

EXECUTIVE SUMMARY

FOR

IDFS, INC., \$6,700,000,000.00

PROPOSED POWER PROJECTS

IN THE TEXAS URBAN TRIANGLE OF TEXAS

**EXECUTIVE SUMMARY
TEXAS INTEGRATED POWER, INC.
US \$6,700,000,000.00**

PART ONE: INTRODUCTION

This executive Summary is to be used for **Private Placement** only. We are seeking funding in the amount of **\$6,700,000,000.00 (Six Billion, seven hundred million Dollars American)** for a total of five energy production facilities with a minimum production capability of **Three Gigawatts (Three thousand Megawatts)**. The **Green/Sustainable** portions of this overall project shall consist of the following:

- Design, permit and build two 50 MWe Solar Farms in South Texas
- Convert 2.4 Gigawatts of existing coal-fired power plants to low carbon emitting natural gas
- Developing a synchronization and phase balancing technology to allow more wind and solar energy on the Texas Grid.
- Research and development of new **carbon Sequestration technologies**
 - a. Conversion of Carbon dioxide into syngas using the **Fischer-Trope** process.
 - b. Conversion of Carbon Dioxide into limestone. This project has environmental value because of its use in the restoration of Coral reefs.

PART TWO: NEEDS ANALYSIS FOR THE PROJECTS:

- On January 1, 2002, the Texas State Legislature decided to deregulate the electricity industry and open up the supply of electricity to competition.
- Texas is the number two State in terms of its area with a wealth of energy resources.
- The State of Texas leads the nation in energy production.
- Texas has the nation's second-largest population and second-largest economy after California.
- Texas uses more energy than any other state and accounts for almost one-seventh of the U.S. total consumption.
- Eighty percent of the State of Texas is not interconnected to any of the other pieces of the National Grid which falls under the licensing of **FERC (Federal Energy Regulatory Commission)**.
- The **Texas Triangle** (also known as **Texaplex**) is one of 11 megaregions in the United States. The 60,000-square-mile (160,000 km²) region contains most of the state's largest cities and metropolitan areas, and in 2018 had a total of 19 million people, nearly 75% of Texas's total population.
- The production margins for the Texas Urban Triangle, not including closed coal-fired power plants is zero. This means that on hot days in the summer some of the closed coal-fired power plants have to be re-activated.
- **ERCOT** estimates that they will need an increase of three gigawatts of production in the next five years (2023-2028) to satisfy the increasing demand for electricity due solely to the increase in population. We can also allow another two gigawatts of increase due to the influx of new Industries to the **Texas Urban Triangle** of Texas.

- The State power production and grid are controlled by **ERCOT (Electric Reliability Council of Texas)** and the **PUC (Public Utility Commission) of Texas**.
- The Federal Government, through the **EPA (Environmental Protection Agency)**, is mandating the closure of many of the coal-fired power production facilities throughout the State.
- There is a massive shortfall of electrical Energy production in the State. This shortfall is the subject of this funding proposal.
- Below is the list of Coal-fired power plants which were decommissioned in 2018. The total production of this decommissioned facilities is 5350 MW.

Name	Location	Capacity (MW)	Decommissioned
Big Brown	Freestone County	1,186	2018
J.T. Deely	Bexar County	932	2018
Monticello	Titus County	1,980	2018
Sandow	Milam County	1,252	2018

- There are an additional 18 coal-fired power plants in Texas that the **EPA** is trying to force into decommissioning.

The conclusion to be drawn from this analysis (Section Two- Needs Analysis) of this document is crystal clear. To meet the growing demand for Electricity we need a coordinated effort to increase energy production.

PART THREE: THE PROJECT

The project consists of the business development, project design, project engineering, project management and construction management of a total of five separate energy production facilities. Each project shall consist of 560-640 MWe, combined cycle, natural gas fired power production facility to be located in various locations in the State. Four of these plants are scheduled as replacement for decommissioned or to be decommissioned coal-fired electrical production facilities in the State of Texas.

- 1. Phase One: Independent Power Producer:** The first phase of the project shall consist of the Engineering, Procurement, Construction and start-up of two **FRAME-7FA**, 171 MWe, natural gas fired turbine combined with a single heat recovery unit (**HRSG**) for a combined production of 560MWe of power to be tied to the grid in the vicinity of the **South Texas Nuclear Power Plant**. All of the project documentation for this facility will be re-usable in all of our five sites. We intend to build each facility with the same footprint and the same equipment.
- 2. Balance of Project:** The balance of the power project will be the replacement of coal-fired power production facilities in the State of Texas with Natural Gas, combined cycle power production facilities. The list below consists of four coal-fired facilities, in Texas which have been decommissioned in 2018. These nodes to the Grid will be accessible for very little investment.

Name	Location	Capacity (MW)	Decommissioned
Big Brown	Freestone County	1,186	2018
J.T. Deely	Bexar County	932	2018
Monticello	Titus County	1,980	2018
Sadow	Milam County	1,252	2018

3. **Solar Component:** The Green component of the overall project shall consist of the Engineering, Procurement, Construction and start-up of two advanced solar farms. These 50 MWe solar farms will include a 45 MWe single Cycle, load following, natural gas fired power plant located at the same node to provide continuous delivery of 40 MWe to the node.
4. **Time to Complete Phase One:** The construction **Gantt Chart** will reflect the startup of the first power production facility within the 30 months from the initiation of the project. The overall project **Gantt Chart** will also reflect the requirement to bring the other four power plants on line in six months intervals. This means that at the end of the fifth year of funding we will have 3,000MWe of combined cycle electrical production in the State of Texas.
5. **SCADA:** The **SCADA** (Supervisory Control and Data Acquisition), **NETWORKING, FACTS Controllers** (Flexible Alternating Current Transmission Systems) and **Synchronization** portion of the project shall consist of:
 - Interconnection of the two Nuclear Power facilities in Texas. The South Texas Nuclear Power Plant will be connected via an **optical fiber**. This optical interconnect will allow us to synchronize the two nuclear facilities in the State. The present allowable variation is plus or minus one-half cycle. With our synchronization technology which is tied to the geosynchronous clock pulse from **CERN** we will be able to synchronize the two power plants to plus or minus 1/20 of one cycle per second.
 - The optical interconnection will be extended to include interconnection to all of our production facilities. This fiber interconnect will act as a private **LAN** (Local Area Network) for our facility to facility communications.
 - The web servers will be located in our Houston Corporate offices and the archival system will be located in Bay City.
6. **Nodal Access:** Connection to the grid at this node provides us with access to the following major energy markets:
 - The City of Houston
 - The City of Austin
 - City of San Antonio.
 - The City of Dallas
 - And the City of Fort Worth

PART FOUR: PROPOSED CORPORATE STRUCTURE FOR PROJECT

- The Senior Engineer of **AscenTrust, LLC.** owns all the stock of **IDFS, Inc. (International Diversified Financial Services, Inc.)** IDFS will be used to manage the distribution of Funds to the various Corporate Entities which will be created for the successful completion of the Construction of the various power production entities. As the initial repository of the funding for the project. **IDFS** will also be used to provide the accounting required by the partners and the funding Group. In the operation phase of the production facilities **IDFS, Inc.** will provide the overall management functions for the various entities which were created in the construction phase of the project.
- **AscenTrust** will incorporate **Matagorda Power, LLC.**, in the State of Texas, if acceptable to all the stakeholders. If **Matagorda Power, LLC.** is not acceptable to the Secretary of State or to one of the stakeholders, an acceptable corporate name will be selected
- **Matagorda Power, LLC.** will be registered with the **PUC** (Public Utility Commission) of the State as an Independent Power Producer, will be the owner and operator of the power plants. Matagorda Power , LLC will be a wholly owned subsidiary of **IDFS, INC.**

PART FIVE: RESPONSIBILITIES OF IDFS:

- IDFS will co-locate with **AscenTrust** at its corporate headquarters in Houston, Texas during the construction phase of the Bay City Project.
- IDFS will act as the representative of the Funding Group while the construction project is underway.
- IDFS will provide the fiduciary oversight for the distribution of funds to the subcontractors
- IDFS will act as the **Fund Control** for the Construction portion of the project.
- IDFS will provide wire transfers for all long lead-time items.
- IDFS will provide timely payments to all subcontractors and vendors through a regular fund control system which will be setup in the Bay City Corporate headquarters of IDFS.

PART SIX: RESPONSIBILITIES OF ASCENTRUST, LLC.

The Company will provide all of the business planning, project design, project engineering, project management and construction management for all the parts of the projects outlined in this document.

The Senior Engineer has more than 30 years of Project Management Experience in diverse industries and multi-million dollar projects including, but not limited to:

- Power Plant Design and Construction
- Infrastructure: Water, Sewer, Fiber-Optic Cabling, Electrical Power Distribution
- Industrial, Commercial and Residential Construction Projects
- Water Retention and flood control using water as a temporary levee system
- Research and Development in Gas Turbine Technologies
- Research and Development in Small Nuclear Reactors Technologies

PART SEVEN: PROPOSED POWER PLANT

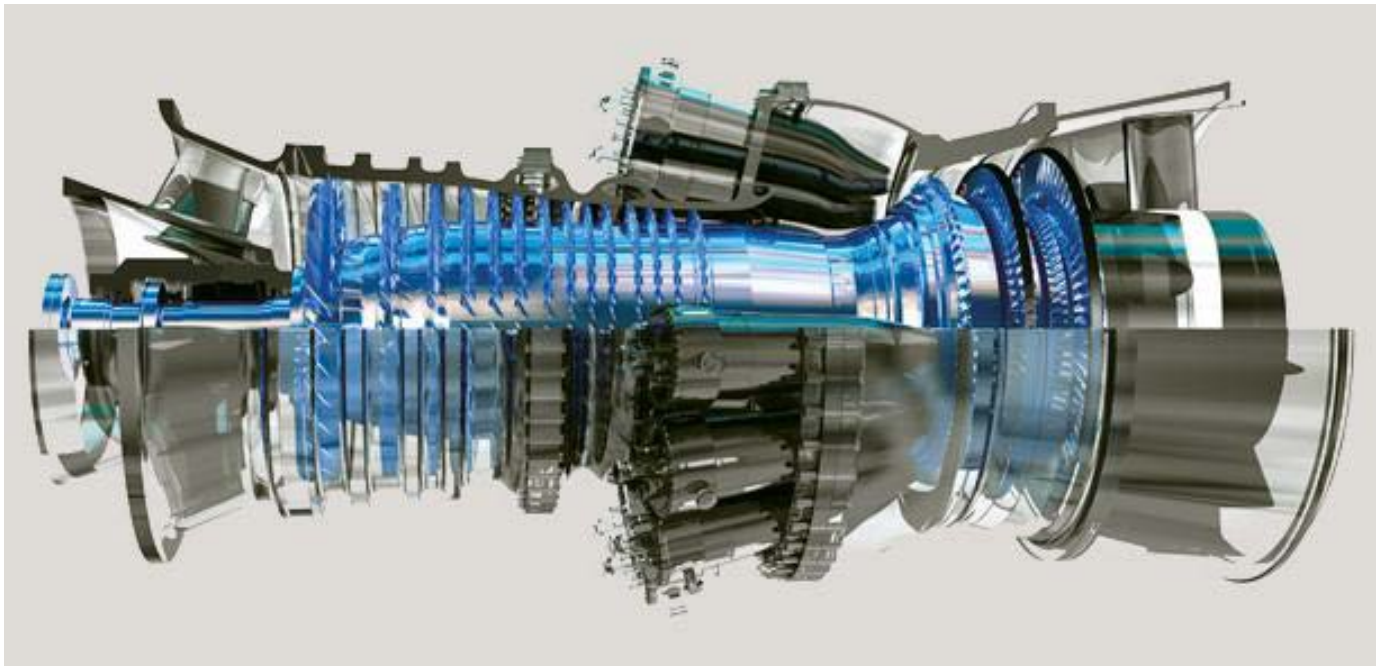
1. The Power Production Facilities: The Company will create an Independent Power Producer in the State of Texas to be Incorporated under the name **Matagorda Power, Inc.**

The Company proposes to build an Electrical Generation Power Plant on a property located in the vicinity of the **South Texas Nuclear Project**, located in Matagorda County Texas. The plant will ultimately consist of two GE Frame 7FA natural gas fired turbine power generating plant capable of producing 342 MWe of electricity. The plant will also incorporate a heat recovery unit for a total production of 560MWe. The heat recovery unit will also include heating elements to be able to increase the electrical production of the steam generation equipment by 40-80 MWe. This additional electrical production will be used for peak shaving.

2. The Turbine-generator Sets: The Power Plant site shall consist of two General Electric Frame 7F-A gas turbine-generator packages. A cross sectional view of the turbine is show below. The combustion turbines will be fired on natural gas. Power will be exported into the high voltage transmission system coming out of the **South Texas Nuclear Project**.

- **System Duty Cycle.** The Plant will be designed for baseload service, which means it will be designed to operating in continuous duty (i.e., 720 hours/month).

CROSS-SECTION OF GENERAL ELECTRIC FRAME 7F-A, NATURAL GAS TURINE



GAS TURBINE EQUIPMENT:

- Foam suppression fire protection system.
- Evaporative cooler on the gas turbine air inlets.
- Diesel starter systems.
- Black start capability if required
- Water injection.
- New blade coatings.
- Standard combustion.
- Minimum of 5 years of service before the next major overhaul.
- Four-stage turbine for moderate stage loading
- Low NO_x combustion system for reduced environmental impacts
- Cold end generator drive for increased efficiency
- Two-bearing rotor for simplified rotor alignment
- Variable inlet guide vanes for improved efficiency
- All blades removable with rotor in place for easy maintenance and shorter outages

The GE FRAME 7F-A standard package comes with:

- Lube oil cooler
- Enclosure air outlet
- Combustion air inlet
- Enclosure air inlet
- Fire and gas system
- On-package controls
- Core engine
- Combustion exhaust
- AC generator

3. Heat Recovery Steam Generator:

RENDERING OF A HEAT RECOVERY STEAM GENERATOR WITH INLINE FIRING



The **heat recovery steam generator (HRSG)** is an energy recovery heat exchanger that recovers heat from the hot gas stream which forms the exhaust from the two Natural Gas Turbines. The steam created from this exhaust heat is used to drive a steam turbine (combined cycle).

The **HRSGs** consist of four major components: the economizer, evaporator, superheater and water preheater. The different components are put together to meet the operating requirements of the unit.

The **HRSG** shall include supplemental, or duct firing. These additional burners provide additional energy to the HRSG, which produces more steam and hence increases the output of the steam turbine. Generally, duct firing provides electrical output at lower capital cost. It is therefore often utilized for peaking operations.

- 4. Switchyard.** The gas turbines will operate at 13,800VAC, 60Hz, 3 phase. The Company will purchase and install three new or used generator step up transformers (GSUs) to meet **ERCOT** power delivery requirements, which are assumed to be 34.5 kV. It should be noted that this assumption is subject to change based on feedback from **ERCOT** after The Company submits its application for interconnection and an interconnect study has been completed.

TYPICAL 13.8kv TO 34.5kv TRANSFORMING SUBSTATION



5. **INTERCONNECT:** Picture below is of a medium voltage (34.5kv) transmission line to bring our generated power to the **South Texas Nuclear Project**, high voltage transmission node.



6. **INTERCONNECT:** Picture below is the high lines leaving the **South Texas Nuclear Project**



7. **Natural gas interconnection.** The existing pipelines on the production facility site will be interconnected to provide the required natural gas.
8. **Emissions to air.** The Plant will generate emissions to air, including nitrogen oxides (NOx), carbon monoxide (CO) and volatile organic compounds (VOC). Since the Plants will not be located in the Houston-Galveston-Brazoria ozone non-attainment area, it will not be subject to a stringent level of air quality regulatory oversight relating to NOx, CO, and VOC emissions. The Company still intends to limit these emissions to “minor source” levels, which are:
 - a. NOx: <25 tons per year
 - b. CO: <100 tons per year
 - c. VOC: <25 tons per year
9. **Water requirements.** Since there will be a constant loss of cycle water for one reason or another, it will be necessary to have a continual source of incoming water. The Company estimates its water requirements will be approximately 50 gpm. The Company will purchase a new or used makeup water treatment system sized at [65] gpm to serve the needs of the power plant. The Company will purchase the required water from Entergy Texas.
10. **Wastewater discharge system.** The Company estimates that wastewater discharges from plant operations will be approximately 4 gpm.

PART EIGHT: FINANCIALS

1. **PROJECT FUNDING:** The total amount of funding required for the **IDFS, INC.** project is:
US \$6,700,000,000.00

2. SYNOPTIC PRO-FORMA

A. Income from One Power Plants:

- 600 MWe, Natural-Gas fired, attached to a proper, existing node to the Texas Grid.
- We project that each plant will be operational in the 30th month after the initial launch the particular project.
- **Gross Income** from 600MWe power plant on the Grid at today's price of five and a half cents per kilowatt hr. of production, at baseload or 720 hours per month is:
 600,000 Kwe-hr. x .055/Kwe-hr = \$33,000.00 per hr. of production
- \$33,000.00 per Hr x 720 hrs per month = \$23,760,000.00 per month.
- **Net Income:** In the first five years of operations the majority of the operating expenses will be related to the cost of natural gas. We can therefore set the maximum operating cost at \$0.022 per KWe-hr. This cost figure leaves us with \$0.033 per Kwe-hr of net Income (This translates to \$33.00 per megawatt-hr). The net monthly income after expenses will be:

$\$23,760,000.00 \text{ per month} \times .66 = \$15,681,600.00 \text{ per month}$

$\$15,681,600.00 \text{ per month} \times 12 \text{ months} = \$188,179,200.00 \text{ per year.}$

$\$188,179,200.00 \times 7 \text{ years} = \$1,317,254,400.00$

B. Separate Income from the Five Power Plants.

1. First Power Plant and Prototype:

- Will be operational within 30 months of initial funding of power project.
- \$15,681,600.00 per month x 6 months = \$94,089,600.00 for the first year
- \$188,179,200.00 per year x 7 years = \$1,317,254,400.00

Total Income for first Power Plant for life of loan _____ \$1,411,344,000.00

2. Second Power Plant:

- Will be operational within 36 months of initial funding of power project.
- \$188,179,200.00 per year x 7 years = \$1,317,254,400.00

Total Income for Second Power Plant for life of loan _____ \$1,317,254,400.00

3. Third Power Plant:

- Will be operational within 42 months of initial funding of power project.
- \$15,681,600.00 per month x 6 months = \$94,089,600.00 for the first year
- \$188,179,200.00 per year x 6 years = \$1,129,075,000.00

Total Income for third Power Plant for life of loan _____ \$1,223,164,800.00

4. Fourth Power Plant:

- Will be operational within 48 months of initial funding of power project.
- \$188,179,200.00 per year x 5 years = \$940,895,000.00

Total Income for Fourth Power Plant for life of loan _____ \$940,896,000.00

5. Fifth Power Plant:

- Will be operational within 54 months of initial funding of power project.
- \$15,681,600.00 per month x 6 months = \$94,089,600.00 for the first year
- \$188,179,200.00 per year x 4 years = \$752,716,800.00

Total Income for Fifth Power Plant for life of loan _____ \$846,786,400.00

C. Aggregate Income from the Five Power Plants

Total Income for first Power Plant for life of loan _____ \$1,411,344,000.00

Total Income for Second Power Plant for life of loan _____ \$1,317,254,400.00

Total Income for Third Power Plant for life of loan _____ \$1,223,164,800.00

Total Income for Fourth Power Plant for life of loan _____ \$940,896,000.00

Total Income for Fifth Power Plant for life of loan _____ \$846,786,400.00

Total Income at the end of the loan period _____ \$5,739,445,600.00

D. Exit Strategy

1. Valuation:

a. Cash Flow Multiplier

The yearly net cash flow from the five functional power plants beginning at the start of the fifth year: $\$188,179,200.00 \times 5 \text{ years} = \$940,896,000.00$.

Using the net yearly cash flow and a valuation multiplier of seven leads us to a valuation of: $\$940,896,000.00 \times 7 = \$6,586,272,000.00$

b. Asset-based Valuation

Each 600MWe power plant in operation for a period of more than three years at the verifiable cash flow shown above can be financed with **GE-Capital** (Providing that we are using GE equipment) for a minimum of **\$800,000,000.00**.

Using the Asset value determined above leads us to a loan valuation of:

$$\$800,000,000.00 \times 5 = \$4,000,000,000.00$$

2. Financing Exit Strategy

Cash on hand from Production at the end of loan period _____	\$5,739,445,600.00
<u>Valuation of Assets at the end of the loan period</u>	<u>\$4,000,000,000.00</u>
Total Cash: including new loan at re-financing _____	\$9,739,445,600.00
<u>Loan Amount to be re-paid</u>	<u>\$6,600,000,000.00</u>
Cash on hand after re-finance _____	\$3,139,445,600.00

3. IPO (Initial Public Offering) Exit Strategy

Cash on hand from Production at the end of loan period _____	\$5,739,445,600.00
<u>Valuation of Assets at the end of the loan period</u>	<u>\$4,000,000,000.00</u>
Net-Valuation at the end of loan period _____	\$9,739,445,600.00
Cash from sale of 40% of common stock _____	\$5,000,000,000.00
<u>Loan Amount to be re-paid</u>	<u>\$6,600,000,000.00</u>
Cash on hand IPO _____	\$3,539,445,600.00

4. Selling Bonds in Europe (Exit Strategy)

Cash on hand from Production at the end of loan period _____	\$5,739,445,600.00
<u>Valuation of Assets at the end of the loan period</u>	<u>\$4,000,000,000.00</u>
Net-Valuation at the end of loan period _____	\$9,739,445,600.00
Cash from Bond issue and sale _____	\$6,000,000,000.00
<u>Loan Amount to be re-paid</u>	<u>\$6,600,000,000.00</u>
Cash on hand at end of Bond Sale _____	\$4,539,445,600.00