consider less optimistic scenarios
- Key stakeholders outside ministries were not part of the PDP development process

AmCham Position & Recommendations

AmCham members are key stakeholders in the success of Vietnam's energy policy decisions and, as such, AmCham requests the opportunity to participate in the PDP 7 process and to participate as a valuable resource on energy planning, policy, regulation, and legislation. Based on the review of PDP 6, AmCham submits the following recommendations for PDP 7:

1. Broaden participation in PDP 7 development by key stakeholders
 - a. Hold a public review/workshop of the PDP 7 draft and invite comment and participation in the process by key stakeholders
2. Develop a fuel mix policy and diversification strategy which looks at the cost and benefit of each option and balances economics, development and poverty reduction needs, and energy security issues
 - a. Incorporate adequate planning tools including Cost Benefit Analysis and Alternatives Assessments in generating the generation mix
 - b. Explain capacity mix rationale in approved PDP
3. Ensure that related Master Plans (e.g., Gas Master Plan) are integrated and consistent
4. Incorporate planning criteria for inclusion of new capacity additions
 - a. Provide clear environmental targets and requirements for application of emission control technology
 - b. Better define the role for alternative and renewable energy projects
 - c. Use long-run marginal cost to make new-build plant decisions between fuel/plant alternatives, including the required infrastructure costs and associated environmental costs
 - d. Establish transparent least-cost dispatch criteria in the market, including allowances for fixed plant and long-term fuel costs (e.g., PPA capacity payments, gas take-or-pay costs)
 - e. Use the forward plant mix as a means to mitigate volatility in short-run marginal cost
5. Standardize methodology for gathering data used to develop PDP 7 and include for reference in standardized format
6. Consider use of comparable country historical development data as a forward planning approach to better predict demand growth forecasts
 - a. Per-capita energy growth comparisons
 - b. Country GDP growth comparisons