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To: Honorable Members of the Joint Legislative Committee on the Budget

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Subject: Act 704 of 2014 Economic & Fiscal Impact Evaluation, Bollinger-Port Fourchon

Act 704 of the 2014 Regular Session requires a standard set of economic and financial information be submitted to the Joint Legislative Committee on the Budget (JLCB) for projects that involve a state commitment in excess of \$10 million over the term of a project. The Act requires the Legislative Fiscal Office to provide an evaluation of the submitted project's economic and fiscal impact assessment.

**Act 704 of 2014 Provisions**

- a) **State Commitment:** The estimated benefits provided to the project over a twenty-year analytical projection horizon (2016 – 2035) are \$35.4 million; composed of \$24.6 million of Port Investment Tax Credits received over nineteen years, \$9.6 million of Quality Jobs Rebates received over ten years, and a \$1.2 million of Enterprise Zone Investment Tax Credit received in one year.
- b) **Analytical Model and Inputs:** Estimates of the economic impact in Louisiana of the construction and operation of the project facilities were provided by the LSU Division of Economic Development, in a report dated August 21, 2015. A state level IMPLAN input-output model of Louisiana was utilized to generate these estimates. This is a commercially available and widely used economic impact analysis model. According to the LSU impact analysis, the main source of input data for the resulting economic impacts are the planned hiring and expenditures reported by the project to LED. Direct expenditures and employment for the construction and operational phases of the project were provided through the ports investment application. Direct construction and its effects are assumed to occur in the initial first year. Operational effects ramp up over the first three years, with full levels in 2018 – 2035. Future monetary values are projected with the GDP growth factor contained in the Implan model and then discounted to 2015 dollar values by discounting future nominal dollar values by a 2.79% factor reflecting the annual average yield curve of 20-year U.S. Treasury bond yields at the time of the impact analysis (June 15, 2015).
- c) **Economic Impacts:**
  - i) **Value-Added** is estimated for the single year of the construction phase and for each of the twenty years of the operational horizon of the analysis. Total economy-wide value-added attributable to construction is estimated to total some \$71.7 million. Total economy-wide value-added attributable to operations ramps up over the first three years of the analysis, then stabilizes at \$34.3 million and grows at about a 2.64% annual growth rate over the remaining analytical horizon. Value-added is the difference between an industry's or establishment's total output and the costs of its intermediate inputs, the sum of which is gross domestic product, the broad headline measure of economic activity, although it includes components that do not necessarily reflect economic impacts on the households of the economy.
  - ii) **Household Earnings** are estimated for the single year of the construction phase and for each of the twenty years of the operational horizon of the analysis. Total

economy-wide household earnings attributable to construction are estimated to total some \$55.2 million. total economy-wide household earnings attributable to operations ramps up over the first three years of the analysis, then stabilizes at \$24.6 million and grows at about a 2.75% annual growth rate over the remaining analytical horizon. Household earnings are composed of all forms of employment income and benefits, including proprietor income. This concept is the most important reflection of economic impact on the population of the economy.

- iii) Employment is estimated for the single year of the construction phase and for each of the twenty years of the operational horizon of the analysis. Total economy-wide employment attributable to construction is estimated to total some 934 jobs. This estimate appears to account for the fact that project application reports 952 jobs expected during the construction phase, but that a large share of these jobs (816 construction workers) are expected to be employed only for three months. Direct employment attributable to operations ramps up over the first three years of the analysis, then stabilizes at 199 jobs throughout the remaining analytical horizon. Total economy-wide employment attributable to operations at full ramp-up is estimated at 403 jobs. Employment is defined as the annual average of monthly jobs. A job lasting 12 months is equal to 2 jobs lasting 6 months each or 3 jobs lasting 4 months each etc. A job can be either full-time or part-time, and no distinction is made. This concept of employment is consistent with the standard concepts utilized by the U.S. Department of Labor.
- d) Impacts By Industry: Total economy-wide value-added, household earnings, and employment are estimated for 8 broad industry sectors for the 2018 year of full capacity operations. For all three metrics, the majority of economic impact (50% - 60%) occurs in the manufacturing sector within which the project is categorized, and 3 sectors (manufacturing, services, and trade) reflect 95% of the impact. While the analysis does not explain this distribution of impact, large portions of impact obviously occur in the manufacturing sector within which the project and many of its suppliers operates. Professional and technical inputs to the firm are also likely to be significant in the service sector, and induced consumption effects will typically be strong in the service sector and the trade sectors. Impacts step down significantly across the remaining broad sectors of the economy.
- e) Fiscal Costs: LED reports the following state benefits provided to the project through the 2035 period, (1) Quality Jobs Program (R.S. 51:2451) payroll subsidies of 6% of eligible payroll totaling \$9.6 million, (2) Enterprise Zone Program (R.S. 51:1787) investment credit of 1.5% of eligible expenditures totaling \$1.2 million and, (3) Port Investment Tax Credits totaling \$24.6 million. Claiming the Quality Jobs rebates and Enterprise Zone investment credit reduces the amount of Port Investment Credit the project can receive in those years. This adjustment is incorporated into these estimated fiscal costs.
- f) Incentive Significance: LED provided a project assessment that explained that in 2012 Bollinger Shipyards approached LED about potential incentives for the construction of a repair and conversion shipyard at Port Fourchon with a primary focus on the Port Investment Tax Credit Program. At that time the credit program did not provide for participation by shipyards. Legislation was passed in 2013 (Act 431) which made shipyards eligible for the program, and Bollinger Shipyards then submitted an application for the program.
- g) Fiscal Cost/Benefits: The impact analysis provides an estimate of total state tax receipts attributable to the project in each year of the projection horizon. In all years of the projection state tax receipts are approximately 7% of the household earnings estimates and 5% of the value-added estimates. This amounts to \$5.3 million in the first year from combined construction and operations, then steps-down to \$1.7 million in the first full year of operations. These shares are typical average tax receipt yields of earnings and value-added. Annual state tax receipts grow at just under 3% per year in line with the projected growth in earnings and value-added.

LED compared these state tax receipt estimates to the fiscal costs of the state incentives, to generate estimates of the annual net state fiscal impact. Estimated state tax revenue exceeds state fiscal costs in all but two of the years of the projection horizon, with the largest net effect \$3.9 million in the initial year when construction and operations occur but no incentive costs are yet paid to the project. After that initial year, positive net effects are fairly small, not exceeding \$500,000 until twelve years into the projection horizon, and exhibiting small negative effects in the third and fourth years.

#### General Evaluation

The economic results of the input/output analysis are essentially mechanical, and are driven by the inputs of direct hiring and wages paid, as reported by the project itself. Those inputs should be examined in any analysis based on them. In addition, the absolute levels of economic impacts estimated from input/output models should be taken with considerable caution. These are based on somewhat dated relationships between national industries, although the IMPLAN model does make effort to incorporate more current national and state level information of various economic variables. In addition, input/output analysis is static and linear. New firms are assumed to purchase inputs from in-state industries to the same degree that average purchases in the new firm's industry are exhibited, and no negative effects on local firms that compete for those inputs is accounted for unless explicitly inserted into the analysis. In addition, induced consumption is assumed to be directly proportional to the change in income associated with the additional project spending. For example, if a consumer were buying one cup of coffee a day from a local vendor before the project occurred, and income doubled after the project occurred, input/output models assume the consumer now buys two cups of coffee a day from the local vendor. Consumers clearly do not do that, and are likely to spend the additional income received on a varying mix of good and services that may or may not be locally supplied, or even save the additional income. It is material to note that roughly half of the total estimated economic impact comes from the indirect business effects and induced consumption effects that are estimated by the model and, assuming accurate reporting of direct spending and hiring by the project itself, are the least reliable components of the analysis. Thus, input/output analysis tends to overstate economic impacts, and consequently the associated fiscal impacts.

The analysis does not account for the state's balanced budget requirement. This omission is common in impact analysis, and means that the \$35.4 million of total fiscal cost of the incentives, that have to be paid for elsewhere in the state budget over several years, are not considered in the analysis. Use of these public resources to support this project results in lower government expenditures elsewhere in the budget and economy. This concept of opportunity cost is applicable to all government expenditure programs, but is less obvious and intuitive with respect programs such as Port Investment, Quality Jobs, and Enterprise Zone since benefits associated with these programs are charged against gross state receipts and result in lower net receipts before any other use of these funds can be considered in the appropriations process. This diversion of resources result is effectively a negative spending change that is ignored in the analysis and that has its own negative multiplier effects that work to dampen the positive effect of the presence of the project spending in the economy. Thus, total economic and fiscal effects are overstated and, consequently, the net excess of state revenue over state costs are overstated, as well.

A couple of relatively minor issues are also noteworthy. First, input/output analysis provides no temporal dynamics. That is, all of the resulting impacts of an initial expenditure change (project construction or annual operations) are assumed to occur essentially instantaneously, within the same period of the expenditure change. However, it can take a surprisingly long time for spending to flow through an economy and result in subsequent rounds of spending. This means that the economic and fiscal effects of spending in one period (typically an annual period) are actually spread over a number of subsequent periods. Thus, total economic and fiscal effects tend to be overstated in the early periods of analysis, and accumulate up to full effects over time.

Another issue involves the various state budget means-of-finance affected. The state tax revenue associated with project expenditures will be received by the State as various different tax and fee

revenues, and the estimates of these revenues do not distinguish the availability of these revenues to the state general fund. However, the fiscal costs of the incentive programs will primarily if not entirely be carried by the state general fund or equivalent resources. This will generally not be a large discrepancy since much of the state revenue estimates will be from income and sales taxes, which are primarily general fund revenue sources, but given the very small net annual fiscal effects generated by the analysis it is possible that actual general fund receipts will not exceed actual general fund costs, even without considering the overstatement of economic and fiscal effects discussed above.

Disregarding the various issues discussed above concerning the overstatement of economic and fiscal effects, the net annual fiscal effects reported by the analysis are quite small, starting at \$200,000 in the first period of operations, not exceeding \$500,000 until some twelve years after that, and not achieving an annual \$1 million level until twenty years after operations begin. Without regard to the uncertainty associated with making twenty-year projections of the viability and activity of a particular business, these estimated net effects seem well within any reasonable bounds of error, and could just as likely be negative in all years as opposed to positive.

Finally, the LED analysis includes a calculation of projected annual cumulative state tax revenue in excess of costs. This component of the analysis should be disregarded. It seems to imply that there are no years within the projection horizon that result in net negative fiscal results, when there are; albeit, only two. More practically, though, there will be no accumulation of results available to support the state budget in subsequent years, as implied by this component of the analysis.