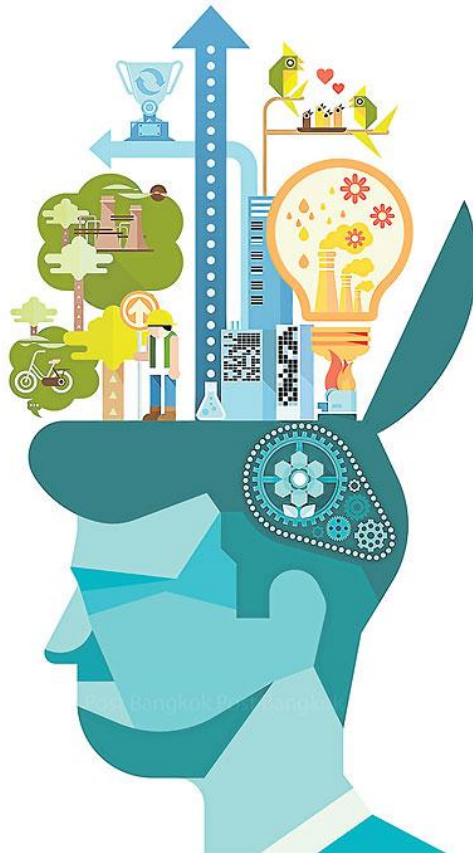


Exporting Megawatts

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Last week we reviewed the sources of Thailand's electricity, and noted that some of the supply comes from its neighbor to the north, Lao PDR. Almost all of of Lao power projects are hydroelectric projects, often sponsored (i.e. funded and organized) by Thai developers and Thai banks. Thailand's thirst for electricity has been a boon to the Laotian economy, and the supply of that electricity by Laos has helped fuel Thailand's rapid growth; a classic symbiotic relationship in many respects. Yet the cross-border supply of electricity is a legally and politically complex enterprise. Let's look at how it is done between Laos and Thailand.



The 1993 Memorandum of Understanding between the Kingdom of Thailand and the Lao PDR on Lao electric power exports provides the overall legal framework for the export of power from Laos to Thailand, outlining Laos' commitment to export to Thailand a progressively larger amount of electricity. The subsequent Laos electricity law has international cooperation in relation to the generation, transmission and distribution of power as one of its key principles. Specific private sector and foreign investment participation in the Lao electric power sector is authorized via build-operate and transfer, or "BOT", agreements. Under a BOT agreement the developer "builds" the project at its own (and its lenders') expense, then "operates" the project for a defined period of time (e.g. 20 years) during which it earns the money to pay its lenders and obtain a return of and on its equity, and then "transfers" ownership of the project infrastructure to the host government. In Laos the BOT agreement is called a Concession Agreement. Other key project agreements include:

- A lease of the relevant land from the Lao government,
- An engineering, procurement and construction (EPC) contract,
- English law loan agreements and Laos law agreements granting the lenders security over the project assets,
- A shareholders agreement relating to the arrangements between the sponsors (which almost always include Lao state-owned enterprise designated by the Government) and, most importantly,
- A power purchase agreement (PPA), in which the purchaser promises to pay an amount for power made available by the project that is sufficient to support the project's cash flow needs.

Historically the Electricity Generating Authority of Thailand (EGAT) has been the purchaser of electricity from the project companies under the Lao-Thai PPAs.

The Lao government operates under an ethic of "State control" over the economy, and maintaining a balance between the preservation of its national interests and the economic opportunities associated with Thai power demand has become an issue. While remaining open to private participation and foreign investment, the Lao government has begun stepping back from granting the more developer- and lender-friendly terms associated with its earliest projects. The Lao government recently announced that new independent power producer (IPP) projects will be required to sell all of their output to the state electricity company Electricité du Laos (EDL) who, in turn, will determine whether to reserve that power for domestic purposes or export all or some of that power to Thailand at a margin. This new policy will render Lao IPP financing more difficult as the credit rating of EDL does not compare to that accorded to the time-tested EGAT.

The tax incentive packages granted to developers and project companies in the concession agreements are becoming less and less generous as national budgetary constraints prevail increasingly over private developers' demands. Approved IPPs that export energy to Thailand (as well as to other neighboring countries) will be required by the Lao government to set aside at least 10% of their total installed capacity to ensure supply of electricity to the Lao domestic market. Finally, though the amended electricity law no longer mandates government equity participation, the Lao government still regularly insists, in concession agreement negotiations, upon governmental equity participation, and various government shareholder veto and non-dilution rights are also often required upon in the related shareholders agreement.

Interestingly, the Lao hydropower sector has become a cross-border power trade and project finance laboratory, rich in sophisticated and innovative documentation and financing models. The level of sophistication of the documentation needed for "limited recourse" project financing, in which lenders can only recover these huge loans from the project revenues and assets as opposed to its developers, has contributed to Lao capacity building efforts. The general level of skills among the relevant government officials has significantly increased over the last decade.

What of the environmental issues associated with hydropower projects? Within Thailand, the development of viable hydroelectric sites has met with considerable opposition from environmentalists and potentially impacted residents. Lao PDR export projects do not face the same level of concern and opposition. To a certain extent, one could consider that the Lao government took hold of this opportunity and adapted it to suit its development goals. Laos' power sector policy has become one of the pillars of its "National Growth Poverty Eradication Strategy". By many economic measures, this strategy has had considerable success.

With the approval and financing of the Xayaburi hydro project in the mainstream of the Mekong River, Lao-Thai power trade issues have also become regional issues. While the Lao government has progressively integrated environmental and social standards in its legal system, the level of compliance by the Lao government with the joint consultation process required by the Mekong River Agreement for Xayaburi and the subsequent planned Mekong mainstream hydro projects has proved to be quite unsatisfactory from the Vietnamese and Cambodian perspective. Silt blockage and fish migration are major concerns. On Mekong tributary hydroelectric projects, while the environment and social protection regulations and plans appear rigorous on paper, actual practice and enforcement are reportedly often a different matter.

So is this the story of a large rapidly developing nation using a small, lesser developed neighbor as a convenient source of electricity and a place to export the environmental and social problems associated with the development of power projects? It is a question worthy of continued debate, as Laos continues to try to strike the right balance between economic growth and environmental stewardship.

Angus Mitchell (angus.mitchell@dfd.com)
Audray Souche (Audray.souche@dfd.com)



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