# **APPLICATION CHECKLIST**

Use this checklist as a tool to ensure that you have all of the components of the application package. Please note, this checklist is for your use only and does not need to be included in the package.

Application
Transmittal Letter
Tax Liability Statement
Letters of Support (If Applicable)
Business Plan (Appendix)
Historical Financial Statements (3 years) (Appendix)
Budgeted Projections (Appendix)
Loan/Loan Guarantee Application (if Applicable, Appendix)
Other Appendices (If Applicable)

When the package is completed, send an electronic version to <a href="mailto:sustainableenergy@nd.gov">sustainableenergy@nd.gov</a> and 2 hard copies by mail to:

Clean Sustainable Energy Authority North Dakota Industrial Commission State Capitol – 14th Floor 600 East Boulevard Ave Dept 405 Bismarck, ND 58505-0840

For more information on the application process please visit: <a href="http://www.nd.gov/ndic/csea-infopage.htm">http://www.nd.gov/ndic/csea-infopage.htm</a>

Questions can be addressed to Al Anderson (701) 595-9668.

# Clean Sustainable Energy Authority

North Dakota Industrial Commission

# **Application**

**Project Title: Cerilon GTL** 

Applicant: Cerilon GTL ND Inc. GTL Project ("Cerilon GTL")

Date of Application: Oct 31, 2021

**Amount of Request** 

Grant: \$10 million Loan: \$50 million

**Total Amount of Proposed Project:** 

\$ 2.8 billion

**Duration of Project: 5 years** 

Point of Contact (POC):

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POC Address:

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#### **ABSTRACT**

#### **Objective:**

The objective is to take clean natural gas, converting it through an ESG compliant Gas to Liquids (GTL) process into clean, environmentally friendly, and value adding products.

The GTL facility will do Carbon Capture and Underground Sequestration (CCUS) to capture up to  $\sim$ 2 million tons per annum of CO<sub>2</sub> and sequester underground.

The GTL facility will enable the usage of the abundant associated natural gas produced with oil to be transformed into high value environmentally favorable products in North Dakota, enabling continued growing oil production whilst limiting the need to curtail oil production growth and potential flaring of gas.

#### **Expected Results:**

Phase 1 of the GTL facility will:

- i) produce 24,000 bpd of GTL products and the facility has a targeted Carbon Intensity (CI) Score of ~50geCO<sub>2</sub>/MJ that is 40 lower than the current 90geCO<sub>2</sub>/MJ California Low Carbon Fuel Standard (LCFS) credits.
- ii) Consume 240 million scf/day of natural gas.
- iii) expect to sequester up to ~2 mtpa of CO<sub>2</sub>.

#### **Duration:**

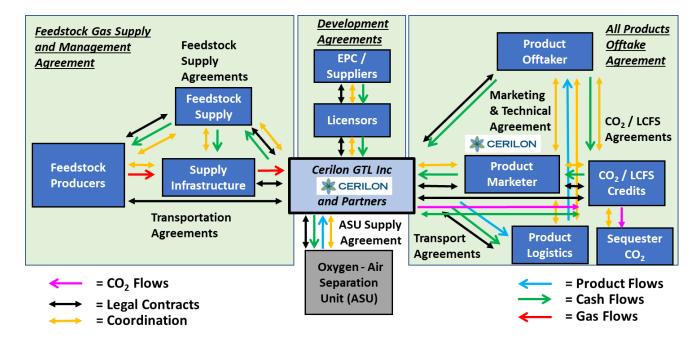
The Phase 1 Project development duration is 5 years with the expected GTL facility operating for 30 years.

#### **Total Project Cost:**

The Phase 1 cost is expected to be a total of \$2.8 billion including the \$300 million for an Air Separation Unit (ASU). Cerilon GTL has no investment or borrowed fund liabilities and has self-funded the project to date with support from its affiliates. All project costs are directly related to expenditure required for the project development. This includes engineering, license fees, sites, environmental studies, associated legal fees, professional and technical specialist fees required for the project development. Details on application of funds per each future stage are provided.

#### **Participants:**

Cerilon GTL inc. is the participant with various industry leading partners. Please refer to Appendix A for more details on the project partners. The key commercial structure partners outlined below.



Gas supplier: Super major supplying 100% of the gas required. Super Major Partner has a market cap of more than \$90 Billion and with a Moody's and S&P credit rating of A2 & A- respectively. The Super Major has relationships with all the producers in ND and already has significant pipeline transport contracts.

Technology Licensor 1: Syngas reforming and Fischer Tropsch provided by a super major company partnership. The super major licensor partnership has a combined market cap of more than \$100 Billion and with a Moody's and S&P credit rating of A2 & A- respectively.

Technology Licensor 2: Product Workup (PWU) provided by a super major company. The super major licensor has a market cap of more than \$200 Billion and with a Moody's Aa2 rating. Cerilon GTL and this super major has worked together on other GTL projects.

The two technology licensors combined provides an overall gas-in-product-out guarantee wrap which includes gas consumption, product volume, and quality output, plant availability, and product selectivity.

Offtaker: Super major company buying 100% of our products. Super Major Partner has a market cap of more than \$90 Billion and with a Moody's and S&P credit rating of A2 & A- respectively. The super major further offers hedging services off their balance sheet. The California Low Carbon Fuel Standard (LCFS) can be traded through the super major if required.

#### PROJECT DESCRIPTION

# **Objectives:**

The project primary objectives are to:

- Establish a first 24,000 bpd Licensed GTL products sustainable business in North Dakota.
- Exceed health, safety, security, and environmental targets for the project and participants in development and operations.
- Ensure stakeholder buy-in and participation.
- Be environmentally sustainable.
- Leverage lessons learned from previous global large-scale GTL projects.
- Setup the platform for downstream projects supported with replication and rapid expansion techniques.

The project secondary objectives are to:

- Create a business and operations platform for further downstream developments.
- Establish a set of project templates for future GTL developments including Phase 2 at the same location. This will enable rapid replication and delivery on the pipeline of projects.

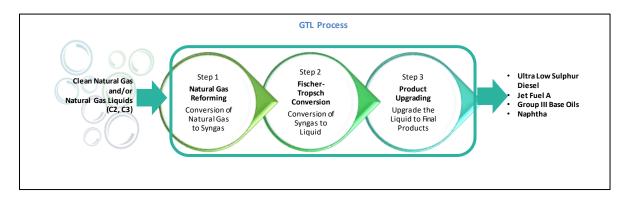
The Project Health, Safety, Security, Environmental (HSSE), and ESG objectives are to:

- Establish and sustain a culture that supports and protects the health, safety, and security of employees and contractors.
- Establish and sustain a culture that protects the environment.
- Ensure compliance with all applicable HSSE regulatory requirements.
- Create a business that is supporting a low carbon future.
- Create the social and community environment around the project that fosters care, respect, and make a difference in society.
- Govern all of the project development and business operational activities that reflect good stewardship.

#### Methodology:

# **Process Methodology**

The process methodology is a conversion of natural gas through the syngas reforming, Fischer Tropsch process, and refining in the Product Workup into high value products.



The GTL process involves three main processes: i) syngas production, ii) Fischer-Tropsch synthesis and iii) product upgrading.

The operational facility design encompasses all utilities, logistics, infrastructure, and outstanding components to allow for a fully functional, standalone GTL facility.

#### Step 1: Natural gas reforming for syngas production

High-pressure lean gas options of methane, ethane, propane, or a combination of the three is converted into Syngas using well established combined reforming and pre-reforming technologies. Off the shelf technologies for this process are available and have been well established in the fertilizer and chemical industries.

The reforming process combines lean gas with oxygen and reforms it to synthesis gas consisting of a predetermined mixture of hydrogen and carbon monoxide.

This technology has been proven over many decades.

#### Step 2: Fischer-Tropsch (F-T) synthesis

The Fischer-Tropsch (F-T) catalyst and reactor tube utilize a recycle loop to convert the syngas to F-T wax and light hydrocarbons in a single-stage process.

The highly efficient single-stage process leads to reduced recycle iterations as well as reduced capital expenditures.

This technology is mature. It has been vetted by Independent Engineer. Backed by super major licensor with guarantees.

#### **Step 3: Product Upgrading**

The long-chain F-T hydrocarbon product is subsequently hydrocracked and fractionated to produce finished products that meet the required product specifications. Again, the primary products include ULSD, jet fuel A, naphtha, and Group III base oil.

Product upgrading and mild hydrocracking processes have been well established in crude oil refineries.

This technology has been proven on commercial scale in many existing commercial operations.

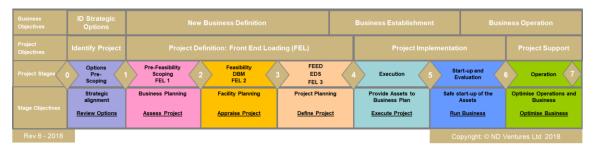
# **Project Execution Methodology**

The project will be executed according to the NDV stage-gate model, with deliverables and criteria reviewed at the end of each of the gates. The Cerilon GTL board will approve the decision to kick off the next stage after the successful completion of the gate criteria.

Depending on the size and risk categorization of the project, the Project Management Plan ("PMP") will be adjusted to reflect the level of governance and control required.

# **Execution Methodology: Stage Gates**

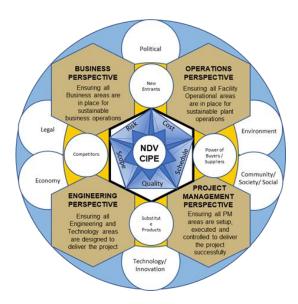
The execution of the project will be based on a proven stage-gate execution model. This is the norm for this size of the investment and complex down-stream petrochemical or refinery projects.



The Stage-Gate model is backed by a detailed set of deliverables for each of the stages and each of the perspectives. This is aligned with the Independent Project Assessment (IPA), AACE, CCI, and CCO institutions. We have further integrated the PDRI assessments into our deliverables set.

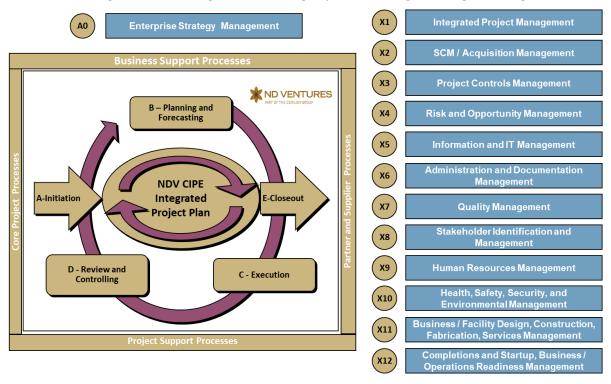
#### Execution Methodology: Critical Integrated Project Execution

The execution methodology applies the NDV proprietary Critical Integrated Project Execution (CIPE) model through the development stages to deliver results.



#### <u>Execution Methodology – Stage Steps</u>

Integrated Execution: The CIPE process looks at planning, baselining, scope, cost, schedule, quality and risk and executing whilst reviewing and controlling impacts of changes through the stages.



The interfaces and integration between the deliverables of each of the perspectives (business, operations, design/engineering/technology and project and cost management), is mapped to ensure a very effective delivery, which is especially important in Front End Loading (FEL) stages 1-4 prior to Final Investment Decision (FID). The CIPE optimization is supported with a back-to-front stage planning approach to ensure that the right scope of work is allocated to the right contractors for effective commissioning and start-up.

Initiation and Setup: The project is registered and setup. The necessary approvals, sponsors and structure established. The project team and business support identified to move to the planning of the project. The stakeholders are identified.

Planning and Baselining: Projects are planned once the approval was received to move to the next stage of the project. The baselines for the cost, schedule, risk, quality, and scope will be set during the planning stage based on the deliverables from the Pre-FEED stage as presented to all partners. This is a baseline centric approach to enable the team to be able to assess variances from the baselines.



Baseline Centric Approach

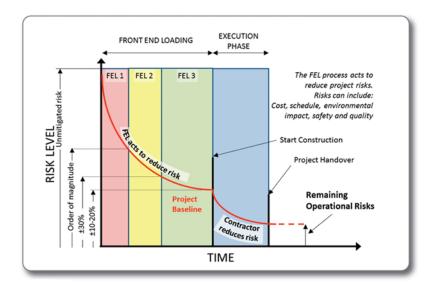
Execution: The project is executed according to the Project Execution Strategy and according to the policies procedures and the Project Management Plan (PMP).

Reviewing, Controlling and Management of Change: With the baselines set all, the project progress is reviewed, managed and controlled. The changes to the baselines are identified, quantified with respect to risk, scope, cost, schedule, and quality. The impacts are reflected during the Management of Change (MOC) process. The objective is to reduce risk in the execution of the project.

Closeout: Once the project or project stage is completed the project scope is closed out and reported. The lessons learned, benchmark databases updated and risks and or outstanding activities with mitigation action items are handed over to the responsible parties.

# Execution Methodology - Risk Approach

The objective through the project execution methodology is to minimize and manage risk in the best way possible. This could mean to mitigate, transfer, delay or minimize and accept risks with clear responsibilities.



The risk framework and plan will be applied during the project execution.

#### The Business and Operations Methodology

The business and operations methodology being applied is

- 1) Business Learning organization design to adapt rapidly to the markets. Integrate the processes, facility and markets with Machine Learning (ML) and Artificial Intelligence (AI). People centered with collaborative approach methodologies.
- 2) Operations Smart Manufacturing Design and Methodologies being applied. This enables the use of IoT, sensors, ML and AI via state-based control and Ethernet APL methodologies.

#### **Anticipated Results:**

- 1) Process Methodology Results
  - Achieve effective methane conversion with the FT technology to produce superior FT products
  - b. Achieve a carbon footprint and CI score of ~50geCO2/MJ.
  - c. Use process to produce ESG compliant, environmentally friendly products
  - d. Capture up to ~2 mtpa of CO2.
  - e. Achieve industry leading core CAPEX below \$100,000/barrel
  - f. Apply the latest CCUS, water treatment, conversion technologies
  - g. Establish a product base for future downstream petrochemical expansions.
- 2) Execution methodology Results
  - a. Delivering project on time and schedule
  - b. Delivering on CAPEX estimated
  - c. Delivering quality designed
  - d. Enhance the template for future GTL developments
  - e. Bring world class partners together
  - f. Mitigate risk
- 3) Business and Operations Methodology Results
  - a. Right culture and team set up for results
  - b. Flexibility to match to some extent the market demand with the right products
  - c. Integrated business and operations design
  - d. Increase in the plant operations availability
  - e. Ability to start up the plant quicker

#### **Facilities:**

Phase 1 facilities built for 24,000 bpd of products and designed to be lowest carbon footprint GTL facility in the world.

Anticipates Phase 2 to be similar in design and footprint.

#### **Resources:**

**Facility Operational Resources** 

- The facility will require 6 MW of power to start up but will be self-sustaining to supply it own power. The facility will potentially have the ability to supply additional power to the grid.
- The facility will require water during the startup for pressure testing and commissioning but will be self-sustaining during normal operations. The GTL will also have water treatment facilities to treat process water.
- The facility effluents will be normal facility effluents that can be treated by the city sewage treatment and the catalyst can be treated by the ND precious metal recovery facility.
- Access to the fiber optic communications will be required.

• The facility will require 77 facility people during operations

#### **During construction**

- The facility will be constructed with a modular approach to design and build modules, skids, and
  units that can be manufactured in ND and North America fabrication shops and shipped to site. This
  will reduce the number of people required on site. The shortage of ND labor can be partially
  mitigated.
- The design of the controls of the facility will enable the testing of modules and other units in the cloud prior to shipment and assembly on site.
- Local support services in restaurants, hotels, general, IT, and other resources will be required to support the construction of the GTL facility.

The support of our world class licensors will be required to support the detail design, construction, and startup of the GTL facility.

Various global support services will be contracted to support the project startup and later operations. The team will bring global expertise and we will train local ND people to be the future support companies.

# **Techniques to Be Used, Their Availability and Capability:**

The latest techniques in process design, Value Improving Practices (VIPs), plant optimization, and process designs will be applied. The design team will utilize simulation modeling for the process (Hyses), SCM design (Arena), Controls (Corys), Optimization (Aspen), and various others. This is state of the art tools applied by the anticipated contractors we will be using Technip, Worley, Hatch, ABB, Emerson, Rockwell Automation.

The team is well versed in Kepner Tregoe (KT) analyses to ensure right options, and correct decisions are made.

In the project execution the collaborative approaches in team management, action logs, DOAG matrices, RASCI matrices, Management of Change (MOC), Risk Registers, weekly reporting, trending, monthly reconciliation, and contractual, stakeholder management, and scope management techniques to ensure proper execution approaches. The cost management and estimating will be in line with the AACE principles and techniques. The project management and engineering in line with the IPA principles and techniques.

The business operations will be utilizing learning organization systems thinking techniques in the design and operations. Business Process Mapping (BPM) will be applied to ensure aligned integration.

All the techniques and principles are either know to us, available to us and it will be capable to support the project design, development, and operations.

#### **Environmental and Economic Impacts while Project is Underway:**

#### **Environmental Impact**

- The site and ground will be resurfaced and graded to be level for the construction.
- EPC firm will contain any spillage, effluents, or any material being used like the water for the pressure testing.
- All waste material, excess will be collected and properly treated or removed.
- No air or water pollution during construction. Dust to be suppressed and water sprayed on ground to minimize dust movement.
- Noise to be controlled during construction as much as possible.

Economic Impact – Construction Phase

The State of ND compiled a REMI model and the summary is an extract from the report. Refer to Appendix B REMI Model - Construction.

This indicates significant job creation, state sales/value added taxes payable, and revenue to the state.

The model results are attached for reference.

# **Ultimate Technological and Economic Impacts:**

# **Technology Impacts**

- Combinations in process technologies will create the lowest carbon footprint GTL facility in the world in North Dakota.
- The business systems thinking, and systems integration will create advantages in business operations.
- The operational optimizations and application of ML and AI will improve the availability of the operations for the next 30 years
- The process technology platform will create a base from which many other downstream technologies can be implemented, and new businesses created.
- The technologies will enhance the ability to recruit and retain people in ND as the leading technologies will create sought after jobs.

Economic Impacts – Operations Phase

The economic impact was modelled by the State of ND in their REMI model, and the results are provided in Appendix B REMI Model - Operations.

In summary the financial impact to the state is above \$6 billion in first 5 years of operations.

The return for the state and economic impacts cannot be measured only in the financial impact but should also consider the impact in times of downturns when oil prices are low, the robustness of a more

stable economy with a strong downstream sector. This will not be achieved with one GTL project, but it ignites the pathway to many more developments.

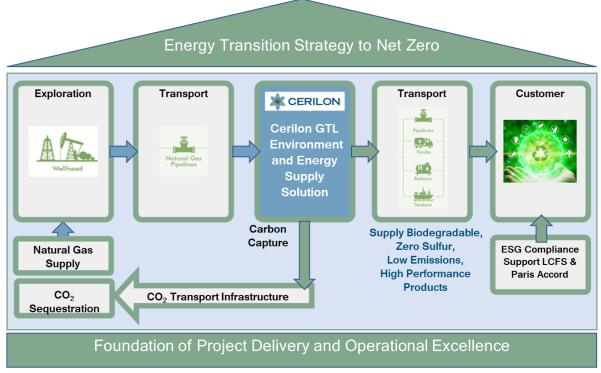
The multiplier effect on adding value, opportunities, and secondary business to ND will be more than just one project impact.

The measure of people with hope open to challenge the status quo and wanting to do more for the state of ND is of huge value.

#### Why the Project is Needed:

At the highest level the project will do the following for ND:

- Utilizing 240 million scf/day of natural gas inside of North Dakota to convert to high value products.
   This will help to ensure ND oil production can continue and will not be constrained by lack of local customers of gas and constraints in pipeline infrastructure to move gas to distant customers.
- Will reduce the potential and the need to flare gas in ND.
- Will create a new downstream industry building block to add value to local gas. Move the energy industry from a resource play to a value play.
- Will reduce the carbon footprint of the energy products versus normal refineries.
- Diversify the Oil and Gas industry into a more robust integrated up and downstream industry to weather bust and boom cycles.
- Creates and support the Carbon Capture and Sequestration of CO<sub>2</sub>.
- Creates momentum and platform for other major organizations to also come and invest in ND.
- Creates community and local economic benefits and high caliber new technology jobs.
- Stimulates the economy.



Cerilon GTL is providing the relationships and building blocks to be crafted together for a substantial  ${\rm CO}_2$  energy transition business

#### STANDARDS OF SUCCESS

The standards by which the success of the project is to be measured. This may include:

- Emissions reduction.
  - A normal refinery has a Carbon Intensity (CI) score of between 100 120 geCO2/MJ where the anticipated Cerilon GTL facility will have a CI score of around 50 geCO2/MJ. This means significant reduced overall emissions from the ULSD where it is applied.
- Reduced environmental impacts.
  - The ULSD is fully biodegradable when spilled within 3 weeks.
  - The ULSD is also nontoxic and not harmful to aquatic life when spilled in water.
- Increased energy sustainability.
  - Oil and Gas produced energy is under scrutiny and under pressure to reduce the carbon footprint.
  - GTL products are a pathway to carbon neutrality and provides green transition energy.
     This increases the energy sustainability for customers
  - Energy sustainability of the ND Oil and Gas sector will be improved by adding a large consumer of natural gas to support local oil and gas production with the oil wells aging and producing more gas for each barrel of oil being produced.
  - o Potential to supply additional power into the grid if required.
  - Establishing new CCUS infrastructure and industry support.
  - Increased financial contributions from a growing downstream industry in North Dakota will help mitigate future energy commodity price risks and cycles
- Value to North Dakota.

- The ability to move from a Resource play to a Value play will add revenue to ND in increasing the value chain of products being produced and then exported as high value products.
- Value in job creation and community sustainability.
- New technology jobs and industries to be created in ND with the application of ML and AI
- New energy infrastructure created to support low carbon transition and pathways.
- Explanation of how the public and private sector will make use of the project's results, and when and in what way.
  - The new CCUS infrastructure and technologies will attract new incumbents and projects.
- The potential commercialization of the project's results.
  - The technologies and processes are commercial proven, but this could label North Dakota as the North American GTL capital and attract other investments into the state to support various downstream industries.
- How the project will enhance the research, development and technologies that reduce environmental impacts and increase sustainability of energy production and delivery of North Dakota's energy resources.
  - o The ongoing drive and the ability to apply, renew, and research will enable further enhancements into the technologies selected for environmental benefits.
  - The Cerilon GTL team will also bring some of the world's leading GTL experts to support the Cerilon GTL project development and operations. This provides the opportunities to enhance research and development programs in ND.
- How it will preserve existing jobs and create new ones.
  - The new downstream industry will create new jobs as there are no GTL facilities in North Dakota.
  - This is not about job replacement but creating a new different industry that will require new skills and people.
  - This downstream GTL development further preserves upstream Oil and Gas jobs as it will
    require a long-term supply of gas as feedstock and thus ensure upstream jobs will be
    required to produce the gas.
- How it will otherwise satisfy the purposes established in the mission of the Program.
  - Lower carbon footprint facility providing clean green transition energy
  - O Creation of CCUS infrastructure to sequester CO<sub>2</sub>.
  - Adding value to clean gas to create needed clean products.

# **BACKGROUND/QUALIFICIATIONS**

Please provide a summary of prior work related to the project conducted by the applicant and other participants as well as by other organizations. This should also include summary of the experience and qualifications pertinent to the project of the applicant, key personnel, and other participants in the project.

The team has worked on most of the larger GTL facilities in the world today in some shape or form spanning all of the different functions and operations.



Sasol 1 (1955) Sasolburg \* 20,000 bpd



PetroSA Mossgas (1992) Mosselbay \* 15,000 bpd



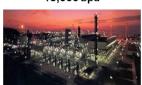
Escravos GTL (1997) Nigeria \* 34,000 bpd



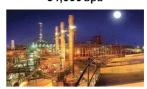
Shell Pearl GTL (2012) Qatar \* 144,000 bpd



Sasol 2 (1980) and Sasol 3 (1984) Secunda \* 160,000 – 168,000 bpd



Shell Bintulu (1993) Malaysia \* 12,000 - 15,000 bpd upgraded



Sasol Oryx (2007) Qatar \* 34,000 bpd



OLTIN YO'L GTL (2021) Uzbekistan \* 34,000 bpd

See Appendix F for the Cerilon GTL Team Resumes.

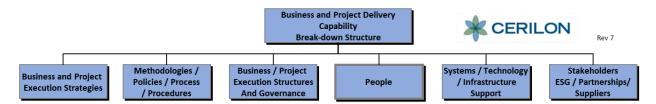
The team is further supported with various other key specialists in functional areas.

#### MANAGEMENT

A description of **how** the applicant will manage and oversee the project to ensure it is being carried out on schedule and in a manner that best ensures its objectives will be met, **and a description of the evaluation points to be used** during the course of the project.

The ability to manage a project of this size requires the team to be able to delivery of each of the stages of the project.

The capability to deliver has a number of components.



The intention is to deliver a successful project on time, within budget and of the correct quality fulfilling the project objectives.

The ability to execute and deliver the project is outlined as described in the components of the business and project strategy, execution methodology, governance, people, systems, and technology support, as well as the partnerships and suppliers to deliver the project.

The NDV Project Management Team (PMT) reviewed many projects, including numerous GTL projects, and concluded after executing and overseeing multiples of large projects that the critical success factors we identified earlier will drive the execution. The current North American landscape will determine the right construction and modularization approach. Combining global best practices, reviewing past mistakes and lessons learned provided the team with a combination of inputs to craft the project execution strategy.

#### Execution fundamentals:

- Collaborative approach and culture harnessing all the project participants to provide their insight and benefit to the project. This includes operations people, fabricators, suppliers, Main Automation Contractors (MAC), modularization experts, maintenance, engineering and Engineering, Procurement, and Construction (EPC) contractors.
- Start with the end goals in mind. How do we want to run the business, operate the facility, how do we want to position ourselves environmentally and with stakeholders including society, how do we want to start up the facility, construct, fabricate, and engineer the facility?
- Apply proven global execution methodologies. Keep everybody aligned with the overall objectives
  of the project and each of the stages. Don't budge under pressure to change direction. Stay the course
  and adapt if it will benefit the project overall. Set the holistic overall scope, baseline, and manage the
  changes to the scopes, risk, schedules, quality, and costs. Ensure the integrated Management of
  Change (MOC) is applied by all project participants.
- Clear communication and allocation of responsibilities. Keep everyone informed and accountable to deliver. Clear governance for all members and partners.
- Standardize the templates for engineering, business, and operations. Keep the current project but also the larger objective of ensuring replicability for the projects to follow in mind. Will this change from the template benefit the overall approach significantly or is it a localized benefit with marginal impact?

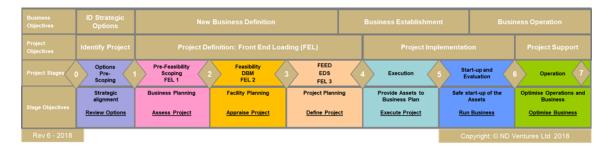
The transparent approach is to share risks and to ensure that no party is carrying risks that are not the right fit for them. The EPC CAPEX approach and structure was verified with risk, EPC, fabricator, and insurance firms. There are clarifications still to be concluded on the roles and differences between, fabricators suppliers, and EPC firms.

The integrated nature of many of the components requires NDV to ensure that the interfaces, responsibilities, and scopes of work are clearly defined, allocated, and managed overall on a holistic top-down approach. The collaboration combined with the holistic approaches ensure team participation and lessons learned are leveraged in the project execution.

Cerilon GTL has already appointed its risk advisors to support and provide input into the risk and insurance structures. The insurance structures will support the mitigation of future development, operations, and business risks to be mitigated.

The contracting structure follows the execution strategy and allows for input from specialists with the owner's interest upmost in mind.

Control points and reviews will take place at the end of each of the stages.



Gate reviews will be completed after the FEL 2 gate and at the end of the FEL 3 / FEED prior to commencing with the construction.

#### **TIMETABLE**

Please provide a project schedule setting forth the starting and completion dates, dates for completing major project tasks/activities, and proposed dates upon which the interim reports will be submitted.

Interim progress reports will be provided each quarter and a Stage report after each of the FEL 2, FEL 3, and Execution stages.

The schedule will be monitored closely by the team to ensure the delivery to schedule.

Appendix C is a summary of key deliverables and milestones for the different stages of the project with the corresponding cost. Also shown are the anticipated funding sources for those costs including the role and use of the CSEA grant and loan requested in this application.

The Table indicates the main deliverables, the matching funds, both the CSEA grant and the CSEA loan application.

The matching funds will be non-state approved funds and provided as required.

It is assumed that the CSEA grant and CSEA loan will be requested in tranches.

#### **BUDGET**

Please use the table below to provide an **itemized list** of the project's capital costs; direct operating costs, including salaries; and indirect costs; and an explanation of which of these costs will be supported by the financial assistance and in what amount. The budget should identify all other committed and prospective funding sources and the amount of funding from each source. **Please feel free to add columns and rows as needed.** Higher priority will be given to projects with a high degree of matching private industry investment.

#### PATENTS/RIGHTS TO TECHNICAL DATA

Any patents or rights that the applicant wishes to reserve must be identified in the application. If this does not apply to your proposal, please note that below.

The Cerilon GTL team will establish patents and rights for all the intellectual property added to the wide range of intellectual property and templates licensed by Cerilon GTL from its affiliates. In addition, the Cerilon GTL team will be completing its own development of the Manufacturing Execution System (MES) platform, and the ML and AI platforms that will be incorporated into the project.

Cerilon GTL will also be using licensed technology from the previously mentioned internationally recognized licensors, which third party technology will need to be kept confidential.

# **STATE PROGRAMS AND INCENTIVES**

Any programs or incentives from the State that the applicant has participated in within the last five years should be listed below, along with the timeframe and value.

Cerilon has just recently applied and was awarded on Oct 14 a NDDF loan of \$3 million.

Cerilon GTL did not participate in any other programs or incentives in ND.