

Real option of prisma energy international

Business



In life, one always has many options to choose from. A situation is no different if to speak about capital investment. In today's volatile business world, managers are aware of how risky most valuable investment opportunities are and how handy a flexible strategy can be. That is why managers want to know all specific options that are at their disposal. Yet, many current financial assessment tools fail to clearly spell out what investors can do in order to make the most out of future uncertain events.

“ Managerial flexibility to adapt and revise future decisions in order to capitalize on favorable future opportunities or to limit losses has proven vital to long-term corporate success in an uncertain and changing marketplace” (Brennan & Schwartz, 1985). Effective use of real options strategy allows businesses to zero in on the value of managerial flexibility in molding to decisions in reaction to unanticipated market changes and developments. When used as a conceptual tool, real options enable company's management to characterize and communicate strategic value or worth of an investment project. There are many methods of doing this including traditional methods e. g. discounted cash flow method and net present value. However, these methods fail to accurately estimate economic value of investments in a milieu of widespread uncertainty and rapid changes that may be constant or wavering.

By using real options, managers can effectively mark and target crucial opportunities to delay, redeploy, modify, or even in certain cases, ditch capital-intensive projects as events unfold. Perhaps, most current and relevant companies utilizing real options theories are found in the energy industry, especially in the development of alternative fuels, such as Prisma

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Energy International. In investments, the Real Options Theory is hugely imperative in the decision making processes in a company. It is built on the Net Present Value Theory, is used to make decisions on investments. The Net Present Theory, in an investment, makes an assumption that the future cash flow is determined and estimated if there is an uncertainty or some certain form of risk. If the Net Present Value is positive, then the project should be given some considerations.

If the NPV is zero, then the company can decide to either undertake the project or reject it. The Real Options Theory on the other hand has made decision making easier and has helped overcome issues in financial management. Today's fiercely competitive environment requires each and every player in the real business world to be pro-active. However, limited financial resources and numerous uncertainties oblige business practitioners to capitalize and maximize their shareholders' equity while reducing the risks incurred to the standard level (Brennan & Schwartz, 1985). Energy industry where Prisma Energy International operates has several reasons to stimulate application of real options. Firstly, energy industry is characterized by its exhaustive capital expenditure Examples are power plant investments and oil field development.

Colossal investment expenditure creates the need for reliable valuation and decision-making tools. Secondly, many energy producing assets swallow certain kinds of operational flexibilities. These operational flexibilities, alongside investment opportunities, are the main sources of option value that are entrenched in energy assets Thirdly, products of the industry are majorly traded commodities. Petroleum products' trading has existed for <https://assignbuster.com/real-option-of-prisma-energy-international/>

decades. Electricity and gas have been recently deregulated and they are now being traded in exchange forums in Canada, the US, Australia, and Europe. Some energy-related derivatives, such as emission rights and weather derivatives come into picture as well.

Subsistence of rich market data is important to make level headed assumptions when modeling the qualms. Finally, companies that trade in energy industries have an engineering culture that adapts to various mathematical models Prisma Energy International has many types of options. First is the option to wait, which is usually considered to be the most important type of real options in oil field investments. One of the latest real options applications available for the energy sector is in electricity markets. Electricity markets have only been deregulated recently in the US, Europe, and Australia.

Consequently, power companies like Prisma Energy International are open to elements not only to tentative customer demand but also to intermittent electricity spot and forward prices. Only generating unit with the most minuscule marginal cost is called online to generate units of electricity. Consequently, peak-load generators may operate for only a transient time span. The primary real option in a thermal power plant is the spark spread option In addition to the spark spread option, there is much flexibility that is of significant relevance to Prisma Energy International. A hydro-power plant is also known as a flexible asset with the likelihood to manage water level in its basin.

Thus, for a hydro-power plant, the operator can choose not only if it will run the turbine, but also when to generate electricity. It is important to keep in mind that regardless of options that are best suited to Prisma Energy International, the real options method serves two related purposes: investment decision-making and asset valuation. And the inferences of real options are two: the short-term operation of an asset and long-term investment functions (Herbelot, 1992). Prisma Energy International is a power plant, and is viewed as a plant that converts other types of energy, for example, mechanical, fossil fuel, solar, wind, and heavy tides, into electricity. In a competitive marketplace, owning a power plant can be viewed as holding real options to execute the process of conversion. The company can at each time period decide whether to turn the plant on to produce electricity or otherwise.

With investment allies to build or acquire a power plant, an investor may be faced with the uneventful possibility of waiting until market conditions are favorable enough and chances of increasing ones' worth present themselves (Bjerksund & Ekern, 1990). In addition to the spark spread option, Prisma Energy International may have other operational flexibilities. One such flexibility includes company's option to toggle fuels during its operation. This option is better known as a fuel switch option. The operational fuel switch option is defined as flexibility for a power unit to switch between different fuels in generating electricity (Bierbrauer, Truck, & Weron, 2003). Nowadays, industrial technology has enabled several power generating units to accommodate different fuels.

For instance, some Integrated Gasification Combined Cycle power plants (IGCC) can burn coke, oil, biomass, heavy refinery liquid fuels, natural gas, biogas, and urban solid waste (Abadie & Chamoro, 2005). Electricity cannot do this, and people usually do not plan an increase or decrease in their consumption of electricity. Therefore, generators have to be put in order to increase or decrease production of electricity according to demand.

Generators also have to be on standby mode to be able to provide frequency support or voltage if quality of power becomes lower than a specific predetermined rate. Subsidiary services like spinning reserve are included in the system capacity charge to customers in markets that are regulated (Brennan & Schwartz, 1985).

In competitive markets, generators can choose to offer ancillary service or to produce electricity. This is another type of spread option between ancillary service price and spark spread option price.