



Services

Superna Energy LLC helps its clients solve technical and business challenges from initial project concept through divestiture or decommissioning.

Services, described in detail on the following pages, include:

Owners Engineering

- Project Development
- Contract Development
- Construction Monitoring
- Technical Support

Due Diligence, Sales & Acquisitions

- Independent Engineering Reviews
- Construction Monitoring
- Acquisition & Divestiture Assistance

Contact

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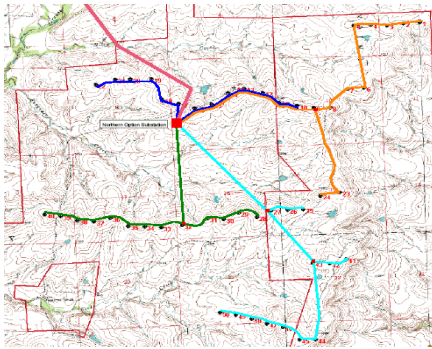


Owners Engineering

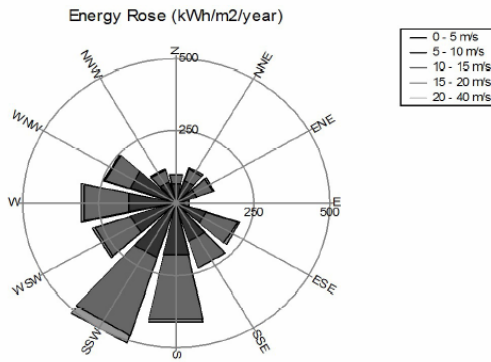
Superna Energy LLC excels at both the technical and business aspects of owner's engineering, as described below.

Development Stage

- Techno-Economic/Feasibility Studies
- Preliminary Site Layouts
- Collection System Layouts and One-Lines

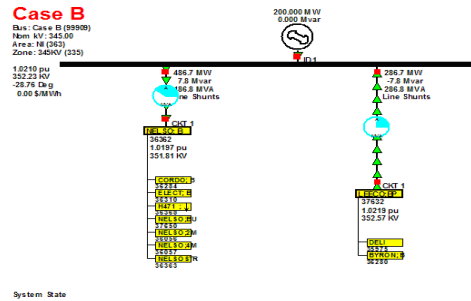


- Collection System Loss Analysis
- Conceptual Cost Estimates
- Assessment of Site Conditions, Wind Resource, etc.

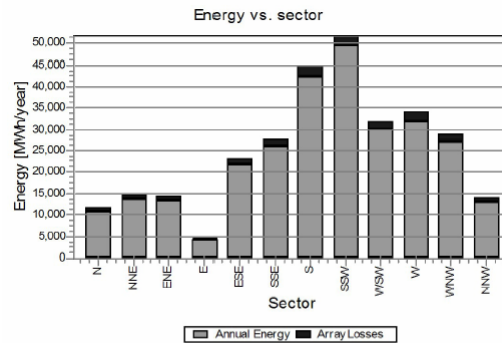


- Fatal Flaw Analysis
- Identification and Quantification of Project Risks
- Assistance with Permitting, Geotechnical Studies, etc. as required

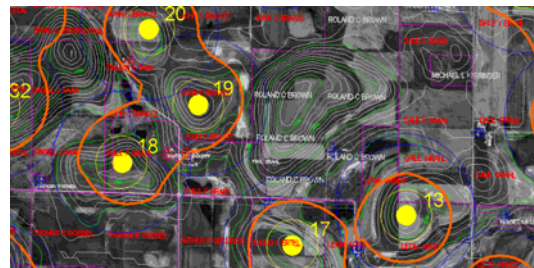
- Transmission Assessment



- Preliminary Energy Estimates



- Assistance with Proposals to Offtakers
- Preparation of Project Design Basis
- Turbine Supplier and Balance of Plant Contractor Evaluation and Pre-Qualification
- Preparation of RFPs for Turbine Suppliers and Balance of Plant Contractors
- Turbine Selection
- Bid Evaluation,
- Noise Studies

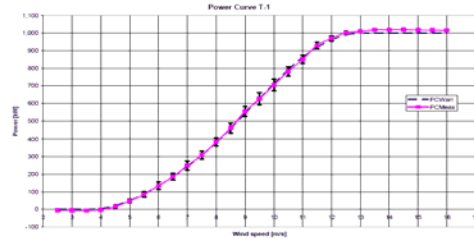


- Shadow Impact Analysis
- Assistance with PPA, TSA and BoP Contract Negotiations
- Assistance with O&M Contracting/ Servicing Arrangements

- Observe Testing
- Review Test Reports for Compliance with Contracts
- Tests Include: Guarantee Verification of Performance, etc.

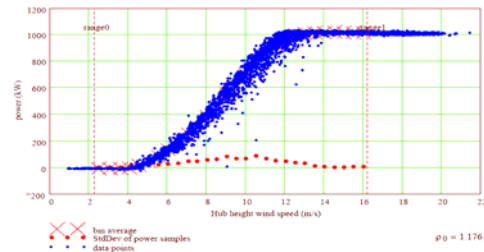
Design Review Stage

- Review for Compliance with Contracts, Codes & Standards
- Coordinate Decisions on Owner Preferences & Direction
- Review Good Engineering Practice & Vendor Selections
- Monitor Schedule Development & Progress
- Mitigate Change Order Impacts



Construction Stage Site Services

- Oversight of Contract Procedures On-Site
- Review Compliance with Contracts
- Support Owner in Discretionary Decisions/Re-work/Re-inspection
- Monitor Progress for Schedule Compliance & LD Impacts
- Review Payment Requests
- Review Testing, Commissioning & Start-up Plans & Performance
- Review As-Built Drawings & Specifications



Contract Closeout /Warranty

- Punchlist Development & Review
- Final Inspections, Report on Defect Liabilities
- Coordinate Warranty Issues & Re-Work
- Assess/Recommend Application of LDs or Bonuses

Acceptance Testing

- Assist in Finalizing Test Protocol, program & procedures

Due Diligence, Sales and Acquisitions

Lenders and sponsors alike must thoroughly understand the interrelationships among a project's many components so that risks arising from technical and financial assumptions associated with the construction and operation of the facility can be mitigated. Due diligence entails the independent review of the engineering and environmental aspects of a project for possible impacts on commercial and financial matters associated with the venture.

Superna Energy will give you the analysis you need to make informed decisions with a detailed assessment of the entire proposal, including:

Due Diligence,

- Technology Review
- Plant/Site Condition Assessments
- Constructibility Review
- Interconnection & Power System Studies
- Contractual Arrangements and Status
- Review Guarantees, Warranties, LDs and Bonuses
- Suppliers and Facilities Reviews (including QA)
- Contractor Reviews including QA Systems
- Review of System/Contractual Boundaries
- Review of Owners Rights to Ensure Correct Operation of the Project (e.g. Wind rights, Property Rights, Access)
- Review for Compliance with Relevant Codes & Standards
- Environmental and Social Impact Requirements Satisfied
- Asset Valuations
- Cost Estimates
- Income Projections
- O&M Arrangements and Cost projections
- Review Project Schedule
- Review Payment Schedules
- Economic Viability of the Project
- Sensitivity Analysis
- Identify and Quantify Project Risks

Asset Sales

- Independent Engineering Assessment
- Describe the Assets
- Document Asset Boundaries
- Document Contracts: Existing & Under Negotiation
- Document Operational Constraints
- Document Asset Condition & Performance
- Document Staffing and Transition Arrangements
- Summarize Asset History
- Document Historical Expenditures.
- Establish and Manage the "Data Room"
- Document Historical Income and Associated Inputs eg wind resource, availability, energy production
- Document Asset Enhancement Opportunities
- Manage the Preparation of the Information Memorandum
- Material Preparation for Sale Launch
- Technical Expert at Sale Launch

Asset Acquisitions

- Independent Engineering Assessment
- Inspect the Assets, Determine Condition and Evaluate Remaining Life
- Review Asset Boundaries
- Review Contracts: Existing & Under Negotiation
- Review Operational Constraints
- Review Asset Performance
- Review Staffing and Transition Arrangements
- Review Asset History
- Review Historical Expenditures and Establish Future Projections.
- Review Historical Income and Associated Inputs eg wind resource, availability, energy production and Estimate Future Production Levels
- Review Asset Enhancement Opportunities and Establish Costs, Benefits and Timing
- Undertake Interconnection & Power System Studies as required
- Review of Owners Rights to Ensure Correct Operation of the Project (eg Wind Rights, Property Rights, Access)
- Review for Compliance with Relevant Codes & Standards
- Review Environmental Management System
- Review Financing Structures
- Evaluate Economic Viability of the Purchase
- Undertake Sensitivity Analysis
- Identify and Quantify Project Risks

Associations

Superna Energy has formed strategic associations to ensure a comprehensive service package to our clients in delivering valuable solutions for project needs.

Power Solutions Inc.

Power Solutions is an independent consulting electrical engineering company.

Superna Energy's association with Power Solutions enables:

- in-depth transmission studies, including load flow studies, congestion studies, LMP studies, support with Interconnection Applications, etc

PB Power Inc.

PB Power is part of the Parsons Brinkerhoff group, an international consulting engineering company with 250 offices world wide and more than 9000 staff, which has been continuously operating in the US for more than 115 years.

Superna Energy's association with PB Power enables:

- in-depth transmission studies, including load flow studies, congestion studies, support with Interconnection Applications, etc
- independent internationally recognized wind resource assessments using WAsP and PB Power's proprietary models
- independent noise studies
- geotechnical review
- foundation review