PROPOSED CONSTRUCTION OF NEW FUEL STORAGE FACILITIES

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1.0 INTRODUCTION

1.1 Foreword

This document sets a proposal by Tanzania International Petroleum Reserves Limited (TIPER) to Construct a new Truck Loading Gantry Project at plot no. 1/2, Kigamboni Industrial area, Dar as Salaam. The company has plans to invest usd 1.643 million to build a truck loading gantry to increase efficiency in delivering products to existing customers and attract other customers who do have depots, including those from neighboring countries for their transit fuel.

This will make Dar es salaam port a better choice to most transit customers who originate from neighboring countries. In general, this will enhance the general capacity of Dar es Salaam as the key of entry for the central corridor to receive and provide storage for significant transit petroleum cargoes.

Expectation is to move those customers from using other ports in the region like Mombasa and Beira, and use Dar es salaam port, hence boosting revenue for government in Tanzania, and improve economic activities in Tanzania, like transport, handling, foreign exchange movements, etc.

TIPER is better positioned to have this project:

- located at Kigamboni (compared to Kurasini which is highly congested)
- Adequate land
- Professional reputation, especially compared to the companies specialized in the storage and loading for transit product - TIPER is a logistic 'pure player', not an OMC, therefore not a competitor for local OMC's or transit operators
- More than 50 years' experience in the petroleum business

At the moment TIPER does Storage business stream. TIPER has been a pure storage facility since the stoppage of refining activity in the late 90's.

- In absence of truck loading, TIPER has always been a buffer storage facility for the industry, being used when needed by various types of customers:
- Incorporation in OMC's with permanent insufficient own storage capacity regarding their volume of sales and transit supply chain
- Buffer storage facility when OMC's own storage are full due to mostly external factors: downstream supply chain disruption (floods, border closure, unrests in destination countries, strikes) or market condition changes (sudden sharp drop of international prices like in February/March 2020 due to Covid 19)

- Safe heaven storage facility for international traders and banks, when imported cargos are on Financial Hold, meaning the buyers have not been able to open their letter of credits due to cash constraints.

Hence TIPER can work with various types of companies importing and loading trucks in Dar Es Salaam:

- Integrated OMC's with their own storage facility, supplying their own local customers (service-stations, industrial facilities...): They give priority in their depot to their own customers and won't be interested in using our services.
- OMC's with no storage facility, mostly small ones, supplying their own service stations and independent ones. These OMC's have throughput contracts with most depots and go to the cheapest ones. We will need some of them on contracts, knowing they are not faithful to any depot.
- Transit customers, using a local OMC as agent (PBPA requirement). If this agent is an OMC with a depot , they use their own depot. TIPER will offer them the one stop service. Some of them have usually complain against the low level of service received from local depots operators: priority given to operator's operations, high level of losses, poor reliability....
- International traders with a local OMC affiliate supplying their own transit customers. They use their own depot in priority but often have a storage and/or loading capacity bottleneck which force them to use 3rd party depots. They often complain about the quality of service from those depots and the sub-standards equipment. They will be keen to move to TIPER due to quality service.

Financial, technical and economic viability has been assessed with the view to help promoters make an investment decision. The various indices applied suggest a positive viability of the project.

1.2 Petroleum subsector categories

Petroleum sector is categorized into two categories namely upstream and downstream. Upstream activities involves exploration and production activities while downstream includes importations, storage, transformations, export, inland transportations of crude oil and refined petroleum products , wholesale and retail distribution of petroleum products including liquefied petroleum gas. In the context of The Petroleum Act Cap 392 and the Energy and Water Utilities Regulatory Authority (EWURA) Act, Cap 414 the petroleum downstream is referred to as the regulated petroleum sub sector.

Dar es Salaam port receives about 2.6 million cubic meters per annum of diesel and about 1.9 cubic meters per annum of gasoline, wholly imported from Mediterranean,

Arabian Gulf and sometimes from Durban, South Africa. Effective from January 2000 petroleum downstream sub sectors was liberated enabling Oil marketing companies to individually procure and trade petroleum products in accordance with their market requirements and setting pump prices based on the prevailing market forces. Since year 2012 importation of petroleum products to Tanzania were to be conducted via a tendering system, a bulk procurement system (BPS), in which all oil marketing companies (OMCs) participate.

1.3 Objectives of the study

The purpose of this study is to work out the technical and commercial details and the financial viability for the above mentioned project

1.4 Projects promoters

Tanzania International Petroleum Reserves Limited (TIPER) is jointly owned by government of Tanzania and Oryx Energies SA (OESA) of Geneva Switzerland, each with 50 per cent stake.

It is important to note that TIPER has wealth of more than 50 years' experience with managing petroleum products storage facilities and current has the largest installed petroleum products storage capacity.

The company is keen to properly utilize its state of the art facilities and exploit its experience to make this project a success

1.5 Study layout

This study is presented in one document comprising the following major chapters

1. Chapter one -Introduction
2. Chapter two -Executive summary
3. Chapter three -Petroleum Products Storage and Loading Operations
4. Chapter four -The Projects and Technical Specifications
5. Chapter five - Capital investment costs
6. Chapter six -Financial Analysis
7. Chapter seven -Economic Analysis
8. Chapter eight -Recommendation
9. Chapter eight -Appendix

2.0 EXECUTIVE SUMMARY

2.1 Introduction

The study examines the benefits of constructing a new Truck Loading Gantry facility at Kigamboni Area, Dar es Salaam. Recognition of market needs and demand will be the hallmark of the anticipated success in the company petroleum products storage and handling operations.

The projects will be properly developed using leading edge technology to enable TIPER enjoy rapid expansion in all target markets as more and more customers continues to appreciate the advantages of using its petroleum products storage facilities. The company will develop more technical capability to properly store and handle petroleum products.

Use of specialized technology is expected to contribute in positioning the company as leading in petroleum products storage, handling and delivery operation. All operations will have latest industry standard accreditation, reassuring customers of petroleum products storage and loading facilities designed to meet their needs and consistently having high quality standards.

Owners of TIPER have enjoyed a proud history and the future looks even brighter for the proposed project implementation. The following are among main reasons why one should use the company petroleum products storage and loading facilities

- Strong foundations

A strict code of professionalism, quality and service has placed the company at the top of other petroleum products storage service providers, and its reputation has been steadily extended through satisfaction of customers.

- Strong On HSSEQ

The company has continuously provided state of the art petroleum products storage terminal. TIPER will continue providing high quality in health, Safety, Security, Environment and Quality (HSSEQ) standards, certified to universally recognized criteria, and this extends to its loading gantry facilities as well.

2.2 Development in energy sector

Tanzania has abundant and diverse indigenous energy resources which are yet to be fully exploited. The sources include; wood fuel and other biomass fuels, hydropower, natural gas, coal, uranium, wind, geothermal and solar.

Tanzania's energy supply depends mainly on biomass. About 85% of the total primary energy supply in Tanzania comes from biomass (mainly firewood and charcoal), while other energy sources include petroleum (9%), electricity (4.5%), and other renewable energy sources (1.2%).

Nonetheless the downstream oil industry is an important sector of the country economy absorbing on average 55% of the country foreign exchange earnings. The volume of petroleum imports in 2018 is estimated at 5704 million cubic meters, which is 6% increase from 5,361 million cubic meters imported in 2017. In 2018, a total of 3,264 million cubic meters or 57% all petroleum products imported into the country were for the local market. This represents 2% increase from local imports in 2017, which was 3,193 million cubic meters. In 2018, a total of 2,440 million cubic meters or 43% all petroleum products imported into the country were for the transit market. This represents 13% increase from transit imports in 2017, which was 2,168 million cubic meters.

Table 2.2 Local and transit products import in year 2018 and 2017

Description	Local Imports	Transit Imports	Total
Year 2017	3,193,252,759	2,168,192,874	5,361,445,633
Year 2018	3,264,785,479	2,440,025,165	5,704,810,644
% Change 2017 and 2018	2%	13%	6%
% Local vs Transit 2017	60%	40%	100%
% Local vs Transit 2018	57%	43%	100%

Government policies are directed at Petroleum products substitution by exploiting indigenous resources. In the upstream oil industry, oil and gas exploration and production is also being encouraged. Extensive gas fields have been identified off the coast at Songo Songo and Mnazi bay which are currently under production and the discovered gas fields off Mafia Island shores that are being developed. Natural gas estimated to be 40 trillion cubic feet which is quite substantial. At present, most of the gas produced from this field is used in power generation. However natural gas can be material for multitude of more valuable petrochemical industries.

Human resource is certainly most important factors of production because it is capable of transforming all the other factors for the betterment of human life and human welfare. Developing and utilizing these resources effectively increases its productivity and its capital value. Thus human resources development must be one of the leading objectives on the nation's development agenda. Given significant discoveries of natural gas, there is apparent demand for petroleum and petrochemical engineers.

2.3 Sub sector regulation

2.3.1 legislation

The petroleum downstream sub sector is governed by the petroleum Act, 2015, as amended from time to time. The ministry of Energy and minerals provides guidance on petroleum industry development in Tanzania reflecting the principles embedded in the National Energy Policy 2015

2.3.2 Regulator and Regulated Services

Regulated activities include importation, oil transformation, transportation, distribution, storage, sale and handling of petroleum products. The energy and water Utilities Regulatory Authority (EWURA) issues wholesale, retail, storage installation, refinery, road petroleum tankers and pipeline transportation license. It also issues petrol station and depot constructions permits. License application forms, rules, regulations and guideline can be downloaded for appropriate usage

In order to execute its regulatory roles effectively and efficiently, EWURA uses various regulatory tools. These tools include: the main Legislations, Petroleum Rules and Petroleum Standards.

Main Legislations tools include:

- The Petroleum Act, 2015 (former Petroleum Act, 2008);
- EWURA Act, Cap 414;
- The Petroleum Regulations and Rules

Petroleum Rules

As per Section 40 of the EWURA Act Cap 414, allows EWURA in consultation with the Minister responsible for petroleum affairs to make Rules in respect of all matters considered necessary or desirable to give effect to the Act.

Petroleum Standards

Petroleum standards are developed by Tanzania Bureau of Standards (TBS) which is a National Standards body, in collaboration with other stakeholders in the downstream petroleum operations in the country including EWURA. EWURA, as a user of the standards, continued to monitor petroleum products standards in order to ensure that these standards comply with the National standards, at all times.

One of the key functions of EWURA in the petroleum sector is to ensure effective and efficient procurement of petroleum products and promote fair competition among serviced providers. In order for Tanzania to get most reasonable petroleum products prices, and as part of implementation of legal requirements, the Government through EWURA embarked on implementation of Bulk Procurement System as an efficient method of importing petroleum products in the country.

The petroleum downstream sub-sector was fully liberalized by the government in January 2000 in order to achieve the following;

- Improve efficiency in provision of petroleum products by encouraging competition within the industry. Ideally, the intention was, among others, to reduce costs in respect of procurement, storage, transportation and distribution of petroleum products by eliminating inefficiencies in the supply chain; and
- Attract investment in downstream supply chain and provide adequate storage and distributed facilities, so as to ensure a reliable supply of petroleum products throughout the country

The overall objective of the reform was to make the petroleum supply reliable, efficient, transparent and competitive. Since liberalization, the sector has registered significant achievement including entry of new players in both retail and wholesale trade, construction of new terminal and maintaine security of supply of fuel in the county.

Despite these achievements, liberalization has registered some problems principally because there was no regulator in place to ensure a level playing field for all players, to monitors market conduct and to sanction defaulters. As a result, there are malpractices in the sectors that EWURA is currently fighting against. They include products adulteration, sub-standard facilities and lack of reliable data on petroleum trading. So far EWURA has registered impressive successes especially in price setting, licensing operators, fighting adulteration, uplifting quality of facilities, and improving information flow on industry operations.

Major challenge remains an efficient way of offloading products in Tanzania with minimal loss and minimal demurrage, so that a country gets a maximum benefit. The solution is to offload petroleum products into a single location. Currently most suitable place is to offload at TIPER.

2.4Location

The fuel storage facilities will be located on an industrial site at Plot No. 1/2, Kigamboni Industrial Area, Dar as Salaam.

2.5 Project Economics

2.5.1 Capital Investment Requirements

In the proposed construction of a new truck loading gantry facility, the total cost is estimated at US$ 1.643 Million. At completion of construction, the engineered package shall be suited to load up to 8 (eight) trucks simultaneously. The total installed loading capacity will reach approximately 3,000 cubic meters per day.

2.5.2 Profitability

Project revenue will mainly be in form of loading fees paid by oil marketing companies (OMCs) that enters into commercial agreements with TIPER for storage of their petroleum products and then delivery via the loading gantry. Based on projected revenue at sustainable levels of operations the project is quite profitable.

2.6 Recommendation

The study shows the proposed project is both technically and financially a feasible undertaking. Furthermore, it will create local employment for national benefit.

In view of the findings, the project is recommended for implementation.

3 PETROLEUM PRODUCTS STORAGE AND LOADING OPERATIONS

A petroleum depot is an industrial facility for storage of petroleum products, other hydrocarbons and /or petrochemical and from which these products are usually delivered to end users or further to storage facilities. A petroleum depot typically has tankage, either above ground or underground, pipelines for receipt and discharges of petroleum products to other depots, or gantries to deliver products to tankers or other vehicles.

3.1 Petroleum storage agreements

This is a type of contract arrangement in which a party (usually one oil company) undertakes to pass (put through) an agreed minimum amount of petroleum products (such petrol, diesel, kerosene) through a storage depot via a pipeline for a fixed period (days, month) to be delivered in future to the owners' destination or equipment of choice at an agreed fee. In the petroleum industry such contracts are commonly known as throughput agreement.

3.2 Petroleum storage tanks

Above ground storage tanks are used to store petroleum products. Various types and volume of petroleum products are stored in storage tanks above and below ground. These tanks vary in size and shape, and can be constructed single or double walled from materials such as steel, concrete or fiber glass. An approval must be obtained from the environmental management authority prior to the installation of a petroleum storage system. Use of appropriate tank storage system for petroleum products protects the environment by preventing petroleum product release, both above ground and underground.

3.2.1 Types of storage tanks

Storage tanks come in all sizes and shapes. Special applications might require tanks to be rectangular, in the form of horizontal cylinders or even spherical in shape. Horizontal cylinders and spheres are generally used for full pressure storage of hydrocarbon or chemical products. The most common shape used is the vertical, cylindrical storage tanks.

3.2.2 Current storage options.

The petroleum industry has experienced significant changes in the types of products used to feed refineries around the world. The increased use of petroleum products has prompted the industry to turn to other sources for supply. Changes in product, physical, and chemical properties impose new challenges to the storage tank industry. Environmental and safety requirement continue to be significant factor in the selection and design of the storage tanks used by the petroleum industry.

3.3 Other activities

Other activities at oil terminal include firefighting facilities, pumping stations, loadings facilities, flow meter facilities, electrical distribution facilities, concrete pavements, sewage treatment units for petroleum products, etc.

3.4 Potential environmental risk / liability factors

Environmental risk/liability associated with petroleum product storage operations include risk of spills resulting in liability claim or regulatory enforcement action, and contamination of soil and ground water.

Others are fees and penalties particularly connected to effluent discharges and run off/storm water drainage from storage area on terminal.

It is crucial for a terminal to work with regulatory authorities to ensure the protection of human health, safety, security, environment and quality (HSSEQ).

4 THE PROJECT AND TECHNICAL SPECIFICATION

The Truck Loading Facility in part of the company plans to diversifying its operations as well as to attract more customers. Ideally the Truck Loading facility will make TIPER customers free to load trucks at TIPER instead of pumping over stored products to another Terminal where there is a Loading facility

4.1 Main capital expenditures

4.1.1 New eight (8 skids) of Engineered Top Loading Arms, PD. Meters, Loading Pumps, Associated equipment and Automated Integrated System:

For a gantry to deliver fuel to trucks, new product pumps are required to deliver fuel to trucks coming to load. Hence TIPER has decided to procure and install.

- eight (8 skids) of Engineered Top Loading Arms with Dia. 4"
- PD. Meters,
- Loading Pumps,
- Associated equipment and
- Automated Integrated System:

This involves detailed design, manufacture, supply, installation supervision, commissioning and performance testing of the equipmwent

4.1.2 Pipes and pipe fittings

Procurement of pipes and pipe fittings to deliver fuel from storage tanks to the loading arms. These pipes are

- pipes and pipe fitting for 2 x Dia.10" products line,
- pipes and pipes fittings for 1 x Dia. 6" fire water line.

Constructions to be done by a Class 1 Mechanical Contractor with Experience in Pipe works + Gantry structure manufacture

4.1.3. Earthworks, loading gantry area concreting, foundation footings, drainage and oil separators + Office block

Construction works for the earthworks, loading gantry area concreting, foundation footings, drainage and oil separators + Office block to be done by a class 2 and above Civil or Class 1 Building Contractor

4.1.4. Electrical equipment office, site procurement and installation including supply and installation of a standby generator.

Electrical construction works to be done by a class 5 and above Electrical Contractor. This involves

- Electrical equipment office,
- site procurement and installation including supply and installation of a standby generator.

4.2 Summary of short, medium and long term solutions

4.2.1 Short to Medium Term Solution

Tanzanian International Petroleum Reserves Limited believes that construction of a new truck loading gantry facility will serve the purpose of increasing efficiency in delivering products to existing customers and attract other customers who do have depots, including those from neighbouring countries for their transit fuel.

In turn this will attract more product under the BPS coming into the country, and yet attracting new customers both local and transit customers, fuel for the Strategic Petroleum Reserves (SPR), and those who want to utilize the bonded warehouse facility. Revenue for the government will increase due to increased product into Tanzania.

4.2.2 Long Term Solution

In the long term, the accomplishment of this project will depend on the storage business growth over time as the firm anticipates continuous local and transit demand growth in the long term.

TIPER is also the place to increase the attractively of Dar Es Salaam port compared to its competitors, like Mombasa port in Kenya and Beira port in Mozambique, in their effort to supply the landlocked countries.

TIPER is the natural place for Government to accommodate the Strategic Petroleum Reserve (SPR) of the country. With increase in loading capacity, delivery of products to customers in times of shortage is quick and reliable.

5.0 CAPITAL INVESTMENT COSTS

5.1 Assumptions

The financial projection to determine the visibility of the project by M/s Tanzania International Petroleum Reserves Limited are based on the following key assumption

- Construction of petroleum products storage facilities and installation of fuel handling and delivery machinery and equipment will start immediately.
- Financial calculations are based on current market prices and costs are assumed constant throughout the operating period under the assumption that if operation costs change, storage fees will change proportionally to preserve the profit margins.
- The project has adopted the currency exchange rate of United States Dollar 1 = Tanzanian shillings 2,427.30 projected for September 2020.
- Average debtor days stand at 30 days. This calculation shows the average number of days it takes for the company to receive payments from its debtors.
- Average creditor days stand at 35 days. This calculation shows the average number of days it takes for the company to pay its creditors.
- Annual operating days stand at 360 days.
- Discount rate stands at 14%. This is the interest rate used in discounted cash flow analysis to determine the present value of future cash flows.
- Project duration is assumed to be 1 year. This refers to the time it takes to complete the entire project from starting the first task to finishing the last task.

5.2 Summary of capital costs

On completion of project implementation, the total investment will reach to US$1.643 million as shown in attached schedules.

5.3 Building and civil costs

The main civil works required involves construction. Other civil works will include electrification and plumbing. Total investment on lands and buildings is estimated at US$ 160 thousand.

Vendor scope of supply shall include

a. Reinforced concrete pavement (C30) at loading gantry area
b. Construction of an office block for gantry operators.

5.4 Plant machinery and equipment costs

The new loading gantry supply shall include design, engineering, fabrication, inspection at the manufacturers, assembling works, testing, supply to site, supervision of site erecting and commissioning of complete loading arms, pumps, flow meters, associated equipment and pre-fabricated loading platform designed to TIPER's approval. The engineered package shall be suited to load up to 8 (eight) trucks simultaneously.

The major components of this scope includes:

a. Topographic survey and construction drawings preparations.
b. Supply of 8 numbers top loading arms + PD flowmeters of good make as per the specification.
c. Supply of centrifugal product loading pumps.
d. Supply of commissioning spare parts.
e. Extension of firefighting piping.
f. Supply and installation of electrical cabinet, cabling for pumps, site electrical lighting.
g. Supply, fabrication, testing and commissioning of 2 x dia.12" piping from TIPER tank farm to loading area.
h. Supply, installation, testing and commissioning of an automated integrated system specific to the loading operation only.

The total investment on machinery and equipment is based on a quotation reserved from major suppliers for main production machinery and amount to US$ 1,483 million approximately.

6.0 FINANCIAL ANALYSIS

TIPER has prepared financial projection for the proposed project taking into account the following roles that financial plans play in an enterprise:

a. First, the financial plan translates the company's goals into specific targets:
   It clearly defines what a successful outcome entails.
   The plan is not merely a prediction; it implies a commitment to marking the targeted results happen and establishes milestones for gauging progress.

b. Second, the plan provides the company with a vital feedback-and-control tool:
   Variances from projections provide early warning of problems.
   When variances occur, the plan can provide a framework to determine financial impact and effects of various corrective actions.

6.1 Income and expenditure

6.1.1 Income

The proposed project by TIPER expects to earn its income through revenue generated from fees charged for storing and loading of petroleum products in its storage depot. The annual gross margin is projected to stand at US$ 4,387,000 in the fifth year of operation.

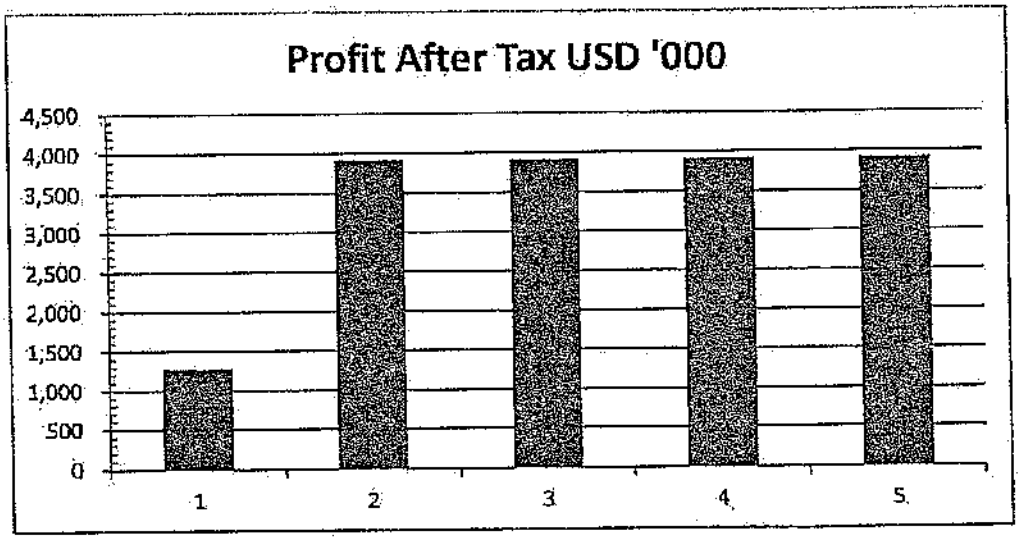
6.1.2 Expenditure

The anticipated project costs have been summarized in detail in the appendix schedule.

6.2 Net income statement highlights

The project's annual after tax net income on the fifth year of operation is estimated to reach US$ 2,744,000 as presented in the Profit/Loss Statement of the financial statements appendix.

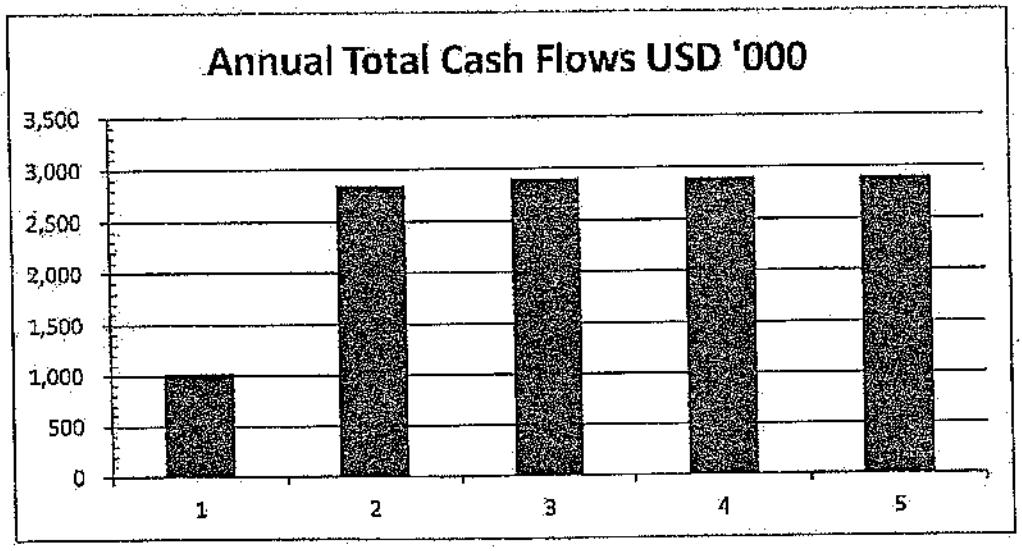
Graph: After Tax Net Income



6.3 Cash flow highlights

This is shown in the financial statements. The project has positive total cash flows from 1st year of operation going forward as shown hereunder.

Graph: Total Cash Flows.



6.4 Net present value.

The difference between the present value of cash inflows and the present value of cash outflows or the proposed project i.e. its Net Present Value has also been calculated to access profitability of the proposed project. Based on enterprise book value and discounted at 14% the project has a positive NPV at US$ 11,916,000

6.5 Internal rate of return

The Internal Rate of Return (IRR) is the discount rate that generates a zero net present value for a series of future cash flows. This essentially means that IRR is the rate of return that makes the sum of present value of future cash flows and the final market value of a project equal its current market value.

Tanzania International Petroleum Reserves Limited has calculated the Internal Rate of Return (IRR) for the proposed project. The IRR stands at 117.65% while the project discount rate is 14%. Since the IRR exceeds the discount rate (cost of capital), this project should be undertaken.

7.0 ECONOMIC ANALYSIS:

Economic analysis is a systematic approach to determine the optimum use of scarce resources, involving comparison of two or more alternatives in achieving a specific objective under the given assumptions and constraints.

Economic analysis takes into account the opportunity costs of resources employed and attempts to measure in monetary terms the private and social costs and benefits of a project to the community or economy.

7.1 Assumptions and considerations

The basic assumptions underlying economic benefits and costs are;

a. Taxes on capital costs have not been considered.
b. Conversions factors have been used to determine economic costs and benefits
c. Economic life of the project is assumed to be 5 years.

7.2 Economic benefits of the project

The successful operation of the project will contribute significant economic benefits of Tanzania. In summary the benefits which will be realized are as follows: -

a. This project will boost investment in the sensitive petroleum sub sector. It will play a major role in stabilizing fuel price which is vital for the country's economy.

b. Employment opportunities for minimum 10 permanent staff when the project is operational.

c. The direct income for the workers, combine with other social benefits that the management of M/s Tanzania International Petroleum Reserves Limited will provide, will help in overall efforts of alleviation of poverty in the country.

d. Provision of a market for goods and services demanded by the new project

e. Expanded tax base to the Treasury and local Government authorities and generation of substantial income to the Government in the form of tax and dividends.

f. Attract more business to Dar es salaam port. Expectation is to move transit customers from neighbouring countries using other ports in the region like Mombasa and Beira, and make them use Dar es salaam port instead due to efficiency, hence boosting revenue for government in Tanzania, and improve economic activities in Tanzania, like transport, handling, foreign exchange movements, etc.

8.0 RECOMMENDATONS

- The project is technically feasible, financially and economically viable and environmental friendly.
- A fast implementation of the project is highly recommended to avoid cost overruns and for the project to be able to realize the benefits outlined above; especially at this juncture when the Government is making effort to boost investment in various sectors in the economy.
- In view of the above it is strongly recommended that the project be approved by Tanzania Investment Centre and be granted the TIC Certificate of Incentives with its associated privileges and benefits as provided for under Tanzania Investment Act, 1997 to facilitate smooth implementation.

9. APPENDIX:

a. Assumptions

US$000	-1	0	1	2	3	4	5
Profitability							
Discount Rate	14%						
Duration of the project	5						
Currency	USD						
Project Local Currency	TZS						
USD Exchange rate	2,427.3						
Reference date	June 2020						
Economic data							
Corporate tax		30.00 %	30.00 %	30.00 %	30.00 %	30.00 %	30.00 %
Withholding tax on dividend		10.00 %	10.00 %	10.00 %	10.00 %	10.00 %	10.00 %
Working Capital (days)							
Debtors		30 days	30 days	30 days	30 days	30 days	30 days
Stocks		6days	6days	6days	6days	6days	6days
Creditors		35 days	35 days	35 days	35 days	35 days	35 days
Annual operating days		360 days	360 days	360 days	360 days	360 days	360 days
Depreciation							
Civils and Buildings		5%	5%	5%	5%	5%	5%
Tanks and Pipes		10%	10%	10%	10%	10%	10%
Equipments		20%	20%	20%	20%	20%	20%

Vehicles		33%	33%	33%	33%	33%	33%
IT		33%	33%	33%	33%	33%	33%

b. Volumes & Gross Margin

US$000	0	1	2	3	4	5
PRODUCT OR SERVICE #1						
VOLUMES (M3)		67,000	180,000	180,000	180,000	180,000
UNIT MARGIN (US$/M3)		3	3	3	3	3
MARGIN (US$000)		201	540	540	540	540
PRODUCT OR SERVICE #2						
VOLUMES (M3)		36,000	96,000	96,000	96,000	96,000
UNIT MARGIN (US$/M3)		2	2	2	2	2
MARGIN (US$000)		72	192	192	192	192
PRODUCT OR SERVICE #3						
VOLUMES (M3)		133,259	358,008	358,008	358,008	358,008
UNIT MARGIN (US$/M3)		5	5	5	5	5
MARGIN (US$000)		600	1,612	1,612	1,612	1,612
PRODUCT OR SERVICE #4						
VOLUMES (M3)		57,363	152,968	152,968	152,968	152,968
UNIT MARGIN (US$/M3)		7	7	7	7	7
MARGIN (US$000)		380	1,013	1,013	1,013	1,013
PRODUCT OR SERVICE #5						
VOLUMES (M3)		194,339	520,941	520,941	520,941	520,941
UNIT MARGIN (US$/M3)		2	2	2	2	2
MARGIN (US$000)		384	1,030	1,030	1,030	1,030
TOTAL M3		487,961	1,307,917	1,307,917	1,307,917	1,307,917
GROSS MARGIN (US$000)		1,637	4,387	4,387	4,387	4,387

c. Expenditure

US$000	0	1	2	3	4	5
VARIABLE EXPENSES						
city service levy		5	13	13	13	13
TOTAL VARIABLE EXPENSES		5	13	13	13	13
FIXED EXPENSES						
US$000	0	1	2	3	4	5
SALARY, SOCIAL CHARGES, BENEFITS		109	164	164	164	164
TEL, FAX, TELEX, E-MAIL, INTERNET (LINES)		2	4	4	4	4
UTILITIES		40	59	59	59	59
INSURANCE OF FACILITY AND VEHICLES		4	4	4	4	4
SECURITY		41	62	62	62	62
TOTAL FIXED EXPENSES		197	293	293	293	293
HEADCOUNT		10	10	10	10	10

d. Profit & Loss

US$000	0	1	2	3	4	5
Gross Margin		1,637	4,387	4,387	4,387	4,387
Variable Expenses		(5)	(13)	(13)	(13)	(13)
Fixed Expenses						
Staff costs		(109)	(164)	(164)	(164)	(164)
Communication & IT		(2)	(4)	(4)	(4)	(4)
Offices & General Expenses		(40)	(59)	(59)	(59)	(59)
Production Costs		(45)	(66)	(66)	(66)	(66)
Total Fixed Expenses		(197)	(293)	(293)	(293)	(293)
Depreciation		(161)	(161)	(161)	(161)	(161)
Operating Profit		1,274	3,919	3,919	3,919	3,919
Profit before tax		1,274	3,919	3,919	3,919	3,919
Corporate Tax		(382)	(1,176)	(1,176)	(1,176)	(1,176)
Profit		892	2,744	2,744	2,744	2,744
EBITDA		1,435	4,081	4,081	4,081	4,081

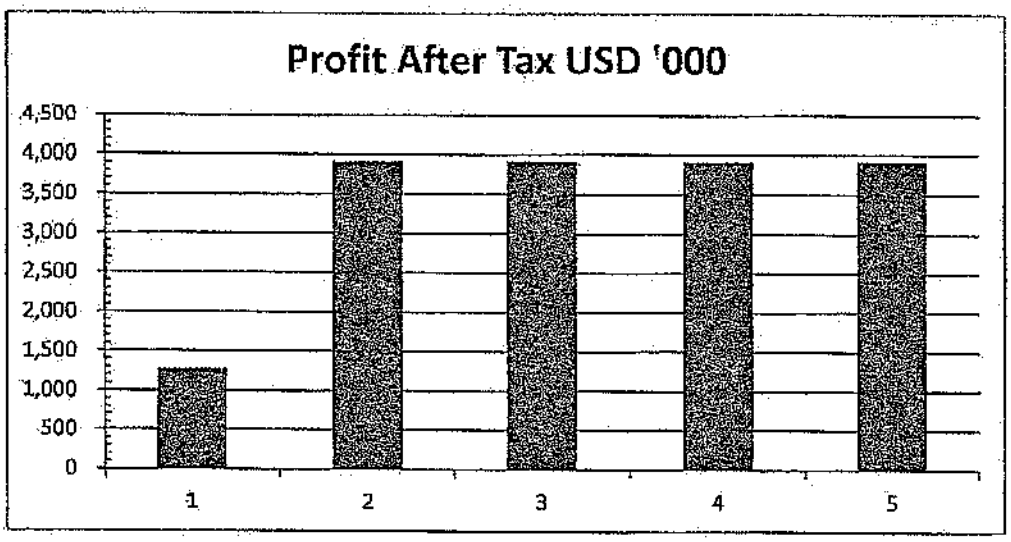
e. **Balance Sheet**

US$000	0	1	2	3	4	5
Current Assets						
Debtors	0	32	85	85	85	85
Cash	(1,643)	(621)	2,230	5,135	8,040	10,945
TOTAL Current Assets	**(1,643)**	**(589)**	**2,316**	**5,220**	**8,125**	**11,030**
Fixed Assets						
Gross Tangible Assets	1,643	1,643	1,643	1,643	1,643	1,643
Cumulated Depreciation Tangible Assets	0	(161)	(323)	(484)	(645)	(806)
Net Tangible Assets	1,643	1,481	1,320	1,159	998	836
TOTAL Current Assets	**1,643**	**1,481**	**1,320**	**1,159**	**998**	**836**
TOTAL ASSETS	**0**	**892**	**3,636**	**6,379**	**9,123**	**11,866**
Retained Earnings	0	892	3,636	6,379	9,123	11,866
TOTAL LIABILITIES	**0**	**892**	**3,636**	**6,379**	**9,123**	**11,866**

f. **Cash Flow statement**

US$000	0	1	2	3	4	5
Result before tax		1,274	3,919	3,919	3,919	3,919
Depreciation & Amortization	0	161	161	161	161	161
Cash flows from activities	0	1,435	4,081	4,081	4,081	4,081
Debtors	0	(32)	(53)	0	0	0
Working Capital variance	0	(32)	(53)	0	0	0
Corporate Tax	0	(382)	(1,176)	(1,176)	(1,176)	(1,176)
Net cash flows from operating activities	**0**	**1,021**	**2,851**	**2,905**	**2,905**	**2,905**
Investments	(1,643)	0	0	0	0	0
Cash flows from investing activities	**(1,643)**	**0**	**0**	**0**	**0**	**0**
CF (Exit Value = Enterprise Book Value)	**(1,643)**	**1,021**	**2,851**	**2,905**	**2,905**	**2,905**

g. Profit projection



h. Cash Flow projection