## Third Party Evaluator's Opinion On The Luzon Grid Transmission Project Associated with Private Power Project

Fernando Y. Roxas, DBA Associate, Professor Asian Institute of Management, Philippines

**Relevance** – The project is especially relevant to the objectives of the Republic of the Philippines (ROP) as mandated in Republic Act 9136 or the Electric Power Industry Reform Act (EPIRA). The landmark piece of legislation, enacted June 2001, envisions the government sector giving way to private initiative in spearheading the development and operations of the industry following phases of mandated privatizations. Firstly, the project interconnects two large IPPs into the Luzon Grid, further enhancing the wholesale competition in dispatch, particularly after the establishment of the Wholesale Electricity Spot Market or WESM. The 1,200 MW KEILCO Ilijan Gas Power Plant in Ilijan, Batangas City has been quite dynamic in following load fluctuations and surprisingly, establishing market clearing prices despite its size. Secondly, the project financed and put in place a key component of the Transmission Development Plan using bilateral funds before TRANSCO's privatization. It would have been more difficult for private bidders to commit to a larger, future CAPEX funding program, given the political problems associated with the automatic granting of the transmission franchise to the winning bidder.

Lastly, EPIRA also sought to promote energy self-sufficiency by establishing a bias for locally available energy sources. The Casecnan Hydro- and the Ilijan Gas Power Plant tapped large sources of local energy that contributed 17% of the electricity generated in Luzon in 2005. It is undeniable that these two projects contributed to limiting oil-based generation in the entire country to single digit percentages. In the recent years when global oil prices have been escalating to new highs, the energy derived from these two projects would contribute to minimizing the country's overall oil import bill. We have to consider however that the pricing formula for the Malampaya Natural Gas is indexed to oil prices, which in the past, was pegged to crude oil prices at the level of \$ 19 per barrel. The country would derive savings only to the extent of the price component is retained or is decoupled from global oil price indexes.

**Impacts** – The main and key element of this project is the creation of a high capacity link between the northern and southern sources of electricity for the main load center in Manila. This ability to optimize power flows from North and South has a huge impact on system stability and reliability. The magnitude of the effect can be seen by comparing SAIDI, SAIFI, SISI and FOR prior to the project's completion (2002) and latest post-project (2006) performance. Post project SAIDI is a quarter of 2002 levels; SAIFI, SISI and FORs are at half to less than half of pre- project operating levels.

Another major impact of the project is enabling full dispatch of the 1200 MW Ilijan Gas Plant in Batangas. Prior to the project completion, the heavy traffic at the Dasmarinas side of the grid was a crucial system bottleneck. Several large plants of the National Power Corporation, including the Calaca Coal Plant and the Meralco IPPs could not be fully dispatched because transmission capacity in the south of Manila was severely inadequate. From the ROP perspective, achieving full dispatch of the Ilijan Gas Power Plant was imperative because it had take-or-pay contracts with both the fuel supplier (Malampaya consortium) and the IPP proponent on the power plant side (KEILCO). Meralco, the electric distribution utility in Manila was also complaining because of take-or-pay liabilities with its own IPPs. Unmet contractual liabilities would be passed on to consumers as extra costs under cost adjustment mechanisms.