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Case study of government initiatives for PRC's BOT power plant project

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Abstract

The economic growth in the People's Republic of China (PRC) has resulted in more demand for basic infrastructure like roads, ports, and power generation facilities. To meet the development needs, the Chinese government has granted build-operate-transfer (BOT) concessions to attract foreign investment. A few state-approved pilot projects have been awarded since late 1996, the first of which was the Laibin B power project in the Guangxi province. This paper will discuss the government initiatives and guarantees provided for BOT projects in China based on the Laibin B Power Plant project in mitigating the risks. The lessons for investing in future similar BOT projects in China will be drawn.

Keywords: Build-operate-transfer (BOT); Government initiatives; Incentives; Guarantees

1. Introduction

In China, infrastructure projects that have been implemented in late 1980s to early 1990s with foreign investment have been concentrated in southern China. These projects have been primarily toll roads, port projects and power stations. The most prominent of these have been the Shajiao B and Shajiao C power stations and the Guangzhou-Shenzen-Zhuhai superhighway in the Guangzhou province constructed under BOT contracts awarded by the provincial government to the Hopewell Group in Hong Kong.

In May 1994, the Central Government identified foreign investment in BOT projects as a priority in developing infrastructure projects in China. It emphasised, however, that the use of the BOT model by the Guangdong Provincial Government in the Shajiao B Power Plant in 1986 did not comply with the BOT policies of the Chinese Government. The main concern of central Government about these projects was a perception that the rates of return being achieved by foreign investors were excessive. In 1995, the central government began a series of pilot BOT projects which to date have consisted of the Laibin B and Changsha power plants and the Chengdu Water Plant project.

Laibin B is the second phase project for the Laibin Power Plant. It involves the investment, financing, design, construction, procurement, operation and maintenance and transfer of a 2×350 MW coal-fired power plant with an estimated cost of US$600 million (5 billion RMB yuan). It is located at Laibin County in the Guangxi Zhuang Autonomous Region, a Chinese backwater southern province where most foreign investors might not venture willingly (Fig. 1). The concession terms require a very tight completion schedule and appear to offer a relatively low rate of return. The Electricite de France (EDF) and GEC Alsthom consortium, which tendered under the name of the Consortium, finally won the concession from five other shortlisted competitive tenderers with a very aggressive tender and the backing of France's export-credit agency, Coface [1].

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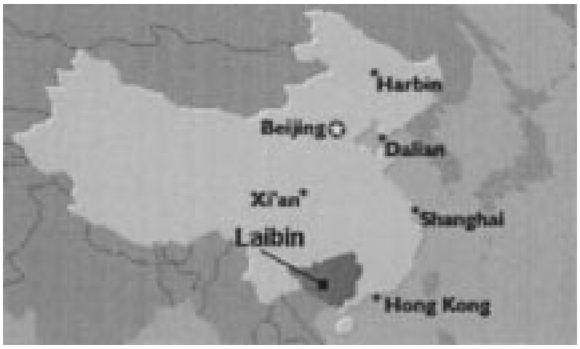

Fig. 1. Location of Laibin B power plant project.

Due to the characteristics of the BOT concept and the nature of Laibin B, it is useful to study the project in detail and to draw lessons from it. This paper will discuss the types of government initiatives and support made available for Laibin B. The case study was carried out by: (a) close examination and analysis on Laibin B's documents especially the Concession Agreement (CA), Power Purchase Agreement (PPA), Fuel Supply and Transportation Agreement (FSTA); (b) interview with related professionals and government officials; (c) literature reviews on the current regulations and approval procedures for investments in such projects; and (d) an international survey (the survey results will be reported in more details later).

2. Recent changes in regulations on foreign investments

In March 1994, the Ministry of Power Industry (MOP) promulgated Interim Regulations for the Use of Foreign Investment for Power Project Construction (the "MOP Guidelines") which set out guidelines applicable to all types of foreign investment by foreign organizations and individuals in electric power projects in China. Direct investment by foreign investors may take the form of equity or cooperative joint venture with a Chinese partner. Foreign investors may do this through investment in construction and operation of new power plants, through investment in expansion and technical upgrading of existing power plants or through purchase of equity in existing power plants. The foreign equity interest in existing plants should usually not exceed 30%. The foreign investors may however apply to the State Planning Commission (SPC) for approval to establish wholly foreign-owned and operated new power plants.

Although the national joint venture legislation sets no limit on the term of joint venture establishment, the March 1994 MOP Guidelines stated that the term of cooperation shall be limited to 20 years for thermal power plants and 30 years for hydroelectric power plants, excluding the construction period. In addition, for key power projects involving unit capacity of over 300 MW and total capacity of over 600 MW, the Chinese parties should maintain a controlling stake. The indications were that China intended to retain control over its power industry, but foreign investment was encouraged in construction and modernization of plants [2].

Since late 1996, China has been preparing for the introduction of BOT on a larger scale. The central government selected a batch of road, bridge, water supply and power projects for the implementation of BOT on a trial basis to bring more foreign capital into infrastructure projects [3], [4]. In its effort to encourage China's move to BOT schemes, the Asian Development Bank gave a US$2.6 million grant to the MOP to accelerate the implementation of BOO and BOT projects [5]. China began its experimental scheme with Laibin B, the pilot BOT project approved by the SPC to test full foreign ownership and peg tariffs to the market place. The developer will only be awarded the concession after a competitive tendering process and the successful tenderer will have to finance its project from a revenue stream based on a letter of comfort from the provincial government supporting off-take agreements instead of the guaranteed returns that have characterised many projects in China. The Chinese government is moving towards adopting international contractual and practices and works out a risk-sharing scheme under which it will bear some risks, while the concessionaire bears the rest. For example, the government was willing to guarantee contract re-negotiations if changes in government policies adversely affect the project. If companies operating the projects face substantial economic losses due to the readjustment of Chinese policies, they will be allowed to extend the period of agreement or increase tariffs on the project [3].

These changes are also the main principles of the newly promulgated Regulations for Foreign Investment Concession Project by the SPC [4]. As for the governmental evaluation and approval of foreign investment projects, China has also regulated and simplified the procedure, as described in details by [6].

3. Government guarantees and incentives currently available

The central government has provided its strong support to Laibin B given its status as the official pilot BOT project which will set the benchmark, not least in terms of risk allocations, for other future BOT infrastructure projects. The project has been approved at the State Council level, and the SPC and MOP have directly participated throughout the project development, tendering, bid evaluation and award process.

Together with the State Administration for Exchange Control (SAEC), they have each issued a support letter for the project. The three support letters underpinned the Guangxi Government's ability to perform and were meant to demonstrate the central government's commitment to ensure the success of the project.

The central government would not, however, provide any direct support to the project for it considered that the letters of support from the SPC, MOP, SAEC and Guangxi Government (GG) were sufficient. In addition, it requested the bureau of foreign exchange to issue a commitment under which the convertibility of RMB can be guaranteed or assured. This could be taken as a positive sign that the central government is flexible to foreign investors' concerns [5], [7]. The principal parties and contractual structure of the project are shown in Fig. 2.

Laibin B is underpinned by three main contracts, namely, the CA, PPA and FSTA with CA as the overriding contract which summarises all the major rights and obligations of the Project Company (the Consortium) and the Guangxi Government (GG), in relation to the concession given for the investment, financing, design, construction, procurement, operation and maintenance of the project. The provincial government is the counterparty to the Consortium under the CA and also the primary obligor under both the PPA and FSTA. The Project Company, which is owned 60/40 by EDFI and GEC Alsthom respectively, is a wholly foreign-owned enterprise incorporated in the PRC. EDFI is a wholly owned subsidiary of EDF which is 100% owned by the French Government. GEC Alsthom is a wholly owned subsidiary of GEC Alsthom N.V. which is jointly owned by the General Electric Company, of the United Kingdom and Alcatel Alsthom of France. The Construction Services Contractor is a special purpose joint venture comprising Alsthom Export and Compagnie Financiere de Valorisation pour L'Ingenierie. The Equipment Supplier/Contractor is a consortium comprising GEC Alsthom Centrales Energetiques SA and EDF, acting through its division CNET. The Operator is 85% owned subsidiary of EDFI, with the balance of ownership held equally by Guangxi Power Industry Bureau (GPIB) and Guangxi Development and Investment Co. Ltd. (GDIC). GPIB is the power purchasing entity of GG. It is designated by GG to enter into the PPA with the Consortium and to undertake GG's obligation to purchase the electrical energy. GCFC is designated by GG to enter into the FSTA with the Consortium. The detailed risk allocation for Laibin B is shown in Table 1.

The following discussion is based on Table 1 and details the government's major guarantees and incentives as well as some other measures for mitigating the Consortium's risks.

3.1. Exclusive concession granted

The Consortium was granted the exclusive right to design, construct, test, operate and maintain Laibin B. It was authorised to use the land provided by GG and to sell the net electrical output and the generating capacity of Laibin B to GG during the concession

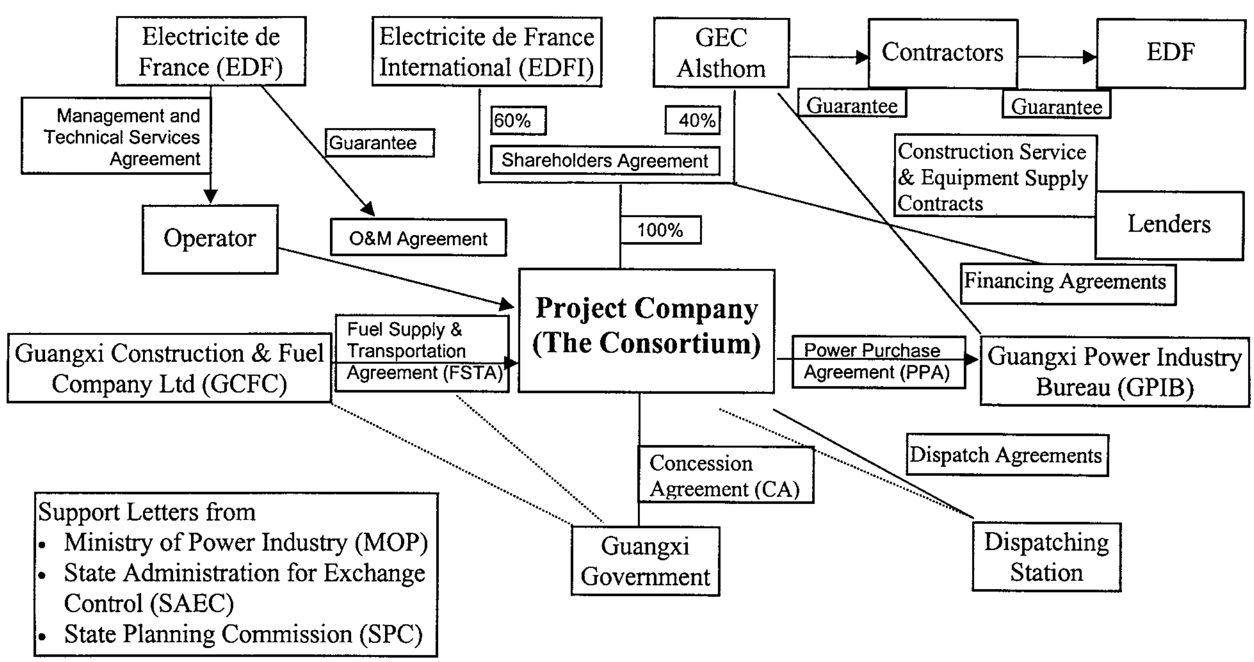

Fig. 2. Contractual structure of Laibin B power plant project.

Table 1
The risk allocation of the Laibin B power plant project

Risk	Guangxi government	The consortium (as Sponsor, Contractor and O&M Contractor)	Lender	Insurer	Bond, Bank or Insurer
1. Political risks					
revoke, expropriation, sequestration	X				
exclusivity, i.e. not second facility		X			
changes in law	X				
development approvals	X	X			
adverse Government action or inaction	X	X			
provision of utilities	X	X			
increase in taxes (general)	X	X			
increase in taxes (specific)	X				
political force majeure events	X				
termination of concession by Government	X				
payment failure by Government	X	X			
2. Construction completion risks					
land acquisition and compensation	X				
restriction on import equipment/materials	X				
cost overruns		X	X		X
increases in financing costs		X	X		
time and quality risk		X			X
Contractor default		X			X
default by Concession Company	X	X			X
time, cost and scope of identified but related work and variations					
environmental damage—subsisting	X			X	
environmental damage—ongoing		X			
protection of geological and historical objects	X				
force majeure	X	X		X	X
3. Operating risks					
Government department default	X				
Concession company default		X			
Operator inability		X			
termination of concession by Concession Company	X	X	X	X	
environmental damage—ongoing		X			
force majeure event	X	X		X	
labor risk	X	X			
technology risk		X			
prolonged downtime during operation		X		X	
condition of facility (maintenance)		X		X	
4. Market and revenue risks					
insufficient fare income	X	X			
fluctuating demand of power generated	X				
transmission failure	X				
problem in bill collection	X				
insufficient other income		X	X		
power theft	X				
fluctuation of cost and availability of fuel/coal	X	X			
Government restriction on profit and tariff	X	X	X		
5. Finance risks					
inflation risk	X	X	X		
interest rate		X	X		
foreign currency exchange rate	X	X			
foreign currency convertibility	X				
6. Legal risks					
title/lease property	X	X			
ownership assets		X			
security structure			X		
insolvency of Concession company		X	X		
breach of financing documents		X	X		
enforceability of security			X		
documentation/contractual risk (conflict and arbitration, applied laws)	X	X	X		
7. Competition risk (before bid award)		X			

period. The concession period started on the date that the government and the Consortium signed the project documents on the financial close date, which is 3 September, 1997. It would last for 18 years including the construction period unless otherwise modified in accordance with the CA. The operating period is approximately 15 years following the commissioning of the plant based on an estimated construction period of 33 months. At the end of the concession period, the Consortium will transfer the project to GG in good order, at no cost and free of any borrowings [8].

During the concession period the Consortium is given the right to own and operate all assets, equipment and facilities constituting Laibin B. At the same time, the Consortium is allowed to mortgage or transfer the right to operate, all assets, facilities and equipment of the project for purpose of financing provided that such mortgage or transfer shall be agreed in writing by GG and have no adverse effect on the rights or interests of GG.

Hence, this helps the Consortium in financing and refinancing the project and reduces the financial costs risk and legal risks. It also enhances the security of the project's revenues.

3.2. Power purchase guarantee

In accordance with the PPA signed by the Consortium and GPIB, GG guarantees to purchase, through its subsidiary department GPIB, the minimum net electrical output of 3500 million kWh (approximately 63% of plant load factor) each operating year from Laibin B. The GPIB has primary responsibility for carrying out its obligations to the Consortium under the PPA while GG gave the assurance on proper and timely fulfillment of the obligation of GPIB under the PPA. So long as the Consortium is not in default of its obligations under the CA, and subject to the provisions pertaining to any such default or the occurrence of an event of Force Majeure during the concession period, GG through GPIB agreed to pay the electricity purchase charge for the net electrical output transmitted to the delivery points in accordance with the PPA. The details of the payment scheme cover the project from testing to commencement of commercial operations of the 2 units of generators:

1. During testing and commissioning of Unit 1 and Unit 2, GG through GPIB shall pay to the Consortium the fuel charge for all net electrical output generated and delivered to the delivery points;
2. For each month or part thereof after the commissioning of Unit 1 and before the commencement of commercial operations, GG or GPIB shall pay: (1) the operating charge calculated on the basis of the part of the operating tariff for the minimum net electrical output for that month denominated in RMB; plus (2) the fuel charge for all net electrical output actually delivered in accordance with the dispatch instructions for such month; plus (3) any supplemental tariff;
3. For each month or part thereof after the commencement of commercial operations and until the end of the concession period, GG through GPIB shall pay: (1) the operating charge for the minimum net electrical output for that month, plus (2) the fuel charge for all net electrical output actually transmitted according to the dispatch instruction for that month; plus (3) any supplemental tariff;
4. After the commencement of commercial operations, at the end of each operating year, GG or GPIB shall pay: (1) the operating charges for the additional net electrical output calculated on the basis of operating tariff for the additional net electrical output; plus (2) any additional charge.

The operating charge in the tariff structure is designed to cover all costs, excluding fuel cost, while the actual fuel price is passed through in the form of the fuel charge.

In addition, during the concession period, GG permitted the Consortium to make reasonable adjustments to the electricity tariff according to the following principles: (a) upon the occurrence of any uninsurable Force Majeure event including any change in laws or any other exceptional events recognized by GG as being of such gravity or importance, which cause difficulties in the repayment of the principal and interest to the lenders by the Consortium; (b) The US$ portion of the operating tariff shall be adjusted from time to time to take account of variations in the US$–RMB exchange rate beyond a certain threshold (5%) as provided under the PPA; (c) The fuel tariff will be adjusted as and when the base fuel price under the FSTA is adjusted.

The government would also pay the electricity purchase charge to the Consortium on each calendar month during the concession period and payments shall be made in RMB only. This off-take guarantee greatly mitigates the market and revenue risks of the Consortium. It could be seen from the above that there are two payment flows in the electricity tariff payment, one a capacity payment and the other an energy payment (this follows international custom and practice). The capacity payment element is essentially tied to a minimum generation concept based on a set number of hours per year. Achievement of an availability target of around 57% should be sufficient to allow the company to cover costs and earn a set return. The actual generation is paid for at much lower tariff. Thus in the operation phase, the Consortium still bears a certain operation risk. It is impossible to actually split out operation and fuel supply risk and thus some degree of fuel supply risk is left with the project. This is really the 'micro' level of risk—essentially that a combination of dispatch instructions from the utility and the company's own inefficiency leave it over or under-committed for fuel at any time [9].

3.3. Fuel supply guarantee

The Government guaranteed to supply, through its subsidiary Guangxi Construction and Fuel Corp. Ltd. (GCFC), the fuel (coal and/or oil) required by and paid for by the Consortium in accordance with the FSTA signed by both sides. The Consortium has the right to reject fuel that is not in conformity with the fuel specifications described in the FSTA. The Government would ensure the availability of sufficient reserves of fuel required by the Consortium.

The coal will be supplied from Panjiang coal field in Guizhou Province, and from the new JinJia mine currently under development. GCFC has provided a comfort letter on the availability of alternative coal supply.

The base fuel price for fuel delivered by GCFC is fixed for each operating year and there is a further adjustment made on delivery of coal to take account of quality variations within the permitted range of the fuel specifications. GCFC has primary responsibility for carrying out its obligations to the Consortium under the FSTA. The Government ensures the proper and timely fulfillment of the obligations of GCFC under the FSTA and shall support all financial consequences resulting from any breach of GCFC under the FSTA.

It could be seen from above that the electricity tariff and fuel price are pre-determined according to international practice, i.e. fixed tariffs with pass-through of fuel cost and foreign-exchange fluctuation, and could be adjusted in accordance with market change and tax change. This guarantee together with the off-take guarantee reduce the market and revenue risks and thereby the financial (especially the inflation) risk that the Consortium bears.

3.4. Force majeure (including change in law) guarantee

Under this guarantee, either party shall be entitled to suspend performance of its obligations under the CA to the extent that such performance is impeded by Force Majeure, i.e. circumstances beyond its control such as natural disasters, war, hostilities, embargo, import or export restrictions and change in law.

However, GG shall not have the right to consider any of the following circumstances to be an event of Force Majeure that would suspend the performance or excuse the non-performance of its obligations under the CA: (a) the expropriation, requisition, confiscation or nationalization of Laibin B by Government Authority; (b) the imposition of any blockade, embargo, import restrictions, rationing or allocation by Government Authority; (c) the cancellation of any approval not caused by a breach of the CA or of any project document by the Consortium; (d) change in law.

In the event of a termination of the CA following Force Majeure arising out of the circumstances, GG shall pay the Consortium the compensation amount. Upon payment of such compensation amount, the Consortium shall transfer Laibin B to GG.

Should changes in Chinese laws, regulations and decrees or in any material conditions associated with any of the approvals applicable to the project take place after the date of the CA which substantially adversely affect the rights or obligations of the Consortium, the Consortium may request adjustment to the terms of the CA so as to place the Consortium in substantially the same economic position it was in prior to such changes.

If as a result of Force Majeure, any of the following shall occur: (a) unavoidable delay to the construction; (b) The Consortium is unable to collect all or part of its electricity purchase charge; (c) The Consortium suffers any material cost, loss, damage or expense which does not otherwise qualify for compensation by GG, the concession period may be extended by mutual written agreement between the parties if necessary.

This guarantee greatly reduces most of the political, Force Majeure risks and some of legal, construction, operating risks that the Consortium might otherwise have to bear. In addition, the 'sponsorship' of the SPC as well as the explicit approval of MOP and SAEC in the letters of support helped to ensure that the other necessary approvals are forthcoming. The risk of failure to obtain key approvals is therefore minimised.

3.5. Foreign exchange guarantee

The foreign exchange and convertibility are also guaranteed as GG promises to assist with the conversion and remittance of RMB-denominated profits. This will cover debt service, payment of dividend and repatriation of capital and thus greatly reduces the foreign currency exchange and conversion risks [10].

For the debt service requirements of the Consortium, GG agreed to pay to the Consortium, on each calendar month during the concession period, taking into account the US$ element of the electricity tariff, an amount in RMB which shall take into account variations in the US$–RMB exchange rate as published by the People's Bank of China.

In addition, GG would ensure that the Consortium, the Construction Contractor and the Operation and Maintenance (O&M) Contractor receive consent, if required, for the opening and operation of, and retention of earnings in, US$ bank accounts inside China, including the payment of all US$ received under the financing documents into such accounts and withdrawals therefrom. The Government also ensured that the Consortium shall have permission to transfer the funds from its accounts in China to its accounts outside China that are necessary to implement and carry out the project in accordance with the CA, including such accounts as are reasonably required under the financing documents, the construction contract, the O&M contract and insurance policies related to the project.

The Consortium was also given the right to convert income from the project from RMB to US$ in order to pay for the project expenses, debt service, and return on equity during the concession period. The Government would ensure that US$ are available from time to time for such conversion. If the Consortium is unable at any time to convert its RMB income into US$, GG agreed that it would undertake to carry out such conversion based on the then current exchange rates published by the People's Bank of China. The Consortium is also entitled to remit its annual profits abroad at the end of each fiscal year.

However, all of the Consortium's transactions related to the project that require foreign exchange, including debt servicing and repatriation of income, should be effectuated through an account with a Chinese bank approved by the parties; provided, however, that foreign exchange from foreign lenders and equity investors used to pay foreign contractors or vendors for services provided, or equipment or materials purchased outside China, may be paid directly to such persons without being transferred through an account in China.

3.6. Compensation under government's default and political risks

If completion of the construction work is delayed or the cost of construction or financing is increased due to an act or omission of GG in contravention of its obligations, GG might, at its sole discretion, (i) either agree to extend the concession period appropriately; or (ii) shall compensate the Consortium by adjusting the electricity tariff so that all additional costs of construction and/or any additional amounts that may become payable under the financing documents after the completion date of the power plant, as a result of such delay shall be reimbursed to the Consortium in equal amounts in the monthly payments of electricity purchase charge paid. In any event, if the debt becomes due and payable prior to the completion date of the power plant, GG would commence payment to the Consortium of the relevant amount so as to allow the Consortium to cover its debt.

If as a result of any delay by GG in performing its obligations and any of the following occur: (a) unavoidable delay to the construction; (b) The Consortium is unable to collect all or part of its electricity purchase charge; (c) The Consortium suffers any material cost, loss, damage or expense which does not otherwise qualify for compensation by GG, the concession period may be extended by mutual written agreement between the parties if necessary.

In the event the Consortium terminates the CA as a result of default by GG, the Consortium shall transfer Laibin B to GG or its designee and, upon such transfer, GG or its designee shall pay the Consortium the compensation amount set forth.

The above guarantees show the support provided by GG in implementing the project on a BOT basis. They reduce or mitigate the Consortium's risks, especially the political and legal risks, such as risks of adverse government action, changes in law, increases in taxes, and political Force Majeure.

3.7. Tax incentives

In addition to the above, GG also promised to use its best efforts to ensure that the Consortium would be entitled to enjoy tax incentives according to the laws and regulations of China. The Government also agreed to assist the Consortium to obtain permissions for other tax incentives in relation to the performance of the CA to the extent permitted then by Chinese tax laws, regulations and by taxation authority.

The detailed tax incentives for the Consortium include: (a) The Consortium is exempt from 3% of the local income tax; (b) Starting from the first profit making year, the Consortium will benefit from a two year complete exemption from national income tax. Thereafter, after this two year period, from the third year to the fifth year, the Consortium will benefit from a 50% exemption from national income tax (and will consequently be liable for income tax at a rate of 15%). From the sixth year, the Consortium will pay the income tax in accordance with the full tax rate of 30%.

In addition, the foreign investors will be exempted from withholding tax on dividend distributed by the Consortium.

If, as of or after the date of signature of the CA there is any increase in: (a) Any duty or tax imposed on sales of electricity by the Consortium; (b) Any customs duty, customs charges and other supplemental fees imposed on the Consortium by any Government Authority, then in any such case, to the extent that any such increased duties, taxes or charges (or any substitute thereof) become applicable and have to be paid by the Consortium, the full increased amount of such duties, taxes, or charges shall be added to the electricity tariff.

These tax incentives enable the Consortium to enjoy a robust cash flow pattern during the early years of the concession and reduced the Consortium's operating risks, finance risks and market and revenue risks.

3.8. Guarantee of lenders' right

From and after financial closing and for so long as the financing documents remain in effect, GG agreed not to terminate the CA without first providing the lenders with an opportunity to cure the event of default of the Consortium and affording the lenders the other rights provided in the CA. The lenders or lender's nominee may make any payment or perform any act required to be made or performed by the Consortium with the same effect as if made or performed by the Consortium.

This guarantee protects the lenders from the risks of the Consortium's default and Force Majeure.

3.9. Land and utilities and other support measures

For acquisition of the site and access to it and performing preliminary contract works, GG gave its support and would maintain the site free from all liens and encumbrances, other than liens and encumbrances which do not have a material adverse effect on the rights and obligations of the Consortium, so that the Consortium has the right to the free and exclusive use thereof for the concession period.

The Government also gave the assurance that all utilities, such as electricity, water and communication facilities, necessary for the construction, Operation and management of Laibin B are made available to the Consortium in a timely manner and at fair rates on terms no less favorable to the Consortium than those generally available to commercial customers receiving service substantially equivalent to that being provided to the Consortium.

The existing facilities will be made available to the Consortium for use during the concession period. In order to ensure that the Consortium shall have reasonable use of the existing facilities during the construction and operation of the project, GG would maintain the existing facilities at its own cost during the concession period, unless the existing facilities are damaged as a result of the negligence or misconduct by the Consortium.

During the construction period, GG would be responsible for: (a) the delivery of the site and completion of the preliminary contract works and the access road; (b) coordinating and facilitating all dealings with the appropriate government authorities during the construction period; (c) obtaining, in a timely manner, and thereafter maintaining, the approvals required for construction which can only be obtained by GG; (d) providing the Consortium with the transmission line and providing start-up electricity and steam and all fuel for testing.

The Consortium, the Construction Contractor and the O&M Contractor are also given the assurance that they may import into China all items and equipment required for the construction, operation and management of Laibin B. Such imports are subject to preferential import duties, customs fees and exemptions applicable to foreign investment enterprises stipulated by Chinese laws. The Government would also use all reasonable measures to expedite the issuance of employment permits for foreign personnel of the Consortium, the Construction Contractor and the O&M Contractor and other persons providing services to the Consortium for Laibin B.

During construction, archaeological, geological and historical objects could be found. In such cases, all costs arising from the protective measures for these objects shall be borne by GG. Any delaying effects on the project schedule caused by such measures shall be compensated by an appropriate extension of the construction period or the concession period or both. In addition, during the concession period, GG shall use its best efforts to assist the Consortium in obtaining all approvals and also provide the Consortium with security and safety control.

These guarantees reduce and mitigate the risks of development approvals, land expropriation, construction time, ownership assets and thus enhance the security structure of the project.

4. Other measures for mitigating risks

4.1. Insurance

Apart from the above government's guarantees and incentives which reduce and mitigate many risks the Consortium bears, there are still other types of Force Majeure risks, construction risk and operating risk. These risks are mitigated by the Consortium through insurance.

The Consortium was obliged to obtain and maintain at its own cost in full force insurance of following kinds from the effective date to completion date: (a) cargo transportation; (b) contractor's all risks; (c) third party liability; (d) miscellaneous.

The Consortium was also responsible to obtain and maintain at its own cost in full force insurance of the following kinds for each Unit from the completion data of Unit 1 to the Transfer Date: (a) property all risks insurance; (b) consequential loss following all risks; (c) machinery breakdown; (d) third party liability; (e) miscellaneous.

4.2. Right to select contractors

In order to carry out its obligations, the Consortium was given the right to select a qualified contractor who has rich experience and expertise in the construction of a 350 MW unit. The Consortium and the Construction Contractor were also given the right to award contracts to suppliers of equipment, materials and services. The selection of the Construction Contractor was to be done through competitive bidding or by direct nomination, subject to the approval of GG.

As mentioned previously, GEC Alsthom will head a consortium comprising EDF for the turnkey construction contract. Hence the construction cost overrun risk is allocated to GEC Alsthom [11].

Similarly, the Consortium was also given the right to select a qualified contractor who has internationally recognized experience and expertise in operation and maintenance of a 350 MW Unit to serve as the O&M Contractor to manage, operate, maintain and repair each Unit of Laibin B. The Government however reserves the right to review the proposed O&M Contract before it is executed by the Company.

The construction service contractor, equipment supplier and O&M contractor have substantial experiences of building and operating power plants in China, and they use commercially proven technology. In addition, the construction service contract and equipment supply contract are both fixed price, lump sum and date certain contracts. They collectively incorporate comprehensive tests, appropriate liquidated damages and warranties provisions. There are some other measures to reduce or mitigate the construction in risk, e.g. the international power plant specifications are adopted and applied to the design, construction and operation of the project. Hence the construction risk is firmly transferred to the contractors [9].

4.3. Dispute resolution

To resolve disputes fairly and immediately during the concession period, some measures and procedures have been determined as below.

Before the commencement of construction work, the Consortium and GG would establish a Coordinating Committee comprising three representatives of the Consortium and three representatives of GG. The committee shall be responsible for resolving disputes concerning the construction, commissioning, operation and maintenance of the power plant.

In the event that any dispute, controversy or claim arises between the parties out of, or in connection with, the CA or in the interpretation of any of its provisions, the Coordinating Committee shall meet promptly on the request of any member thereof, in an effort to resolve such dispute, controversy or claim by discussion. All such disputes should be settled through discussion between the representatives of the Coordinating Committee and the decision of the Coordinating Committee shall be binding upon the parties.

In the event that the parties are unable to resolve a dispute, controversy or claim then either party may refer the dispute, controversy or claim to a panel of experts.

In the event that the parties are unable to resolve any dispute, controversy, or claim by Coordinating Committee and panel of experts, these disputes shall be finally settled by reference to the China International Economic and Trade Arbitration Commission (CIETAC). The arbitration proceedings shall be conducted in either the Chinese or the English language and the place of the arbitration shall be Beijing. Any award made by CIETAC shall be binding on the parties as far as the CA is concerned.

Lenders and the Consortium were initially reluctant as CIETAC's track record was not well established and there were concerns with regard to its jurisdiction. However, after extensive due diligence the Consortium and Lenders concluded that not only was an offshore forum unlikely to be acceptable but that its decisions could well be unenforceable. Hence the arbitration risk is also fairly allocated.

5. Conclusion

Foreign ownership is perhaps the most controversial element of the new regulations in Laibin B. Until 1996, foreign participants entered most infrastructure projects through joint-venture agreements. The laws in this area are well tested after more than 20 years of experience. This is the legal regime under which foreign direct investment has poured into the country's manufacturing sector since the 1980s. In the power sector, however, 100% ownership could be a mixed blessing. It enables the Consortium to have more control over the project and to operate efficiently though, it will also mean more risks and responsibility. In risk sharing, the political and legal risks are mainly borne by the local government, the construction, operating, technical and finance risks are mainly borne by the sponsor with the Force Majeure risks shared by the local government and the sponsor. In addition, if companies operating projects face substantial economic losses due to the readjustment of Chinese policies, they will be allowed to extend the period of agreement or increase electricity tariffs.

While the deal is a landmark for future BOTs, there are no signs of a flood of such transactions in the near future. China has so far approved four BOTs. But even if Laibin does not spell the end to excruciating negotiation and confusion, it does provide a framework. Establishing a framework is always the easy part. What is unclear is how much the framework or the very idea of the BOT structure will be used in the future. There was a great deal of political importance attached to the harmonious resolution of the Laibin deal, and this played a part in the speed with which the complex and varied approval processes were completed. Whether that same transparency and assistance will be offered to future deals remain to be seen.

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