

Jose Hernandez

PROJECT ENGINEER

CONTACT:

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PROFILE:

Experienced Project Engineer with a strong aspiration to transition into the Renewable Energy sector. My extensive expertise is founded on a solid educational background in alternative energies (wind and solar), sustainability systems, and hydrogen, complemented by a robust background in oil and gas engineering and construction. I'm particularly proud of my pivotal role in Chevron's Wheatstone Project, one of Australia's most significant LNG developments, which underscores my unwavering commitment to delivering exceptional results. My consistent track record of success across various industries reflects my steadfast dedication to excellence.

PROFESSIONAL EXPERIENCE:

Project Engineer / Designer. Antares Energy Solutions. (2020 to 2021)

- ✓ Successfully completed Front End Engineering Design (FEED), upstream, midstream, and downstream engineering activities, 3D modeling designs, detailed plans, and P&IDs plans of four offshore methane gas extraction facilities and a 56MW onshore methane gas processing plant for a gas-fired power generation plant located in Rwanda, Africa. The project is owned by Shema Power Lake Kivu (SPLK) and is valued at \$400MM. The facilities are built and are currently operating effectively.

Project Manager. Self-employed. (2019)

- ✓ Successfully completed the construction of a new home, from the design process to completion. Responsible for managing general construction activities, including hiring workers and contractors, purchasing materials, permitting process, supervision, and budget control.

Project Engineer / Designer. Antares Energy Solutions. (2009 to 2018)

- ✓ Efficiently completed upstream engineering activities, 3D modeling design, piping stress analysis, and detailed design plans for ten Subsea Manifolds, including Pipeline End Termination (PLET), and Pipeline Termination Structure (PTS) for the Wheatstone LNG project located in Australia. The project is owned by Chevron and is valued at \$34BN. The manifolds are fully installed on the seabed and are currently operating effectively.
- ✓ Successfully completed the delivery of quality midstream engineering and detailed plans within budget and on schedule for over one hundred offshore pipeline s-lay installations, including abandonment and recovery methods in the Gulf of Mexico and Alaska. Collaborated with clients such as Chevron, Shell, Exxon, BP, Chet Morrison, and Crowley to ensure project specifications were met.
- ✓ Detailed design and engineering plans were successfully completed for five distinct stinger structures across various S-Lay Pipelay Vessels, including the Global 1200 (G1200), McDermott DLV 2000, and Morrison's CM-15 pipelay barge.

EARLY CAREER SUMMARY:

Engineer Designer. Keppel AmFELS (shipyard located in Brownsville, TX). (2007 to 2009)

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Responsible for the development of detailed engineering plans, material take-off, nesting, as-builts, bill of materials, and site supervision for the construction of five jack-up platforms (offshore platforms) with a combined value >1BN. Responsible for reviewing and approving construction drawings of other teams.

Field Engineer. PEMEX-UAT (The largest oil and gas company in Mexico). (2006 to 2007)

Support in the development of land survey studies and supervision of the construction of gas pipelines.

Field Engineer. Bolado Construction. (2004 to 2006)

Responsible for planning, supervising, and coordinating the daily activities of 160 workers, contractors, and subcontractors (Electrical, Mechanical, Plumbing, Carpentry, Painting, and Welding) for the construction of an 11-story building, reporting daily work progress and job safety report to project engineer, project manager, and superintendent.

Field Engineer. CFE (Primary Electricity Provider in Mexico). (2003)

Responsible for coordinating construction activities for the development of office buildings.

EDUCATION:

- ✓ **Master's degree:** Renewable Energy and Sustainability Systems. Graduated in 2023. Pennsylvania State University, PA, US. (GPA: 3.97 of 4.0)
- ✓ **Bachelor of Science:** Civil Engineering. Autonomous University of Tamaulipas, Mexico.

CERTIFICATIONS:

- ✓ **Solar Energy**, Pennsylvania State University, PA
- ✓ **Hydrogen Economy**, University of Houston, TX
- ✓ **CCUS Economy**, University of Houston, TX
- ✓ **Energy Leadership**, University of Houston, TX

SKILLS:

- ✓ **Renewable Energy and Sustainability Systems (2 yrs)**
 - Development of feasibility studies for solar and wind projects.
 - Evaluation of existing power plants.
 - Solar and Wind resource assessment.
 - Project management.
 - Financial analysis.
- ✓ **Solar Energy (2 years)**
 - Design of utility-scale solar photovoltaic projects with the use of PV design software.
 - Basic knowledge of PV electrical design.
 - Solar project development procedures.
 - Selection of solar PV components (PV modules, inverters, tracking system, electrical materials).
 - Familiar with land search, permitting, interconnection, and environmental studies.
 - Familiar with codes, and regulations.
 - Energy storage.

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✓ **Oil & Gas** (15 years)

- Subsea Engineering (Manifolds, piping 3D modeling, piping stress analysis).
- Familiar with ASME, ASTM, DNV, API codes, and ABS standards.
- Offshore S-lay Pipeline Installation Engineering (abandonment, and recovery).
- 3D structural design.
- Development of Piping & Instrumentation Drawings P&IDs.
- Development of detailed engineering drawings.
- Nesting.
- Material Take Off (MTO).
- Bill of material (BOM).
- As-built drawings.

✓ **Construction** (6 years)

- Construction management.
- Construction procedures.
- Procurement.
- Planning.
- Supervising.
- Coordinating.
- Scheduling.
- Hiring of workers.
- Train workers.
- Strong teamwork.
- Strong work ethic.
- Job safety.
- Problem-solving.
- Quality control.
- Daily reports.
- Construction equipment.
- Blueprint reading.
- Communication, and motivational leadership.
- Administration of payments to contractors.
- Attention to detail.

LEADERSHIP EXPERIENCE:

- ✓ During my time at Antares, I held a leadership role within the pipeline division, where I successfully spearheaded complex engineering projects, most notably Chevron's Wheatstone and SPLK projects.
- ✓ While at Keppel Amfels, I spearheaded a team of four, ensuring the punctual completion of construction drawings vital for the fabrication of jack-up rigs.
- ✓ My first venture into leadership entailed supervising a group of contractors in the construction of 30 residential homes, commercial offices, and an 11-story building.

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SOFTWARES EXPERIENCE:

- ✓ **AutoCAD.** 3D Modelling.
- ✓ **OFFPIPE.** Software package for finite element analysis of pipeline installations.
- ✓ **Orcaflex.** Software package for dynamic finite element analysis of offshore systems.
- ✓ **CAESAR II.** Software package for pipe stress analysis of offshore systems.
- ✓ **System Advisor Model.** (SAM) renewable energy industry program from NREL.
- ✓ **Helioscope.** Solar design software.
- ✓ **FUROW.** Wind design software.
- ✓ **Windographer.** Wind resource analysis software.
- ✓ **Microsoft Office.** Powerpoint, excel, word.
- ✓ **Microsoft Project.** Project management software.

LANGUAGES:

- ✓ English
- ✓ Spanish